
AMOS Maintenance & Purchase

Reference Manual

Version 5.3

Edition Note

The document is prepared for version 5.3 of AMOS M&P.

Acknowledgements

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Foreword

This guide has been written for advanced users, as well as consultants and other professionals who are configuring and administrating the AMOS M&P program. The objective of this guide is to provide the technical information needed to perform these tasks.

Since many of the configuration features described in this guide affect the way a system function or module operates, it is assumed that the reader is familiar with the AMOS M&P program. A good knowledge of automatic data processing and general familiarity with the Windows[®] operating environment are also assumed.

The aim of this manual is to cover all relevant technical issues of the program. However, it does not include topic oriented user instructions, which are to be found in the *User Guide*. The remaining documentation for AMOS M&P is to be found in the following manuals:

- AMOS M&P Installation Guide
- AMOS M&P User Guide

Please note that this manual is not meant to be read from cover to cover, but rather to serve as a reference manual covering the topics listed.

Contents

1	Introduction	1
1.1	The AMOS Maintenance & Purchase application	1
1.2	How to use this manual	1
1.3	Related documentation.....	2
1.4	Troubleshooting	2
2	Principles and Tasks	3
2.1	The client / server model	3
2.1.1	The hardware components	3
2.1.2	The software components.....	4
2.2	Navigating within AMOS M&P	5
2.2.1	Title Bars.....	5
2.2.2	The Menu Bar	6
2.2.3	The Standard Toolbar.....	7
2.2.4	The Window Toolbar.....	8
2.2.5	Shortcut Keys.....	9
2.3	Filtering information	10
2.3.1	What is a Filter?.....	10
2.3.2	Look-up Filters	11
2.3.3	Column Sorting	11
2.3.4	Column Ordering.....	12
2.3.5	Calendar facility	13
2.4	The Edit and Options menus	14
2.4.1	The Edit menu	14
2.4.2	The Options menu	15
2.5	Using Component & Stock Types	15
2.5.1	The Component Types register.....	16
2.5.2	The Stock Types register	16
2.5.3	Advantages using Component and Stock Types	17
3	The File Menu	18
3.1	Open Register	18
3.1.1	Components.....	19
3.1.2	Stock Items	29
3.1.3	Job Descriptions	33
3.1.4	Addresses	36
3.1.5	Employees	38
3.1.6	Currency Rates	39

3.1.7	Functions	40
3.1.8	Rounds.....	41
3.1.9	Component Types.....	43
3.1.10	Stock Types	47
3.1.11	Image	49
	3.1.11.1 Sources.....	53
	3.1.11.2 References.....	53
3.1.12	General.....	54
	3.1.12.1 Templates.....	55
	3.1.12.2 Disciplines.....	56
	3.1.12.3 Counter Types.....	57
	3.1.12.4 Product Types	57
	3.1.12.5 Currency Codes.....	57
	3.1.12.6 Quality Codes.....	57
	3.1.12.7 Units.....	58
	3.1.12.8 Component Classes.....	58
	3.1.12.9 Stock Classes	58
	3.1.12.10 Job Classes.....	59
	3.1.12.11 Price Classes	59
	3.1.12.12 Function Criticality.....	59
	3.1.12.13 Q A Grades	59
	3.1.12.14 Stock Grades	60
	3.1.12.15 Transfer Reasons.....	60
	3.1.12.16 Project Categories.....	60
3.1.13	Maintenance.....	61
	3.1.13.1 Criteria	61
	3.1.13.2 Types.....	61
	3.1.13.3 Classes.....	62
	3.1.13.4 Causes	62
3.1.14	Purchase	63
	3.1.14.1 Order Priority	63
	3.1.14.2 Account Code.....	63
	3.1.14.3 Delivery Terms	64
	3.1.14.4 Payment Terms	64
	3.1.14.5 Delivery Locations.....	64
	3.1.14.6 Receipt Status.....	64
3.2	Open Hierarchy.....	65
3.2.1	Components.....	65
3.2.2	Functions	66
3.2.3	Locations	69
3.2.4	Component Types.....	70
3.2.5	Stock Types	70
3.3	Switch Department.....	71
3.4	Export / Import.....	71
3.4.1	Export.....	71
3.4.2	Import	75
3.4.3	Tasks	75
3.4.4	Task Server.....	76
3.4.5	Export Log.....	76

	3.4.6	Import Log	77
	3.4.7	Portal Log	77
3.5		Printer Set-up	78
3.6		Print	78
3.7		Exit	78
4		The Maintenance Menu	79
4.1		Work Orders	79
	4.1.1	The Work Orders Filter	80
	4.1.2	The Work Orders window	80
	4.1.3	Printing Work Orders.....	82
	4.1.4	The Work Orders Options menu	83
4.2		Work Planning	87
	4.2.1	The Standard Work Planning Interface	87
		4.2.1.1 The Work Planning Filter	87
		4.2.1.2 The Work Planning window	87
		4.2.1.3 The Work Planning Options menu	88
	4.2.2	The Enhanced Work Planning Interface.....	90
		4.2.2.1 The Enhanced Work Planning Filter.....	90
		4.2.2.2 The Enhanced Work Planning Window	91
		4.2.2.3 The Enhanced Work Planning Options Menu ..	94
	4.2.3	The various Work Order statuses	96
4.3		Projects	97
4.4		Report Work	100
	4.4.1	Different strategies for Reporting Work.....	100
	4.4.2	The Report Work window	101
	4.4.3	The tab cards in the Report Work window	101
	4.4.4	The Report Work Options menu	105
4.5		Requisition Work	106
	4.5.1	The Requisition Work window	106
4.6		Generate Work Orders	107
	4.6.1	Generating Work Orders	107
4.7		Counters	108
	4.7.1	Update	108
	4.7.2	Overview	109
	4.7.3	Counter Log.....	110
4.8		History	110
4.9		Log	111
	4.9.1	The Options menu for the Maintenance Log	112
	4.9.2	Sorting the Log	113
5		The Stock Menu	114
5.1		Wanted	114
5.2		In/Out of Stock	119
5.3		Control	120
5.4		Transactions	121
5.5		Transfer Documents	122

6	The Purchase Menu	127
6.1	Forms	127
6.1.1	The Forms Filter	127
6.1.2	The Forms Window	128
6.1.3	The Forms Options Menu	128
6.1.3.1	Details	129
6.1.3.2	Additional Info	129
6.1.3.3	Line Items	129
6.1.3.4	Quotations	132
6.1.3.5	Deliveries	135
6.1.3.6	Vouchers	137
6.1.3.7	Budget	138
6.1.3.8	Note To Vendor	138
6.1.3.9	Vendor's Note	138
6.1.3.10	Terms and Conditions	139
6.1.3.11	Change Approval	139
6.1.3.12	Receive	139
6.1.3.13	Convert	140
6.1.3.14	Estimate Cost	140
6.1.3.15	Copy	140
6.2	Transport Documents	141
6.2.1	The Transport Documents Filter	141
6.2.2	The Transport Documents Window	141
6.2.3	The Transport Documents Options Menu	142
6.2.3.1	Details	142
6.2.3.2	Additional Info	142
6.2.3.3	Consolidated Deliveries	142
6.2.3.4	Unconsolidated Deliveries	144
6.2.3.5	Recalculate Totals	145
6.3	Contracts	145
7	The Tools Menu	148
7.1	Budget	148
7.2	Account Transactions	153
7.3	Forecast	154
7.3.1	Stock Analysis	154
7.3.2	Workload Analysis	155
7.4	Reports	156
7.5	Select View	159
7.6	Hand Terminal Interface	159
7.7	Configuration	162
7.7.1	Users	162
7.7.2	Groups	164
7.7.3	Approval Limits	167
7.7.4	Parameters	167
7.7.4.1	The Parameters Interface	169
7.7.4.2	Auto-Numbering	170
7.7.4.3	Default Templates	172

7.7.4.4	Directories.....	172
7.7.4.5	Options.....	173
7.7.4.6	Sharing.....	189
7.7.4.7	Transaction Codes.....	190
7.7.4.8	User Defined Fields.....	191
7.7.5	Number Series.....	191
7.7.6	CBM References.....	193
7.7.7	Transaction Codes.....	193
7.7.8	Account Code Categories.....	194
7.7.9	Cost Centres.....	194
7.7.10	Stock Grade Categories.....	194
7.7.11	Depreciation Levels.....	194
7.7.12	Installations/Departments.....	195
7.7.13	e-Business Portals.....	195
7.7.14	e-Business Formats.....	196
7.7.15	Workflow.....	196
7.7.16	Printer Tasks.....	199
7.7.17	Extension Features.....	200
7.7.17.1	‘Reports’ Menu.....	200
7.7.17.2	‘Modules’ Menu.....	201
7.7.17.3	Access Modules.....	201
7.7.18	Update System License.....	202
7.8	Change Password.....	202
7.9	View PSR Reports.....	204
7.10	Options.....	205
7.10.1	The General tab.....	205
7.10.2	The Views tab.....	207
7.11	Delegate Mailbox Access.....	208
7.12	Mailbox Access Log.....	208
A	Layouts and Reports.....	209
A.1	Brief introduction to PowerBuilder and InfoMaker.....	209
A.1.1	Making and using layouts.....	209
A.1.2	Working with reports.....	210
A.1.3	Creating a database profile.....	210
A.1.4	Creating a new .Pbl file.....	211
A.2	Designing layouts.....	212
A.3	Making and tailoring reports.....	214
A.3.1	Creating a new report.....	214
A.3.2	Saving the report.....	216
A.4	The window to design the report or layout.....	217
A.4.1	Moving and aligning fields.....	217
A.4.2	Setting field properties.....	218
A.4.3	Setting date format masks.....	219
A.4.4	Inserting new objects.....	220
A.4.5	Previewing the report.....	221
A.4.6	Setting the tab order.....	221

A.5	Adding user defined reports	221
A.5.1	The Report Browser	221
A.5.2	Defining a new Module	224
A.5.3	Grant Access to a Report.....	224
A.5.4	Testing a New Report.....	225
B	Condition Based Maintenance	226
B.1	Overview	226
B.2	CBM Jobs.....	227
B.3	CBM References	228
B.4	Day-files	229
i	Index	230

1 Introduction

1.1 The AMOS Maintenance & Purchase application

AMOS M&P is a complex and powerful Windows program to handle maintenance, stock and purchasing functions in an organisation that may consist of multiple locations. It is a client/server application, where the client program is run on a Windows PC, and the server program may use one of several different database systems.

Note that the appearance of the screenshots in this manual may differ somewhat from those you can see on your screen. This is due to the fact that there are some optional modules that can be used with AMOS M&P. In addition to the optional modules, there are a significant number of 'user defined fields' that your organisation may have chosen to implement.

1.2 How to use this manual

This *Reference Manual* is written to contain all relevant technical information about AMOS M&P.

Most of the material is organised according to the menu structure of the application. For example, the **File** menu is presented in Chapter 3 and all the commands and sub-commands of this menu are presented in the same order they appear in the application itself. The subsequent chapters cover the other menus in AMOS M&P.

In addition, some other topics are covered elsewhere in the manual. For example, section 2.1 contains a description of the client/server set-up on which the AMOS M&P application is based. Other topics not related to one single menu command are covered elsewhere in Chapter 2, and in the appendices at the end of the reference manual.

In order to make it easier to find the desired information in the reference manual, a number of cross-references are included. These will refer to the number of the section in which a topic is covered.

The selected structure makes it easy to find out where in the manual a menu command is described. However, it may be more difficult to find information about a function for a user who does not know which command is used to activate the function. If this is the case, try to use the *Index* at the back of the manual in order to locate the function. Extra effort has been put into making the index as extensive as possible to facilitate finding the desired function in the reference manual.

1.3 Related documentation

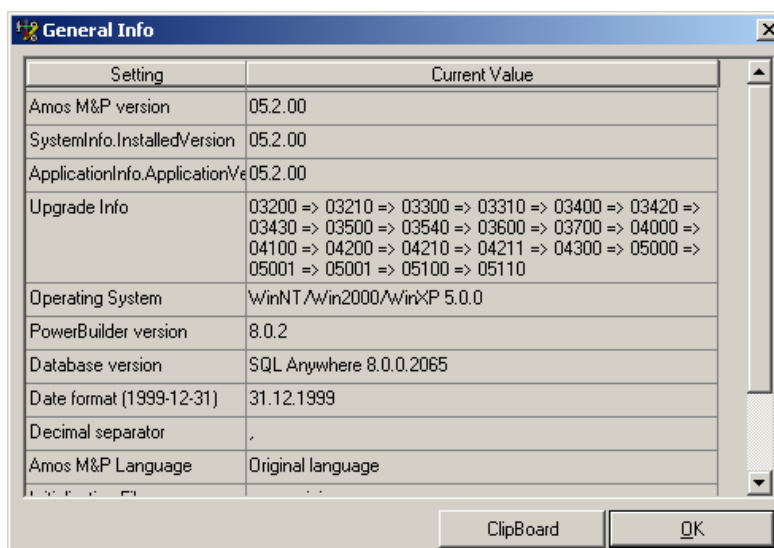
There are two other manuals written for AMOS M&P:

- *AMOS M&P Installation Guide* contains description of how the application is installed and upgraded. The installation guide covers the various database platforms for which AMOS M&P is available.
- *AMOS M&P User Guide* is written for end users, and is organised according to topics. It does not cover all the available functions and options in the program. In addition to the various AMOS M&P functions, the user guide also contains a chapter covering a general introduction to the Windows environment intended for users lacking such experience.

1.4 Troubleshooting

In the event that you are experiencing problems with AMOS M&P, and you wish to contact us either through GSS or by e-mail, it is important for us to know certain details of your system set-up. In the past it has occasionally taken several phone calls and some time to ascertain the exact installation details so we have made the process quicker and simpler.

If you press the keys CTRL+SHIFT+F8 together you will see a window similar to the following:



Click on the ClipBoard button to copy the contents of this window and then paste the contents into GSS or an e-mail.

Explain the problem you are having with the application and we will attempt to solve the problem as quickly as possible.

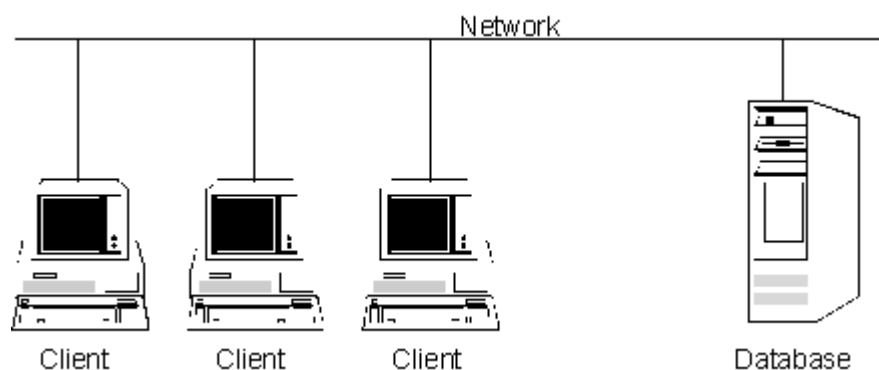
2 Principles and Tasks

2.1 The client / server model

AMOS M&P is a *client/server application*, and the data is stored in a database. This section provides a brief description of the client/server model on which the AMOS M&P application is based.

2.1.1 The hardware components

The illustration below shows a typical hardware set-up for an AMOS M&P installation:

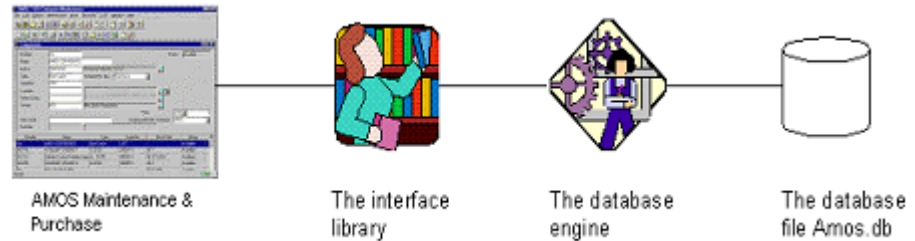


- Each AMOS M&P user runs the application on a client PC with Windows. The PCs are connected to and communicate with a database server through a network.
- This is not the only possibility. AMOS M&P may also be set up in a stand-alone configuration, where the database is located on the same PC as the AMOS M&P application.
- AMOS M&P may be used in organisation with multiple locations. Typically, a Local Area Network (LAN) is used to set up for each location to facilitate the communication on that location. There are also functions in AMOS M&P that make it possible to exchange data stored in databases on the various locations. Such data exchange typically takes place on a Wide Area Network (WAN). For example, this makes it possible to exchange data between a main office and the various locations in the organisation

2.1.2

The software components

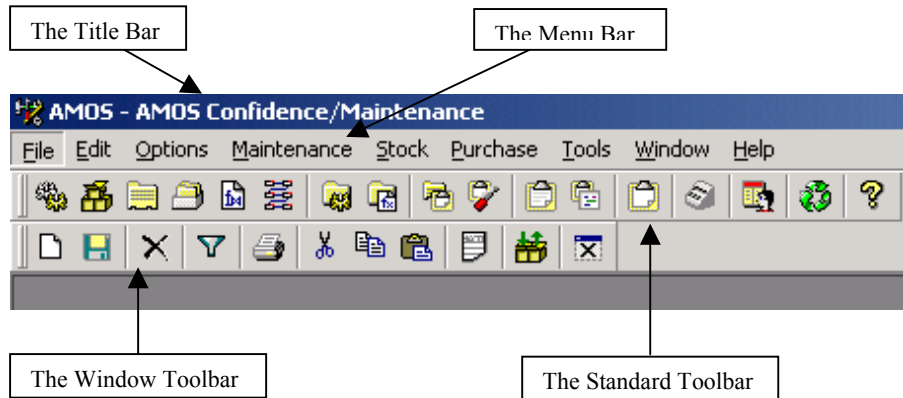
The next illustration shows some of the vital software components that are involved in an AMOS M&P installation:



- The client program AMOS M&P is installed on each PC where it is to be run.
- The type of interface library depends on which database management system is used at the installation. For example, for the Adaptive Server Anywhere database system, an ODBC (Open Database Connectivity) interface may be used.
- The database engine typically resides on the database server machine (or on a PC in a stand-alone configuration). During installation, it is necessary to set certain parameters that allow AMOS M&P to communicate with the database engine through the interface library.
- The Amos.db database file is created when the application is installed. It is the selected database engine that actually creates the database file according to its internal structural rules.
- When AMOS M&P is upgraded to a new version, the installation program automatically handles the updating of the database. Please note that the AMOS M&P application can only communicate with the database file through the interface library and the database file.

2.2 Navigating within AMOS M&P

AMOS M&P is designed to be as user friendly as possible. The user interface, in similarity to many commonly used applications, offers alternative navigation options to cater for most peoples preferences. The currently active window 'Title Bar' will contain information to keep you informed of where you are within the application. The display will normally look something like the following image:



2.2.1 Title Bars

When you first open AMOS M&P the window that appears will have a title bar, usually blue in colour. The title bar informs you which installation and department you are viewing information for. In the following example, the installation is 'AMOS Voyager' and the department is 'Maintenance'.



In addition to the main title bar, each window that is opened within the application has its own 'Window Title Bar'. These title bars always display the name of the open window and, depending on the information you are viewing, sometimes extra details of the individual item displayed within the window.



In the above example, the Window Title Bar shows that the open window is displaying the stock items menu option. Because the window is showing only information relevant to a particular stock item, the title also displays (in brackets) the stock item number and name.

2.2.2

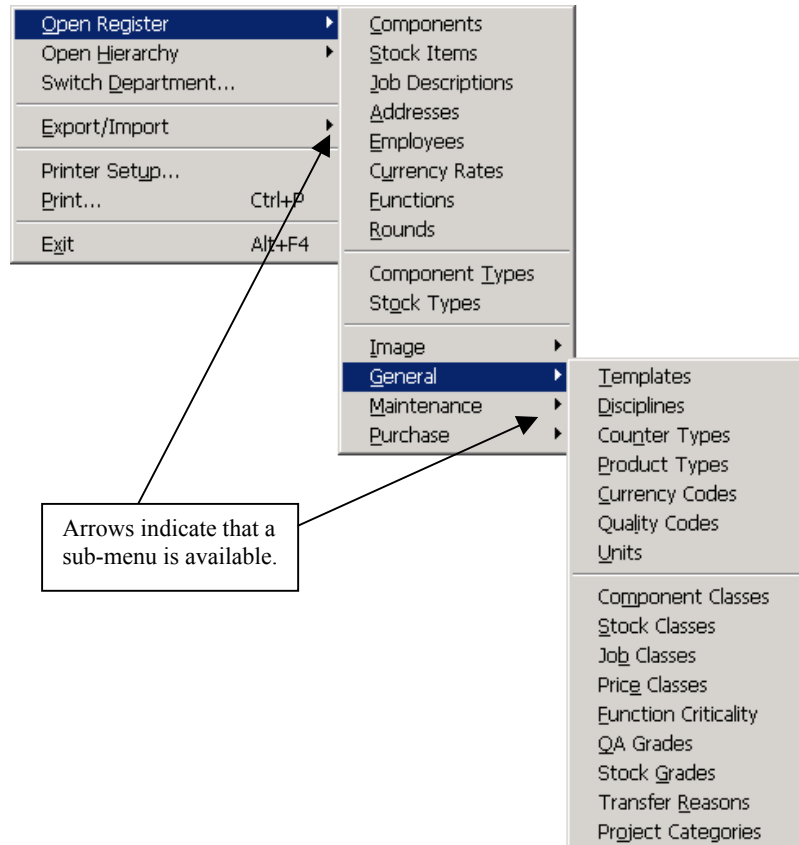
The Menu Bar

The main navigation area within AMOS M&P is the Menu Bar below.

File Maintenance Stock Purchase Tools Window Help

All of the commands and functions available within the application can be accessed through the Menu Bar.

If you click on any of the items on the Menu Bar, a list of available sub-menu items appears beneath that menu item. If any of the available menu items have an arrow to the right hand side, it means that there is a further sub-menu available, which is accessed by moving the mouse pointer over the menu line containing the arrow.



Most applications allow for the use of shortcut keys when selecting menu items, and AMOS M&P is no exception.

Each menu item has a single underlined letter within its name. If you want to select a top-level menu item such as the 'Stock' menu, you should press the 'Alt' key at the same time as the 'S' key (usually indicated by 'Alt+S').

Once a top-level menu has been opened, you only need to press the key corresponding to the underlined letter to move to the next menu item.

The above menu selection can be achieved with the following keystrokes:

Alt+F (followed by) O (followed by) G

Then, if you want to open the Price Classes window, you should press the 'E' key.

Note:

Once you open a data window, the Menu Bar changes to include the Edit and Options menu items illustrated below.

File Edit Options Maintenance Stock Purchase Tools Window Help

These menu options are explained further in section 2.4.

2.2.3


















The Standard Toolbar

AMOS M&P, in similarity to many common applications, makes extensive use of 'Toolbars' to make it easier for the user to navigate within the program. The toolbar shown below is the 'Standard Toolbar' and is usually placed directly beneath the 'Menu Bar' at the top of the application window.



As you move the mouse pointer over a button, it will appear as if it is raised up slightly and, if you have Toolbar tips activated (menu item Tools/Options), a small description of the button's function will appear.

The following buttons are normally available on the Standard Toolbar:

<u>Button</u>	<u>Description</u>	<u>Menu Hierarchy</u>
	Components	<u>F</u> ile/ <u>O</u> pen Register/ <u>C</u> omponents
	Stock Items	<u>F</u> ile/ <u>O</u> pen Register/ <u>S</u> tock Items
	Job Descriptions	<u>F</u> ile/ <u>O</u> pen Register/ <u>J</u> ob Descriptions
	Addresses	<u>F</u> ile/ <u>O</u> pen Register/ <u>A</u> ddresses
	Functions	<u>F</u> ile/ <u>O</u> pen Register/ <u>F</u> unctions
	Rounds	<u>F</u> ile/ <u>O</u> pen Register/ <u>R</u> ounds
	Component Hierarchy	<u>F</u> ile/ <u>O</u> pen <u>H</u> ierarchy/ <u>C</u> omponents
	Function Hierarchy	<u>F</u> ile/ <u>O</u> pen <u>H</u> ierarchy/ <u>F</u> unctions
	Generate Work Orders	<u>M</u> aintenance/ <u>G</u> enerate Work Orders...
	Report Work	<u>M</u> aintenance/ <u>R</u> eport Work...
	Work Orders	<u>M</u> aintenance/ <u>W</u> ork <u>O</u> rders
	Work Planning	<u>M</u> aintenance/ <u>W</u> ork <u>P</u> lanning
	Requisition Work	<u>M</u> aintenance/ <u>R</u> equisition <u>W</u> ork...
	Purchase Forms	<u>P</u> urchase/ <u>F</u> orms
	Reports	<u>T</u> ools/ <u>R</u> eports
	Switch Department	<u>F</u> ile/ <u>S</u> witch <u>D</u> epartment...
	Help	<u>H</u> elp/ <u>C</u> ontents (or F1 function key)

Note: The number of visible buttons may vary depending on how the application has been set-up and your access level within the system.

Further navigation options are available through the new style interface described in section 7.10 Tools/Options.

2.2.4

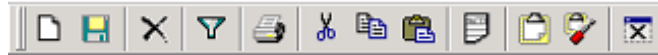
The Window Toolbar

When you open a window within AMOS M&P a second toolbar, called the 'Window Toolbar' usually becomes available.

This toolbar, unlike the 'Standard Toolbar', can be different for each window that you open (the buttons available are dependant on the functions related to the open window).













The Window Toolbar is normally found directly beneath the 'Standard Toolbar'.

The toolbar shown below is for the 'Components' window.
(File/Open Register/Components)



The functions represented on the Window Toolbar are a mixture of the more basic functions of the File and Edit menus combined with the most used functions within the Options menu.

These buttons behave in the same way as the ones on the Standard Toolbar with regard to the toolbar tips description appearing when you point to a button with the mouse. Below is a list of each button from the Window Toolbar shown above.

<u>Button</u>	<u>Description</u>	<u>Menu Hierarchy</u>
	New	<u>E</u> dit/ <u>N</u> ew Record
	Save	<u>E</u> dit/ <u>S</u> ave Changes
	Delete	<u>E</u> dit/ <u>D</u> elete Record
	Filter	<u>F</u> ile/ <u>F</u> ilter...
	Print	<u>F</u> ile/ <u>P</u> rint...
	Cut	<u>E</u> dit/ <u>C</u> ut
	Copy	<u>E</u> dit/ <u>C</u> opy
	Paste	<u>E</u> dit/ <u>P</u> aste
	Details	<u>O</u> ptions/ <u>D</u> etails
	Requisition Work	<u>O</u> ptions/ <u>R</u> equisition Work...
	Report Work	<u>O</u> ptions/ <u>R</u> eport <u>W</u> ork...
	Close	<u>F</u> ile/ <u>C</u> lose

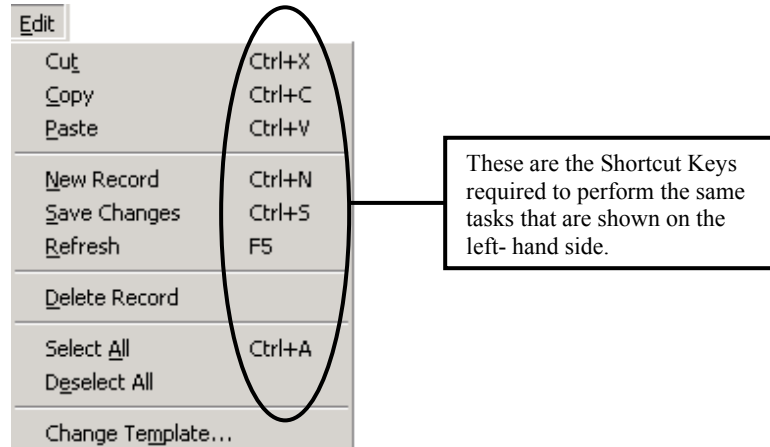
If you are viewing a window toolbar that contains different buttons to the ones shown above you should point to the button you are interested in with the mouse pointer and wait for the toolbar tip description to become visible.

Switching on toolbar tips and other navigation options are covered in section 7.10 Tools/Options

2.2.5

Shortcut Keys

Many of the most commonly used commands within AMOS M&P can be accessed by pressing a single key on the keyboard or a combination of key presses. These key combinations are called 'Shortcut Keys'.



Wherever you see key combinations to the right-hand side of menu options, as above, you can use them as an alternative. If the shortcut takes the form of 'Ctrl+?' or 'Alt+?' you should press the 'Control' or 'Alt' key and the key represented by the '?' at the same time.

<u>Shortcut Keys</u>	<u>Equivalent Action</u>
Ctrl+F4	Close (Current window)
Ctrl+F	Filter
Ctrl+P	Print
Alt+F4	Exit (Application)
Ctrl+X	Cut
Ctrl+C	Copy
Ctrl+V	Paste
Ctrl+N	New Record
Ctrl+S	Save Changes
F5	Refresh
Ctrl+A	Select All
F8	Receive
F6	Select View
F1	Help (contents)

Note: The availability of these Keyboard Shortcuts is dependent on the currently active window and how the application has been set up at your installation.

2.3 Filtering information

AMOS M&P makes extensive use of Filters throughout the application. Many of the menu commands open initially with a Filter window to enable you to restrict the amount of information you are presented with. These filter windows are recognisable because they all contain the following title in the top left hand side of the window.



If you are already viewing information in an open window and you want to restrict the information further, or you want to use the same window function to view information for a different stock or component item, you can click on the icon that looks like a small funnel, which is located on the window toolbar. This will open the filter window for the current menu item and you can enter new filter information.

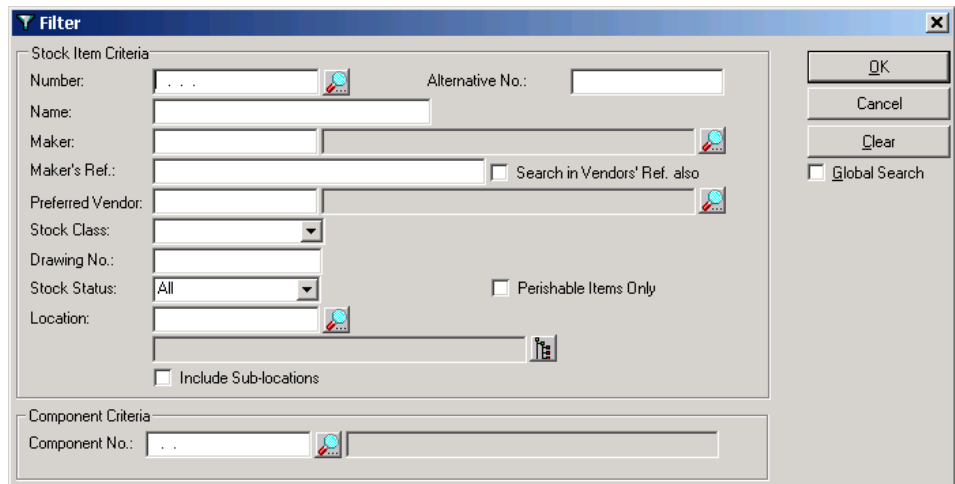
Note: The filter function can also be accessed by pressing the shortcut keys Ctrl+F.

2.3.1 What is a Filter?

A Filter allows you to tailor the data screens so that you don't have too much to scroll through when finding the entry you really need. This isn't too much of a problem in the beginning, when your database is relatively small, but as time goes on, and your database grows larger, it can be very time consuming to trawl through 500 records to get to the one you really want.

A Filter modifies the SQL statement sent by AMOS M&P to the database running behind the application.

Filters change their appearance according to the data you're requesting. Here's an example of a filter for the Stock Items function:

A screenshot of the "Filter" dialog box in the AMOS M&P application. The dialog has a title bar with a funnel icon and the word "Filter". It is divided into two main sections: "Stock Item Criteria" and "Component Criteria". The "Stock Item Criteria" section contains several input fields: "Number:" (with a search icon), "Alternative No.:", "Name:", "Maker:" (with a search icon), "Maker's Ref.:" (with a search icon and a checkbox "Search in Vendors' Ref. also"), "Preferred Vendor:" (with a search icon), "Stock Class:" (a dropdown menu), "Drawing No.:", "Stock Status:" (a dropdown menu with "All" selected and a checkbox "Perishable Items Only"), and "Location:" (with a search icon and a checkbox "Include Sub-locations"). The "Component Criteria" section contains a "Component No.:" field with a search icon. On the right side of the dialog, there are three buttons: "OK", "Cancel", and "Clear", along with a checkbox "Global Search".

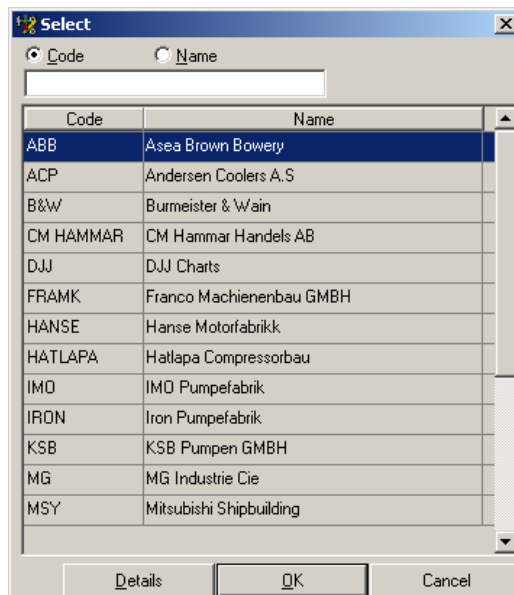
As you can see, there are many fields you can use to cut down the amount of information returned.

The fields in a filter can also be used in different combinations to produce a search that restricts the data returned to an extremely exact specification – useful when your database entries number in the thousands!

2.3.2 Look-up Filters

In addition to the filter windows mentioned in the previous section, you will often find small buttons that look like a magnifying glass at the right-hand side of certain fields. Clicking on one of these buttons will either take you to a second filter window and then to a 'look-up' filter or, occasionally, directly to a 'Look-up' filter. If you know the starting letter or number of the information you are searching for, you can enter it into the standard filter window before clicking on 'OK' in order to restrict the look-up filter by displaying only records beginning with the letter/number you have entered.

Look up filters enable you to quickly find the information you are searching for. The following window shows a typical example of a look-up window. It is possible to sort information and search using either the code or the name associated with the information you are viewing. You choose the type of information you want to select from by clicking in one of the two radio buttons and then type the first letters of the information you are searching for. As you type the letters, the highlight moves automatically to the first record starting with those letters. Once the highlight is on the record you want to use, click on OK.

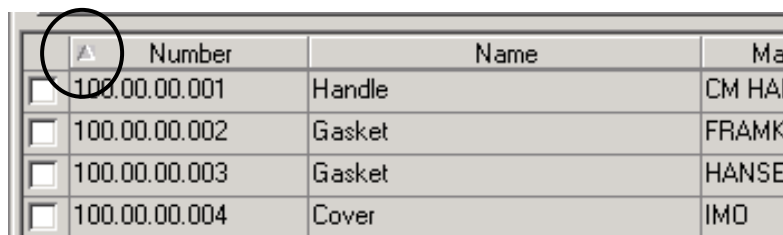


Certain of these filters may also have an additional 'Details' button which can be used to open a window containing read only information regarding the highlighted selection.

2.3.3 Column Sorting

Apart from using Filters, you can sort entries in data returned by a search by clicking on the column headers.

The columns that you see sortable and their sort state is indicated by an arrow icon in the column header. If there is no arrow then the column is unsorted.



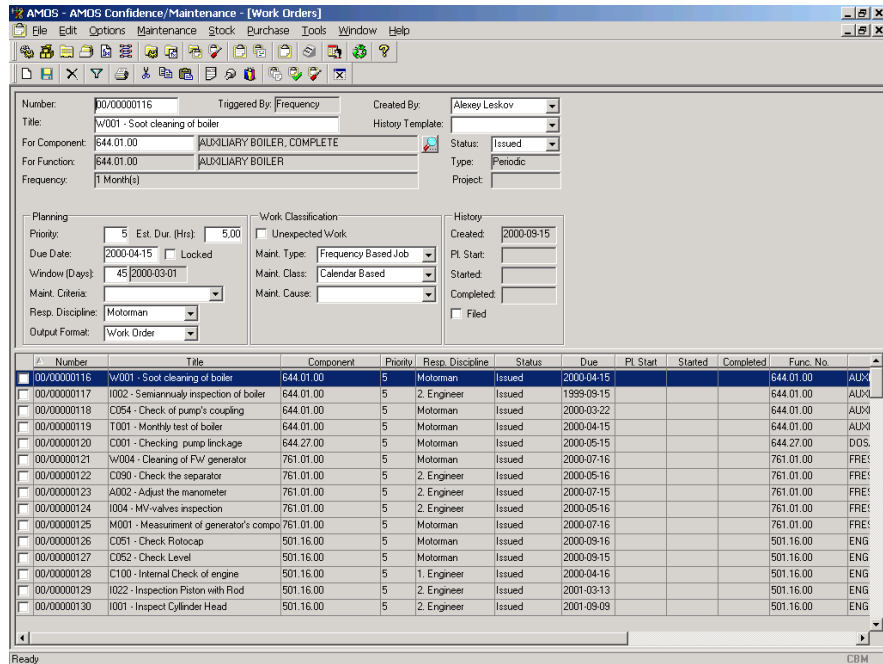
The screenshot shows a table with columns 'Number', 'Name', and 'Ma'. The 'Number' column header has a small upward-pointing arrow icon circled in red. The table contains four rows of data.

Number	Name	Ma
100.00.00.001	Handle	CM HAT
100.00.00.002	Gasket	FRAMK
100.00.00.003	Gasket	HANSE
100.00.00.004	Cover	IMO

2.3.4

Column Ordering

Many of the screen displays within AMOS M&P contain multiple columns. Sometimes these columns may not be visible at the same time and the information in the columns may be cropped, even when the window has been maximised (see below).



To make it easier for you to see the information that you really want, you can change column widths and the order in which the columns appear using 'drag and drop' techniques.

To alter the width of a column you should move the cursor to the vertical line at the side of the title of the column you wish to alter until the cursor changes to a bold vertical line with arrows on either side of it:

	Number	Name	Maker	M
<input type="checkbox"/>	651.01.01.011	Trust Flange for Fuel Inj	B&W	H 2
<input type="checkbox"/>	801.07.01.012	Trust Bearing	KSB	646

Once the above symbol is visible, you can left-click and drag it sideways until you have the desired column width and then release the mouse button:

	Number	Name	Maker	M
<input type="checkbox"/>	651.01.01.011	Trust Flange for Fuel Injection Valve	B&W	
<input type="checkbox"/>	801.07.01.012	Trust Bearing	KSB	

To move a column to a different position, left-click and hold on the title of the column that you wish to move (the column will become black in colour). Drag the mouse cursor to the new column position and then release the mouse button to drop the column in place.

	Number	Title	Component	Priority	Res
<input type="checkbox"/>	00/00000116	W001 - Soot cleaning of boiler	644.01.00	5	Mot
<input type="checkbox"/>	00/00000117	I002 - Semiannually inspection of boiler	644.01.00	5	2. E
<input type="checkbox"/>	00/00000118	C054 - Check of pump's coupling	644.01.00	5	Mot
<input type="checkbox"/>	00/00000119	T001 - Monthly test of boiler	644.01.00	5	Mot
<input type="checkbox"/>	00/00000120	C001 - Checking pump linkage	644.27.00	5	Mot
<input type="checkbox"/>	00/00000121	W004 - Cleaning of FW generator	761.01.00	5	Mot
<input type="checkbox"/>	00/00000122	C090 - Check the separator	761.01.00	5	2. E

The screen shots above and below show how the Number and Title columns have been switched. This facility allows you to re-organise the columns in any way you choose.

	Title	Number	Component	Priority	Re
<input type="checkbox"/>	W001 - Soot cleaning of boiler	00/00000116	644.01.00	5	Mot
<input type="checkbox"/>	I002 - Semiannually inspection of boiler	00/00000117	644.01.00	5	2. E
<input type="checkbox"/>	C054 - Check of pump's coupling	00/00000118	644.01.00	5	Mot
<input type="checkbox"/>	T001 - Monthly test of boiler	00/00000119	644.01.00	5	Mot
<input type="checkbox"/>	C001 - Checking pump linkage	00/00000120	644.27.00	5	Mot
<input type="checkbox"/>	W004 - Cleaning of FW generator	00/00000121	761.01.00	5	Mot
<input type="checkbox"/>	C090 - Check the separator	00/00000122	761.01.00	5	2. E

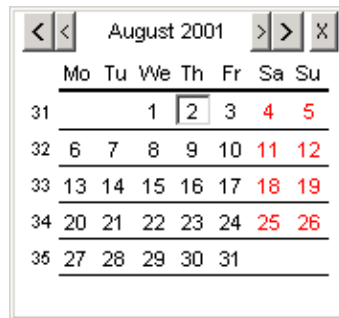
This technique does not permanently change the column order within AMOS M&P. If you close and then re-open the window, the column order will revert to the default setting. If you re-apply a filter without closing the window, the column order will remain as you altered it.

If you want to have a more permanent re-ordering of the columns in a window you can save the window as a 'View' which you can select again and again through the 'Select View' function described in section 7.5.

2.3.5 Calendar facility

AMOS M&P contains a Calendar Facility that can be used to select dates within data entry windows and filter windows alike.

Double-clicking or pressing F2 in any date field brings up a calendar, from which you can choose the date to be inserted in that field.



In addition to the arrow buttons, the following commands are available:

- Ctrl-Left (Right) Arrow - Previous (Next) Year
- Shift-Left (Right) Arrow - Previous (Next) Month
- Up (Down) Arrow - Previous (Next) Week
- Left (Right) Arrow - Previous (Next) Day
- Enter - Accept selected date
- Alt-F4 - Close calendar

If you prefer to type the dates in manually, you can do so by typing two digits each for the day, month and year separated with a space (see below).



When you enter the date information in this way, the date field will automatically adjust to the default view when you press enter or move to another field.

Note: The format of the date within AMOS M&P is controlled by the default settings within your operating system. On a 'Windows' based machine, open the Regional Settings function within Control Panel.

2.4 The Edit and Options menus

When you have opened a data window within the AMOS M&P application the Menu Bar will extend to show the Edit and Options Menus.



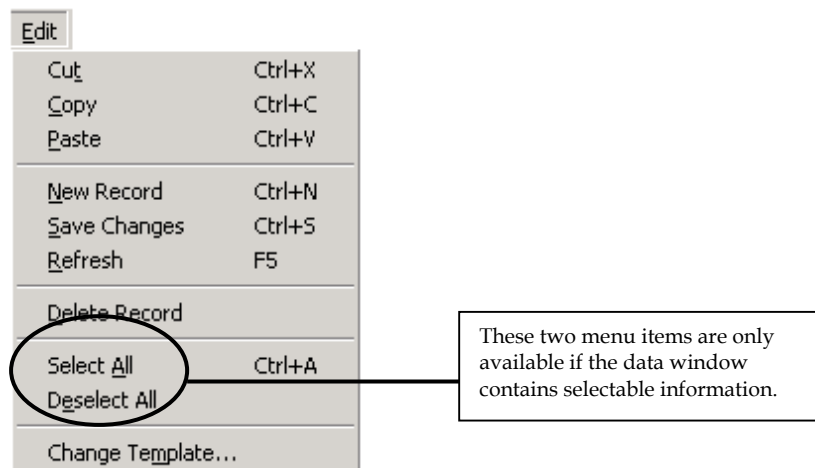
These menus change depending on the currently active window.

Note: A combination of these two menus also appears if you right click the mouse whilst you are viewing an open window.

2.4.1 The Edit menu

The Edit Menu (shown below) contains the basic information manipulation tools for all AMOS M&P data windows, providing that there is editable information within the window.

When there is a column at the left hand side of the data window that allows for tagging of one or more records, the Edit menu will be the same as below.



If there is no facility to tag records, the Select All and Deselect All menu options will not be visible.

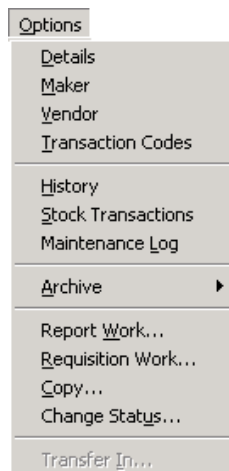
Cut	Removes the highlighted text and places it on the clipboard.
Copy	Places a copy of the highlighted text on the clipboard.
Paste	Places the contents of the clipboard at the cursor position.
New Record	Creates a new, blank, record.
Save Changes	Saves any changes made to information.
Refresh	Updates the current window with recent information.
Delete Record	Deletes the currently highlighted record.
Select All	Tags all records in the current window.
Deselect All	Un-tags all records in the current window.
Change Template...	Changes the template to be used for details screens.

Note: Changing a template may make it impossible to read existing information that has already been entered using a different template or without a template altogether.

2.4.2

The Options menu

The Options menu is specific to the currently active window within AMOS M&P. An example of a typical Options menu is shown below.



This is the Options menu associated with the Components window (File/Open Register/Components). Remember that the functions on this menu can also be accessed by right clicking the mouse.

Because the Options menu is different for almost every active window, you will find detailed descriptions of each menu option explained thoroughly in the relative chapters.

2.5 Using Component & Stock Types

AMOS M&P version 3.0 introduced optional functionality in the form of the two registers Component Types and Stock Types. This section describes some of the general aspects of using these functions and the advantages they offer, particularly in larger organisations. The general principles behind component types and stock types are quite similar, and they are therefore described together in this section. You also find references to the specific sections in Chapter 3, which describe the relevant registers.

- This functionality is particularly useful in an organisation where the same component and/or stock types are used on multiple locations. For example, a specific type of pump may be in use at many locations. Traditionally, information about a new pump had to be entered in the Components register each time a new pump of this type was introduced. This meant more registration work, and increased the possibility of incorrect registration.
- If the Component Types register is used instead, the fixed information for the pump, such as the name of the Maker and the Type, is registered once only. When a new pump of this type is introduced at one of the installations, this information is inherited from the central Component Types register. A field such as Serial Number is unique for each individual pump, and is therefore registered at the given installation.
- The functionality described in this section is optional, controlled by the two parameters Use Component Types and Use Stock Types. If these parameters are set to the default FALSE value, AMOS M&P will behave as it did prior to version 3.0. This means that all component information must be entered in the Components register at the individual location, and similarly for the Stock Items register. The two parameters mentioned above are described in section 7.7.4.
- If the organisation elects to use the types functionality, the Component Types and Stock Types registers are typically updated at the main location only, and information is then exported to the various installations. Export and import functions are described in section 3.4 of this reference manual.

2.5.1

The Component Types register

The Component Types register is described in section 3.1.9 of this reference manual. Below is a screen picture from the Components register when the Use Component Types parameter has been set to TRUE. Notice that the three fields Name, Maker and Type are grey and unavailable in this register, since the information is inherited from the central Component Types register. The picture below may be compared to the one in section 3.1.1, which shows the same register when the Use Component Types parameter is set to FALSE.

The screenshot shows the 'Components' window with the following fields and values:

- Number: 601.01.00
- Type Number: 601.01.00
- Status: In Use
- Name: MAIN ENGINE 1 (greyed out)
- Maker: B&W (greyed out)
- Type: HG-8 (greyed out)
- Serial No.: 65875
- Location: Engine Room
- Parent Comp.: 601.00.00
- Vendor: B&W
- Component Class: Engine
- Unplanned Maint. Template: (dropdown)
- Warranty End: (dropdown)
- Purchased Date: 05.09.1995
- Price: USD 586000.00
- Deprec. time (Months): 0

Number	Name	Type	Serial No.	Status	Func. No.	Func. Description
601.01.00	MAIN ENGINE 1	HG-8	65875	In Use	601.01.00	MAIN ENGINE 01
601.02.01	ME 1, CYLINDER COVER 1	AG2	129	In Use	601.02.01	CYL. COVER 01 FOR ME
601.02.02	ME 1, CYLINDER COVER 2	AG2	128	In Use	601.02.02	CYL. COVER 02 FOR ME
601.02.03	ME 1, CYLINDER COVER 3	AG2	127	In Use	601.02.03	CYL. COVER 03 FOR ME
601.04.01	ME 1, PISTON 1	AR 2	559	In Use	601.04.01	PISTON 01 FOR ME 01
601.04.02	ME 1, PISTON 2	AR 1	561	In Use	601.04.02	PISTON 02 FOR ME 01
601.04.03	ME 1, PISTON 3	AR 1	560	In Use	601.04.03	PISTON 03 FOR ME 01
601.53.00	ME 1, TURBOCHARGER	NQ-12	75987	In Use	601.53.00	TURBOCHARGER FOR

- The field Type Number at the top of the window is used to select which type the component belongs to. Also note that the Serial number is unique for each component, and thus available for registration in the Components window.
- When a new Component Type is registered, it may include a set of maintenance jobs. These jobs typically contain job descriptions and information about intervals that together make up a template for the suggested maintenance programme for the component type.
- You find the defined jobs connected to the selected component type on the Jobs tab card. As you see from the screen picture above, there are also tab cards for Parts, Counters and Images connected to the selected component.
- At an installation, it is possible to register a new component with or without the defined jobs. The next two bullet points describe how.
- To register a new component without inheriting any of the pre-defined jobs, enter the Components register and select New Record from the Edit menu. This approach may be used when the installation wants to have complete control over which jobs are to be defined for the new component.
- If the pre-defined jobs are to be added to the jobs at the location when a new component is introduced, enter the Component Types register and select Register as Component from the Options menu. Any defined jobs connected to the selected Component Types are then included in the maintenance programme for the location

2.5.2

The Stock Types register

As pointed out above, the Stock Types register works according to the same principles as the Component Types register.

- The Stock Types register is described in section 3.1.10 of this reference manual.

2.5.3

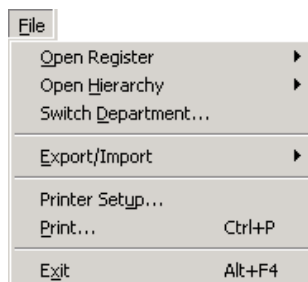
Advantages using Component and Stock Types

There are several advantages in using the functionality described above:

- It is much easier to carry out analyses across all the installations in the organisation. For example, when the Component Types function is used, it is possible to select the **Components for this Type** command from the **Options** menu to get an overview of how many components of the selected type are in use in the entire organisation. This makes it much easier to ensure that the stock level is correct, and the information is useful in obtaining good quotation prices when re-ordering stock.
- Another major advantage is the reduction in the need for registering the same information several times. This saves time, and makes it easier avoid misregistration of data. If an error has been made, it is sufficient to correct it once.

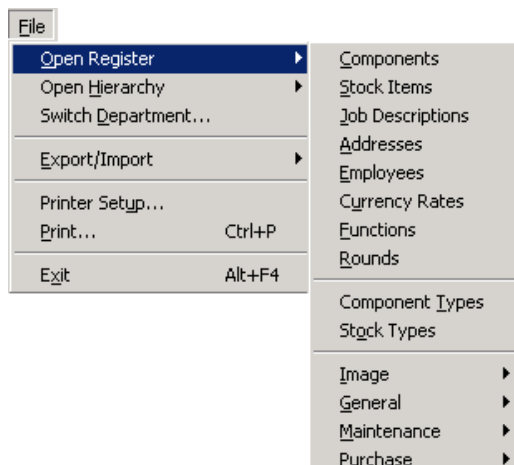
3 The File Menu

This chapter covers the commands in the **File** menu:



3.1 Open Register

AMOS M&P stores entered information in a number of registers. The **Open Register** command in the **File** menu gives access to the registers:



- A filter window is presented once an Open Register sub-command is selected. In the following sections, a screen picture and a description of each filter window is included.
- Once the Filter has been filled in, the window of the selected register appears on the screen. In addition, the Options menu appears in the main menu bar. The contents of this menu vary from register to register. In the following section, a screen picture and a description of the Options menu is included for each register.
- The Edit menu is also added to the main menu bar when a registered window has been opened. The menu normally contains the commands shown in the screen picture below. They are used to cut, paste and copy information, and to create, delete and save records in the selected register.

Edit	
Cu <u>t</u>	Ctrl+X
<u>C</u> opy	Ctrl+C
P <u>a</u> ste	Ctrl+V
<u>N</u> ew Record	Ctrl+N
<u>S</u> ave Changes	Ctrl+S
<u>R</u> efresh	F5
<u>D</u> elete Record	
Change <u>T</u> emplate...	

- Access control is used to determine which user groups have access to each individual register. Access control is described in section 7.7.2 of this Reference Manual.

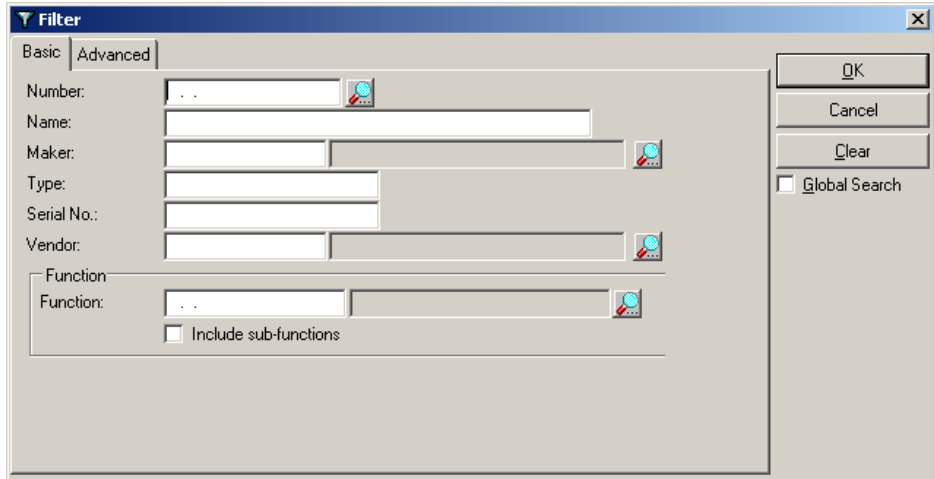
3.1.1 Components

The maintenance information in AMOS M&P is organised according to the physical installation: the ship, assembly line or plant. The installation is described by its components. A component is any physical unit on which a maintenance task is performed.

A component may be made up of other smaller components. At the lowest level components have parts. A part is the smallest physical unit that is normally replaced at one time.

The **Components** command from the **Open Register** sub-menu opens the filter window for components. There is a corresponding toolbar button.

The Components filter



- The filter dialog box contains the two tab cards, Basic and Advanced. On the Advanced tab card it is possible to filter components by Warranty Period, location and/or Component Type.
- The Only Component Classes area on the Advanced tab card contains a list of the classes of components that are defined. It is possible to select multiple classes by holding the shift button down while clicking the desired classes. Section 3.1.12.8 describes the Component Classes register.

The Components window

Number	Name	Type	Serial No.	Status	Func. No.	Func. Description
601.01.00	MAIN ENGINE 1	HG-8	65875	In Use	601.01.00	MAIN ENGINE 01
601.02.01	ME 1, CYLINDER COVER 1	AG2	129	In Use	601.02.01	CYL. COVER 01 FOR ME
601.02.02	ME 1, CYLINDER COVER 2	AG2	128	In Use	601.02.02	CYL. COVER 02 FOR ME
601.02.03	ME 1, CYLINDER COVER 3	AG2	127	In Use	601.02.03	CYL. COVER 03 FOR ME
601.04.01	ME 1, PISTON 1	AR 2	559	In Use	601.04.01	PISTON 01 FOR ME 01
601.04.02	ME 1, PISTON 2	AR 1	561	In Use	601.04.02	PISTON 02 FOR ME 01
601.04.03	ME 1, PISTON 3	AR 1	560	In Use	601.04.03	PISTON 03 FOR ME 01
601.53.00	ME 1, TURBOCHARGER	NQ-12	75987	In Use	601.53.00	TURBOCHARGER FOR
601.55.00				Available		

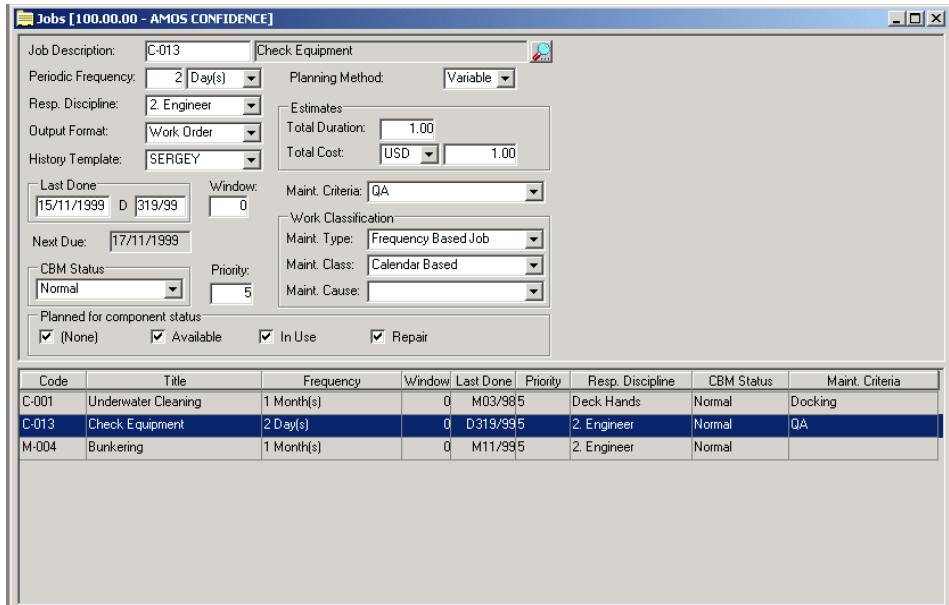
- The screen picture above shows the Components window with the Component Types function turned off. This function is described in section 2.5. By default, the General tab card is selected.
- There are two buttons next to the Location field. If the Search button is clicked, a selection list of the defined locations is presented, while a click on the Hierarchy button brings up the Locations window. This window is described in section 3.2.3.
- If the Component Types function is used, several fields in the window cannot be edited in the Components window, and they appear with a grey background. The Component Types register is described in section 3.1.9.
- The Purchased area on the right hand side of the General tab card contains controls that may be used to specify when the component was purchased, the price paid and the depreciation period.

The Jobs tab card

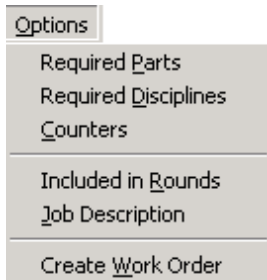
The Jobs tab card gives access to the window to connect maintenance jobs to the selected component.

Code	Title	Frequency	Last Done	Priority	Resp. Discipline	CBM Status	Maint. C
C-022	Every month check	1 Month(s)	M03/005	2	Engineer	Normal	QA
C-023	Every three month check	3 Month(s)	M03/995	2	Engineer	Normal	QA
C-024	Every year check	12 Month(s)	M03/995	2	Engineer	Normal	QA
L-002	Every three month lubrication	3 Month(s)	M03/005		Motorman	Normal	QA
M-003	Megger test Electric Motor	12 Month(s)	M03/005	2	Engineer	Normal	QA
T-005	Quarterly electric test	3 Month(s)	M01/005	2	Engineer	Normal	QA

- Chapter 3 of the AMOS M&P User Guide describes the most important aspects of how to define, plan, report on and follow up maintenance jobs with AMOS M&P.
- Click the View button to get the window which displays the information for each individual job or the Details button to view the job description details screen.



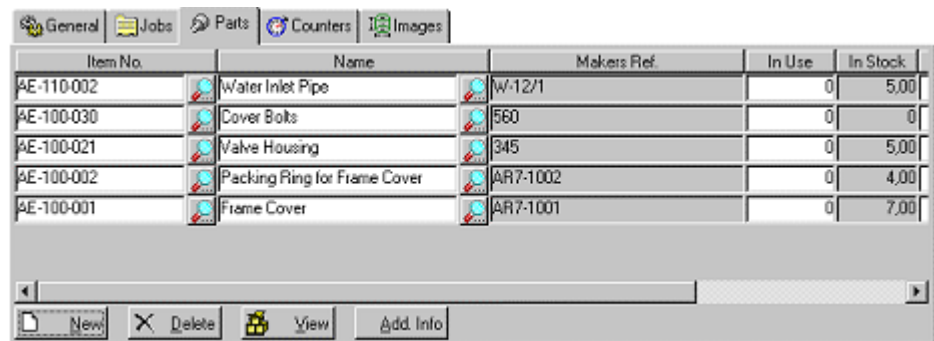
- Once the Jobs window has been opened, the Options menu is updated to include the commands that may be used while defining a job:



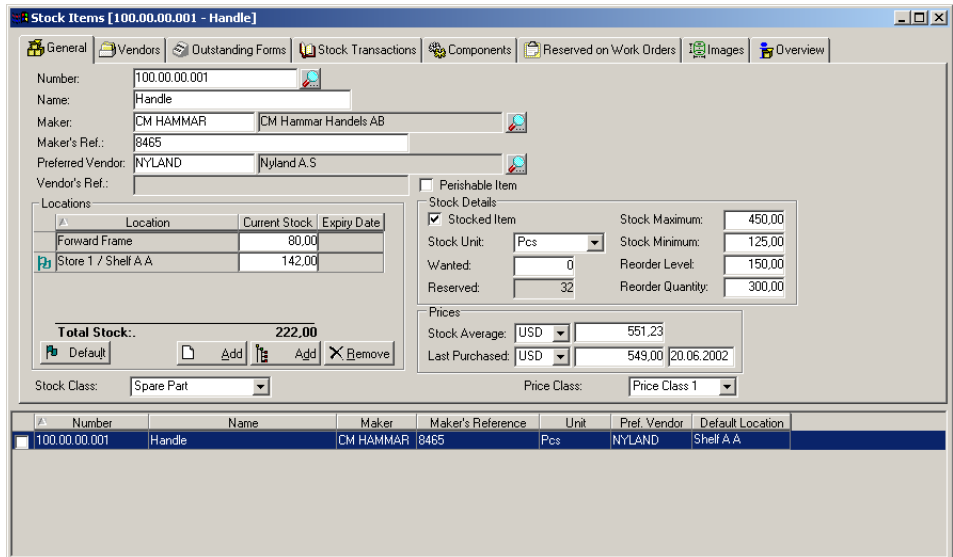
- The first three commands in the Options menu for the Jobs window are used to specify parts and disciplines required for the job, and to set any relevant counters. There are corresponding toolbar buttons that may be used to enter the respective windows.
- Several related jobs can be included in the same Round. The Rounds register is covered in section 3.1.8. A job also has a Job Description, and this register is described in section 3.1.3.

The Parts tab card

The Parts tab card gives access to the window used to specify parts connected to the selected component.

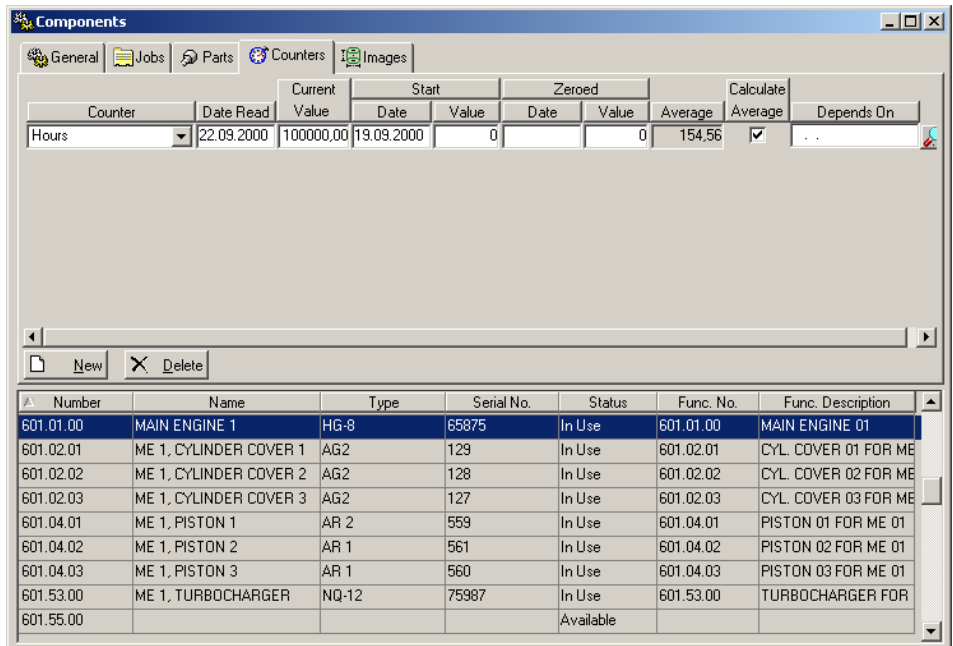


- Click the View button to get the window that displays the stock item window for the selected part. The Stock Items register is described in section 3.1.2.



The Counters tab card

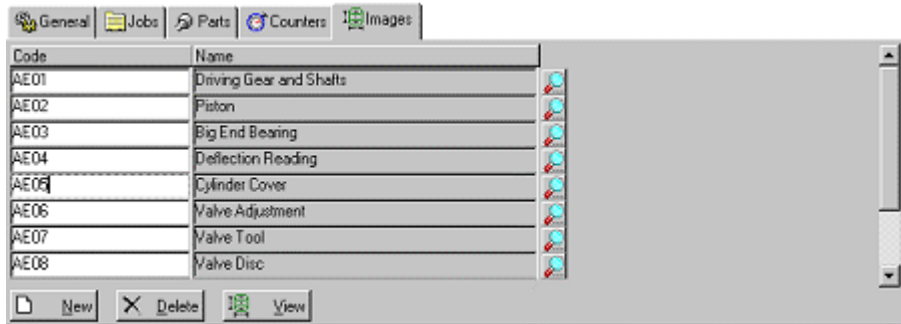
The Counters tab card shows the counters that have been defined for the selected component.



- The Counter drop-down list to the left on the tab card displays the values that have been defined in the Counter Types register. This register is described in section 3.1.12.3.
- In order to have AMOS M&P calculate average values for a counter, the Calculate Average field must be checked.
- The value of a counter may be inherited from a specified component. To select the component on which the counter is dependent, click the Search button next to the rightmost field on the tab card. This gives access to the window where the component may be selected:

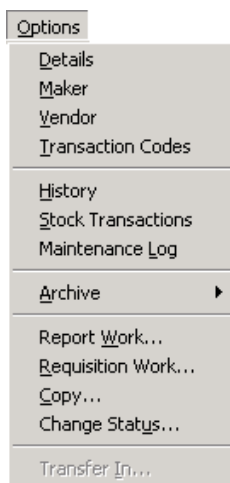
The Images tab card

AMOS M&P makes it possible to connect images to a component. For example, these may be scanned images from the component documentation or video films explaining maintenance details. The Images tab card shows the images connected to the component. There is a corresponding toolbar button.



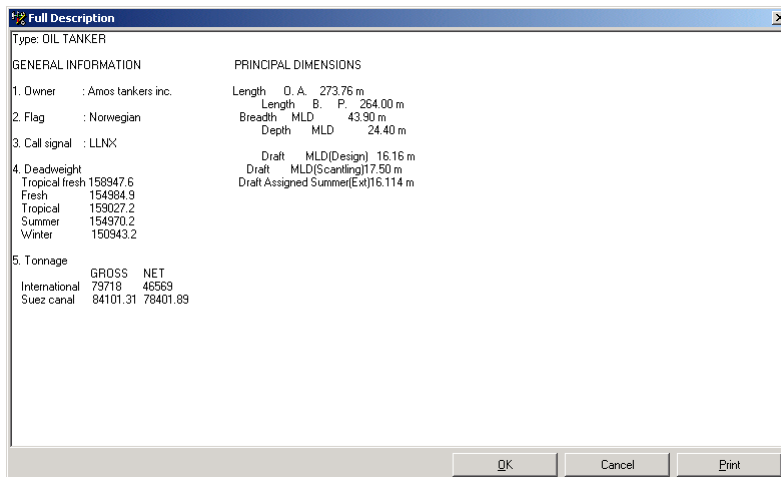
- Section 3.1.11 contains a description of the image functionality available in AMOS M&P.
- The image may be previewed by selecting the image and clicking the View button.

The Options menu for Components

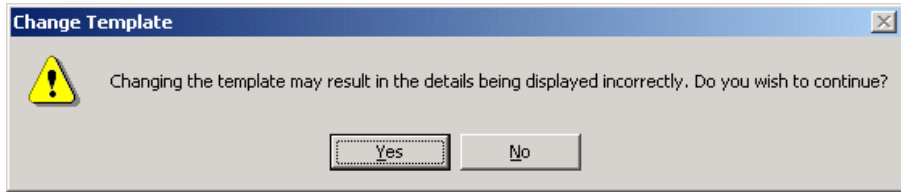


Details

The command **Details** from the **Options** menu gives access to the window called Full Description. The Details toolbar button may also be used to access the window.

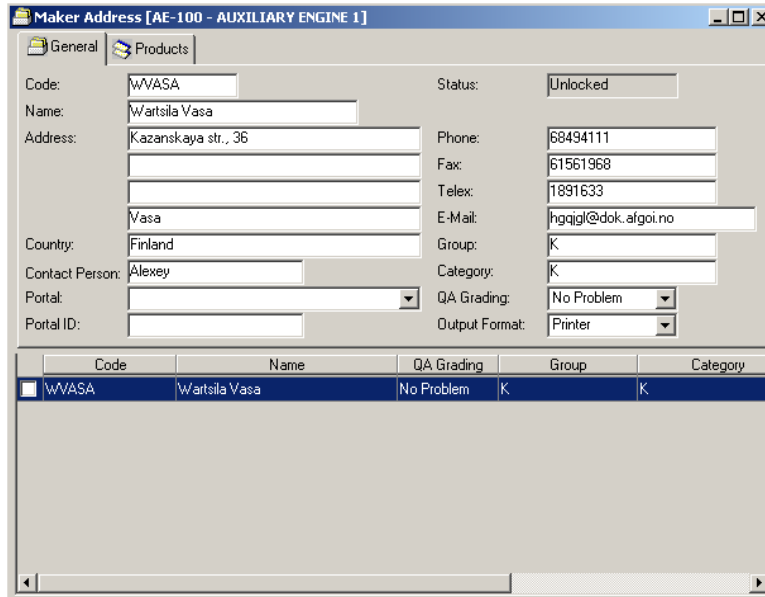


- The Full Description window may be used for a textual description of the component. If a Template is used, the user may be presented for a tailored layout containing fields and formatting.
- If the **Change Template** command is selected from the **Edit** menu, AMOS M&P presents a warning message to alert the user that a change of template may cause problems for data stored with the help of the existing template:



Maker

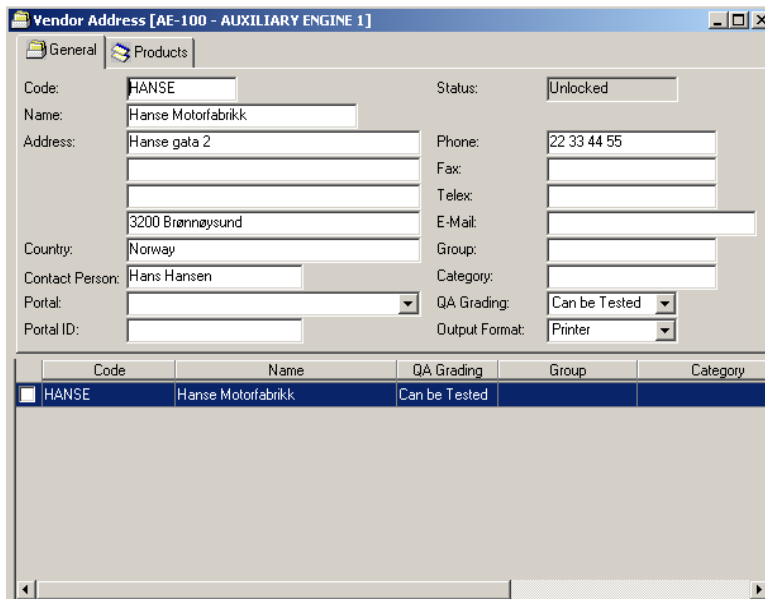
The **Maker** command from the **Options** menu in the Components window gives access to the Maker Address window. This window is used to specify address and other relevant information of the maker of the component.



- If the Search button next to the Maker field is clicked, a filter is presented for the Select list of addresses from the Address register.

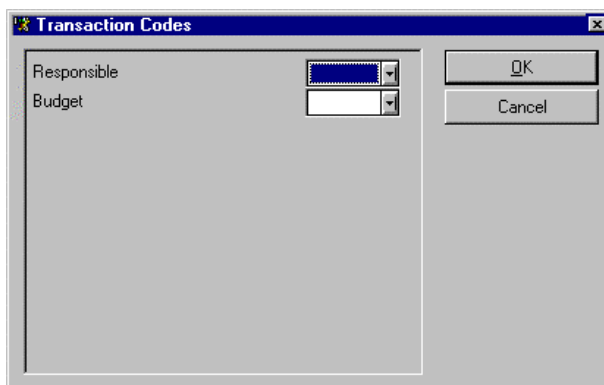
Vendor

The **Vendor** command from the **Options** menu in the Components window gives access to the Vendor Address window. The General tab window is used to specify address and other relevant information about the vendor of the component. The Products tab window is used to display the various products that can be supplied by the vendor.



Transaction Codes

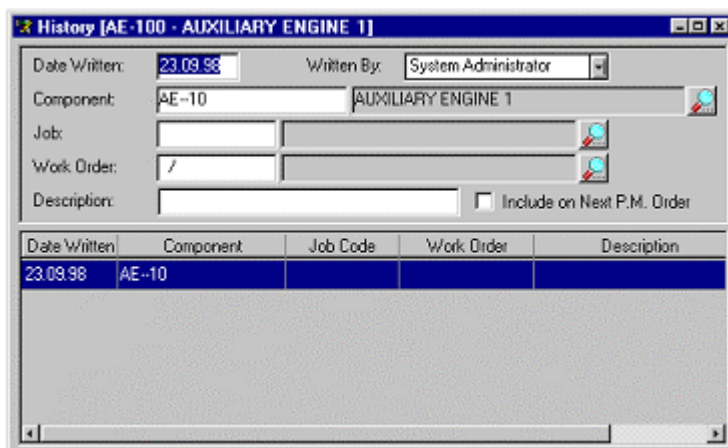
The Transaction Codes parameters may be used to connect expenses to a specific budget dimension, like Responsible or Project. The **Transaction Codes** command from the **Options** menu of the Component window gives access to this window:



- Section 7.7.7 describes the screen to define transaction codes.

History

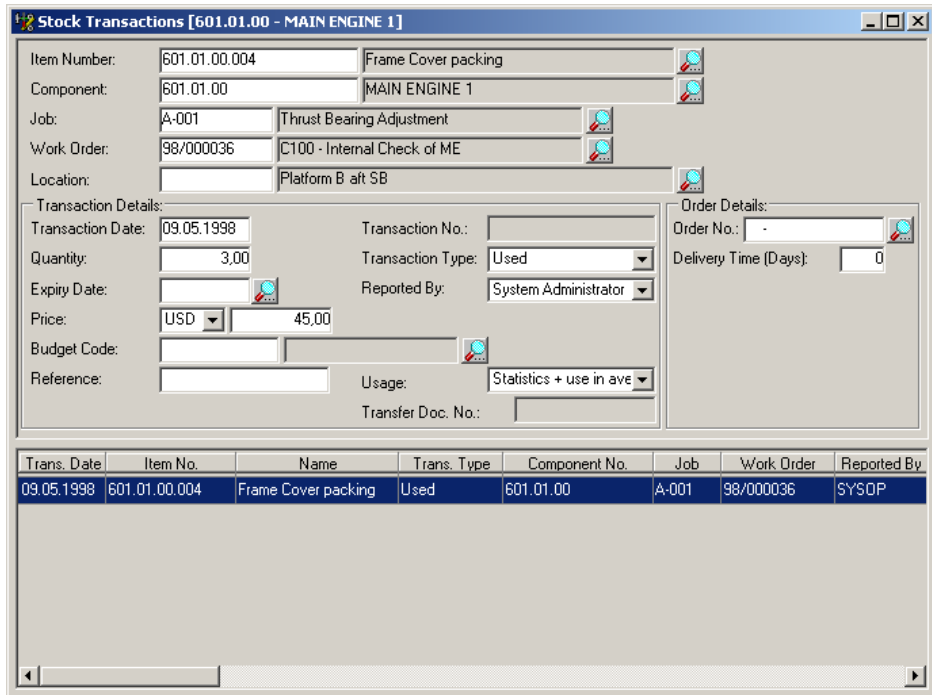
When work is reported in AMOS M&P, the window used for this purpose contains a History tab card. The **History** command from the **Options** menu in the Components window gives access to the History window.



- The window may also be used to add history information for the selected component. The Date Written field will show the current date, and the Written By list will show the name of the user currently logged on. To add a description, select the correct Job and click the Save toolbar button. Then select **Details** from the **Options** menu of the History window to enter the Full Description window.

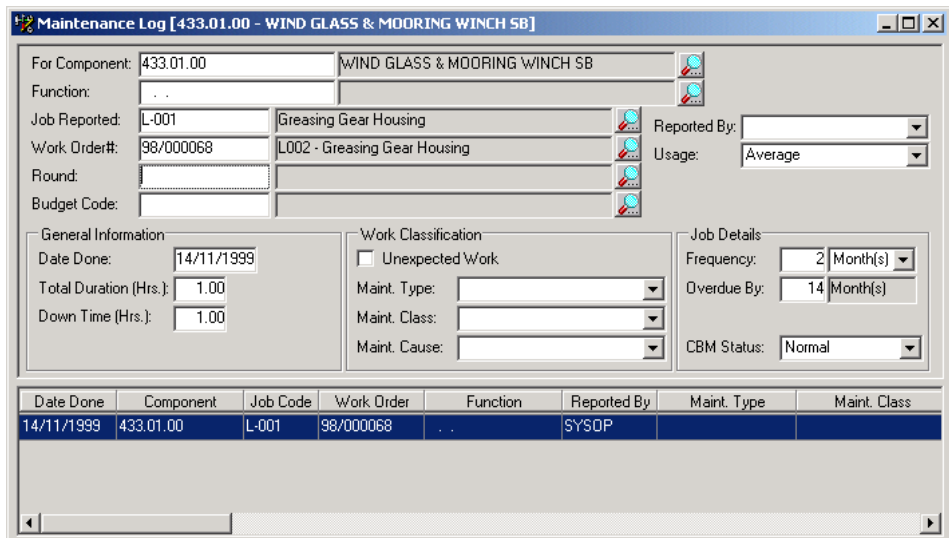
Stock Transactions

AMOS M&P contains functions that allow the organisation to keep track of the items in stock, and purchasing functions. These are described in Chapters 4 and 5 of the *AMOS M&P User Guide*. The command **Stock Transactions** from the **Options** menu of the Component window gives access to the stock transactions connected to the selected component.

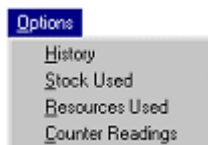


Maintenance Log

When work is reported, AMOS M&P stores the information in the maintenance log. The **Maintenance Log** command from the **Options** menu for the Components window gives access to the Maintenance Log window.

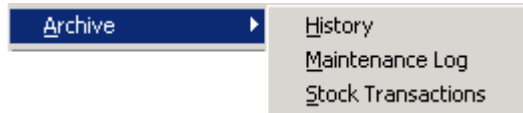


- When one of the records in the Maintenance Log is selected, the **Options** menu contains the following commands that may be used to access the various windows of the selected record:



Archive

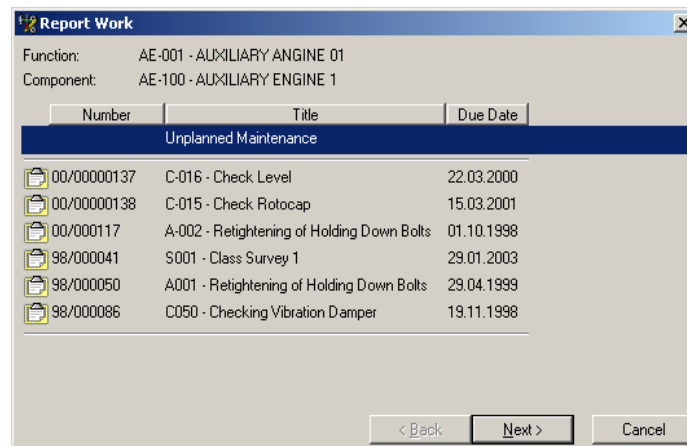
The Archive command from the **Options** menu leads to a sub-menu containing the three different kinds of archive information that may be available if you have a component that has been transferred in from another department. Note that the parameter 'Create Component Archive On Transfer In' must be set to true.



The three 'Archive' windows are similar to the corresponding windows in the main section of the **Options** menu but contain historical data from departments who have previously 'owned' the particular component. Because of this, the windows are 'Read Only' and also show which department created each record.

Report Work

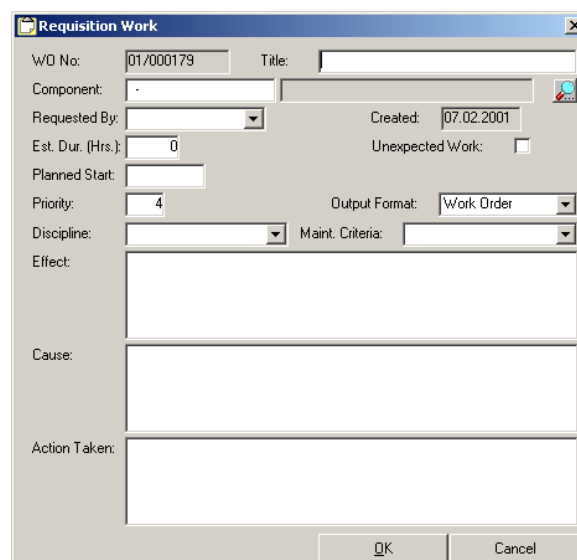
Work may be reported on a work order defined for the selected component. The **Report Work** command from the **Options** menu gives access to the following window. There is a corresponding toolbar button.



- Section 3.3 in the *AMOS M&P User Guide* explains the Report Work window.
- If there are no defined work orders listed in the Report Work window, AMOS M&P assumes that the work to be reported is Unplanned.

Requisition Work

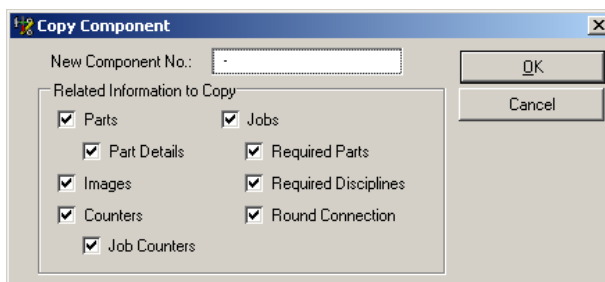
When work needs to be carried out on a specific component unexpectedly, the Requisition Work is used to record the work. The **Requisition Work** command from the **Options** menu of the **Components** window gives access to the window to be used. There is a corresponding toolbar button.



- Section 3.2.4 in the *AMOS M&P User Guide* explains the use of the Requisition Work window.

Copy

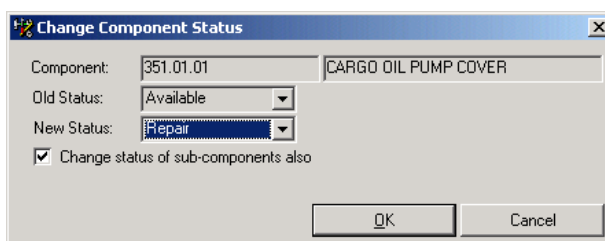
It is possible to copy information connected to a component when a new component is created. The command **Copy** from the **Options** menu for the Components window gives access to the Copy Component window.



- The field New Component No. is used to specify the number of the new component. The checked boxes in the window determine which types of information are copied to the new component. When the OK button is clicked, the new component is inserted in the list of the Components window. The information may be edited with the various commands described previously in this section.

Change Status

The parameter Default Status of New Components is used to determine the status of new components introduced in the system. It is possible to change the status of a selected component with the command **Change Status** from the **Options** menu for the Components window.



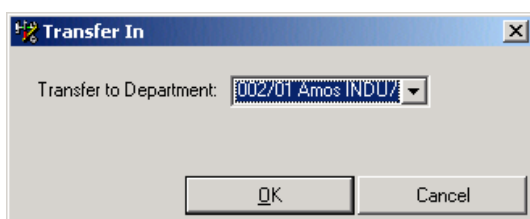
- It is possible to check the box 'Change status of sub-components also' to have this done automatically when the status of the 'parent' component is changed.
- If you have a component that you want to transfer out to another department, you simply select transferred from the New Status drop down window. The 'Office' installation can then transfer the component to its destination department.

Note: Changing the component status to Transferred or Scrapped will cause AMOS M&P to cancel all outstanding work orders, including round work orders, unless reported as started.

The parameter Default Status of New Components is described in section 7.7.4.1. of this reference manual.

Transfer In

Once a donating department has set a components status to transferred, the component (and sub-components if originally selected for inclusion) will become available for transfer in the Office. Select the component to transfer and choose 'Transfer In' from the Options menu. This will open a dialogue box where you can select the receiving department from a drop-down window.



3.1.2

Stock Items

AMOS M&P contains functionality to keep track of stock items in the organisation. The Stock menu is covered in Chapter 5 of this reference manual, and in Chapter 4 of the *AMOS M&P User Guide*. The **Stock Items** command from the **Open Register** sub-menu opens the filter window for stock items. There is a corresponding toolbar button.

The Stock Items filter

- The Number field is used to specify the number of the component to which the stock item is connected. The Search in Vendors' Ref. also makes it possible to use the criterion entered in the Maker's Ref. field to search the Vendors' Ref. register also. You can use the Stock Status drop down window to select between All, Stocked or Non-stocked items. Finally, it is possible to use the filter to search for Perishable Items Only by checking the corresponding field.

The Stock Items window

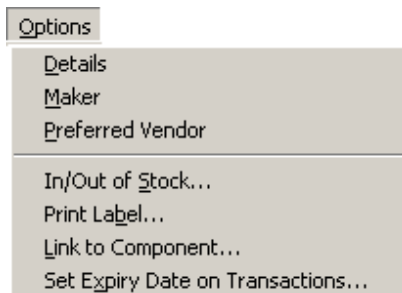
Location	Current Stock	Expiry Date
Forward Frame	80,00	
Store 1 / Shelf A A	142,00	
Total Stock:	222,00	

Number	Name	Maker	Maker's Reference	Unit	Pref. Vendor	Default Location
100.00.00.001	Handle	CM HAMMAR	8465	Pcs	NYLAND	Shelf A A
100.00.00.002	Gasket	FRAMK	4856	Pcs	IMO	Auxiliary Engine
100.00.00.003	Gasket	HANSE	r4841	Pcs	KSB	Auxiliary Engine
100.00.00.004	Cover	IMO	G84654	Pcs	HANSE	Main Engine
100.00.00.005	Program Knob	FRAMK	F468651	Pcs	HATLAPA	
100.00.00.006	Screw	IMO	45 T857451	Pcs	HATLAPA	Shelf A A

- The screen picture above shows the Stock Items window with the Stock Types function turned off. This function is described in section 2.5. If the Stock Types function is used, several fields in the window cannot be edited in the Stock Item window, and they appear with a grey background. The Stock Types register is described in section 3.1.10.

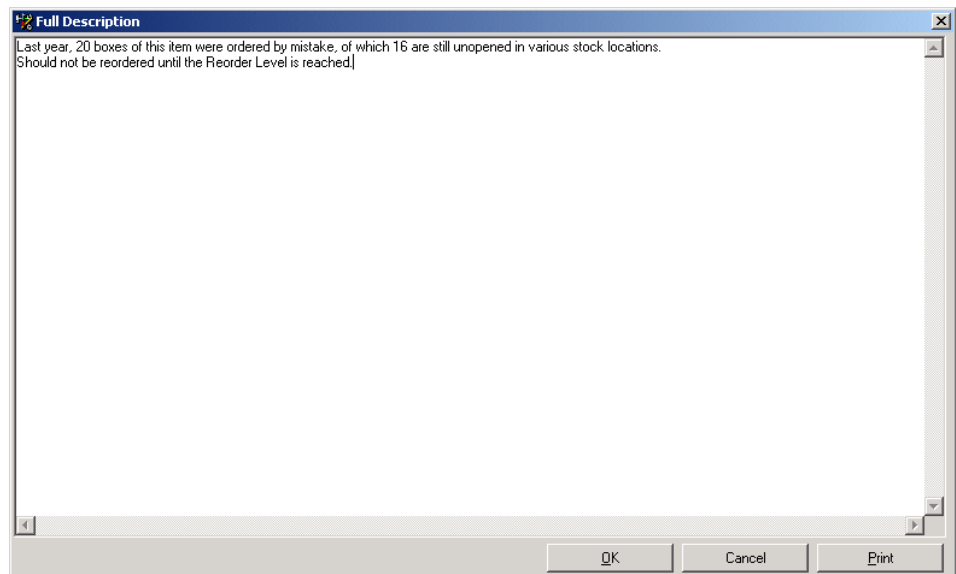
- There are two Add buttons and one Remove button in the middle right part of the Stock Items window. These buttons are used to specify which physical locations actually contain the selected stock item. The Locations window may be used to define a new location, and is described in section 3.2.3.
- The two drop-down lists in the Prices frame of the Stock Items window display the defined Currency Codes. This register is described in section 3.1.12.5.
- The Stock Units drop-down list in the Stock Items window displays the defined stock units. The Units register is described in section 3.1.12.7.
- The Stock Class drop-down list in the Stock Items window displays the defined stock classes. For example, classes like Spare Part and Consumable may be defined. The Stock Class register is described in section 3.1.12.9.

The Options menu for Stock Items



Details

The command **Details** from the **Options** menu for the Stock Items window gives access to the window called Full Description. There is a corresponding toolbar button.



- The Full Description window may be used for a textual description of the stock item. If a Template is used, the user may be presented for a tailored layout containing fields and formatting.

Maker

The command **Maker** from the **Options** menu for the Stock Items window gives access to the Maker Address window. This window is used to specify address and other relevant information of the maker of the stock item. The Products tab can be used to list the different types of equipment available from a particular Maker.

The screenshot shows the 'Maker Address' window for 'IMD Pumpfabrik'. The window has two tabs: 'General' and 'Products'. The 'General' tab is active, showing various fields for contact information. The 'Products' tab is also visible, showing a table of equipment types.

Code	Name	QA Grading	Group	Category	Country	Status
IMD	IMD Pumpfabrik	Can be Tested			Sweden	Unlocked

Preferred Vendor

The command **Vendor** from the **Options** menu for the Stock Items window gives access to the Preferred Vendor window. This window is used to specify address and other relevant information of the preferred vendor of the stock item. The Products tab can be used to list the different types of equipment available from a particular Vendor.

The screenshot shows the 'Preferred Vendor Address' window for 'HATLAPA'. The window has two tabs: 'General' and 'Products'. The 'General' tab is active, showing various fields for contact information. The 'Products' tab is also visible, showing a table of equipment types.

Code	Name	QA Grading	Group	Category	Country	Status
HATLAPA	Hatlapa Compressorbau	No Problem	E	E	Germany	Unlocked

In/Out of Stock

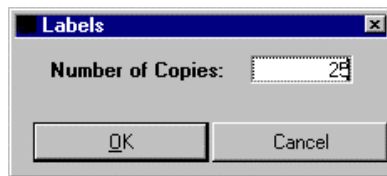
When stock arrives at or is removed from a stock location, the movement is registered in AMOS M&P. The command **In/Out of Stock** from the **Options** menu of the Stock Transaction window opens the window to register such movements.

The screenshot shows the 'In/Out of Stock' window. It has a 'Transaction' section with fields for 'Trans. Date' (01.07.2002), 'Trans. Type' (Used), 'Work Order', 'Component', and 'Reference'. Below this is a table with columns for 'Stock Item', 'Location', 'Quantity', 'Expiry date', 'Purchase Price', and 'Budget Code'. The table contains one row: '601.01.00.004 Frame Cover packing Platform B alt SB' with a quantity of 0 and a purchase price of 39.00 USD. At the bottom, there is an 'Info - Current Item' section showing 'Location: Platform B alt SB', 'Current Stock: 6.00', 'Total Stock: 6.00', and 'On Order: 2.00'. There are buttons for 'Delete Entry', 'New Entry', 'OK', and 'Cancel'.

- The Trans. Date field contains the current date but can be modified for more accurate reporting.
- The following transaction types may be used:
 - Purchased (the quantity is increased)
 - Used (the quantity is decreased)
 - Returned Unused(the quantity is increased)
 - Lost (the quantity is decreased)
 - Found (the quantity is increased)
 - Sold (the quantity is decreased)
 - Transferred in (the quantity is increased)
 - Transferred out (the quantity is decreased)
 - Delivered back (the quantity is increased)
 - Lent out (the quantity is decreased)
 - Trashed (the quantity is decreased)
- The Transaction Type will determine which other information is required, such as Work Order number, Component number etc.
- The Current Stock field shows the total available in the default location. The Total Stock field shows the total number of parts available in all locations. The On Order field shows how many parts are currently on order.

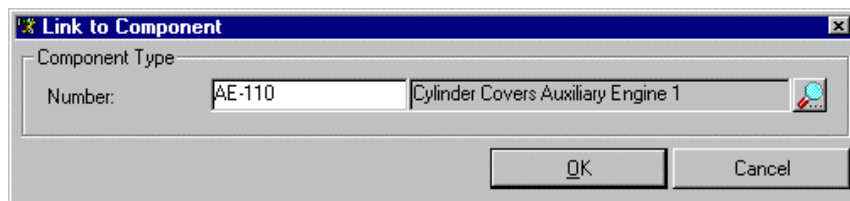
Print labels

The **Print Labels** command from the **Options** menu for the Stock Items window prints labels for the selected stock items on the default Windows printer. The Labels dialog box is used to specify the number of labels to be printed. The parameter Printer Task to Use When Printing Labels (see section 7.7.4) may be used to define a Printer Task that defines a different printer to be used for printing the labels.



Link to Component

Stock items may be connected to components from the Components register. The command **Link to Component** from the **Options** menu gives access to the window to establish a connection between the selected stock item and a component.



Set Expiry Date on Transactions

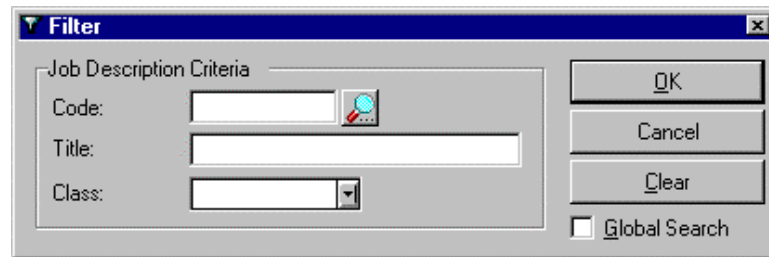
This option is used to set a dummy expiry date on existing stock items that have been redefined as perishable.

3.1.3 Job Descriptions

The Job Descriptions register is used to store descriptions of the maintenance jobs defined in AMOS M&P.

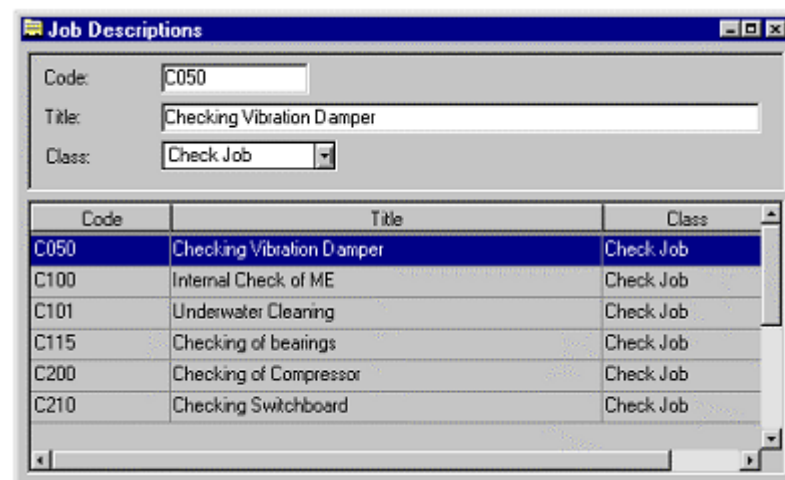
The **Job Descriptions** command from the **Open Register** sub-menu opens the filter window. There is a corresponding toolbar button.

The Job Descriptions filter



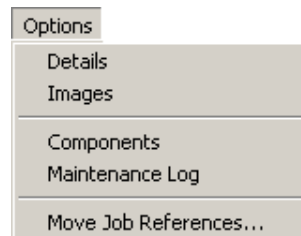
The Job Descriptions window

The following screen picture shows a list of job descriptions with codes starting with the letter C.



- The Class drop-down list displays the contents of the Job Classes register, which is described in section 3.1.12.10.

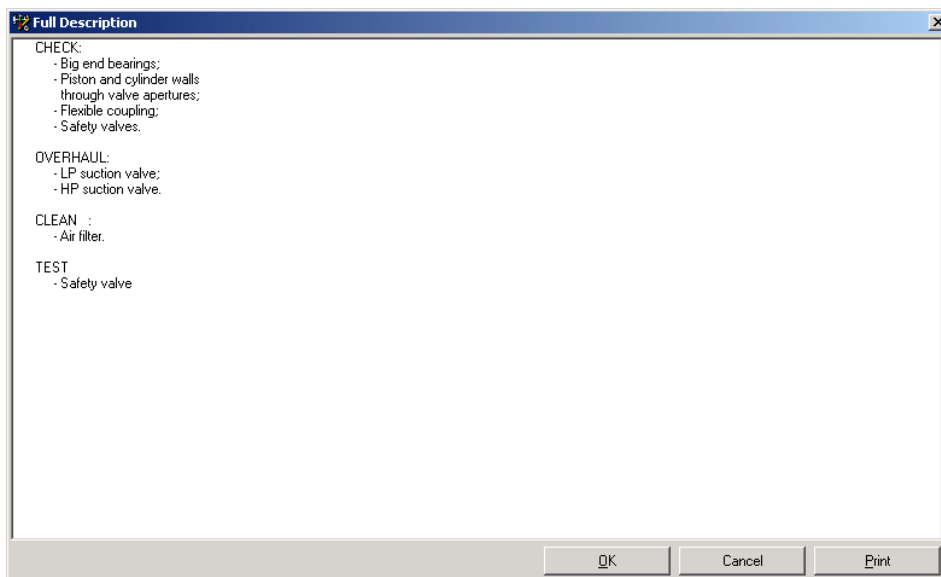
The Options menu for Job Descriptions



This **Options** menu contains the following commands:

Details

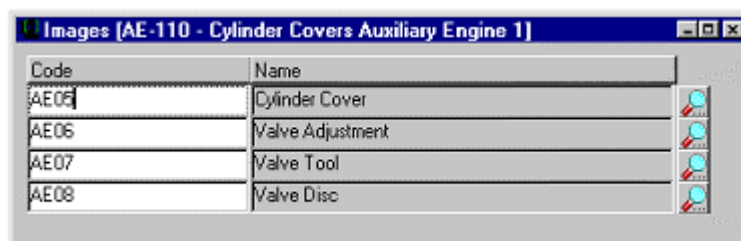
The **Details** command from the **Options** for the Job Descriptions window gives access to a window with a Full Description. There is a corresponding toolbar button.



- The Full Description window may be used for a textual description of the job. If a Template is used, the user may be presented for a tailored layout containing fields and formatting.

Images

AMOS M&P makes it possible to connect images to a component. For example, these may be scanned images from the component documentation or video films explaining maintenance details. The **Images** command from the **Options** menu of the Job Descriptions window gives access to the window to connect images to the component. There is a corresponding toolbar button.



- The image may be previewed with the **View Image** command from the **Options** menu for the Images window.

Components

A job description may be connected to one or more defined components. The **Components** command from the **Options** menu of the Job Descriptions window gives access to the window where the selected job description may be connected to a component. A single job description may be connected to multiple components.

The 'Components' window displays a table with the following data:

Number	Name	Frequency	Res. Discipline	Last Done
AE-100	AUXILIARY ENGINE 1	6 Month(s)	1. Engineer	01.01.96
AE-200	AUXILIARY ENGINE 2	6 Month(s)	1. Engineer	01.01.96
EN-002	AUXILIARY ENGINE 2	6 Month(s)	1. Engineer	01.01.96

Maintenance Log

When work is reported, AMOS M&P stores the information in the maintenance log. The **Maintenance Log** command from the **Options** menu for the Job Description window gives access to the Maintenance Log window.

Date Done	Component	Job Code	Work Order	Function	Reported By	Maint. Type	Maint. Class
14/01/1998	761.09.00	A-001	97/000027	...	SYSOP		
14/11/1999	761.09.00	A-001	98/000038	...	SYSOP		

- When a line is selected in the Maintenance Log window, the **Options** menu contains for commands to view or register History, Stock Used, Resources Used and Counter Settings respectively. There are corresponding toolbar buttons for these commands.

Move Job References ...

AMOS M&P allows you to replace all occurrences of a Job Description with another one. The **Move Job References ...** command from the **Options** menu of the Job Descriptions window gives access to the window where all occurrences of the selected job description in the database are replaced by the job description you select from the menu below:

This function can be protected by Group, at **Tools / Configuration / Groups**, then selecting **Access Control** from the **Options** menu and selecting the **Functions** tab.

Module	Execute
Job Requisitioning	<input checked="" type="checkbox"/>
Link to Component	<input checked="" type="checkbox"/>
Maintenance Planning	<input checked="" type="checkbox"/>
Manually Trigger Work Order	<input checked="" type="checkbox"/>
Move Address References	<input checked="" type="checkbox"/>
Move Job References	<input type="checkbox"/>
Move User References	<input checked="" type="checkbox"/>
Print Labels	<input checked="" type="checkbox"/>
Report Work:Detailed	<input checked="" type="checkbox"/>
Reports	<input checked="" type="checkbox"/>
Reschedule Work Orders	<input checked="" type="checkbox"/>
Reverse Stock Transaction	<input checked="" type="checkbox"/>

3.1.4

Addresses

The Addresses register is used to store information about all companies and persons with whom the organisation deals.

The **Addresses** command from the **Open Register** sub-menu opens the filter window for addresses. There is a corresponding toolbar button.

The Addresses filter

The Filter dialog box is divided into two main sections: Address Criteria and Product Criteria. The Address Criteria section includes text input fields for Code, Name, Country, Group, and Category, a dropdown menu for QA Grading, and a checkbox for Global Search. The Product Criteria section includes a dropdown menu for Product Type and a text input field for Product Descr.. On the right side, there are buttons for OK, Cancel, and Clear.

- The QA Grading drop-down list displays the values entered in the QA Grades register, which is described in section 3.1.12.13.
- The Product Type drop-down list displays the values entered in the register of the same name, described in section 3.1.12.4.

The Addresses window

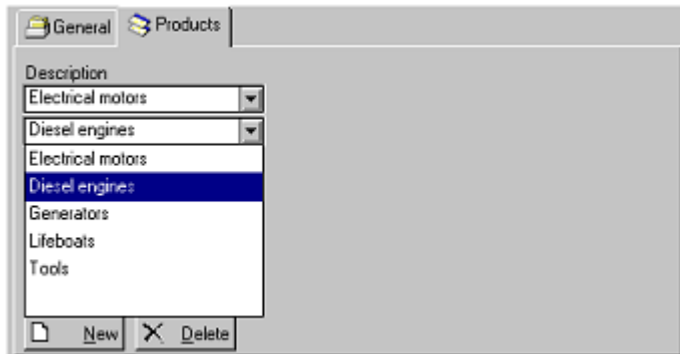
The Addresses window has two tabs: General and Products. The General tab is active and contains various input fields for address information. Below the input fields is a table listing existing addresses. The table has columns for Code, Name, QA Grading, Group, and Category. The first row is selected.

Code	Name	QA Grading	Group	Category	
<input checked="" type="checkbox"/>	ABB	Asea Brown Boveri	Reasonable	A	A
<input type="checkbox"/>	ACP	Andersen Coolers A.S	Fair		
<input type="checkbox"/>	B&W	Burmeister & Wain	No Problem	B	B
<input type="checkbox"/>	CM HAMMAR	CM Hammar Handels AB	No Problem	C	C
<input type="checkbox"/>	DJJ	Name of Company	Can be Tested	D	D
<input type="checkbox"/>	FRAMK	Franco Machienenbau GMBH	Blacklisted		
<input type="checkbox"/>	HANSE	Hanse Motorfabrikk	Can be Tested		
<input type="checkbox"/>	HATLAPA	Hatlapa Compressorbau	No Problem	E	E

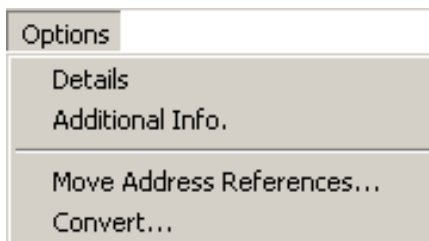
- The Addresses window is used to enter information about companies and persons. The various address information fields are located on the first tab card, called General.
- Each address in the list at the bottom of the window contains a check box all the way to the left. This box makes it possible to tag multiple addresses. The tagged addresses may then be processed together. For example, it is possible to convert multiple addresses (see the next page) at the same time.

The Products tab card

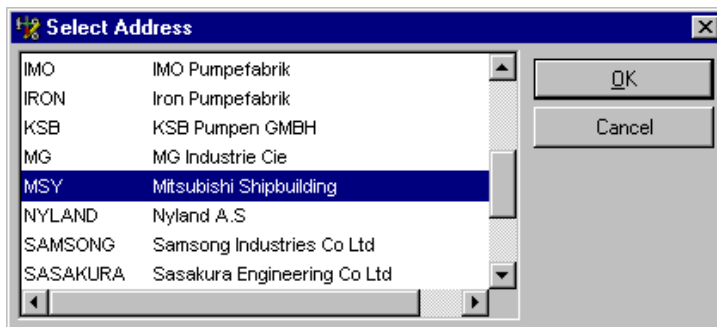
On the Products tab card, it is possible to select one or more product types that are to be connected to the selected address. When the New button is clicked, a field with a drop-down list opens. The list contains the Product types defined (see section 3.1.12.4).



The Options menu for Addresses



- The **Details** command brings up a Full Description window that may be used to enter additional textual information about the addressee. There is a corresponding toolbar button.
- The **Additional Info.** command brings up a window that displays any additional information that may have been registered for the addressee.
- The **Move Address References** command may be used to “clean up” a database if the same addressee has been entered several times. For example, this may occur if an address is registered at an individual location and then exported to the main office. When the command is selected, all database references to the selected address are located. You are presented with the list of all the addresses except the one from which the references are to be moved. Select the address to which the references are to be moved.



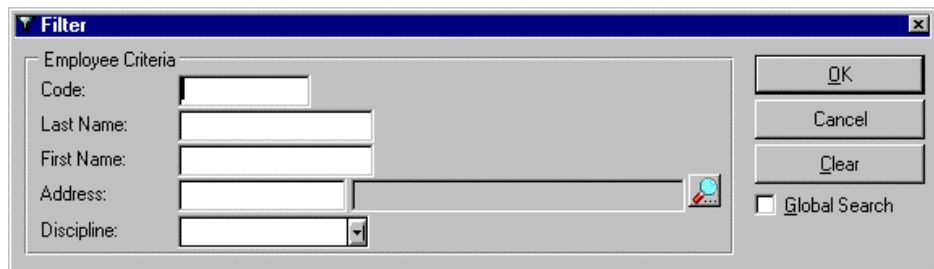
The command **Convert Address Status** is used to toggle the status of selected addresses. The possible values are Locked and Unlocked. Only authorised users are allowed to edit an address with the Locked status.



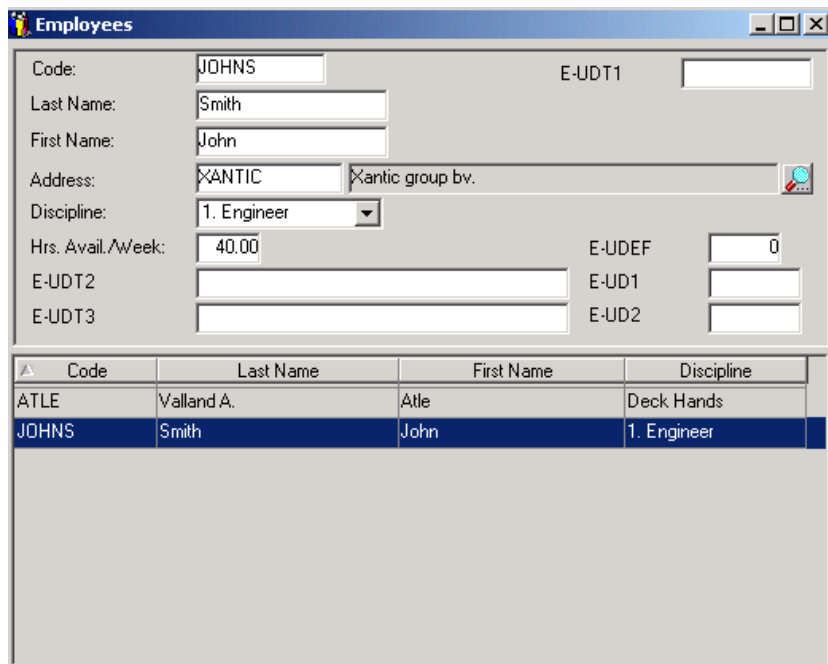
3.1.5 Employees

The Employees register is used to store information about the employees in the organisation.

The Employees filter



The Employees window

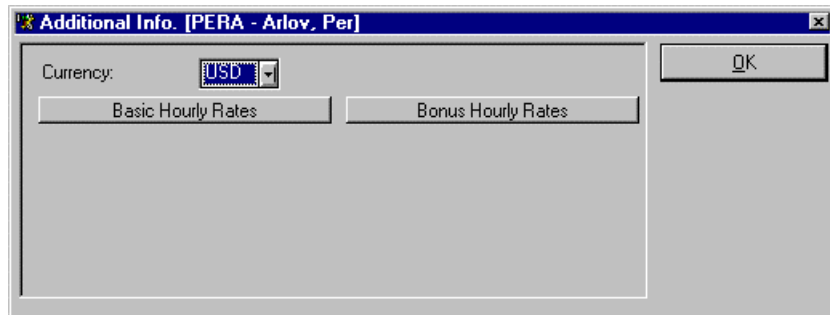


- Each registered employee is assigned a Code, which typically consists of the initials of the employee.
- The Search button next to the Address field may be used to select information from the Address register.
- The contents of the Discipline drop-down list consist of the register with the same name, described in section 3.1.12.2.
- The fields starting with E-Uxx are user-defined fields. See section 7.7.4.8 for more information on these fields.

The Options menu for Employees



- The **Details** command brings up a Full Description window that may be used to enter additional textual information about the addressee. There is a corresponding toolbar button.
- The **Additional Info.** command brings up a window that displays any additional information that may have been registered for the selected employee.

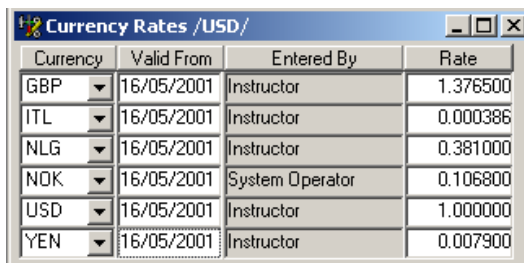


- The **Address** command from the Options menu for the Employees window gives access to the Address register to select an address or register a new one.

3.1.6

Currency Rates

AMOS M&P can handle amounts in several currencies simultaneously, and one currency is defined as the Base Currency. The parameter Base Currency Code determines this, and is described in section 7.7.4.



Currency	Valid From	Entered By	Rate
GBP	16/05/2001	Instructor	1.376500
ITL	16/05/2001	Instructor	0.000386
NLG	16/05/2001	Instructor	0.381000
NOK	16/05/2001	System Operator	0.106800
USD	16/05/2001	Instructor	1.000000
YEN	16/05/2001	Instructor	0.007900

- The Currency Rate window is used to set and update the rate of each currency rate used in the organisation compared to the Base Currency Rate. When the rate is updated, the field Entered By displays the initials or name of the user who has performed the update.
- The currency rate should be entered as the comparative value of one unit of currency against one unit of the base currency. The illustration above shows that one unit of GBP (British Pounds) is worth 1.3765 units of the base currency (USD) whilst one unit of YEN (Japanese Yen) is worth 0.0079 units of the base currency (USD).
- When a new currency rate is registered, the Currency drop-down list displays the values of the Currency Codes register, which is described in section 3.1.12.5.
- The Show All command from the Options menu for the Currency Rates window makes it possible to toggle the Show All option. There is a corresponding toolbar button.

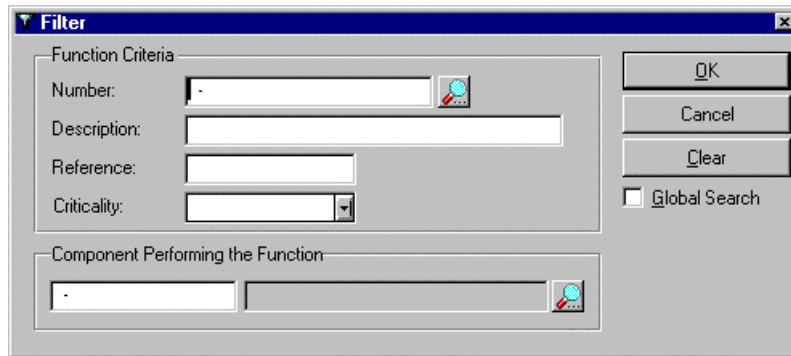
3.1.7

Functions

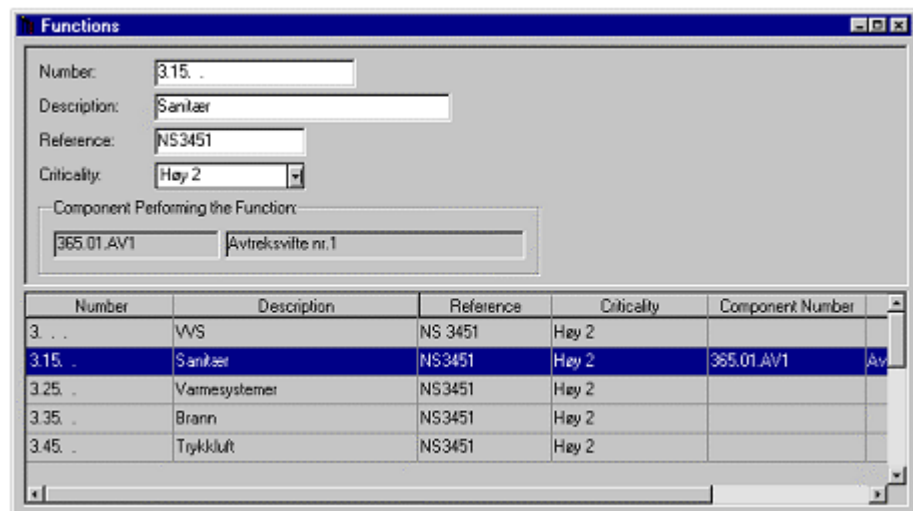
Components move around, but functions stay put. For example, in a 6-cylinder internal combustion engine, Piston 3 is a function. There can also be a component that is called piston 3 - today. However, that physical component may be taken out, cleaned and put back into the piston 4 position, and the component name then becomes piston 4.

The Functions register is described below. The defined functions may also be displayed and manipulated in the Functions hierarchy, which is described in section 3.2.2.

The Functions filter

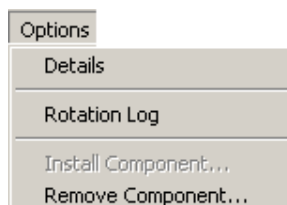


The Functions window



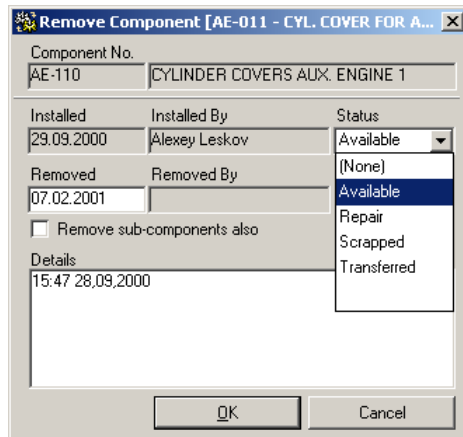
- The Component Performing the Function field displays the component that is connected to the selected function. The Functions hierarchy is used to install and remove components in defined functions. The Functions hierarchy is described in section 3.2.2.

The Options menu for Functions



- The **Details** command from the **Options** menu in the Functions window gives access to a window with a Full Description. There is a corresponding toolbar button.

- The **Rotation Log** command from the **Options** menu brings up a window which shows which components have been installed in and removed from a selected function. The rotation log is automatically updated when the Functions hierarchy is used to update this information.
- To see the comments registered while installing or removing a component in a function, select the required line and give the menu command **Options/Details**.
- The Remove Component command from the Options menu brings up a window that allows you to remove the selected component.



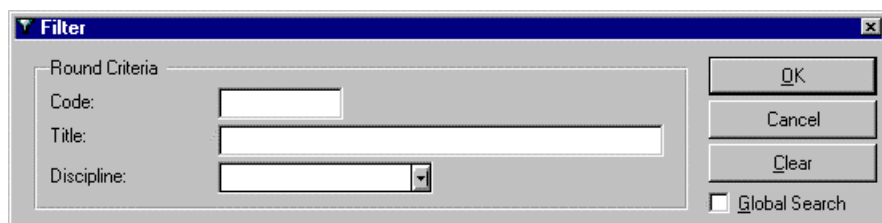
- You are given the choice of several reasons for the removal, which translate effectively into states of the removed component, and the option to ‘remove sub-components also.’
- If component Status ‘Scrapped’ or ‘Transferred’ is chosen, all outstanding work orders will be cancelled unless already reported as started. Work can still be reported against already started work orders until they are reported as completed.
- For a more detailed description of this functionality, go to section 3.2.2.

3.1.8 Rounds

It is possible to define Rounds of related jobs that are placed on a single work order. Typically, jobs in a round are handled by a single discipline, but this depends on how the rounds are defined.

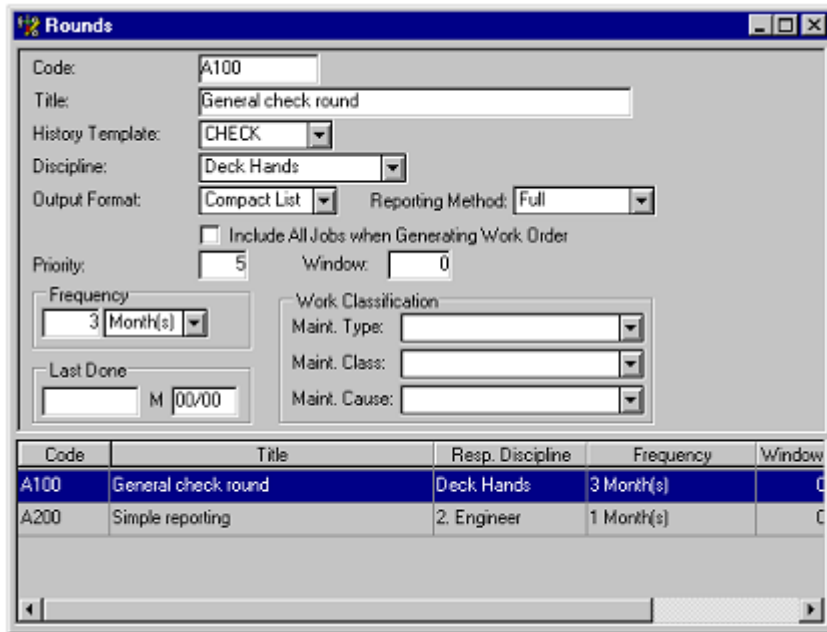
The functions for planning and reporting on maintenance jobs are described in Chapter 4 of this reference manual, and in Chapter 3 of *AMOS M&P User Guide*.

The Rounds filter



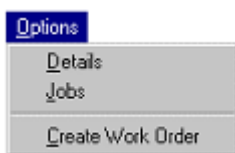
- The Discipline drop-down list displays the values from the register with the same name, described in section 3.1.12.2.

The Rounds window

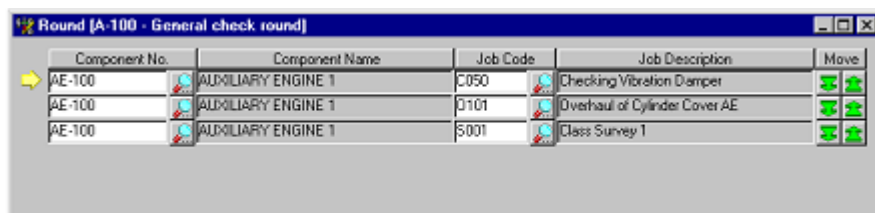


- The History Template drop-down list displays values from the register described in section 7.7.4.
- There are three available output formats for a round: A List containing a single line for each job, a Compact List containing only the most important information, and a Work Order format which also includes the textual description of each job.
- The Reporting method drop-down list contains the two values Simple and Full. When work is reported against a round work order, the interface is somewhat different for the two options. This is described in section 4.4.3.
- The Include All Jobs when Generating Work Orders check box should be checked in order to generate a work order which covers all the maintenance jobs included in the round when the Create Work Order command is selected from the Options menu.

The Options menu for Rounds



- The Details command from the Options menu for the Rounds window opens a window for a Full Description for the selected round.
- The Jobs command from the Options menu for the Rounds window opens a window which lists the jobs included in the round. In this window, it is possible to change the sequence in which the jobs appear. To move a job, make sure it is selected. The yellow arrow in the left part of the screen indicates which job is currently selected. Use the green arrows in the right part of the window to move a job up or down in the sequence.



Number	Title	Component	Priority	Resp. Discipline	Status
03/000181	ROUND1 - Inspection Round	...	5	2. Engineer	Issued

- The Create Work Order command in the Options menu for the Rounds window generates a new work order for the selected round. The work order that is created is given the status Issued. Work may be reported on a work order that has been issued.

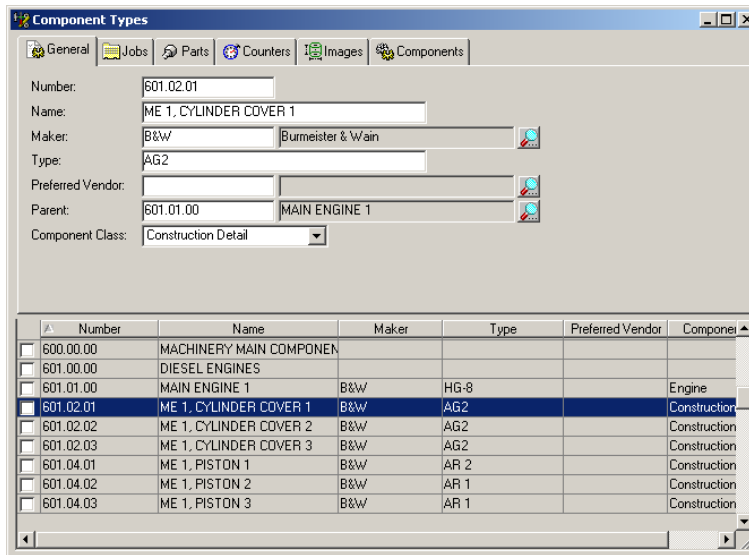
3.1.9 Component Types

If the Use Component Types parameter is set to TRUE, the Component Types register is used to define the types of components that are used at multiple locations. When this is used, information from the Component Types register is automatically inherited from the register, making it easier to ensure data consistency. Section 2.5 in this reference manual explains how to use the Component Type function.

The Component Types filter

- The Only Component Classes area contains a list of the classes of components that are defined. It is possible to select multiple classes by holding the SHIFT button down while clicking the desired classes. Section 3.1.12.8 describes the Component Classes register.

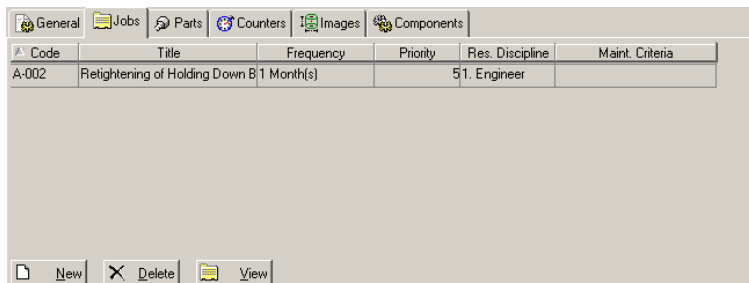
The Component Types window



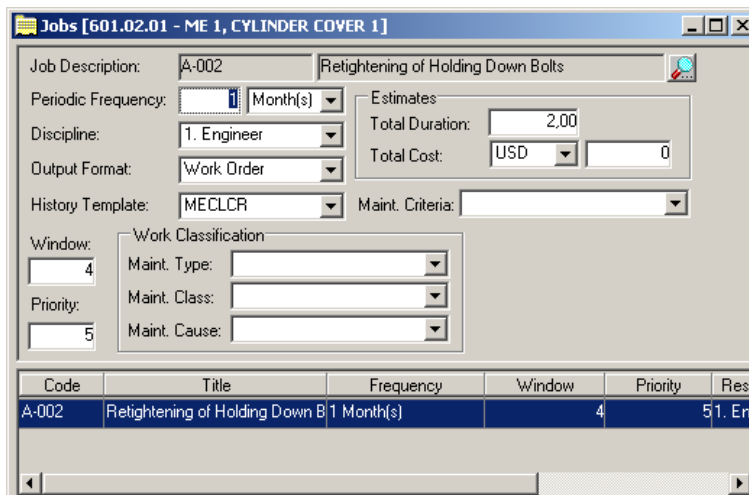
- By default, the General tab card is selected.
- The information in the three fields Name, Maker and Type is entered in the Component Types register only. When a new component is registered at a location, the information for these three fields is automatically inherited from the central register when a type number is selected for the component.
- Several of the tab cards in this window are quite similar to ones found in the Components window, described in section 3.1.1.

The Jobs tab card

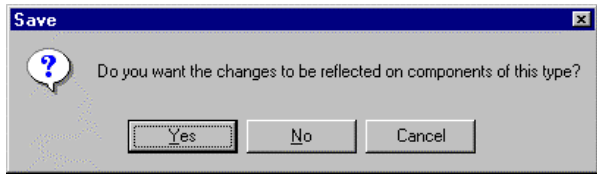
The Jobs tab card shows the jobs connected to the selected component:



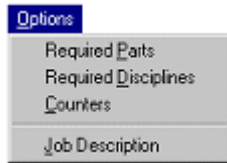
It is possible to click the View button to enter the window used to connect maintenance jobs to the selected component type.



- When a new Component Type job is saved, the following dialog box appears:



- Click Yes in order to have the defined job connected to all components of the selected type.
- Once the Jobs window has been opened, the **Options** menu is updated to include the commands that may be used while defining a job:



- The first three commands in the **Options** menu for the Jobs window are used to specify parts and disciplines required for the job, and to set any relevant counters. There are corresponding toolbar buttons that may be used to enter the respective windows.
- A job has a Job Description, and this register is described in section 3.1.3.

Parts

The Parts tab card gives access to the window used to specify parts connected to the selected component. This tab corresponds to the one found in the Components window, which is described in section 3.1.1.

Counters

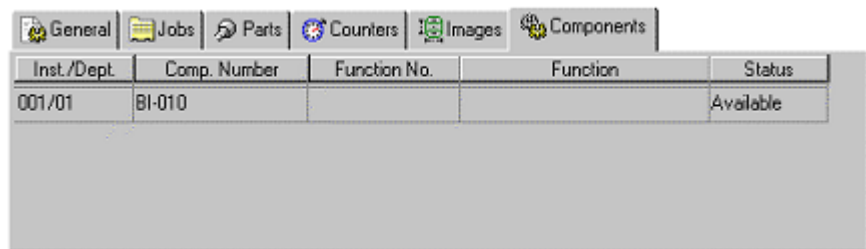
The Counters tab card shows the counters that have been defined for the component type. There is a corresponding toolbar button.

Images

The Images tab card makes it possible to connect images to the component.

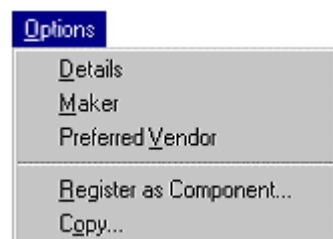
Components

The Components tab card lists which components of the selected type are available.



- The Components tab card shows which component is in use at which installation for which function, and the status of each registered component of the type.

The Options menu for Component Types



Several of the commands are quite similar to the **Options** menu in the Components window, described in section 3.1.1.

Details

The command **Details** from the **Options** menu for the Component Types window gives access to the window called Full Description. The Details toolbar button may also be used to access the window.

Maker

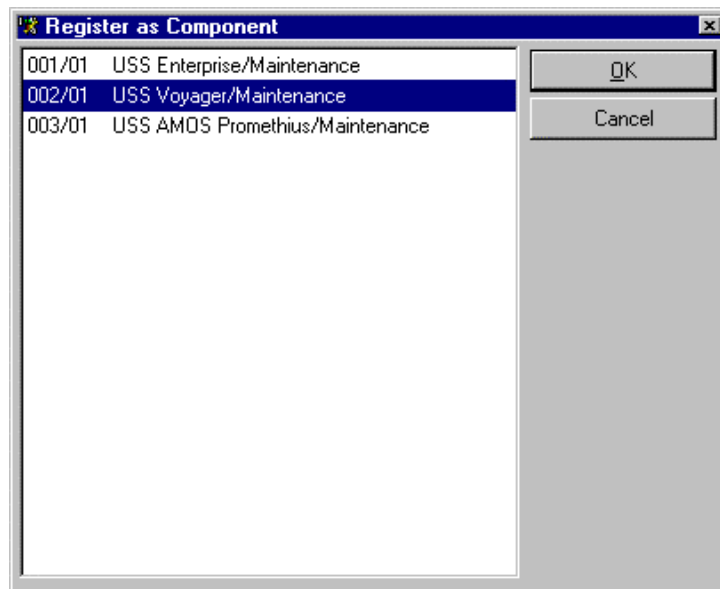
The **Maker** command from the **Options** menu in the Component Types window gives access to the Maker Address window. This window is used to specify address and other relevant information of the maker of the component.

Preferred Vendor

The command **Preferred** from the **Options** menu for the Component Types window gives access to the Preferred Vendor window. This window is used to specify address and other relevant information of the preferred vendor of the stock item.

Register as Component

The **Register as Component** command from the **Options** menu of the Component Types window gives access to the window that may be used to register a component of the selected type at an installation.



- The **Register as Component** window presents a list of the defined installations and departments. Select one from the list and click OK to register a new component of the selected type at the selected installation.
- If any jobs are connected to a component type in the central Component Types, these jobs are automatically inherited along with the type information when a new component is registered this way.

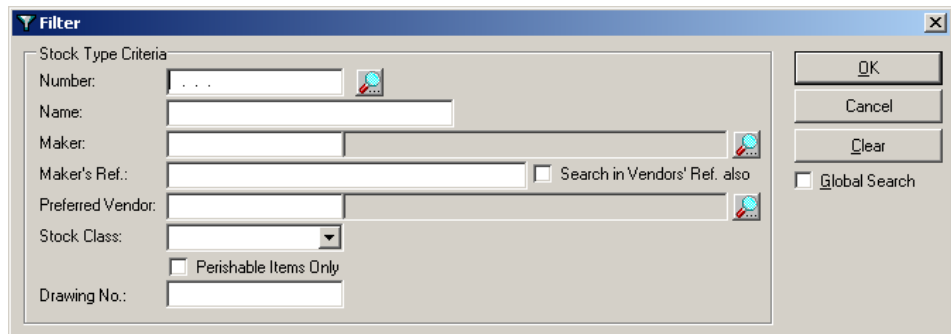
Copy

It is possible to copy information connected to a component type when a new component type is created. The command **Copy** from the **Options** menu for the Component Types window gives access to the Copy Component window.

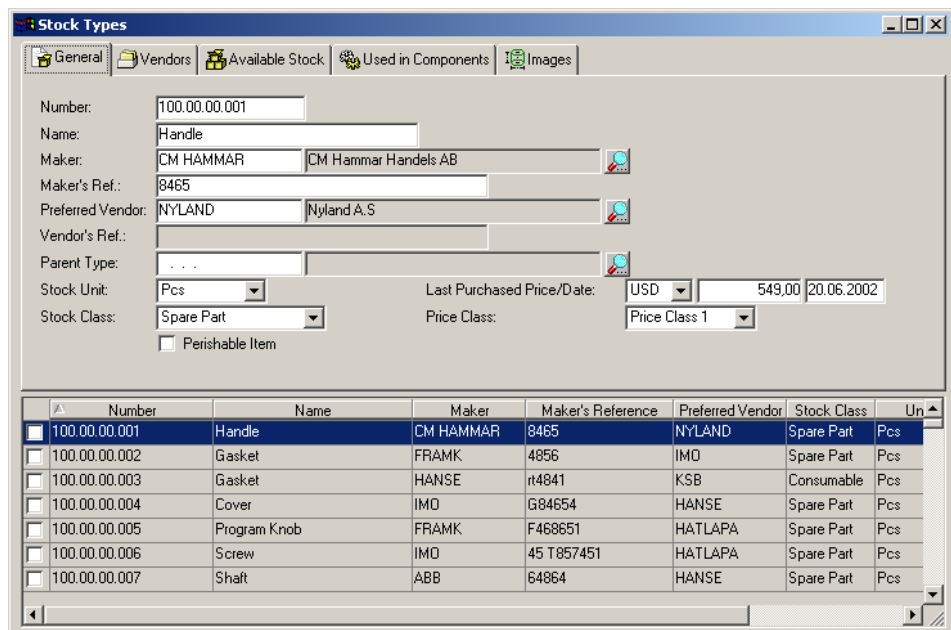
3.1.10 Stock Types

If the Use Component Stock parameter is set to TRUE, the Stock Types register is used to define the types of components that are used at multiple locations. When this is used, information from the Stock Types register is automatically inherited from the register, making it easier to ensure data consistency. Section 2.5 in this reference manual explains how to use the Stock Type function.

The Stock Types filter

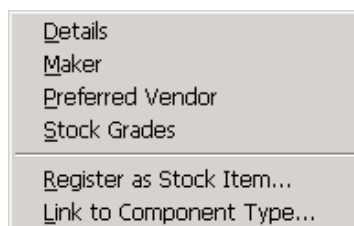


The Stock Types window



- The information in the three fields Name, Maker and Maker's Ref. is entered in the Stock Types register only. When a new stock item is registered at a location the information for these three fields is automatically inherited from the central register when a type number is selected for the stock item.

The Options menu for Stock Types



Several of the commands are quite similar to the **Options** menu in the Stock Items window, described in section 3.1.2.

Details

The command **Details** gives access to the window called Full Description. There is a corresponding toolbar button.

Maker

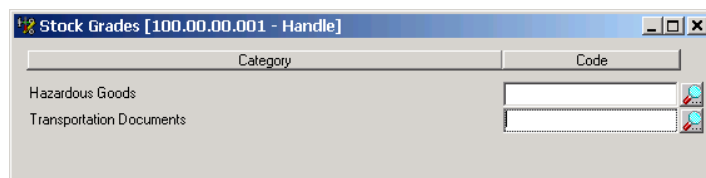
The command **Maker** gives access to the Maker Address window. This window is used to specify address and other relevant information of the maker of the stock item.

Preferred Vendor

The command **Preferred Vendor** gives access to the Preferred Vendor window. This window is used to specify address and other relevant information of the preferred vendor of the stock item.

Stock Grades

The command **Stock Grades** gives access to the following window:



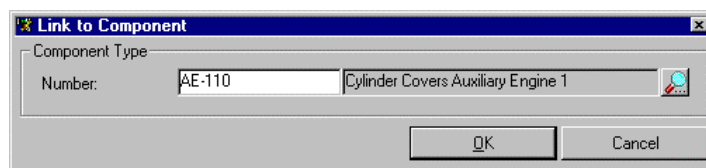
You can use this window to add stock grade information to the stock type. The information entered here will be copied to order line items on purchase forms and is used to add supplementary information related to the stock item to the purchase form. The categories for stock grades are defined in the Tools/Configuration/Stock Grade Categories menu selection and the stock grades available in each category are defined in the menu selection File/Open Register/General/Stock Grades.

Register as Stock Item

The **Register as Stock Item** command gives access to the window that may be used to register stock items of the selected type at an installation. The window presents a list of the defined installations and departments. Select one from the list and click OK to register new stock items of the selected type at the selected installation.

Link to Component Type

Stock items may be connected to components from the Components register. The command **Link to Component** gives access to the window to establish a connection between the selected stock item and a component.

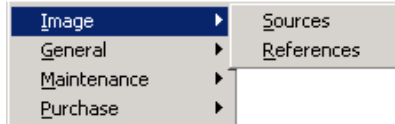


Once stock items have been connected to components, the toolbar button Used in Components gives access to the window that lists connections of this type.

3.1.11

Image

AMOS M&P makes it possible to connect images to a component. For example, these may be scanned images from the component documentation or video films explaining maintenance details. The **Open Register** command of the **File** menu contains the **Image** command for working with images. The **Sources** sub-menu is used to set up internal or external tools for displaying images; see section 3.1.11.1. The **References** sub-command is used build a library of images for use in AMOS M&P; see section 3.1.11.2.

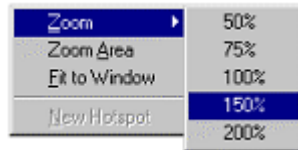


Looking at an image

To view an image on the screen, select one from the library of image references and click on the View Image button. The image is then displayed in a new window.

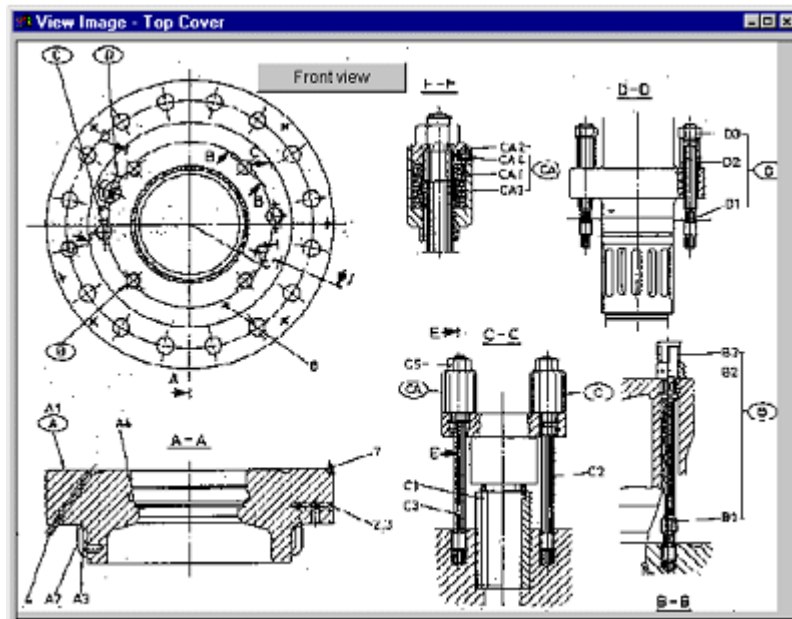
AMOS M&P contains an internal viewer that may be used to work with images. In order to zoom in on a detail of the image in the window, use the cursor to mark the part of the image you want to examine. Then click on the button Zoom Area, the one with the magnifying glass. After having zoomed in, the vertical and horizontal scroll bars may be used to move around in the image.

To zoom back out, click on the button Fit to Window next to the Zoom Area button. The **Options** menu contains **Zoom** commands. It is also possible to right-click in the image to get a pop-up menu that contains the most relevant options:



Select a specific zoom value from the **Zoom** sub-menu, or use the commands Zoom Area or Fit to Window, which correspond to the toolbar buttons described above.

The illustration below shows the image window.



The image contains a button; read out this below.

There is a system parameter called Open Image In New Window that controls what happens when a hotspot is clicked to open a new image. If the default parameter value FALSE is set, the new image replaces the image currently in the window. If the value is set to TRUE, the new image will be displayed in a new window.

Hotspots on an image

Once an image reference has been defined, its usability may be enhanced further by adding hotspots on the image. This means that the user may click a hotspot to enter a new window providing more information about relevant parts of the image.

There are different types of hotspots:

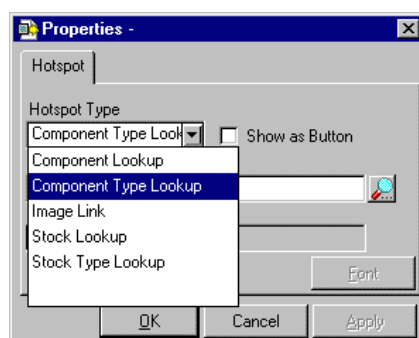
- A hotspot may open the Component or Component type window in order to find relevant information about the entry to which the image is connected.
- A hotspot may open the Stock Items or Stock Type window to find relevant information about the entry to which the image is connected.
- A hotspot may open the Stock Items or Stock Type window to find out about the current stock situation of the item.

The toolbar contains two buttons that can be used when defining hotspots. They are called Show Hotspots and Show Workspace respectively.

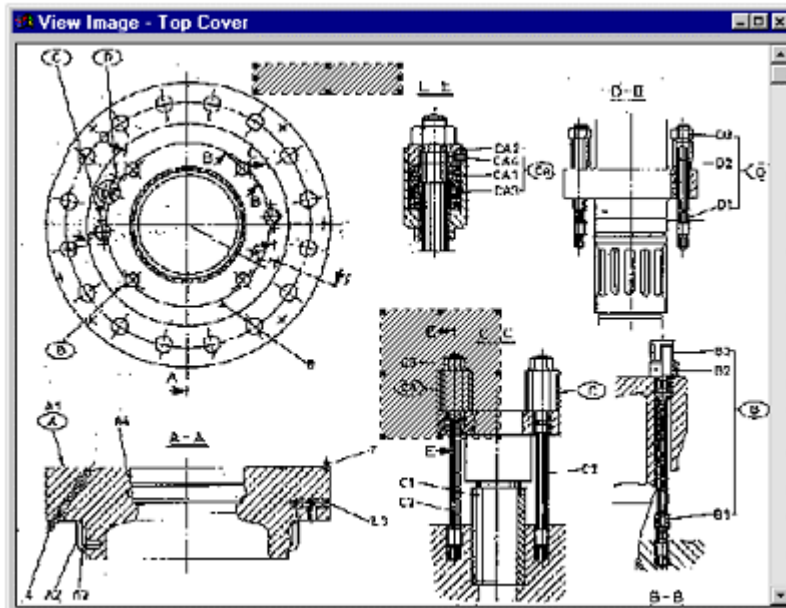
To add a new hotspot, click the New button on the toolbar. AMOS M&P automatically changes to the Show Hotspots mode, and the corresponding button is automatically pressed by the program. If any hotspots have been defined already, they are displayed as shaded areas on the image.

The new hotspot appears as a shaded area in the top left corner of the image window. The mouse may be used to drag it to the part of the main image that you want to become the hotspot. Once it is in the desired location use the mouse to re-size it by dragging one of the eight little marking squares that indicate the size and location of the hotspot. Continue until the hotspot has the desired size and location.

Right-click the hotspot and select Properties from the pop-up menu to determine which type of hotspot to use. This dialog box is presented:



Open the Hotspot Type drop-down list and select the desired type. Next, place the cursor in the empty Reference text field and click the Browse button. Depending on the type selected, a dialog box is used to select the component, the image or the stock item to be opened when the hotspot is clicked. Click OK to complete the definition. The illustration below shows an image with two defined hotspots.



When hotspots have been defined on an image, click the Show Hotspots toolbar buttons in order to display the hotspots as shaded areas, where they may be moved or re-sized.

If the Show Hotspots buttons has not been pressed, it is still possible to locate the hotspots in an image. The cursor turns into a hand with a pointing finger when placed on a hotspot.

Button hotspots

Hotspot buttons may be placed on the image. To do so, define a new hotspot and check the option Show as Button in the Properties dialog box. The field Button text becomes available, and is used to define the text to appear on the button.

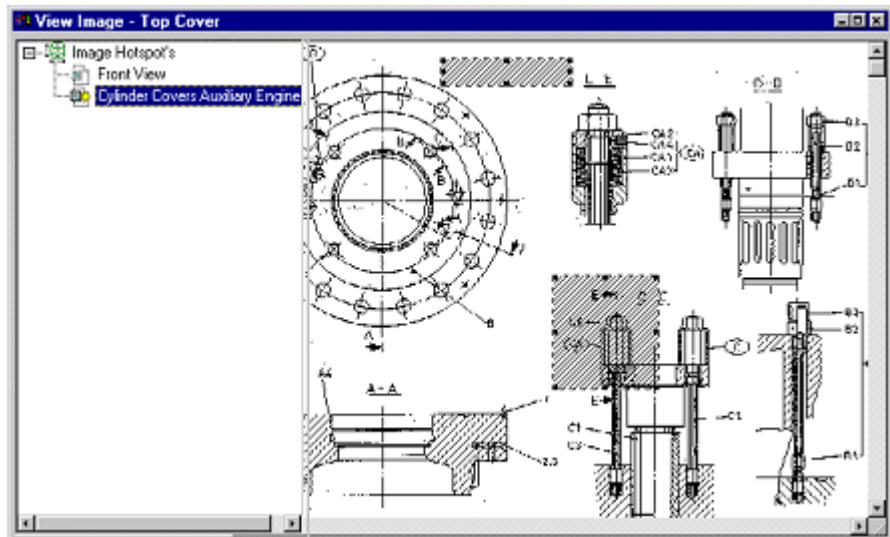
To change the font to be used for the button text, click Font and select font, style and size from the dialog box you enter. A button hotspot may be re-sized the same way as other hotspots. However, there is one difference: When the Show Hotspots button is not pressed, the hotspot on the image always has the form of a button.

Browsing between image windows

If a hotspot of the type Image Link is clicked, the image to which the hotspot is linked opens up in the image window, replacing the original image. However, AMOS M&P keeps track of which images you have looked at, and allows you to browse between them. The two buttons Go Back and Go Forward becomes available in the toolbar. These two buttons may be used to browse efficiently through the images that you have previously looked at in the session.

The Workspace of an image

A number of hotspots may be defined on an image. In order to keep track of the hotspots and their links, click the Show Workspace button in the toolbar. The left side of the window opens to show the defined hotspots:



When the cursor is placed on one of the hotspots in the image, the corresponding hotspot is highlighted in the list of hotspots at the left of the window. This makes it easy to see the name of the link for each hotspot.

Connecting an image to a stock item, component or job description

A defined image may be connected to a stock item, a component, and/or a job description. When such connections have been made, it is possible to view the relevant images directly from these registers. For example, if an image has been connected to a job description, it is possible to view or print out the image as a part of the documentation of the job to be carried out.

This is how you connect an image to one of the three registers.

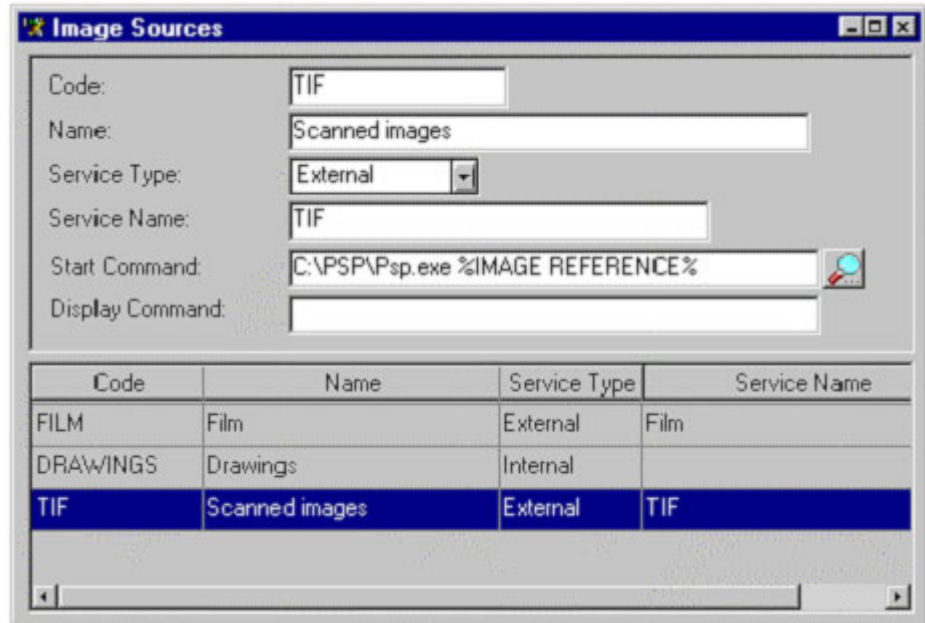
- Give the menu command **File/Open Register** and select Components, Stock Items or Job Descriptions
- Use the Filter dialog box to locate the element in question.
- Select the element that is to be connected to the image in the next dialog box, and give the menu command **Options/Images**
- Click the Browse button to access the list of available images, select the one you want to use, and click OK.
- Click OK to establish the connection.

Once the connection has been made, the Images toolbar button may be clicked to view the image from the relevant register

3.1.11.1 Sources

Before images can be viewed, an image source tool must be defined for the tool that is going to be used for viewing. AMOS M&P offers an internal viewer that can display bitmaps like BMP and PCX, in addition to a number of other formats. Other viewers and Windows programs on your PC may be defined as external viewers.

Give the command **File/Open Registers/Image/Sources** to enter this window:



From the Service Type drop-down list select Internal if you wish to define the internal viewer as an image source, and select External to define a different program. If the latter is selected, fill in the name of the tool in the Start Command field including the full path.

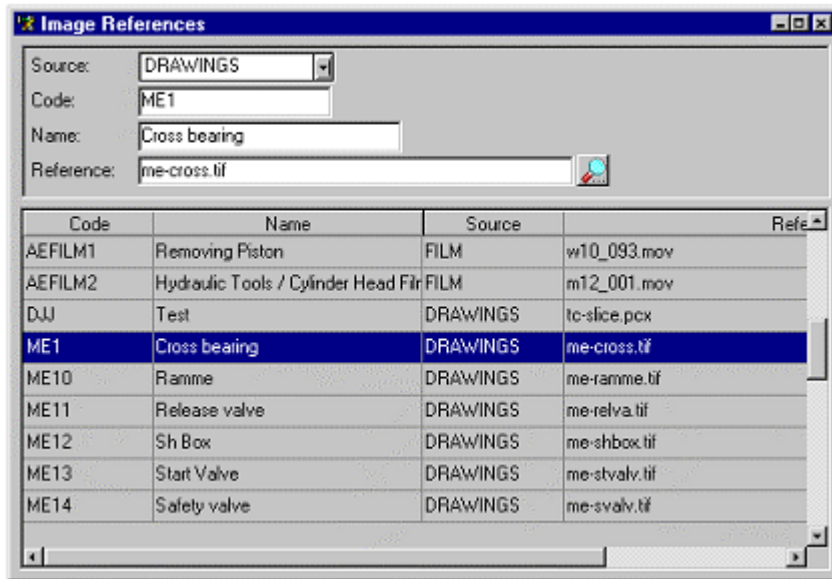
The start command should end with the characters %IMAGE REFERENCE% which tells the tool that it should display the image supplied by AMOS M&P. The field Display Command may be used to specify a DDE command. It is necessary to know the names and syntax of DDE commands supported by the tool in order to use this function.

3.1.11.2 References

Once the image sources have been defined, a library of images in AMOS M&P may be built up. When the library has been established, an image reference may be connected to one or more relevant components, stock items, and job descriptions.

The images that are going to be used should be stored in a specific folder. Normally, this should be the Graphics sub-folder in the folder where AMOS M&P has been installed. Make sure that the field Graphics Directory contains the name and path of the folder you are going to use for this purpose. This is described in section 7.7.4.4. of this reference manual.

The command **File/Open Register/Image/References** is used to enter the window to define image references.



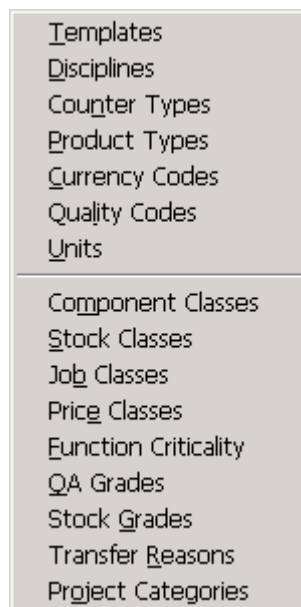
For each image a Source, a Code, a Name and a Reference are specified. The Reference is the full path name of the image that is going to be used later. The Browse button may be clicked to select the reference.

3.1.12

General

AMOS M&P contains a number of smaller registers that are used to store values that are tailored to the organisation. Typically, drop-down lists in other windows display and let the user select from a list of the registered values. For example, the Components window described in section 3.1.1 contains the Component Class drop-down list, which displays the classes defined in the Component Classes register.

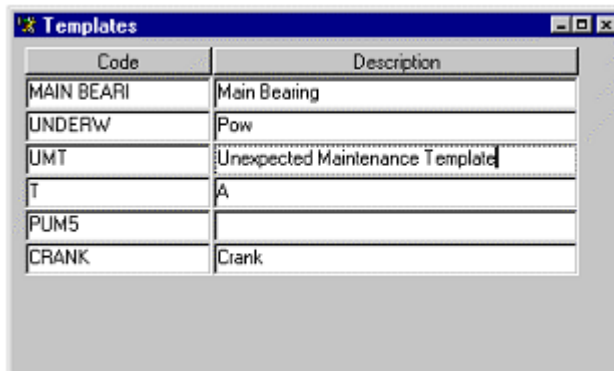
To open a general register, select **File/Open Register** and then **General**:



Most general register windows are fairly simple, and do not contain any **Options** menu. The **Edit** menus contain similar commands to what is found on the second toolbar: It is possible to create a new record or delete an existing one, to save changes, and to use the cut, copy and paste functions.

3.1.12.1 Templates

Various documents handled by AMOS M&P require different layouts. The Templates general register is used to register a Code and a Description for each layout template



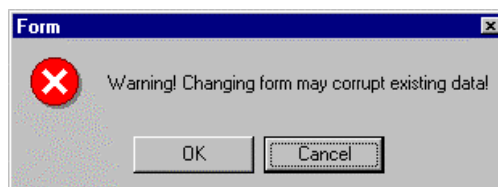
A form definition created in PowerBuilder may be connected to a template code. When this is done, the user will be presented with a form that may contain drop-down list boxes, selection boxes, input fields and other controls on entering the Full Description window for an item in a register.

Note: Data registered with a form in AMOS M&P is stored on a comma-separated format in so-called BLOBs (Binary Large Objects) in the database. This means that the data from the form is transferred to the database in the defined field sequence. If the field sequence is changed, data will be displayed incorrectly to the user. Once a form has been used to input data, it should not be changed.

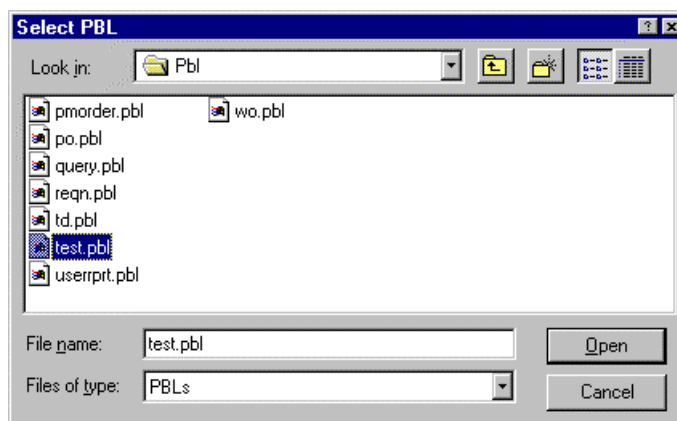
To connect a template to a form definition, select the template in the Templates window and select **Import Definition** from the **Options** menu



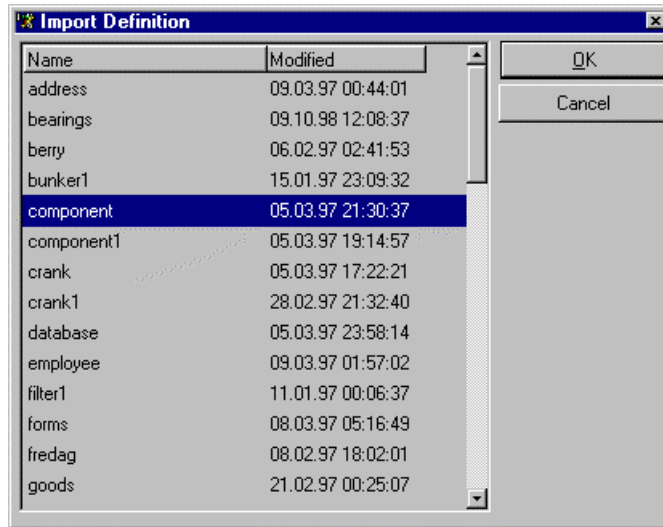
The following warning is presented:



Next, a Select PBL dialog box is presented, allowing the user to select the .PBL file which contains the desired form definition.



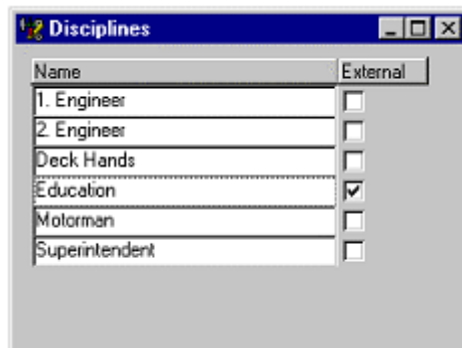
Select the correct .PBL file and click OK to get a list of the form definitions contained in the selected file:



Once the connection between the template and the form definition has been made, the user will be presented with the defined input form when entering the Full Details window. The creation of layout templates is described in Appendix A of this reference manual.

3.1.12.2 Disciplines

The Disciplines register is used to define various labour functions. Once this has been done, costs may be tracked by disciplines, for example. It is possible to check a discipline as External



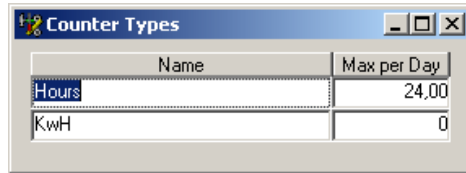
External disciplines are indicated with the character *. For example, the filter for work orders contains an Only Disciplines list that will differentiate between internal and external disciplines:



External disciplines must be used in conjunction with work orders if you wish to be able to purchase those services externally.

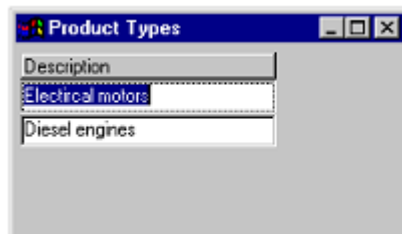
3.1.12.3 Counter Types

The Counter Types register is used to define the different types of counters that typically are used in order to handle Condition Based Maintenance, which is described in Appendix B of this reference manual. You can set a daily limit for counters in order to try and minimise incorrect reading/inputting.



3.1.12.4 Product Types

The Product Types register is used to define different categories or types of products. This information may be used in searching in the Addresses register. This register contains the tab Products for linking the addressee to specific Product Types. This is described in section 3.1.4.



3.1.12.5 Currency Codes

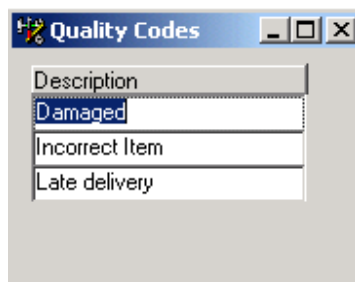
The Currency Codes register is used to store information about which currencies are used in the organisation. The Currency Rates register, described in section 3.1.6, is used to enter and update the exchange rates between the currencies as changes occur.

The screenshot shows a window titled "Currency Codes" with a table listing various currencies and their multipliers:

Code	Description	Multiplier
DEK	Danske Kroner	100
DEM	German Mark	1
ECU	Euro	1
GBP	British Pounds	1
NOK	Norske Kroner	100
SEK	Svenske Kroner	100
USD	US Dollars	1

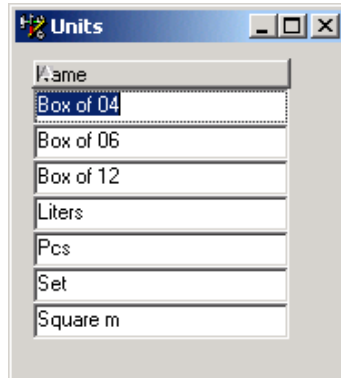
3.1.12.6 Quality Codes

The Quality Codes register is used to create and store the available options for use in the Quality Check function during the receipt of line items.



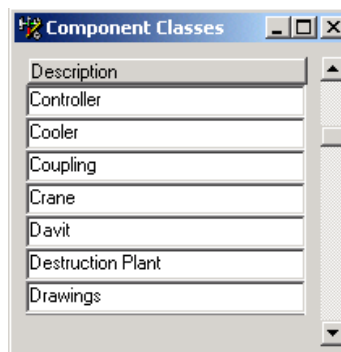
3.1.12.7 Units

The Units register is used to define the various units that are typically used for stock items. If the Use Stock Types parameter is set to FALSE, the values from the Units register are available in the Stock Units drop-down list in the Stock Items window. If the Use Stock Types parameter is set to TRUE, the values from the Units register are available in the Stock Units drop-down list in the Stock Types window.



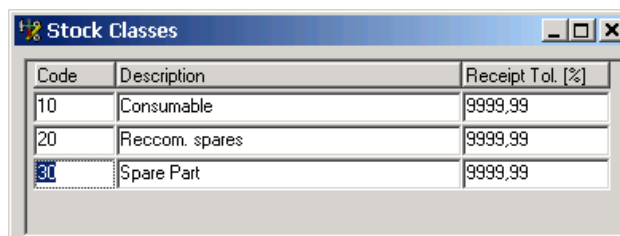
3.1.12.8 Component Classes

The Component Classes register is used to define classes for components. Once component classes have been defined, the Components filter may be used to select components of the desired class.



3.1.12.9 Stock Classes

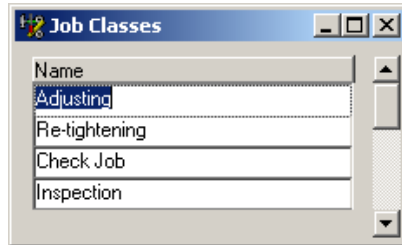
The Stock Classes register is used to define Class Codes and Descriptions for stock items. Once stock classes have been defined, the Stock Items filter may be used to select stock items of the desired class. The Receipt Tolerance column allows you to set a maximum percentage of difference between stock quantities on goods received. If the goods received quantity falls outside of the permitted tolerance range compared to the order quantity, the items cannot be entered into stock.



Code	Description	Receipt Tol. [%]
10	Consumable	9999.99
20	Recomm. spares	9999.99
30	Spare Part	9999.99

3.1.12.10 Job Classes

The Job Classes register is used to create and store the available classes that are attached to Job Descriptions. When a Job Description is created, it must be given a class that reflects the type of work being carried out. Various maintenance window filters can use the available Job Classes to restrict the information presented on screen. Further information on Job Descriptions can be found in section 3.1.3.



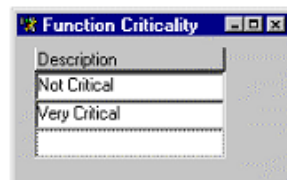
3.1.12.11 Price Classes

The Price Classes register is used to store the various formulae that may be applied to stock item values. Price classes may be used to add varying levels of administration or transport costs to an item or to reflect differing international tax rates.

Descr	Formula
Price Class 1	$PRICE + (PRICE * 1) * (3 * PRICE * 0,1)$
Price Class 2	$PRICE + (PRICE * 2) * (6 * PRICE * 0,2)$
Price Class 3	$PRICE + (PRICE * 3) * (12 * PRICE * 0,3)$

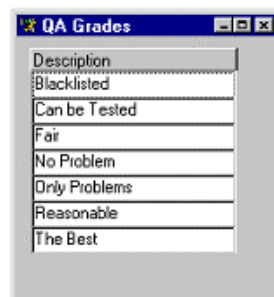
3.1.12.12 Function Criticality

The Function Criticality register may be used to designate a degree of criticality for functions. The Functions window (see section 3.1.7) contains the Criticality drop-down list that displays the values entered in the Function Criticality register.



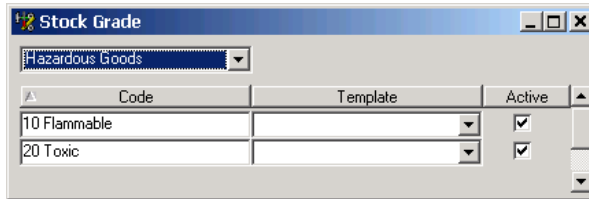
3.1.12.13 Q A Grades

The QA Grades register is used to define various quality assurance grades that may be assigned to suppliers. The Addresses window (see section 3.1.4) contains the QA Grading drop-down list from which a QA grade may be selected for a supplier. Similarly, when an option is selected in the Stock Items window (see section 3.1.2), the **Options** menu gives access to the commands **Vendors** and **Preferred Vendor** and these windows also contain fields that display the quality grading.



3.1.12.14 Stock Grades

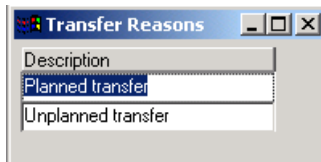
The Stock Grades register is used to add supplementary information to stock items. The information will be copied to purchase form line items to assist with delivery of the stock item.



The categories available in the drop down window are defined in the menu option Tools/Configuration/Stock Grade Categories.

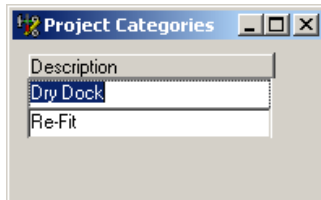
3.1.12.15 Transfer Reasons

The Transfer Reasons register is used to define the list of reasons that might be applied to a transfer document at **Stock / Transfer Documents**. This setting has no effect on any other entries in the database.



3.1.12.16 Project Categories

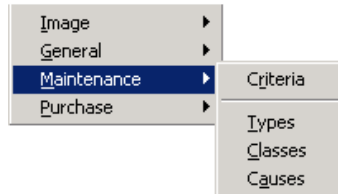
The Project Categories register is used to define the project categories available for use in connection with projects. The correct category can be selected when creating a new project or added to an existing project by using the Project Properties option. For further information on projects see section 4.3.



3.1.13 Maintenance

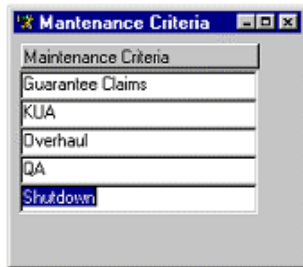
AMOS M&P contains registers to differentiate between various aspects of maintenance tasks to be carried out. The relevant commands in the **Maintenance** menu are described in Chapter 4 of this reference manual and in Chapter 3 of *AMOS M&P User Guide*

To open a maintenance register, select **File/Open Register** and then **Maintenance**:



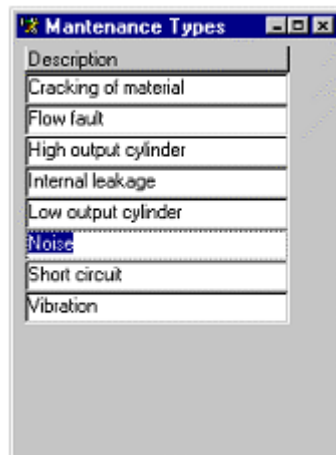
3.1.13.1 Criteria

Below is an example of maintenance criteria that may be used. The Advanced tab card of the Work Orders filter may be used to select work orders that belong to a selected maintenance criterion.



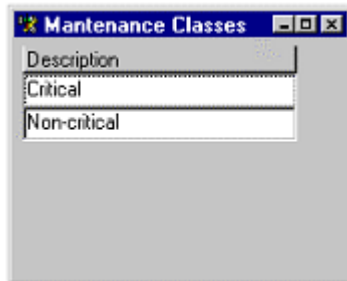
3.1.13.2 Types

Below is an example of maintenance types that may be defined. The Advanced tab card of the Work Orders filter may be used to select work orders that belong to a selected maintenance type.



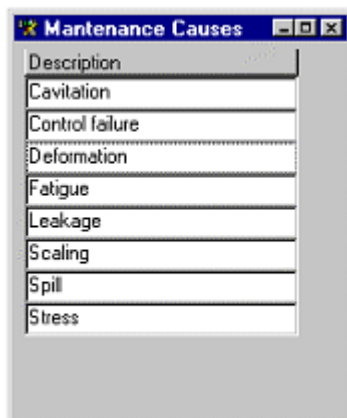
3.1.13.3 Classes

Below is an example of maintenance classes that may be defined. The Advanced tab card of the Work Orders filter may be used to select work orders that belong to a selected maintenance class.



3.1.13.4 Causes

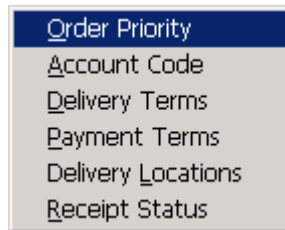
This register resembles the other Maintenance registers described in the previous sections. The Advanced tab card of the Work Orders filter may be used to filter according to a selected maintenance cause.



3.1.14 Purchase

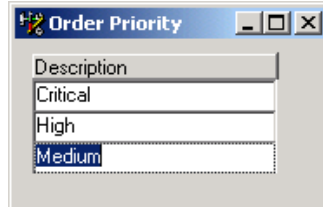
AMOS M&P contains registers to allow the user to define certain aspects of purchase forms according to their own requirements. The information entered in these registers will then be available in various purchase windows in the form of drop-down lists enabling the user to select the required item. When setting up these tables it is important to bear in mind that they may be used for future e-Business functions. Whilst the information entered is generally up to the individual organisation, it is probably advisable to adopt an international standard for these tables such as the International Marine Purchasing Association (IMPA) codes where possible. Chapter 5 of the *AMOS M&P User Guide* and chapter 6 of this reference manual contain further information on the purchasing functions.

To open a purchase register, select **File/Open Register** and then **Purchase**:



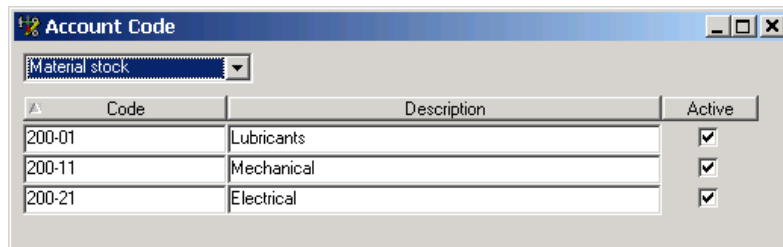
3.1.14.1 Order Priority

This register is used to store the Order Priority options available within purchase forms. The field can be used according to individual company purchasing strategies whether a descriptive term is used or a numbering system.



3.1.14.2 Account Code

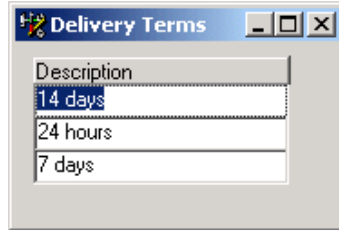
This register is used to store the Account Code options available within purchase forms. The fields can be used according to individual company purchasing and accounting strategies. The Account Code facility can be used to give an alternate method of expense reporting than the budget system. To create the account code categories available in the drop-down list see section 7.7.8.



If you are using the Accounting module, this register will be linked to Cost Centres and recorded in the Account Transactions window (described in chapter 7).

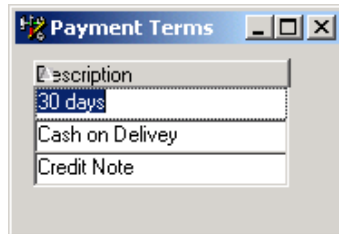
3.1.14.3 Delivery Terms

This register is used to store the Delivery Terms options available within purchase forms. The field can be used according to individual company purchasing strategies whether a descriptive term is used or a numbering system. We would recommend that you use internationally recognised codes with a view towards future e-business usage.



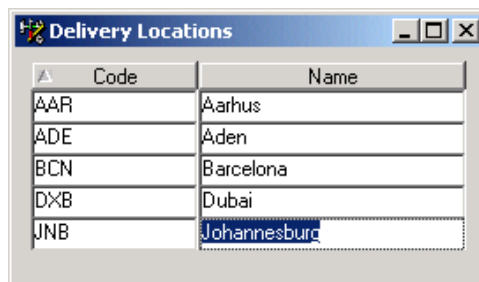
3.1.14.4 Payment Terms

This register is used to store the Payment Terms options available within purchase forms. The field can be used according to individual company purchasing strategies whether a descriptive term is used or a numbering system. We would recommend that you use internationally recognised codes with a view towards future e-business usage.



3.1.14.5 Delivery Locations

This register is used to store the possible Delivery Locations to be used within the organisation. The field can be used according to individual company purchasing strategies whether a descriptive term is used or a numbering system. We would recommend that you use international port codes with a view towards future e-business usage.



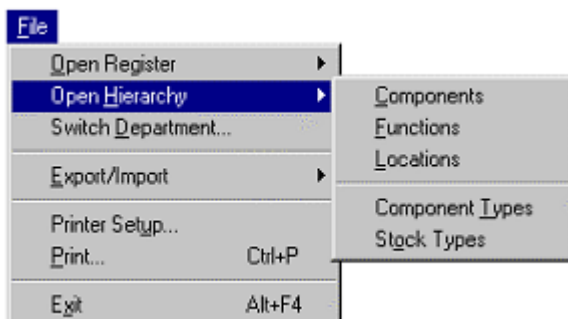
3.1.14.6 Receipt Status

This register contains the available options for receipt status available in purchase form line items.



3.2 Open Hierarchy

AMOS M&P can display the information stored in several of the registers in the format of hierarchical tree structures. The **Open Hierarchy** command in the **File** menu gives access to the hierarchy commands:

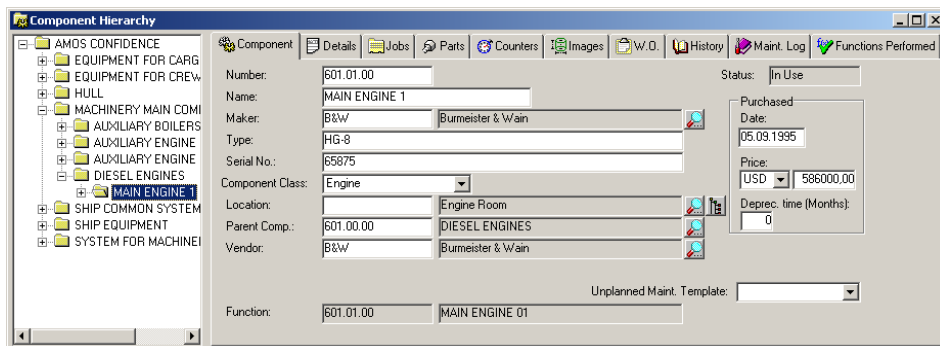


- The Hierarchy windows function in a way which is similar to Windows Explorer: Each window contains a tree hierarchy list on the left, where it is possible to click a + icon to expand a branch and a – icon to collapse it. The area in the right part of the window displays details about the element that is selected in the list on the left. A folder icon represents each hierarchy element. The selected element icon is displayed in the form of an opened folder.
- The standard Windows drag and drop functionality may be used to move an element in a hierarchy. Drag the folder to be moved and drop it on the folder to which it should be moved. The hierarchy will automatically be updated to reflect the move.
- At present, only the Functions hierarchy described in section 3.2.2 may be used to create, delete and otherwise manipulate the elements contained in the hierarchy. The other hierarchies may only be used to display and rearrange pre-defined elements.

3.2.1 Components

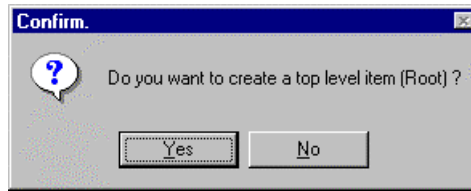
The **Components** command from the **Open Hierarchy** sub-menu of the **File** menu opens the Component Hierarchy window. There is a corresponding toolbar button. Section 3.2 contains general information about working with hierarchy windows in AMOS M&P.

The Component hierarchy window



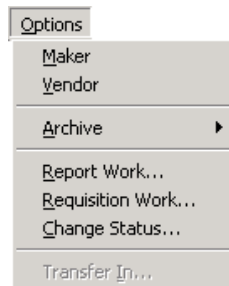
- In the illustration above, the component called Main engine is selected in the hierarchy. The right hand side of the window contains information from the Components register about the installed component. The tabs at the top of the Component hierarchy window give access to all relevant component information.

- To create a new folder in the Component hierarchy, select the folder in which the new folder is to be placed and click the New toolbar button. If a folder on the top level is selected when the button is clicked, the following message is presented:



- Click Yes to create the new folder on the top level, or click No to have the new folder created as a sub-folder in the currently selected folder.

The Options menu for the Component hierarchy



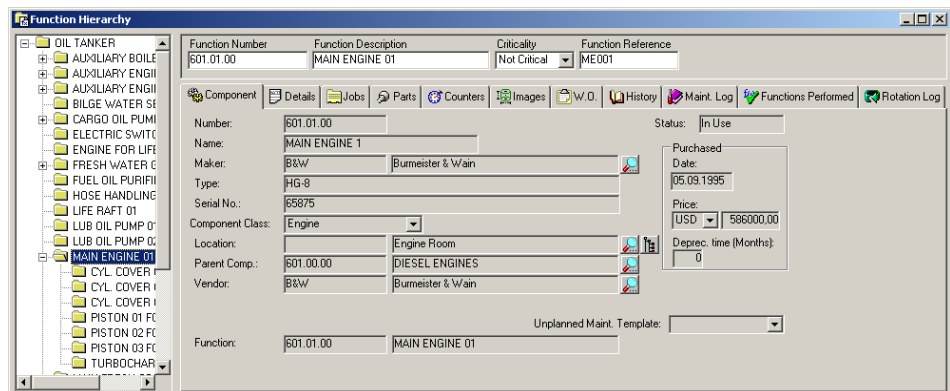
The commands available in the menu correspond to the ones found in the **Options** menu of the Component register window. They are described in section 3.1.1.

3.2.2

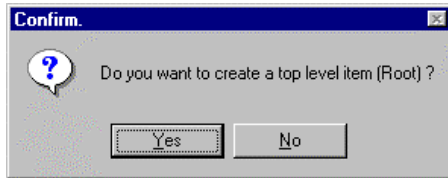
Functions

The **Functions** command from the **Open Hierarchy** sub-menu menu of the **File** menu opens the Function Hierarchy window. There is a corresponding toolbar button. Section 3.1.7 describes the Function register, while section 3.2 contains general information about working with hierarchy windows in AMOS M&P.

The Function hierarchy window

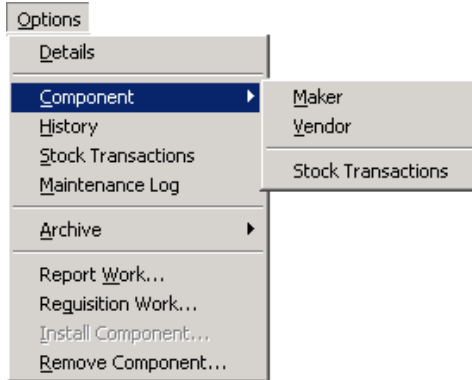


- In the illustration above, the function called Main engine is selected in the hierarchy. A component is installed in this function, and the right hand side of the window contains information from the Components register about the installed component. The tabs at the top of the Function hierarchy window give access to all relevant information about the installed component.
- To create a new folder in the Function hierarchy, select the folder in which the new folder is to be placed and click the New toolbar button. If a folder on the top level is selected when the button is clicked, the following message is presented:



- Click Yes to create the new folder on the top level, or click No to have the new folder created as a sub-folder in the currently selected folder.

The Options menu for the Function hierarchy

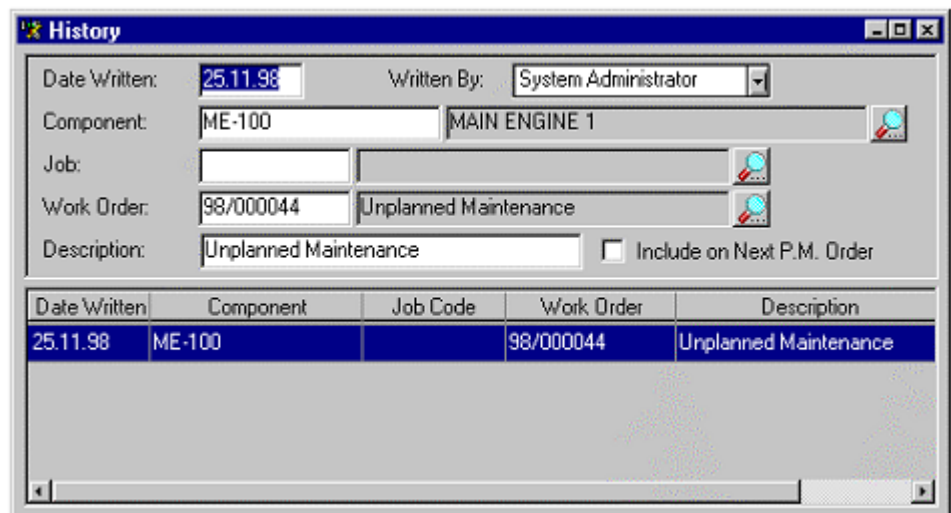


The Component sub-menu from the Options menu

When the selected function in the Function Hierarchy window contains an installed component, the **Components** sub-menu in **Options** menu is available. The commands available in the sub-menu correspond to the ones found in the **Options** menu of the Components register window. They are described in section 3.1.1.

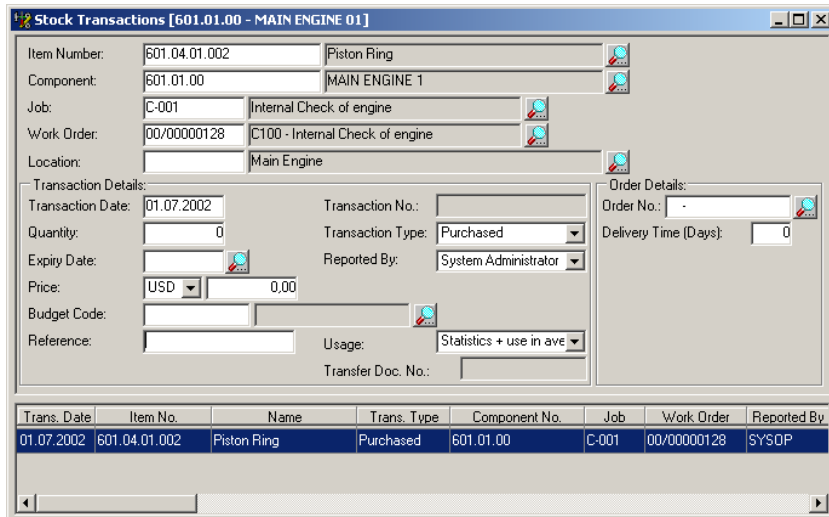
History

The command **History** in the **Options** menu displays history information that has been registered for any component *while installed in the selected function*. As the screen picture below shows, the History window will show the component number for each history line.



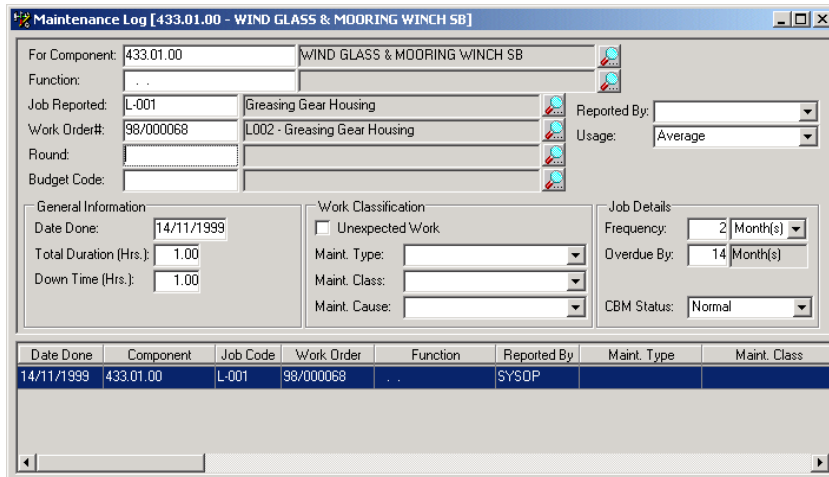
Stock Transactions

The command **Stock Transactions** in the **Options** menu displays stock transaction information that has been registered for any component *while installed in the selected function*.

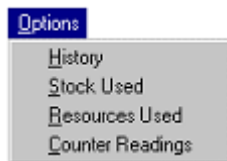


Maintenance Log

The command **Maintenance Log** in the **Options** menu displays information about logged maintenance that has been performed on any component *while installed in the selected function*.



- When a line in the maintenance log is selected, the **Options** menu contains commands that provide access to the logged information such as any registered History, Stock Used, Resources Used and Counter Readings



Archive

The commands available in the Archive sub-menu correspond to the ones found in the **Options/Archive** sub-menu of the Components register window. They are described in section 3.1.1.

Report Work

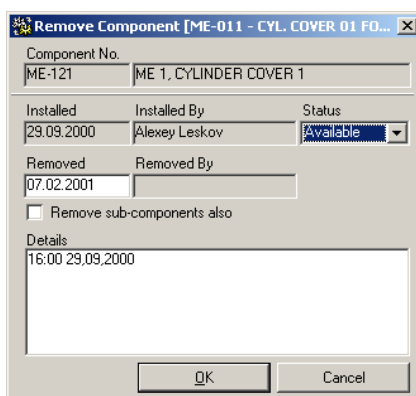
In AMOS M&P performed maintenance work is reported by registered component. However, it is also possible to use the Functions hierarchy as the starting point for reporting work, provided a component has been installed in the selected function. When the **Report Work** command is selected from the **Options** menu, AMOS M&P knows Function and Component numbers based on which function is selected. Chapter 3 in *AMOS M&P User Guide* describes how work is reported.

Requisition Work

Similarly, it is possible to select the **Requisition Work** command from the **Options** menu to requisition work on the component that is currently installed in the selected component.

Installing and removing components in functions

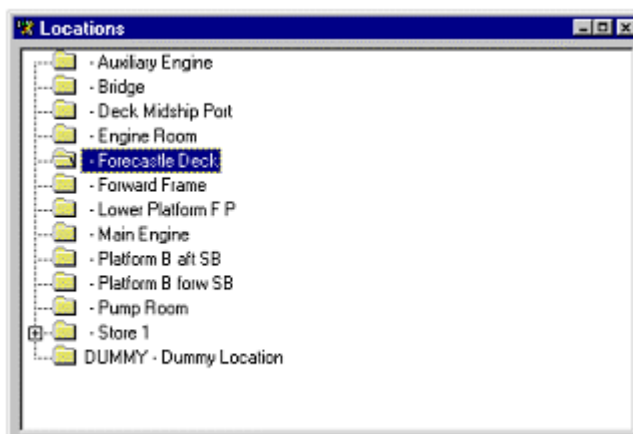
- The Functions hierarchy window may be used to install and remove a component from a function. There are two toolbar buttons for this purpose. One of them is available, the other is unavailable when a function is selected. If a component is installed already, the Remove component button is available. Opposite, when no component has been installed, the Install component button is available. There are corresponding commands in the **Options** menu, called **Install Component** and **Remove Component**.
- The following dialog box is displayed when installing and removing a component in a function. The Details field at the bottom of the box may be used to enter relevant comments or similar notes about the component. These Details are viewable at **Options / Rotation Log Details**.



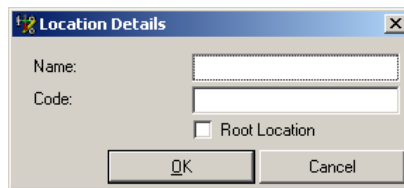
- When 'Remove sub-components also' box is checked, removing this component also removes all components in sub-functions of the currently selected function and Rotation Log entries are made for these components, containing *Status*, *Removed*, *Removed By* and *Details*.

3.2.3 Locations

The Location hierarchy may be used to define various physical locations at an installation where components are located. The Components window, described in section 3.1.1, contains a Location field and buttons with access to the list to select a location and hierarchy button that takes the user into the Locations hierarchy. Section 3.2 contains general information about working with hierarchy windows in AMOS M&P.

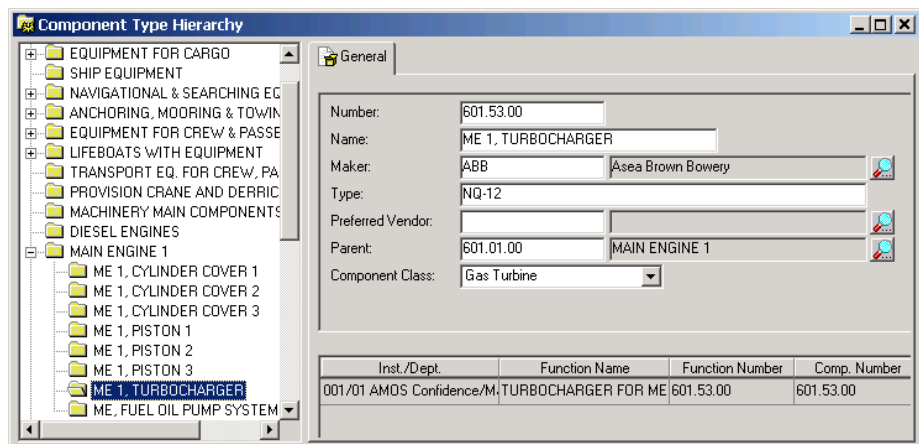


- To define a new location, enter the Locations hierarchy and click the New toolbar button. In the Locations Details dialog box, enter a Code and a Name for the location. If the location is to become a location at the highest hierarchy level, check the Root Location box.



3.2.4 Component Types

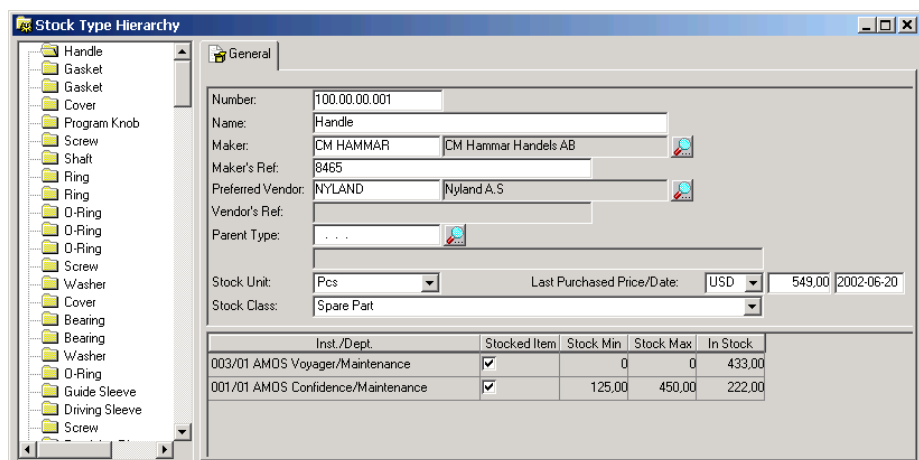
The **Component Types** command from the **Open Hierarchy** sub-menu menu of the **File** menu opens the Component Type Hierarchy window. Section 3.2 contains general information about working with hierarchy windows in AMOS M&P.



- The lower right part of the window displays a list that shows in which installations/departments components of the selected type are presently installed.

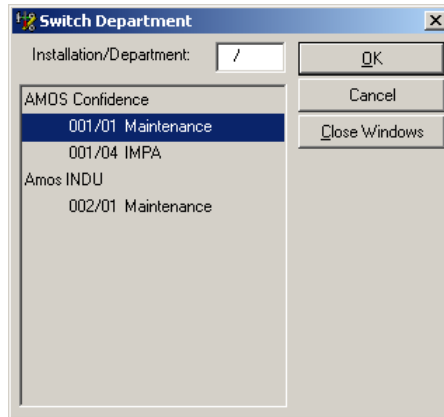
3.2.5 Stock Types

The **Stock Types** command from the **Open Hierarchy** sub-menu menu of the **File** menu opens the Stock Type Hierarchy window. Section 3.2 contains general information about working with hierarchy windows in AMOS M&P.



- The lower right part of the window displays a list that shows in which installations/departments stock of the selected type is currently available.

3.3 Switch Department

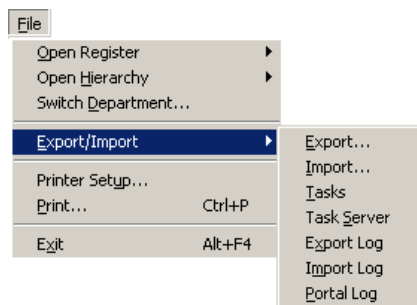


The **Switch Department** command from the **File** menu gives access to the list of the defined installations and departments of the organisation. Note that Switch Department window will only present the departments that the logged in user has access to.

- The window to define new installations and departments is described in section 7.7.12. in this reference manual.

3.4 Export / Import

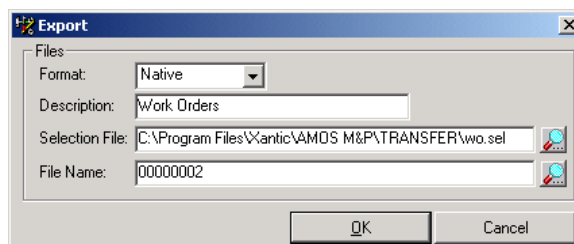
The **Export/Import** command from the **File** menu gives access to a sub-menu containing the commands used for exporting data from and importing data into AMOS M&P databases.



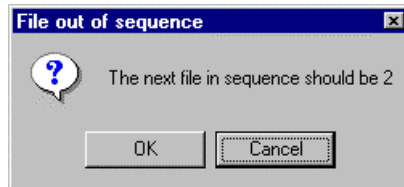
Chapter 8 of the *AMOS M&P User Guide* describes the process of exchanging data between a main office and installations in an organisation. Section 7.7.4.5. of this reference manual describes the parameters that determine file extensions for export and import files, and section 7.7.4.4. shows how a transfer directory is defined.

3.4.1 Export

The **Export** sub-command gives access to a drop-down menu containing choices for the format of the export file and a dialog box to choose a selection file for the export process.



- When the Search button next to the Selection File field is clicked, AMOS M&P starts looking for a selection file in the defined Transfer directory.
- Export files are given numbers, and the number is automatically incremented by one compared to the last export when the **Export** command is selected. For example, if the export process failed, it is possible to click the Search button and select an existing file name. AMOS M&P presents a reminder; click OK to precede and overwrite the previous file.



Selection file commands for import and export

During data import or export, command files with the file extension .SEL are used to specify how the import or export is to be handled. The following commands may be used in selection files:

InsertData <On/Off>

This command controls whether new table entries may be added during an Import operation.

StampDate <On/Off>

If this is set to On, the new or updated table will have the field LastUpdated set to today's date during import.

StampMark <On/Off>

This command controls whether the new or updated table entries will have their ExportMarker field set during import.

OverwriteOldData <On/Off>

This command controls whether updates to already existing table entries is allowed during export.

MarkedRecordsOnly <On/Off>

This command controls whether only marked records are included during export.

UnmarkExportedRecords <On/Off>

This command controls whether exported records are to be unmarked on export.

IgnoreDeleted <On/Off>

This command controls whether deletion messages are included in the export or import. The default value is Off, which means that such messages are included. This command should be used for backwards compatibility, when exporting to AMOS M&P versions lower than 2.2.00. Such versions are incapable of processing deletion messages. When this switch is set to On, deletion messages are not exported.

Department <Installation number/Department number>

Controls which department is to be exported or imported.

Examples:

DEPARTMENT 002/01

DEPARTMENT 003/02

DEPARTMENT ALL (use carefully at an office site during export)

If no DEPARTMENT command is included in the selection file, only the current department is processed. If you have an export file containing information from several departments, it is often wise to use the command DEPARTMENT ALL to allow everything to be imported.

Register <Table name>

This command is used to specify which register (table) to export or import. The command may be combined with the commands listed below.

If <SQL Select Statement>

This command allows you to specify the criteria that the table entries must satisfy in order to be exported or imported.

Note: When using 'If' statements, you should add the text 'amos.' when specifying additional tables within the search criteria, as below:

Register ComponentType

```
If ( ( ComponentType.LastUpdated > LASTEXPORTEDDATE ) AND  
( ComponentType.CompTypeID IN ( SELECT CompTypeID FROM  
amos.ComponentUnit WHERE ( DeptID = 235000003 ) ) ) ) OR  
( ComponentType.CompTypeID IN ( SELECT CompTypeID FROM  
amos.ComponentUnit WHERE ( DeptID = 235000003 ) AND ( ExportMarker = 1 ) ) )
```

ExcludeFields <Table Field List>

This command allows you to specify which table fields are not to be updated during import; all other fields are automatically included. This command cannot be used in combination with the command IncludeFields.

IncludeFields <Table Field List>

This command allows you to specify which table fields are to be updated during import. All other fields are automatically excluded. This command cannot be used in combination with the command ExcludeFields.

Selection file examples

Example 1:

```
MarkedRecordsOnly ON  
UnmarkExportedRecords ON  
Register Component  
Register JobDescription
```

Example 2:

```
MarkedRecordsOnly ON  
UnmarkExportedRecords ON  
Register OrderForm  
If ( FormType In (1,3) ) And ( FormStatus In (2,3) )
```

What follows the IF command is actually an SQL statement defining the criteria that must be satisfied before a form can be exported.

The FormType field may have one of three values:

- 1 indicating a Purchase Order
- 2 indicating a Requisition Form
- 3 indicating a Query

The FormStatus field may have one of five values:

- 1 indicating Active
- 2 indicating Parked
- 3 indicating Filed
- 4 indicating Split
- 5 indicating Cancelled

The above Register command would therefore only export order forms if they were of the type Purchase Order or Query with the status of either Parked or Filed.

Example 3:

```
MarkedRecordsOnly ON  
UnmarkExportedRecords ON  
Register OrderLine  
If OrderID In (Select OrderID From OrderForm Where ( FormType In (1,3) ) And  
(FormStatus In 2,3) )
```

The above Register command would only export order lines if they are attached to order forms which are of the type Purchase Order or Query with a status of Parked or Filed.

You can read the above IF statement as follows:

Export the order line if its OrderID (that is the ID of the order to which it is attached) is in the set of OrderIDs in the OrderForm table satisfying the condition that the order form type is PurchaseOrder or Query with the status Parked or Filed.

Example 4:

```
MarkedRecordsOnly Off
Register ComponentType
If ( CompName Like '%pump' ) And ( VendorID In ( Select AddressID From Address
Where Code Like '%SPEC' ) )
```

The above Register command would only export components types where the name contains the text 'pump' and are delivered by a vendor who's name contains the text 'SPEC'.

Example 5:

```
InsertData On
OverwriteOldData On
Register ComponentType
ExcludeFields Misc1
If ( CompName Like '%PUMP' )
```

The above Register command would only import component types where the name contains the text 'pump', but the field Misc1 would not be updated during the import.

Selection file keywords

Three selection file keywords have been implemented in AMOS M&P. These are called Today, LastExportedDate and LastImportedDate, and they make it possible to create very flexible selection files. Examples are shown below.

Note: When using keywords enclosed within parentheses (brackets) it is necessary for there to be a single space between a parenthesis and the keyword.

For example: If (LastExportedDate)
or If (..... LastImportedDate)

Today

If this keyword is found in the selection file, it is replaced by the current date. As all dates in AMOS M&P also contain a time component, the value that is substituted for the Today keyword depends on how it is used. For example, in '>=Today' may be replaced by 1998-05-14 00:00:00.00000 if the date is 14 May. If the expression '<=Today' is used for the same date, the replacement value is 23:59:59.99999.

LastExportedDate

If this keyword is found in the selection file, it is replaced with the date/time of the last export performed for the installation and department in question.

LastImportedDate

If this keyword is found in the selection file, it is replaced with the date/time of the last import performed for the installation and department in question.

Here are some examples of how these keywords can be used:

```
Register WorkOrder If DueDate <= Today
```

```
Register WorkOrder If LastUpdated Between LastExportedDate and Today
```

```
Register WorkOrder If LastUpdated >= LastImportedDate and LastUpdated <= Today
```

Avoiding problems with import and hierarchies

In order to avoid problems with hierarchies during import and export operations, you may use the command InitDBCmd in the [Import] section of the AMOSW.INI file. Below, you see examples of how you use it for the SQL Anywhere and Oracle databases respectively.

SQL Anywhere:

```
[Import]
DBMS=ODBC
```

.

```
InitDBCcmd01=SET OPTION WAIT_FOR_COMMIT = ON
```

Oracle:

```
[Import]
DBMS=OR8
```

.

```
InitDBCcmd01=SET CONSTRAINTS ALL DEFERRED
```

Other ways to access database commands

You can also access database commands by pressing CTRL+SHIFT+F9. When you do, you enter a dialog box where you can select a command file you may select to execute commands.

You can also add import and export commands in the [Import] and [Database] sections of the AMOSW.INI file. If you do, you number them from 01 to 99. Here is an example:

```
[Database]
DBMS=OR8
```

.

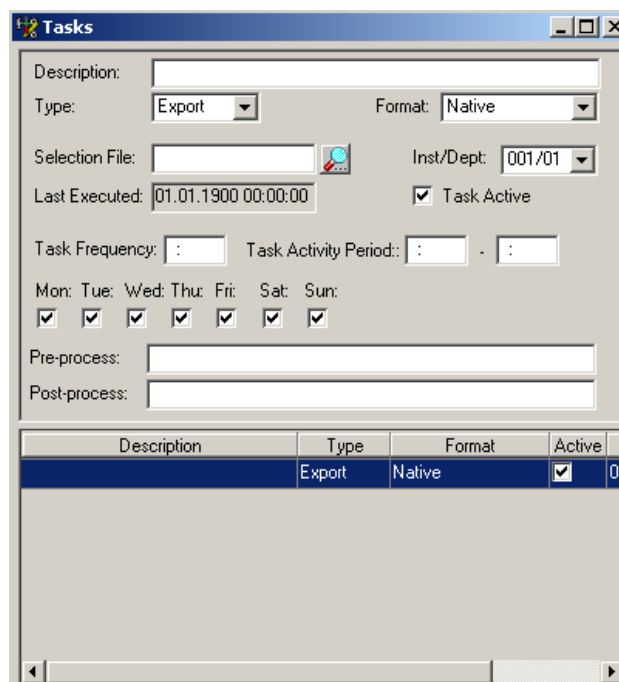
```
InitDBCcmd01=Alter Session Set Optimizer_Mode= First_Rows
```

3.4.2 Import

The **Import** command is parallel to the **Export** command described in the previous section, and is used to import data into an AMOS M&P database.

3.4.3 Tasks

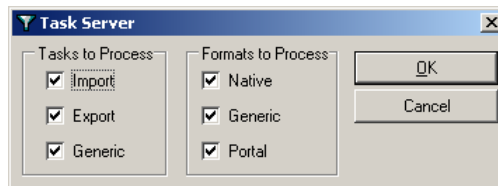
The **Tasks** command gives access to the Export/Import Tasks window, which is used to define tasks to handle import and export of data.



- The drop-down list called ‘Type’ below the Description file is used to select the task type. The three available types are Import, Export and Generic. Generic tasks may handle various system maintenance tasks. For example, after files have been successfully imported, there may be a defined task to compress the imported files, archive them and delete the files on the directory, clearing it for the next batch of files to be handled.
- The format drop-down called ‘Format’ to the right of the ‘Type’ drop-down is used to select the format of the file: Native, Generic or Portal.
- The two fields Pre-process and Post-process may be used to name batch files to be carried out before and after the selection file. The file extensions .Bat, .Com and .Cmd may be used. For example, a Pre-process batch file may be defined to get e-mail files containing data to be imported by a task, and a Post-process batch file may contain commands to delete imported files. Such files should be located on the same directory as the Selection File for the task. If not, the full path of such files should be provided.
- The task contains information about when and how often it is to be performed. If the task is only to be performed on certain days of the week, make sure that the correct weekdays are checked.
- A defined task may be temporarily de-activated: Remove the check mark from the Task Active box of the desired task. The task may be re-activated again later by checking the box.

3.4.4 Task Server

The **Task Server** command is used to execute defined tasks. When this command is given, a filter dialog box is presented. The box makes it possible to select which types of tasks and formats that are to be processed:

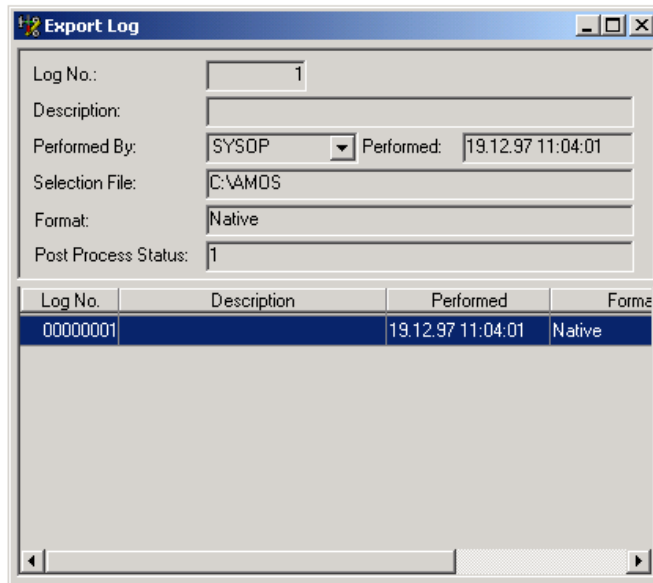


When the selection has been made, the tasks of the selected types are processed. Then the Task Server window is displayed. In this window, it is possible to delete defined tasks.

Type	Description	Selection File	Last Executed
Export	Export of work orders	WD.sel	01.01.00 00:00:00
Import	Import new addresses	Address.sel	01.01.00 00:00:00

3.4.5 Export Log

The **Export Log** command opens a window with a list of the log files from export operations. Each log file contains log number information about when the export took place and who started it, the format of the export, and which selection file was used. The Post Process Status field contains the number 1 for successful transactions and 0 for unsuccessful ones. If you find unsuccessful transactions then you should investigate the possible causes.

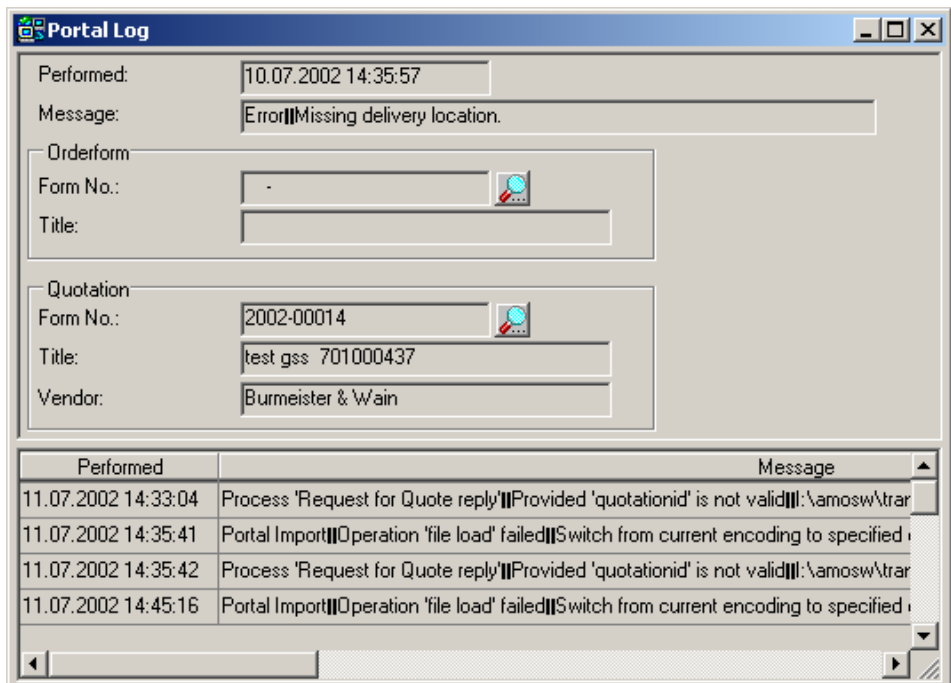


3.4.6 Import Log

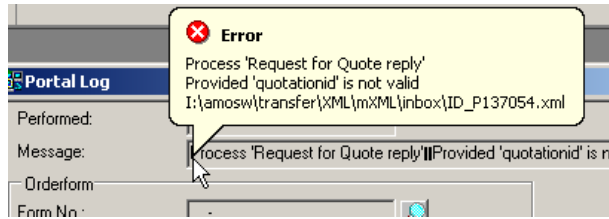
The **Import Log** command is parallel to the **Export Log** command described in the previous section, and is used to show the log of import operations.

3.4.7 Portal Log

The **Portal Log** command is used to record and display error messages and related information concerning portal importing.



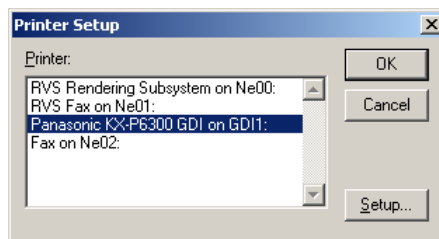
Clicking on the look-up button alongside a Form No. will open the original form. In some cases the message can be much longer than the field can accommodate. If you would like to see the whole message you should move the cursor so that it is on the message and a balloon containing the full error message will appear as shown below:



There are two parameters associated with the portal log entitled Show 'Error Messages During Portal Import' and 'Store Imported XML Document In Portal Log'. These parameters are described in section 7.7.4.5.

The Options menu for the portal log contains the menu entry 'Show XML'. Clicking this will display the stored XML document, for the selected portal log record, in your default web browser.

3.5 Printer Set-up



The **Printer Set-up** command from the **File** menu presents a list of the defined printers. The default Windows printer is used for printouts unless a different printer is selected from the Printer Set-up window.

Click the Set-up button in order to enter the Properties dialog box for the selected printer. The options available in this box depend on the printer and printer driver selected.

3.6 Print

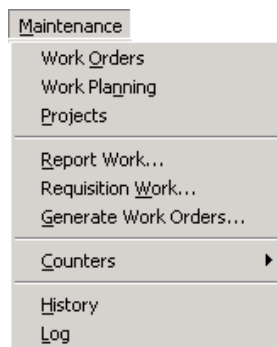
The **Print** command from the **File** menu prints out the contents of the currently active window on the default Windows printer. To print on a different printer, select the **Printer Set-up** command before starting the printout. There is a corresponding toolbar button.

3.7 Exit

Select the **Exit** command from the **File** menu in order to shut down the database and close AMOS M&P. If there are open windows containing unsaved data, the user is prompted about this and given the opportunity to save the data.

4 The Maintenance Menu

This chapter covers the commands in the **Maintenance** menu.



4.1 Work Orders

AMOS M&P uses *work orders* to describe which jobs and other tasks need to be carried out. The system is set up to handle a *work order flow*, which typically consists of five steps:

- A new work order is generated when the previous work order for the defined job has been completed. The default status of a new work order is set to Requested.
- The Planning window is used to schedule when the jobs are to be carried out, which resources are to be used, etc. Once this is done, the status changes to Planned. This is described in section 4.2.1.2.
- The status of work orders have been changed to Planned, the actual work orders are issued and a maintenance plan may be printed.
- As the maintenance work is performed, it is reported on the various work orders. Work is reported until the status can be changed to Completed.
- The final step is to control the work reports and file them for the records.

There are several system parameters that may be set to automate and modify this typical work order flow. The three types are:

- Periodic work orders, which are generated for jobs with a defined periodic frequency, for Condition Based Maintenance (CBM) or for counters.
- Round work orders.
- Work orders generated when work is requisitioned when the need arises.

For example, there are system parameters for indicating default priority and status of each type of work order, as well as the default output format and if Controlled and Completed work orders of the various types are to be Auto-filed. The parameters are described in section 7.7.4.

4.1.1

The Work Orders Filter

The Filter dialog box for Work Orders contains the two tab cards, Basic and Advanced:

The screenshot shows the 'Filter' dialog box with the 'Basic' tab selected. It features several input fields and checkboxes for filtering work orders. The 'Number' field contains a slash (/). The 'Title' and 'Component' fields are empty. The 'Function' field is also empty. The 'CBM Criteria' section has checkboxes for 'Acknowledged' and 'Unacknowledged', both of which are unchecked. The 'Show Project Jobs' checkbox is also unchecked. The 'Only Job Classes' list includes Adjusting, Check Job, Inspection, Lubrication, and Measurement. The 'Only Disciplines' list includes (Unassigned), 1. Engineer, 2. Engineer, Deck Hands, and Motorman. The 'Planning' section has checkboxes for 'Due Now', 'Overdue', 'Due This Week', and 'Due Next Week', all of which are unchecked. The 'Due Between' field is empty. On the right side, there are buttons for 'OK', 'Cancel', 'Clear', and a 'Global Search' checkbox which is unchecked.

The Basic tab card contains the parameters normally used to filter out the work orders to work with. For example, it is possible specify CBM Criteria to be Acknowledged and/or Unacknowledged, to filter Only Job Classes or Only Disciplines and select from the Planning area to pick out work orders according to when they are due. Work orders assigned to projects will only be included if you check the 'Show Project Jobs' box.

The screenshot shows the 'Filter' dialog box with the 'Advanced' tab selected. It features several checkboxes and dropdown menus for filtering work orders. The 'Include Work Orders of Status' section has checkboxes for 'Requested', 'Postponed', 'Pending', 'Cancelled', 'Issued', 'Completed', 'Planned', 'Controlled', and 'Filed'. The 'Include Work Orders of Type' section has checkboxes for 'Periodic', 'Requisition', and 'Round'. The 'Maint. Criteria' and 'Created By' fields are empty. The 'Work Classification' section has a checkbox for 'Unexpected Work Only' which is unchecked. The 'Maint. Type', 'Maint. Class', and 'Maint. Cause' fields are empty. The 'Priority' section has 'From Priority' and 'To Priority' fields. The 'Est. Dur. (Hrs)' section has 'From Duration' and 'To Duration' fields. On the right side, there are buttons for 'OK', 'Cancel', 'Clear', and a 'Global Search' checkbox which is unchecked.

The Advanced tab card contains more filter options Note that AMOS M&P will use all the selections on the two-tab card when filtering work orders.

4.1.2

The Work Orders window

The Work Orders window provides a list of all the work orders in the system. From this window, a work order may be selected and work may be reported on it. The window is also used to change the current status of the work order.

In the Work Orders window, at the bottom of the screen there is a list of work orders matching the filter criteria specified. If one of these is selected, the details of that work order are displayed in the various other fields in the window.

Work Orders

Number: 00/00000116 Triggered By: Frequency Created By: Alexey Leskov
 Title: W001 - Soot cleaning of boiler History Template:
 For Component: 644.01.00 AUXILIARY BOILER, COMPLETE Status: Issued
 For Function: 644.01.00 AUXILIARY BOILER Type: Periodic
 Frequency: 1 Month(s) Project:

Planning
 Priority: 5 Est. Dur. (Hrs): 5,00
 Due Date: 18.07.2002 Locked
 Window (Days): 45 03.06.2002
 Maint. Criteria:
 Resp. Discipline: Motorman
 Output Format: Work Order

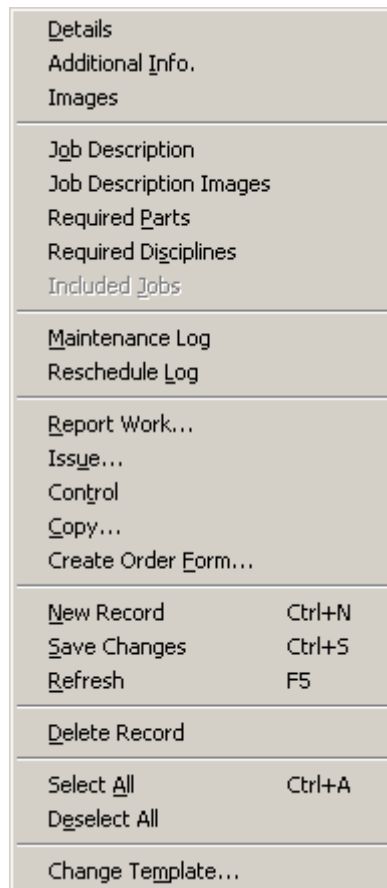
Work Classification
 Unexpected Work
 Maint. Type: Frequency Based Job
 Maint. Class: Calendar Based
 Maint. Cause:

History
 Created: 15.09.2000
 Pl. Start:
 Started:
 Completed:
 Filed

Number	Title	Component	Priority	Resp. Discipline	Status	
<input checked="" type="checkbox"/> 00/00000116	W001 - Soot cleaning of boiler	644.01.00	5	Motorman	Issued	18.0
<input type="checkbox"/> 00/00000117	I002 - Semiannually inspection of boiler	644.01.00	5	2. Engineer	Issued	15.0
<input type="checkbox"/> 00/00000118	C054 - Check of pump's coupling	644.01.00	5	Motorman	Issued	22.0
<input type="checkbox"/> 00/00000119	T001 - Monthly test of boiler	644.01.00	5	Motorman	Issued	15.0
<input type="checkbox"/> 00/00000120	C001 - Checking pump linkage	644.27.00	5	Motorman	Issued	15.0
<input type="checkbox"/> 00/00000121	W004 - Cleaning of FW generator	761.01.00	5	Motorman	Issued	16.0
<input type="checkbox"/> 00/00000122	C090 - Check the separator	761.01.00	5	2. Engineer	Issued	16.0

- To tag work orders, check the box all the way to the left of the work order. If a group of work orders is tagged, it is possible to use a menu command to handle all the tagged work orders. The **Edit** menu also contains the options **Select All** and **Deselect All**.
- The status of a selected work order may be changed by opening the Status drop-down list and selecting the proper status from it.
- If the work order belongs to a project, the project number will be displayed
- The Report Work button in the secondary toolbar is used to enter the window to report work performed on a work order that has been issued; see section 4.4.
- The icons in the secondary toolbar may be used to enter Details about the work order or enter windows to specify Requested Parts and Requested Disciplines. The Details button gives access to a window for a description of the work order.
- The information for a work order also contains a check box Locked. For new work orders generated automatically by AMOS M&P, this box will always be unchecked. This means that the system may adjust the estimated due date based on counters for example. Work orders you generate manually are locked when defined, but you may uncheck the box if the due date needs to be moved for some reason.

The pop-up menu

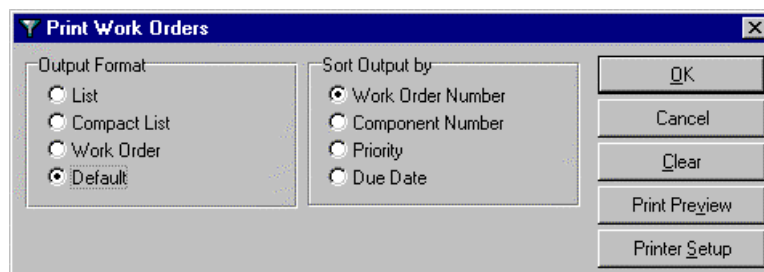


To access the pop-up menu in the Work Orders window, select the work order in the list and click on the right mouse button. The pop-up menu contains the commands from the **Edit** and **Options** menus:

Click on a command to give it.

4.1.3 Printing Work Orders

To see what jobs to perform, use AMOS M&P to print jobs that are due. It is possible to print lists of jobs from the Work Orders window. Tag the work orders that are to be printed. When the Print button is clicked, the following dialog box is used to select how the work plan should look:

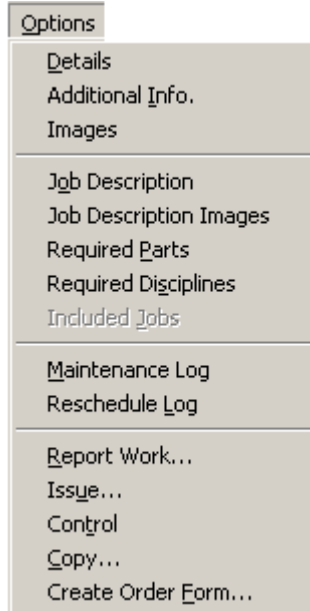


If no work order has been tagged before the Print button is clicked, an extended Filter dialog box is presented. It contains the same options as the regular Work Orders filter, plus the Output options from the dialog box displayed above.

4.1.4

The Work Orders Options menu

The **Options** menu is added to the main menu bar once the Work Orders window has been opened. It contains the following commands:



Details

The **Details** command from the **Options** for the Work Orders window gives access to a window with a Full Description of the selected work order. There is a corresponding toolbar button.

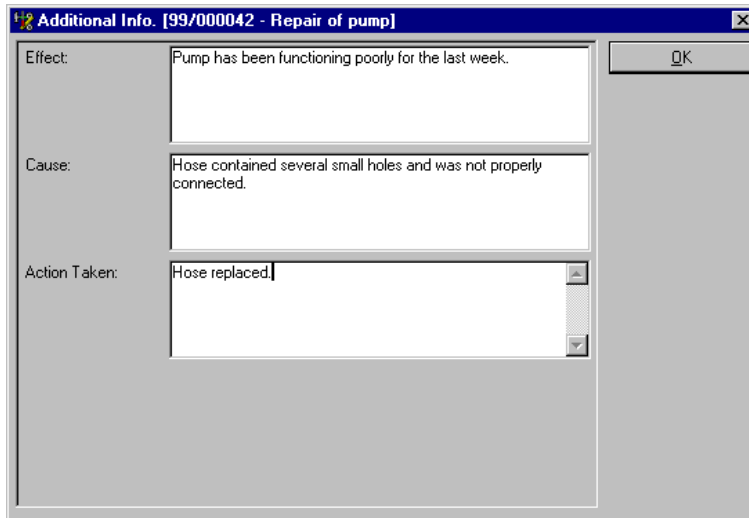
A screenshot of the 'Full Description' window. The window has a title bar with a maximize button, a close button, and a print button. The main area contains several sections of data entry fields:

- Present Inspection:** Location, Country, Commenced date, Finished date, Time.
- Last Inspection:** Location, Country, Date, Previous report existing.
- Segment:** Segment, Report Type.
- Diving Supervisor in charge:** Diving Supervisor in charge, Station ID No., Priode of attendance From, To, Negatives of photos kept by, Report Code, Additional documentation kept by.
- Condition of existing paint system(s):** Sq., Application date, Existing paint system.
- Corrosion:** Corrosion, Mechanical Damage, Oil or other deposits, Photos taken, Pinholes, Adhesion, Cohesion, Slime.
- Surface condition:** Surface condition, Inert spot, Cracking (Size, mm, Depth, mm), Peeling/detachment (Between which coats), Blistering (Size, mm, Dry/wet, PH), Shell fouling (Type and size), Weed/grass (Type and size).

The screen picture above shows a description that has been based on a template. The History Template drop-down list in the Work Orders window is used to specify the template. A description of the location of templates is found in section 7.7.4.3., while Appendix A describes the creation of new templates.

Additional info

The **Additional info** command from the **Options** menu gives access to this window:



The screenshot shows a window titled "Additional Info. [99/000042 - Repair of pump]". It contains three text input fields:

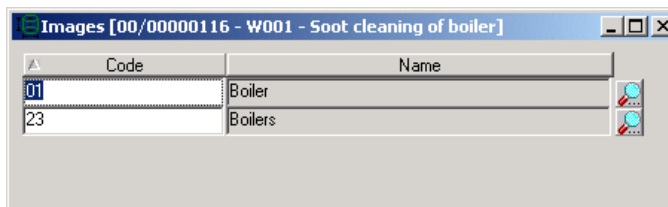
- Effect:** Pump has been functioning poorly for the last week.
- Cause:** Hose contained several small holes and was not properly connected.
- Action Taken:** Hose replaced.

An "OK" button is located in the top right corner of the window.

The Additional Info window contains three text fields that are used to provide additional textual information about the Effect and Cause of the selected Work order, and the Action Taken.

Images

The **Images** command from the **options** menu allows you to see which component/part images are associated with a particular Work Order. It is possible to add and delete related images from this window. To view the selected image, choose View Image from the revised **Options** menu. The Images register is covered in section 3.1.11.



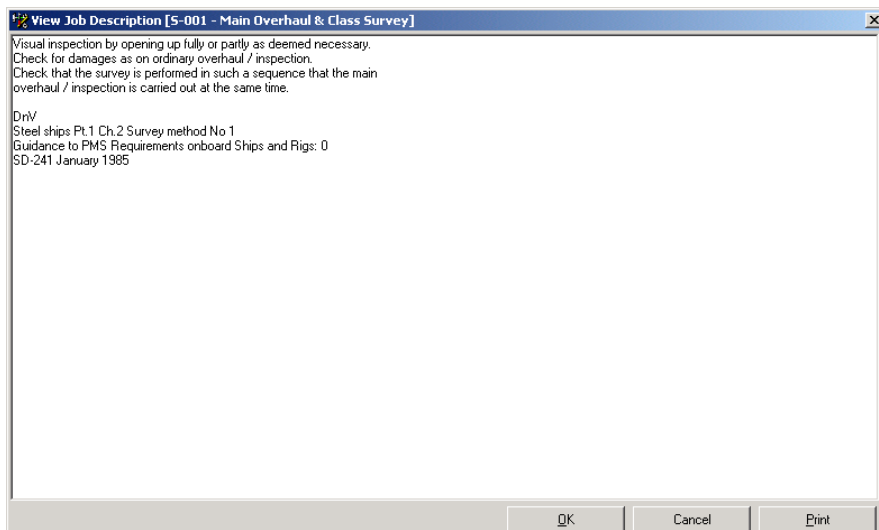
The screenshot shows a window titled "Images [00/0000116 - W001 - Soot cleaning of boiler]". It displays a table with two columns: "Code" and "Name".

Code	Name
01	Boiler
23	Boilers

Each row has a small icon to its right, and there are "Add" and "Delete" icons at the bottom right of the table area.

Job Description

A defined job may contain a Job Description with a textual explanation that is printed out to provide instructions for how a work order is to be carried out. The Job Descriptions register is described in section 3.1.3. The **Job Description** command from the **Options** menu gives access to this window:



The screenshot shows a window titled "View Job Description [5-001 - Main Overhaul & Class Survey]". It contains the following text:

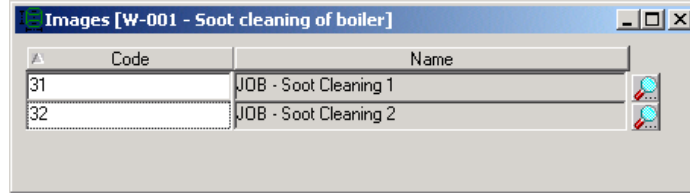
Visual inspection by opening up fully or partly as deemed necessary.
Check for damages as on ordinary overhaul / inspection.
Check that the survey is performed in such a sequence that the main overhaul / inspection is carried out at the same time.

Driv
Steel ships Pt.1 Ch.2 Survey method No 1
Guidance to PMS Requirements onboard Ships and Rigs: 0
SD-241 January 1985

Buttons for "OK", "Cancel", and "Print" are located at the bottom of the window.

Job Description Images

The **Job Description Images** command from the **Options** menu allows the user to see which work related images are associated with a particular Work Order. It is possible to add and delete related images from this window. To view the selected image, choose View Image from the revised **Options** menu. The Images register is covered in section 3.1.11.



Required Parts

The **Required Parts** command from the **Options** menu gives access to the window that is used to register which parts are being used in the selected work order. There is a corresponding toolbar button.

Item No.	Name	Maker's Reference	Quantity	Reserved	Avg. Used	Avg. Max
651.01.00.004	Water Jacket	U21300		0	0	0
651.01.00.005	Cylinder Bearing Surface Greaser	U21500		0	0	0
651.01.00.006	Diaphragm	U21505		0	0	0
651.01.00.007	Head Stud-Bolt	U21507		0	0	0
651.01.00.008	Nut	U21508		0	0	0
651.01.00.002	Packing Ring for Frame Cover	AR7-1002		0	0	0
651.01.00.021	Valve Housing	345		0	0	0
651.01.00.030	Cover Bolts	560		0	0	0
651.01.00.009	Packing Ring 110x9	U21509		0	0	0
651.01.00.001	Frame Cover	AR7-1001		0	0	0
651.01.00.010	Stud Bolt	U21510		0	0	0
651.01.00.011	Nut M64x6	U21511		0	0	0
651.01.00.012	Packing Ring 85x5,3	U21513		0	0	0
651.01.00.013	Pusher	U21513		0	0	0
651.01.00.014	Spring Plate	U21514		0	0	0

Read more about reporting work in section 4.4.

Required Disciplines

The **Required Disciplines** command from the **Options** menu gives access to the window that is used to register which disciplines are involved in the selected work order. There is a corresponding toolbar button.

Discipline	Est. Hrs.	Est. Cost	Avg. Hrs.	Max. Hrs.	Avg. Cost	Max. Cost
Motorman	2.00	USD 200.00	0	0	0	0
Deck Hands	2.00	USD 100.00	0	0	0	0

Read more about reporting work in section 4.4.

Included Jobs

If the selected work order is defined as a round the command **Included Jobs** is made available in the **Options** menu. The command may be selected to get an overview of the jobs that are included in the round. The function for defining rounds is described in section 3.1.8.

Maintenance Log

Work performed on work orders is logged in the Maintenance log to keep track of parts and resources used for example. There is a separate command for the log in the **Maintenance** menu, and it is described in section 4.9.

Reschedule Log

Work orders that have been rescheduled can be recorded in the reschedule log. If you want to use the reschedule log you need to set the parameter 'Log Job Rescheduling' to True. If you also want to record the reason for rescheduling the job you should set the parameter 'Require Reason For Job Rescheduling' to True. Both of these parameters are described in section 7.7.4.5.

Report Work

The functions for reporting work are described in section 4.4.

Issue

Work orders that have been planned may be issued from the Work Orders window. It is possible to issue multiple work orders in a single operation by checking the ones to be issued:

<input type="checkbox"/>	Number	Title	Component	Priority	Resp. Discipline	Status
<input checked="" type="checkbox"/>	99/000092	C572 - 3000 Hours Check of Air Compress	731.01.00	5	2. Engineer	Planned
<input checked="" type="checkbox"/>	99/000094	L002 - Greasing Gear Housing	433.01.00	5	Deck Hands	Planned
<input checked="" type="checkbox"/>	99/000095	C001 - Checking fuel oil pump linkage	703.01.00	5	Motorman	Planned
<input checked="" type="checkbox"/>	99/000096	C115 - Checking of bearings	601.53.00	5	1. Engineer	Planned
<input type="checkbox"/>	99/000097	C100 - Internal Check of ME	601.01.00	5	1. Engineer	Issued
<input type="checkbox"/>	99/000099	S001 - Main Overhaul & Class Survey	651.02.00	5	1. Engineer	Issued
<input type="checkbox"/>	99/000101	M011 - Crankshaft deflection	601.01.00	5	1. Engineer	Issued

Use the menu command **Options/Issue**, or click the corresponding toolbar button to issue the required job(s). In the Issue Work Orders dialog box that appears select the preferred Output Format and how the output is to be sorted.

Control

Unless a system parameter has been set so that completed work orders are filed automatically, the Work Order window must be used to control the work orders and file them. From the Work Orders window, tag the work orders to be marked as Controlled and give the menu command **Options/Control** or click the corresponding toolbar button.

Copy

The **Copy** command from the **Options** menu allows you to make a copy of an existing work order. The new work order will be given the next available number in the series. When presented with the dialogue box, choose whether to copy the required parts and/or disciplines when you make the copy.

Create Order Form

If you are viewing a work order that you would rather purchase (as a service) you should select Create Order Form from the Options Menu. This will open a selection window where you can choose which of the three form types you wish to create. There is also a checkbox to use if you want to list the newly created form. When the form is created it will be given the next form number in the sequence and the work order details will be included as a line item attached to the form.

4.2 Work Planning

Unless certain work order flow system parameters at the installation have been set differently, generated work orders will have the status Requested and not Planned. In order to activate such work orders, and also work orders that have been requested manually in the window Requisition Work (see section 4.5), the Work Planning window must be used to plan the work orders. This window is also used to re-schedule and otherwise follow up on work orders.

4.2.1 The Standard Work Planning Interface

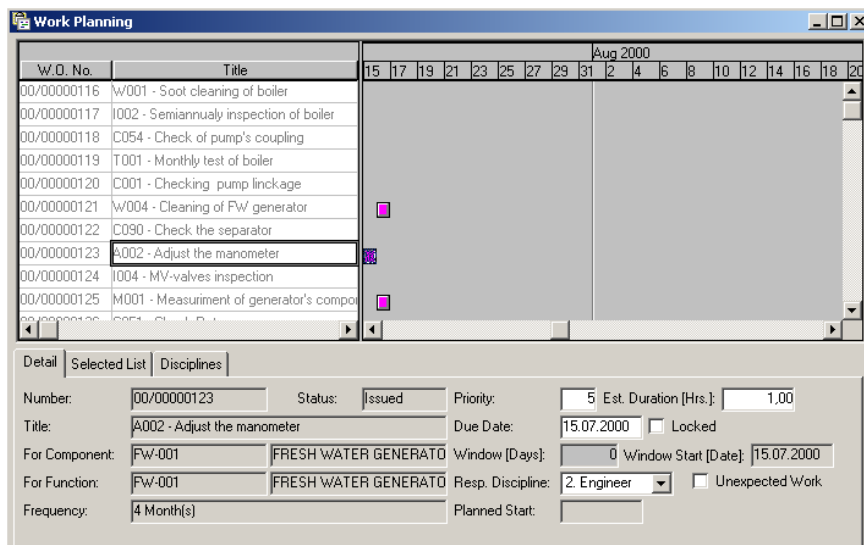
AMOS M&P is supplied with a choice of work planning interfaces. The standard interface is included without charge and is discussed in the following section. The enhanced interface, which offers greater functionality and flexibility, can be purchased as a plug-in module and is covered in section 4.2.2.

4.2.1.1 The Work Planning Filter

The Filter dialog box for the Work Planning window is the same that is used for the Work Orders window. This filter is described in section 4.1.1.

4.2.1.2 The Work Planning window

The work-planning window looks like this:



These are the areas found in the Work Planning window:

- The second toolbar contains a drop-down list with the various possible statuses a work order may have. Each status is represented by a specific colour. Once the menu has been opened, it is possible to let the mouse pointer rest on a colour to see a tool tip with the name of the status for each colour.
- On the left hand side is a list of the work orders matching the criteria that were specified in the filter window.
- To the right of the work order list there is a graphic representation of a timeline. Each work order is represented by a colour coded horizontal bar on this timeline.
- On entering the work-planning window, the Gantt chart scrolls to Today. When a work order title is clicked, the Gantt chart automatically scrolls to the associated work order, and selects it.
- It is possible to click a column header in the Gantt chart to have it sorted by that column.

- The upper, left part of the window contains several columns with additional information about the work orders. Use the mouse to drag the line separating the data columns and the graphical timeline sideways, depending on what is to be displayed.

W.O. No.	Title	Comp. No.	Comp. Name	Frequency	Func. No.	Func. Desc.
99/000115	3001 - Bunkering	100.00.00	AMOS CONF1	1 Month(s)	100.00.00	OIL TANKER
99/000114	C002 - Check Equipment	100.00.00	AMOS CONF1	2 Day(s)	100.00.00	OIL TANKER
99/000113	D101 - Overhaul of Cylinder Cover	651.02.00	ALJILIARY	12 Month(s), 5000 Hours (5150)	651.02.00	ALJILIARY ENGINE 02
99/000110	M100 - Thrust Bearing Adjustment	761.09.00	FRESH WATE	16 Week(s)	761.09.00	FRESH WATER PUMP
99/000109	D101 - Overhaul of Cylinder Cover	601.02.01	ME 1, CYLI	18 Month(s), 18000 Hours (-25489)	601.02.01	CYL COVER 01 FOR ME 01
99/000108	D101 - Overhaul of Cylinder Cover	601.02.02	ME 1, CYLI	18 Month(s), 18000 Hours (-24670)	601.02.02	CYL COVER 02 FOR ME 01
99/000107	D101 - Overhaul of Cylinder Cover	601.02.03	ME 1, CYLI	18 Month(s), 18000 Hours (-25489)	601.02.03	CYL COVER 03 FOR ME 01
99/000106	M201 - Megger test Electric Motor	563.01.00	PROVISION	12 Month(s)	563.01.00	PROVISION CRANE
99/000105	C571 - 1000 Hours Check of Air Compress	731.01.00	STARTING A	6 Month(s), 1000 Hours (2930)	731.01.00	STARTING AIR COMPRESSOR
99/000104	M201 - Megger test Electric Motor	731.01.02	STARTING C	12 Month(s)	731.01.02	EL MOTOR FOR ST. AIR COMPRE
99/000103	M100 - Thrust Bearing Adjustment	601.53.00	ME 1, TURB	1 Month(s)	601.53.00	TURBOCHARGER FOR ME 01

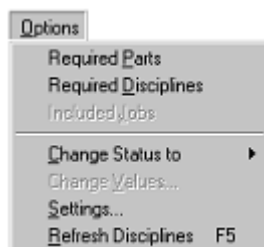
- The first tab card in the lower part of the window shows the details of the work order that is selected in the timeline. Note that a single line may represent several jobs (for example, if the work order represents a round).
- The Selected List tab card is the second of the three cards. It is possible to select multiple work orders in the window and work on them as a group. Hold down the Ctrl key while clicking on the work orders to select.
- The Disciplines tab card is the third one. It shows an overview of the disciplines for which work has been planned. The figures in the Work column represent the total number of hours planned for each discipline. The timeline to the right of the three tab cards shows the number of scheduled hours for the involved disciplines for the selected work order.

Detail		Selected List	Disciplines
	Name	Work [h]	29 30 1 2 3 4 5
1	Deck Hands	3,0	3,0
2	Motorman	1,0	1,0
3	2 Engineer	4,0	1,0

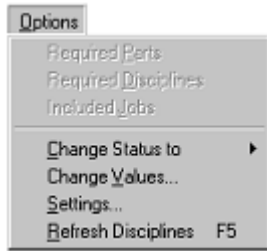
- The F5 key may be used to update the Disciplines tab card.

4.2.1.3 The Work Planning Options menu

The **Options** menu is added to the main menu bar once the Work Planning window has been opened. It contains the following commands:



If multiple work orders have been selected (by holding down the Ctrl button while clicking), the **Options** menu will look like this:



Required Parts

The command **Required Parts** from the **Options** menu gives access to the window that displays the parts that have been connected to the selected work order. There is a corresponding toolbar button.

Item No.	Name	Maker's Reference	Quantity	Reserved	Avg. Used	Avg. Max
100.00.00.008	Ring	54846		0	0	0
100.00.00.001	Handle	8465		0	0	0
100.00.00.002	Gasket	4856		0	0	0
100.00.00.003	Gasket	r4841		0	0	0
100.00.00.004	Cover	684654		0	0	0
100.00.00.005	Program Knob	F468651		0	0	0
100.00.00.006	Screw	45 T857451		0	0	0
100.00.00.007	Shaft	64864		0	0	0
100.00.00.009	Ring	498465		0	0	0
100.00.00.010	O-Ring	4894652		0	0	0
100.00.00.011	O-Ring	487461		0	0	0
100.00.00.012	O-Ring	F 5456		0	0	0
100.00.00.013	Screw	45646		0	0	0
100.00.00.014	Washer	48546		0	0	0
100.00.00.015	Cover	48646		0	0	0

Required Disciplines

To specify additional disciplines for the selected work order, give the menu command **Options/Required Disciplines**. There is a corresponding toolbar button.

Discipline	Est. Hrs.	Est. Cost	Avg. Hrs.	Max. Hrs.	Avg. Cost	Max. Cost
2. Engineer	2.00	USD 200.00				
1. Engineer	1.00	USD 200.00				
Deck Hands	4.00	USD 160.00				

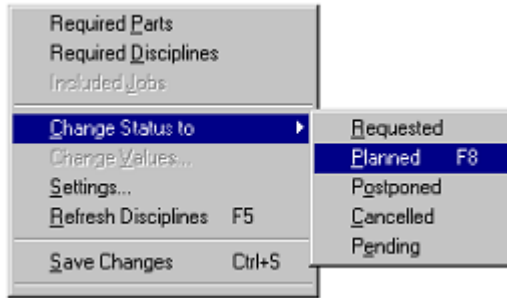
To add a new line, click the New button, select the discipline from the first dropdown list and specify the number of hours. It is also possible to specify the estimated cost in the same dialogue box. Close the box and click the Save button to save the data.

Included Jobs

If a round has been attached to a work order, the command **Included Jobs** is available in the **Options** menu. Give it to access the list of jobs that are included in the round.

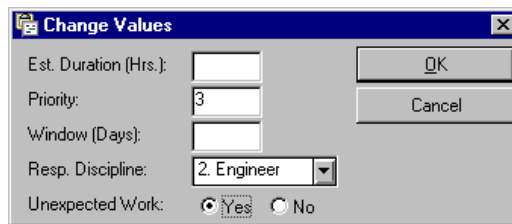
Change Status to

The command **Change Status to** in the **Options** menu is used to change the status of one or more work orders in the timeline.



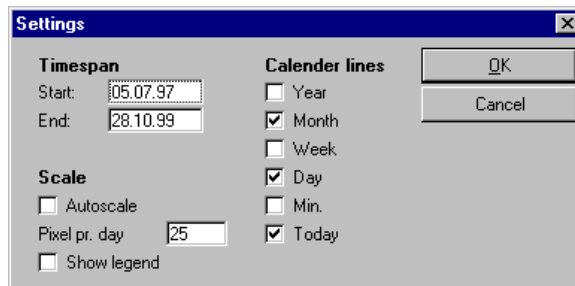
Change Values

The command **Change Values** in the **Options** menu is used to change values of one or more work orders in the timeline.



Settings

To access the window for setting up the calendar, make sure the Work Planning windows is open and give the menu command **Options/Settings**. The dialog box shown below is used to specify what the timeline should look like.



Note that if the box **Autoscale** has been checked, the number of pixels per day is set to zero, and AMOS M&P automatically scales the timeline to display the defined work orders.

Refresh Disciplines

The command **Refresh Disciplines** may be used to refresh the corresponding tab card at the bottom of the window. This has the same effect as pressing the F5 key.

4.2.2 The Enhanced Work Planning Interface

The Enhanced Work Planning Interface offers greater functionality and flexibility than the standard interface. It is possible to carry out almost all maintenance planning and reporting through the enhanced interface. It is also anticipated that future expansion of the enhanced interface will provide further benefits.

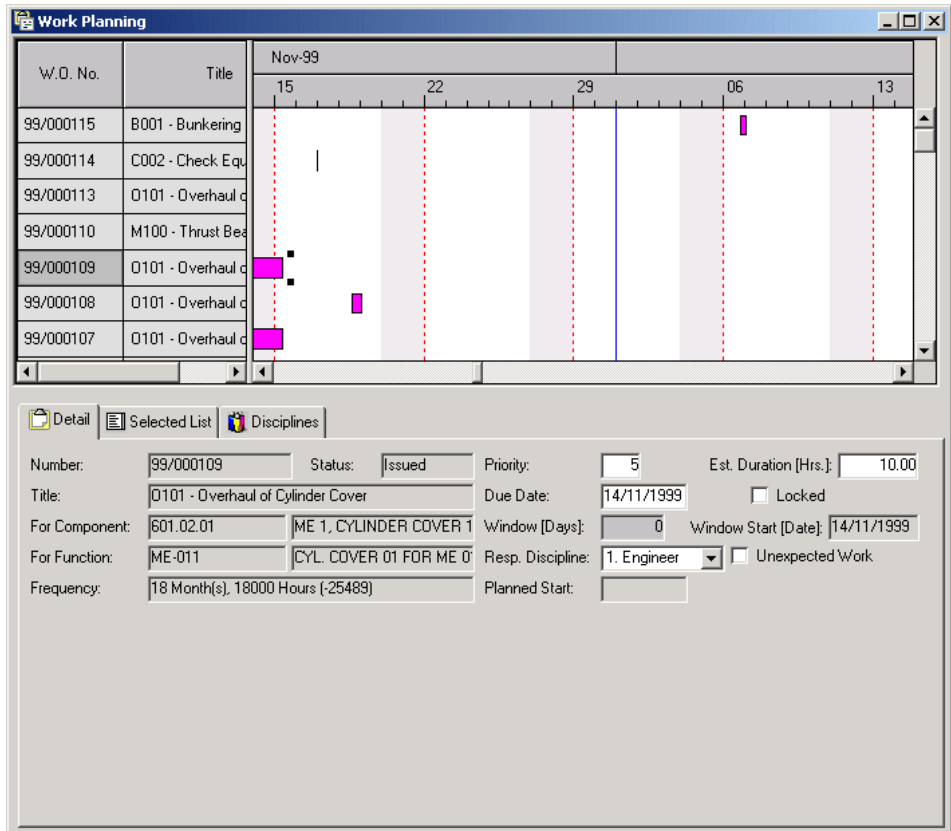
4.2.2.1 The Enhanced Work Planning Filter

The Filter dialog box for the Work Planning window is similar to the one that is used for the Work Orders window. This filter is described in section 4.1.1. The main difference is that you can search for project jobs by individual project (either on their own or with all other work orders) or by individual project section (only section jobs are shown).

4.2.2.2

The Enhanced Work Planning Window

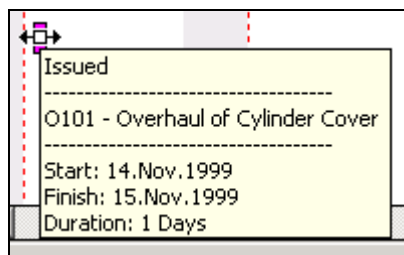
The enhanced work planning window looks like this:



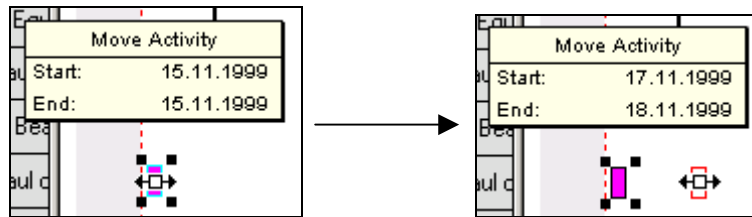
These are the areas found in the Work Planning window:

- The second toolbar contains a drop-down list with the various possible statuses a work order may have. Each status is represented by a specific colour. Once the menu has been opened, it is possible to let the mouse pointer rest on a colour to see a tool tip with the name of the status for each colour.
- On the left hand side is a list of the work orders matching the criteria that were specified in the filter window.
- To the right of the work order list there is a graphic representation of a timeline. Each work order is represented by a colour coded horizontal bar on this timeline.
- On entering the work-planning window, the Gantt chart scrolls to Today. When a work order title is clicked (selected), the Gantt chart automatically scrolls to the start date of the associated work order.

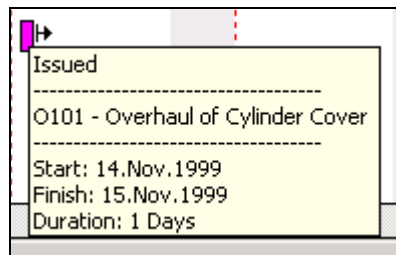
If you move the cursor over a work order, the cursor changes from a pointer to a box with arrows on either side. At the same time as the cursor changes, a text box appears containing details of the work order. Here is an example:



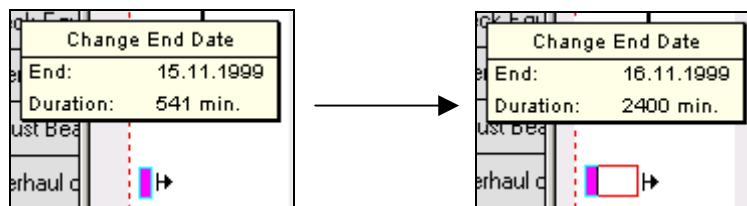
Once the cursor has changed, it is possible to move the selected block or work order to a new position on the time line, using the 'drag and drop' technique. Left click and hold the mouse while the double arrowed cursor is over the work order you wish to move. You should notice that small black squares appear at each corner of the work order to signify that it is now selected. A new text box, entitled 'Move Activity', will appear above the work order. This informs you of the start and end dates where the work order (represented by a box outline) is, as you drag the work order one way or the other. When the dates shown in the text box are to your satisfaction, release the mouse button and the work order is now rescheduled. If you have the Reschedule log enabled the alteration will be recorded with or without a reason depending on how the parameters have been set. See section 4.1.4 for more information on the reschedule log.



It is also possible to vary the duration of a work order in a similar way to the rescheduling option shown above. Move the cursor to one side of the work order you wish to alter. The cursor should change to a single arrow pointing one way or another.



Once the cursor has changed, it is possible to alter the length of the selected block or work order along the time line, using the 'drag and drop' technique. Left click and hold the mouse while the single arrowed cursor is over the work order you wish to alter. A new text box, entitled 'Change End Date', will appear above the work order. This informs you of the end date and duration of the work order as you drag it one way or the other. When the date and duration shown in the text box are to your satisfaction, release the mouse button and the work order is now altered. Note that if you move both the start and end dates the alterations will be classed as a rescheduling.



The Details Tab

Detail		Selected List		Disciplines		
Number:	99/000115	Status:	Issued	Priority:	5	
Title:	B001 - Bunkering	Due Date:	06/12/1999	Est. Duration [Hrs.]:	5.00	
For Component:	100.00.00	AMOS CONFIDENCE	Window [Days]:	0	Window Start [Date]:	06/12/1999
For Function:	AA-001	OIL TANKER	Resp. Discipline:	Deck Hands	<input type="checkbox"/> Unexpected Work	
Frequency:	1 Month(s)	Planned Start:				

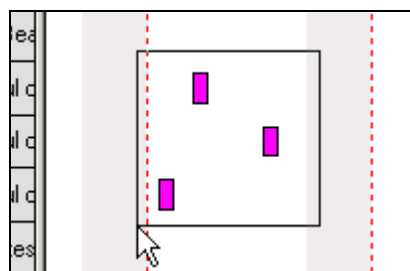
The lower part of the Enhanced Work Planning window contains the details of the currently selected work order. The areas with a white background may be modified.

The Selected List Tab

The Selected List tab card is shown below:

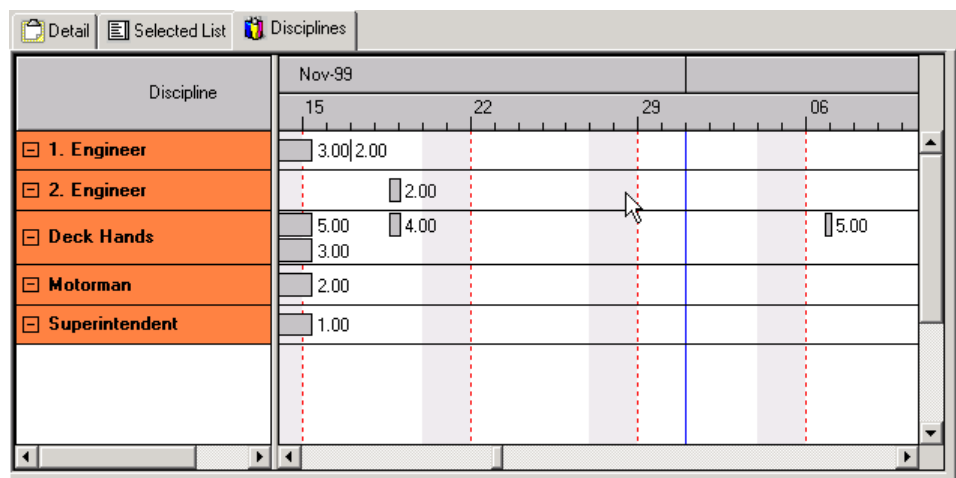
Number	Title	Due Date	Locked	Pl. Start	Planned By	Status	Unexpected Work
99/000107	0101 - Overhaul of Cylinder Cover	14/11/1999	<input type="checkbox"/>			Issued	<input type="checkbox"/>
99/000108	0101 - Overhaul of Cylinder Cover	18/11/1999	<input type="checkbox"/>			Issued	<input type="checkbox"/>
99/000109	0101 - Overhaul of Cylinder Cover	14/11/1999	<input type="checkbox"/>			Issued	<input type="checkbox"/>

It is possible, as shown above, to select several work orders to be worked on at the same time. To do this you can either hold down the Ctrl key while clicking on the required work orders or by clicking and dragging a rectangular box which covers the work orders to be included, as shown below.

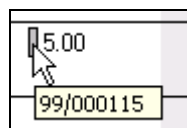


The Disciplines Tab

The Disciplines Tab is shown below:

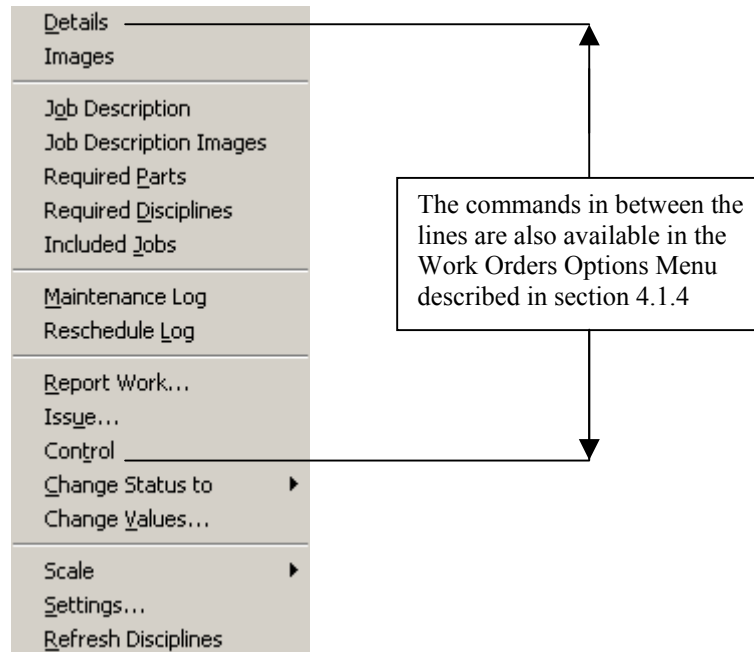


The Disciplines Tab gives you an overview of the work planned for each discipline. The timeline contains a box for each work order according to discipline(s) required. The number of required hours appears to the right hand side of each work order. This makes it clear to see whether there are manpower shortages or conflicts of scheduling. If you move the cursor over a work order, a text box appears informing you of the work order number.



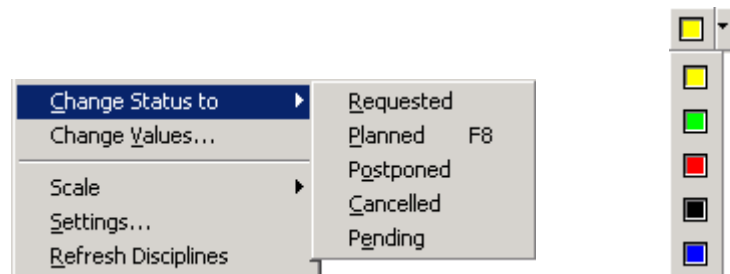
4.2.2.3

The Enhanced Work Planning Options Menu



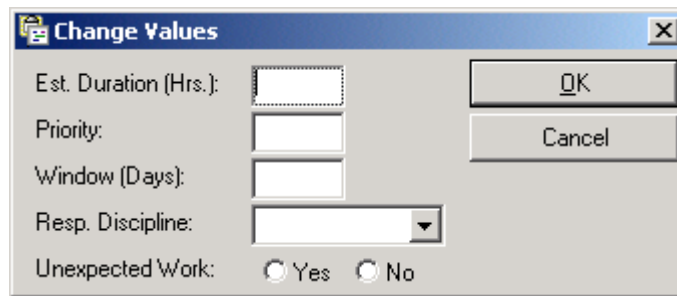
The Enhanced Work Planning Options Menu is very similar to the Work Orders Options Menu. The menu selections from 'Details' down to 'Control' are all available within that menu. See section 4.1.4 for further explanation.

Change Status to



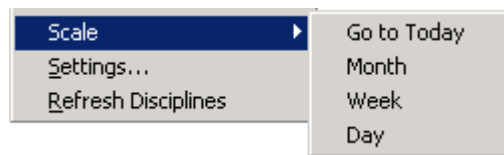
The Change Status To menu option allows the status of the selected work order to be changed to one of the listed alternatives. The yellow button on the toolbar is a shortcut to the same function. It has a small arrow next to it that, when clicked, changes into a drop down window (shown above) with the equivalent work order statuses in the same order as they appear in the menu. There is a further shortcut option for altering the status to 'Planned' by pressing the F8 key.

Change Values



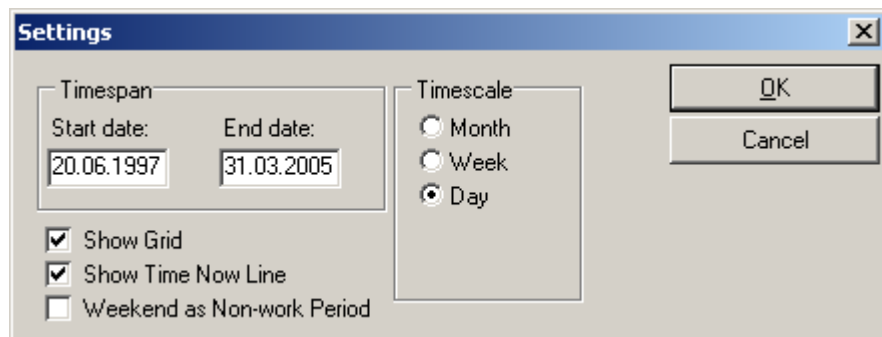
When you have a number of work orders grouped together into a selected list, it is possible to alter the above values to apply to all grouped work orders. There is also a toolbar button to access the same window.

Scale



The scale option allows you to jump to today's date, regardless of the time scale in use, and to change the way the timeline is displayed. The options Month, Week and Day alter the amount of time displayed in the timeline window by changing the space allocated for the selected time period and also takes the timeline to the current date. There are corresponding toolbar buttons. The Work Order Tracking Accuracy parameter can also be set to allow display and tracking of work orders to the nearest 15 minutes if required. See section 7.7.4.5 for details on this parameter.

Settings



The Settings window allows for further customisation of the timeline window. The Work Order Tracking Accuracy parameter can also be set to allow display and tracking of work orders to the nearest 15 minutes if required. See section 7.7.4.5 for details on this parameter.

Refresh Disciplines

The refresh Disciplines option allows you to update the Disciplines Tab screen without having to close and re-open the Enhanced Planning Window.

4.2.3

The various Work Order statuses

A work order changes status at different points in the process. AMOS M&P registers a work order as started the first time you report work based on it. Here is a list of the various statuses a work order may have:

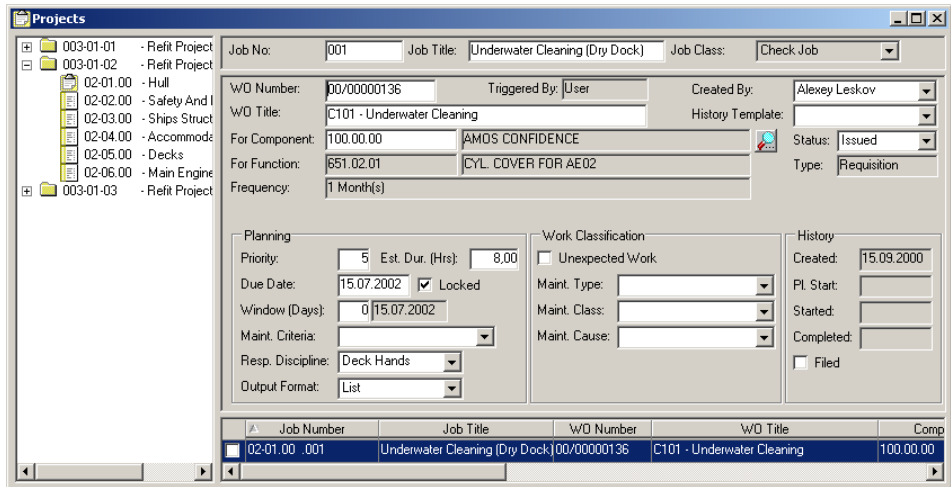
Status	What has happened
Requested	Work orders generated for periodic jobs are normally given this status (unless a system parameter has been set to give such jobs the status Planned), and this is also the status of work orders that have been requested manually in the Requisition Work window.
Planned	Work orders with a status of Requested, Pending or Postponed may be set to Planned if the work may start when the Due Date has been approved. If certain system parameters have been set, periodic jobs will automatically be set to Planned.
Issued	Work orders with the status Planned may be issued and printed out.
Postponed	If for any reason a job needs to be postponed, the status may be changed to this from jobs with the current status of Requested, Pending or Planned.
Pending	Jobs depending on a specified condition, such as Shutdown required, may be set to Pending. Jobs with the current status Requested, Postponed, or Planned may be changed to Pending.
Cancelled	This status may be set if it is necessary to cancel a work order.
Completed	If a work order report specifies that the work has been carried out, the status should be changed to Completed.
Controlled	Unless system parameters specify that Completed work orders be filed automatically, they must have their status changed to Controlled first.
Filed	The work order has been closed and stored; it may be viewed, but no further changes can be made. Only Completed jobs may get the status Filed.

4.3 Projects

The Projects function allows extraordinary or emergency maintenance work to be grouped together under a project name and sub-divided into sections. This enables the user to keep closer track on related maintenance tasks within a major project situation such as damage repair or re-fit.

When you first open the Projects window you will need to add projects, sections and jobs. The projects window will initially appear quite empty until you have begun entering information.

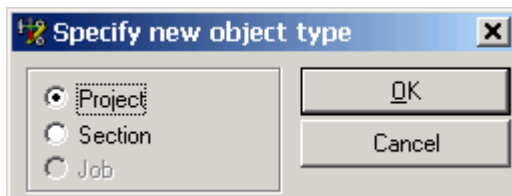
The following screenshot shows a project that has already been created.



The creation of new projects and sections is carried out by clicking on the 'New' toolbar button when the area of focus is the hierarchy (left-hand) pane. Creation of new jobs within a section is carried out by clicking on the 'New' toolbar button while the area of focus is in the bottom left-hand list of jobs pane. To focus on one area or another just left-click with the mouse while the cursor is in the desired area of the projects window.

The remainder of the window is the same as the work orders window described in section 4.1.2 with a line at the top allowing you to add your own job number and title to the work order.

Clicking on the new button opens the following window:



Select project or section (note that you cannot create a section unless you have already created a project) and click on OK. Once you have created a section, the create job will become active (providing that you are highlighting a project section).



If you chose to create a project you will see the following window:

Enter the required information for the project you want to create. The Project No. and Title fields should contain information meaningful to your organisation. Installation, Project Manager, Category and Status can be selected from the various drop down windows. Created, Start and End are all date fields and can be set by double clicking in the field and selecting the required date from the pop-up calendar. The Locked checkbox can be used to fix the estimated duration of a project. Access to this box is controlled by an entry in the 'Fields' tab of Access Control, described in section 7.7.2. This feature could be useful for comparing estimated duration against the actual duration upon completion of the project. The pane on the right can be used to attach account categories and codes to the project.

If you chose to create a section you will see the following window:

The Section No. and Section Name fields should contain information meaningful to your organisation.

When you have created a project with at least one section and you have selected the required section (should be highlighted in blue), you can click on new in order to add jobs to it.

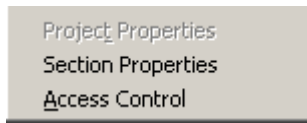
In order to make it easier to add jobs to the correct section of a project, when there are many sections to choose from, the currently selected section has the following clipboard icon  instead of the normal list icon .

Click on the new button and select job from the dialogue box to obtain the following window:

If you click on Yes you will be allowed to select any existing work order.

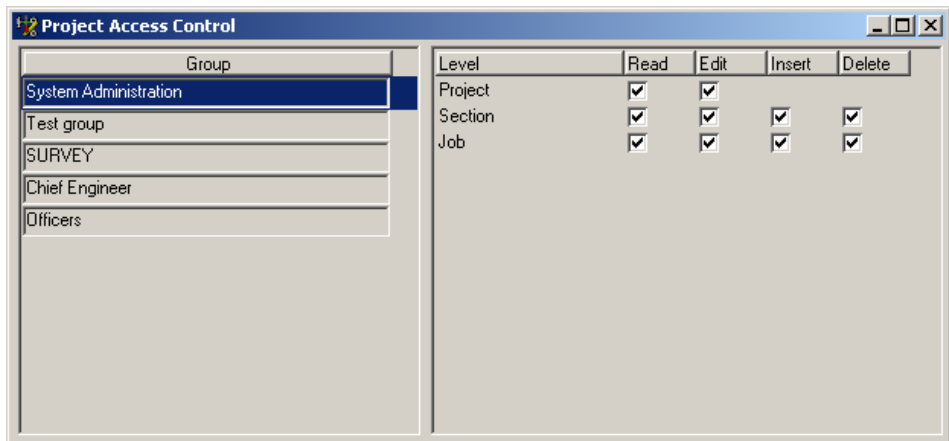
If you click on No the work order area of the screen will be emptied of information and you will be able to create a manual work order as described in section 4.1.2. Note that any manually created project job will be issued the next available work order number to uniquely identify it.

When you are in the projects window the Options menu available contains exactly the same choices as the one found in the work orders window with the addition of the following:



Project Properties and Section Properties are only available when you have highlighted the appropriate area of the hierarchy pane. When you click on either of the properties options you can alter the details of the project or section in the same types of window that you used to create them.

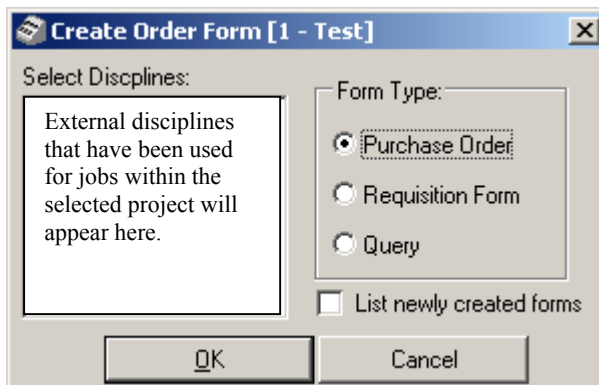
Access control is used to open the following window:



Each project has its own, dedicated, access control feature that can be used to allow or deny different levels of access to any defined group .

All the other menu entries function in exactly the same way as the ones in the work orders options menu except for the 'Create Order Form' menu item.

When you want to sub-contract project jobs to an external supplier, click Create Order Form and the following window will open:



If you want to sub-contract project jobs it is important that the disciplines selected to carry out the jobs are defined as external in the Discipline Register, see section 3.1.12.2. When you open the create order forms window above, you can select the required external discipline from the left-hand window. AMOS M&P will list external all disciplines that have been used for the jobs contained within the selected project.

When you have selected the discipline and form type, check the box if you want to list the form, click on OK and a new purchase form will be created containing individual line items for each job scheduled to be carried out by the selected discipline. The form will be given the next automatically generated form number and you can fill in the remaining details to complete the form ie. Vendor, Budget, Payment Terms etc.

4.4 Report Work

Once the jobs have been performed, progress is reported back to AMOS M&P. Otherwise, AMOS M&P will keep issuing reminders.

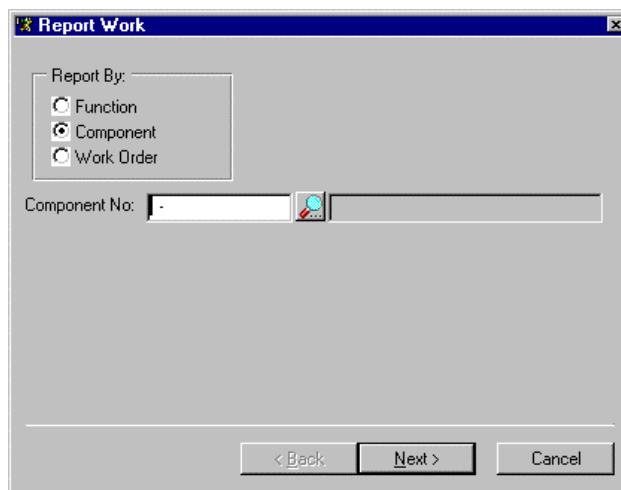
AMOS M&P uses the report to update the maintenance schedule, and the stock and budget information. AMOS M&P also documents the compliance with warranty requirements and safety regulations.

- For one-time tasks that are known about in advance where there is no job defined, make and report a Requisition work order. Read about this in section 4.5.
- In some cases, maintenance tasks are handled on the spot and reported after they have been completed.
- When reporting jobs done out-of-turn, the report should be marked as “unexpected” so AMOS M&P can help evaluate the maintenance program fairly.

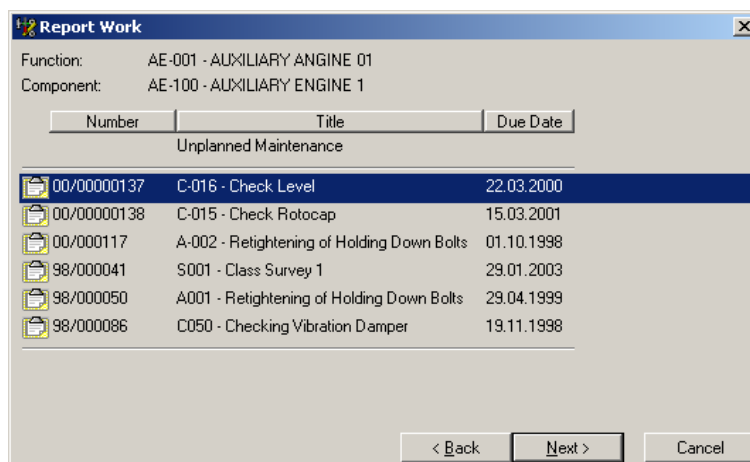
4.4.1 Different strategies for Reporting Work

Reporting work may be approached from one of the following angles:

- If the menu command **Maintenance/Report Work** is given without any open windows, AMOS M&P presents the following dialog box:



- The system parameter Default Preference When Reporting Work determines which default option is checked: Function, Component or Work Order. Use the Search button to select the Function, Component or Work Order and click Next to enter the Report Work screen.



- For example, if Component is selected when the Search button is clicked, the first step is to select the relevant component. When Next is clicked, a list containing the item Unplanned Maintenance is presented. In addition, the issued work orders for the jobs connected to the selected component: are included.
- When the desired work order has been selected, click 'Next' to enter the Report Work window.
- It is also possible to select Options/Report Work while in the Components screen. The same dialog box shown above will be presented. Similarly, the command is available from the Function hierarchy.
- Finally, work may be reported from the Work Orders screen.

4.4.2 The Report Work window

The Report Work window looks like this:

The screenshot shows the 'Report Work' window with the following details:

- Function: 601.01.00 - MAIN ENGINE 01
- Component: 601.01.00 - MAIN ENGINE 1
- Work Order: 99/000097 - C100 - Internal Check of ME
- Tab cards: Details (selected), Resources Used, Stock Used, History
- General Information:
 - Date Done: 03.07.2002
 - Total Duration (Hrs.): 0
 - Down Time (Hrs.): 0
 - Misc. Expenses: USD, 0.00
 - Mark Work Order as Completed:
- Reporting Options:
 - History
 - Stock Used
 - Resources Used
- Work Classification:
 - Unexpected Work
 - Maint. Type: [dropdown]
 - Maint. Class: [dropdown]
 - Maint. Cause: [dropdown]

4.4.3 The tab cards in the Report Work window

The Report Work window contains four tab cards with information. If work is reported on a round, a fifth tab card is added. The tab cards are described below.

The Details tab card

- The job should normally be marked as unexpected if it did not appear on the printed maintenance plans, that is, if it is a regularly scheduled job that had to be performed out of turn.
- A Type, Class and Cause may be selected. Click the small down arrow to open the list and click on the choice.
- When all the information on the other tab cards such as History, Stock Used and Resources Used have been completed, remember to save the Work Order Report.

Note: The Reporting Options frame contains the three check boxes History, Stock Used and Resources Used. There are corresponding AMOS M&P parameters that are used to set which of these boxes are checked by default. If an option box is checked, it is necessary to fill in data on the corresponding tab card. If the tab card is to be left empty, it is necessary to un-check the corresponding box in order to be allowed to exit the window.

The Resources Used tab card

Use the Resources Used tab card to report time used to complete maintenance jobs. This card can display Disciplines or Employees depending on how AMOS M&P is set up. Typically, the system will be set up to register resources by discipline. AMOS M&P will also update the budget information.

Report Work [00/000119 - R-001 - Battery replacement]

Function: 411.01.00 - RADAR
 Component: 411.01.00 - RADAR PLANT
 Work Order: 00/000119 - R-001 - Battery replacement

Details | Resources Used | Stock Used | History

Discipline	Hrs.	Cost
Deck Hands	0	USD 0.00

Estimated
 Cost: USD 421.00 Hours: 2

Reported
 Cost: Hours:

The Stock Used tab card

If parts from stock were used to complete the job that is being reported on, fill out the Stock used tab card to keep your stock and budget information up-to-date. If you have used stock items that are defined as perishable, you will have to select the correct expiry date from the 'Expiry Date' look-up list.

Report Work [00/00000128 - C100 - Internal Check of engine]

Function: 501.16.00 - ENGINE FOR LIFBOAT 01
 Component: 501.16.00 - LIFEBOAT 1, ENGINE
 Work Order: 00/00000128 - C100 - Internal Check of engine

Details | Resources Used | Stock Used | History

Item No.	Item Name	Location	Unit	Quantity	Expiry Date	Depreciation
100.00.00.004	Cover	1AA	Pcs			

Info - Current Item
 Location: Store 1 / Shelf A A Estimated: Used:

Note: If AMOS M&P is set up to take Depreciation into account, you can differentiate between the use of new and used stock items by selecting the appropriate level of Depreciation from the drop-down menu in the column furthest to the right in the above screen.

The History tab card

The appearance of the history window can vary from installation to installation, and from job to job. Click the History tab to begin working on the History tab card. Here is an example of what the History tab may look like if a template has been applied:

Simple reporting of rounds

A Round consists of several jobs grouped together. When reporting work on a defined round and the Report Method is set to Simple (see section 3.1.8), the Jobs tab card is added, making it possible to check off which defined round jobs have been completed

For Component	Job Code	Job Title	Completed
ME-100 MAIN ENGINE 1	C100	Internal Check of ME	<input checked="" type="checkbox"/>
ME-100 MAIN ENGINE 1	M120	Deflection Readings Diesel Engine	<input type="checkbox"/>

The first time work is reported against a simple round work order the Completed box is unchecked for all the jobs listed. It is then possible to check the jobs that have actually been completed, and save the work order. When more jobs belonging to the same work order have been completed, the reporting may continue until all the jobs have been checked off as completed.

The toolbar also contains two buttons that may be used to check all the jobs as completed, or to mark all the jobs as not completed:



There are corresponding commands in the **Edit** menu.

Full reporting of rounds

The Reporting Method (see section 3.1.8) may also be set to Full. When work is reported against such a work order, the user is first presented with a Round Summary window:

- The amount entered in the Total Time is automatically distributed equally between the not completed jobs connected to the work order.
- Similarly, the amount in the Misc. Expenses is distributed between the not completed jobs.
- The Resources Used tab card may be used to specify by whom the work has been performed. The values entered are also distributed between the jobs not yet completed.
- The Down Time (Hrs), entered in the Round Summary window, will be assigned unchanged to each not completed job.
- When the values to be distributed have been entered, the Next> button is clicked to move to the next window described below.

For Component	Job Code	Job Title	Completed	
AE-100	AUXILIARY ENGINE 1	C050	Checking Vibration Damper	<input type="checkbox"/>
AE-100	AUXILIARY ENGINE 1	S001	Class Survey 1	<input type="checkbox"/>
AE-100	AUXILIARY ENGINE 1	0101	Overhaul of Cylinder Cover AE	<input checked="" type="checkbox"/>

- The box Mark Work Order as Completed at the top should be checked the last time the dialogue box is used to report work against this work order.
- It is possible to report on a round work order several times, until all the included jobs are checked as completed. The Completed column in the bottom right corner of the window will show which jobs have been completed already when work has been reported previously.
- The jobs included in the round are displayed in the list at the bottom of the window. Select the job to report work on, and fill in the various tab cards. When the job is completed, remember to check the box Job Completed on the Details tab card.

4.4.4 The Report Work Options menu

The **Options** menu is added to the main menu bar once the Work Orders window has been opened. It contains a single command:



If transaction codes have been defined (see the next paragraph), the command may be selected to specify proper transaction codes for the work order.

Section 7.7.4.7 describes the options that may be set for transaction codes, while section 7.7.7 shows how values may be specified for defined transaction codes.

4.5 Requisition Work

Sometimes it is necessary to perform maintenance work that is not defined as a job because it happens so rarely or unpredictably: For example, an additional refrigeration unit is installed, or the ship is taken into dry-dock. AMOS M&P helps to plan and document this work as well.

For once-off tasks like this, create a Requisition work order for the component on which work is to be done, describing the work, the parts needed, and the time to be used. Later, report the work back to AMOS M&P by entering completion data for the work order.

4.5.1 The Requisition Work window

The screenshot shows the 'Requisition Work' dialog box. The fields are as follows:

WO No:	01/000178	Title:	Test water quality
Component:	761.09.00	FRESH WATER PUMP	
Requested By:	Hans Hansen	Created:	01/08/2001
Est. Dur. (Hrs.):	2.00	Unexpected Work:	<input checked="" type="checkbox"/>
Planned Start:	01/08/2001	Output Format:	Work Order
Priority:	1	Discipline:	2. Engineer
Maint. Criteria:	QA	Effect:	Fresh water tastes unusual.
Cause:	New pump fitted 24/07/2001. Protective lubricant on new pump was not removed before installation causing water to taste different. Harmless.		
Action Taken:	Thoroughly cleaned pump to remove all traces of lubricant which could contaminate water supply.		

Give the menu command **Maintenance/Requisition Work** or click the corresponding button in the toolbar to see the Requisition Work form. There is a corresponding toolbar button.

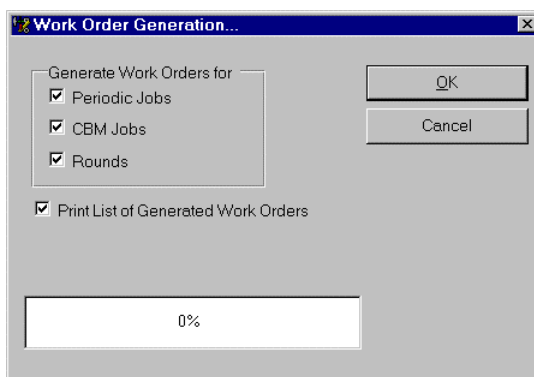
- Enter the Title of the work order in the WO No. field to describe the work to be carried out.
- By entering the date for 'Planned Start,' the Requisition automatically generates an entry that can be viewed in the Work Planning screen, at **Maintenance / Work Planning**.
- The default priority of such a Request for Work is 1.
- If the work is unexpected, check the box Unexpected Work.
- Be sure to fill in the three free text fields for Effect, Cause and Action Taken in order to provide a good description of why the work order has been issued

4.6 Generate Work Orders

To generate work orders for newly defined jobs and requests for work, it is necessary first to plan them. Then issue the work orders to show what work needs to be done in the coming period. Once a work order for a periodic job has been generated for the first time, AMOS M&P will automatically generate the next work order for the same job once the status of the previous one has been set to Completed.

4.6.1 Generating Work Orders

To generate work orders, give the menu command **Maintenance/Generate Work Orders** or click the corresponding toolbar button. The following dialog box is displayed:



- Check the relevant boxes in the area Generate Work Orders for.
- Check the box Print List of Generated Work Orders if you want to do so, and click OK to generate the work orders. Click OK when you are asked to confirm that you really want to generate work orders.

Work orders based on jobs that are defined with a periodic frequency, are handled automatically by AMOS M&P once the system has been 'kick started' by generating the first work order: Once the status of this work order has been set to Completed, the system generates the next work order.

On some occasions it is necessary to create a new work order in between regular due dates of the defined frequency. For example, a job may be defined to be carried out twice a year, and major maintenance is being planned between the previous and the next due date. AMOS M&P makes it possible to schedule an additional work order for that job in between the regularly planned work orders. To do so, select the menu command **Options/Create Work Order** while the job in question is selected in the Jobs window.

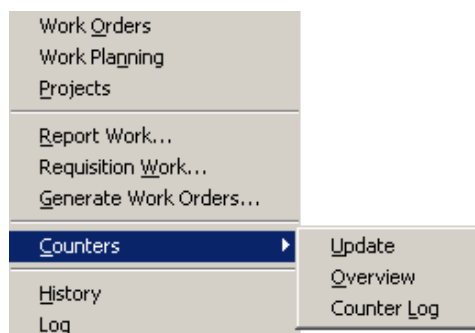
4.7 Counters

Each job has information about when it should be performed: This can be a frequency, either daily, weekly or monthly, or the job can be performed when some *counter* reaches a predefined level. For example, if an engine is to be checked every 1200 hours, AMOS M&P will start counting hours again as soon as it is reported that the engine has been checked. When 1200 hours approaches, the job “check the engine” will appear when print job lists for the coming period are printed or the window for planning work is used.

AMOS M&P counts time by itself, but some other types of counters must be updated manually. For example, if there are maintenance jobs that must be performed when the ship has docked a certain number of times, there will be a counter for the number times the ship has docked which is updated at each new harbour.

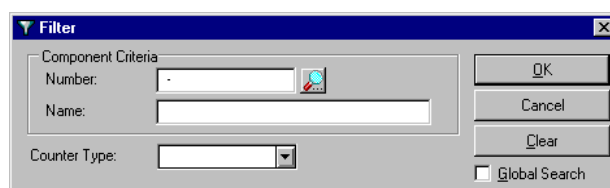
If the installation uses automatic Condition-Based Maintenance (CBM) functions described in Appendix B, then a job may be scheduled when a monitor or sensor detects a predefined condition in a component and passes this information to AMOS M&P. For example, a sensor might detect when the temperature in a cooled unit rises above 10° Celsius, or when an arm on a rotating unit has made 36000 rotations.

The **Counters** sub-menu contains two commands:



4.7.1 Update

The command **Maintenance/Counters/Update** brings up the following filter dialog box:



The Search button may be used to select a specific component. The Counter Type drop-down list contains the defined counter types. The register for defining counter types is described in section 3.1.12.3.

The Update Counters window displays the counters that match the criteria specified in the filter. For each counter, the Current Value field may be updated along with the Date Read.

Component No.	Name	Counter Type	Current Value	Date Read
AE-100	AUXILIARY ENGINE 1	Hours	67560,00	
AE-200	AUXILIARY ENGINE 2	Hours	23000,00	
BO-001	AUXILIARY BOILER	Hours	10,00	
CA-	CARGO SYSTEM	Hours	0,00	
PW-001	FRESH WATER GENERATOR	Hours	24,00	
LS-001	LIFEBOAT 1, ENGINE	Hours	5,00	
ME-100	MAIN ENGINE 1	Hours	100000,00	
MO-001	WIND GLASS & MOORING WINCH	Hours	63,00	
ST-100	STARTING AIR COMPRESSOR	Hours	4570,00	

4.7.2

Overview

The command **Maintenance/Counters/Overview** brings up the following filter dialog box:

The filter resembles the one for the **Update Counters** command described in the previous section, but it is also possible to select a component from which the counter is supposed to inherit values. It is also possible to filter the information by Component or Function Criteria.

The Counter Overview window looks like this:

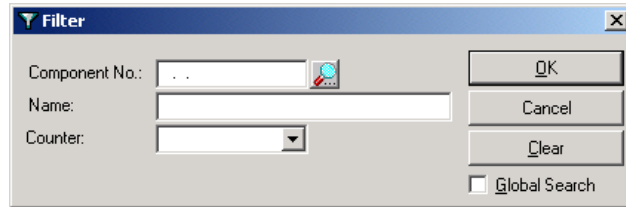
Component No.	Component Name	Function No.	Function	Counter Type	Date Read	Total Value	Average	Start Date	Start Value
433.01.00	WIND GLASS & MOORING	433.01.00	MOORING WINCH	Hours	22/09/2000	63.00	0.23	29/08/2000	0
501.16.00	LIFEBOAT 1, ENGINE	501.16.00	ENGINE FOR LIFBOAT	Hours	22/09/2000	5.00	0.02	03/09/2000	0
601.01.00	MAIN ENGINE 1	601.01.00	MAIN ENGINE 01	Hours	22/09/2000	100000.00	395.26	19/09/2000	0
601.02.01	ME 1, CYLINDER COVER 1	601.02.01	CYL. COVER 01 FOR M	Hours	22/09/2000	113489.00	64.78	12/08/1996	0
601.02.02	ME 1, CYLINDER COVER 2	601.02.02	CYL. COVER 02 FOR M	Hours	22/09/2000	112670.00	64.35	13/08/1996	0
601.02.03	ME 1, CYLINDER COVER 3	601.02.03	CYL. COVER 03 FOR M	Hours	22/09/2000	113489.00	64.45	03/08/1996	0
601.04.01	ME 1, PISTON 1	601.04.01	PISTON 01 FOR ME 01	Hours	22/09/2000	104500.00	59.64	12/08/1996	8.00
601.04.02	ME 1, PISTON 2	601.04.02	PISTON 02 FOR ME 01	Hours	22/09/2000	112340.00	20.67	12/07/1996	4.00
601.04.03	ME 1, PISTON 3	601.04.03	PISTON 03 FOR ME 01	Hours	22/09/2000	113450.00	20.87	12/07/1996	4.00
601.53.00	ME 1, TURBOCHARGER	601.53.00	TURBOCHARGER FOR	Hours	22/09/2000	25684.00	21.86	12/03/1998	0
644.01.00	AUXILIARY BOILER, COMPL	644.01.00	AUXILIARY BOILER	Hours	22/09/2000	10.00	0.04	13/09/2000	0
644.27.00	DOSAGE PUMP	644.27.00	DOSAGE PUMP	Hours	22/09/2000	120.00	0.39	20/09/2000	21.00
651.01.00	AUXILIARY ENGINE 1	651.01.00	AUXILIARY ENGINE 01	Hours	22/09/2000	67560.00	14.43	04/08/1988	0
651.01.01	CYLINDER COVERS AUX. E	651.01.01	CYL. COVER FOR AE 0	Hours	22/09/2000	0	0	21/03/1999	0
651.02.00	AUXILIARY ENGINE 2	651.02.00	AUXILIARY ENGINE 02	Hours	22/09/2000	23000.00	5.08	01/01/1989	0
651.02.01	CYLINDER COVERS AUX. E	651.02.01	CYL. COVER FOR AE 0	Hours	22/09/2000	0	0	21/01/1998	0
703.01.00	ME, FUEL OIL PUMP SYSTE	Hours	22/09/2000	4515.00	17.90	21/09/2000	21.00
731.01.00	STARTING AIR COMPRESS	731.01.00	STARTING AIR COMPF	Hours	22/09/2000	4570.00	2.40	12/03/1996	0
731.01.01	STARTING COMPRESSOR,	731.01.01	STARTER FOR ST. CO	Hours	22/09/2000	4500.00	3.04	12/12/1997	655.00
761.01.00	FRESH WATER GENERATO	761.01.00	FRESH WATER GENE	Hours	22/09/2000	24.00	0.09	10/09/2000	0

This window only displays information on the current value for the selected counters; none of the fields may be updated here.

4.7.3

Counter Log

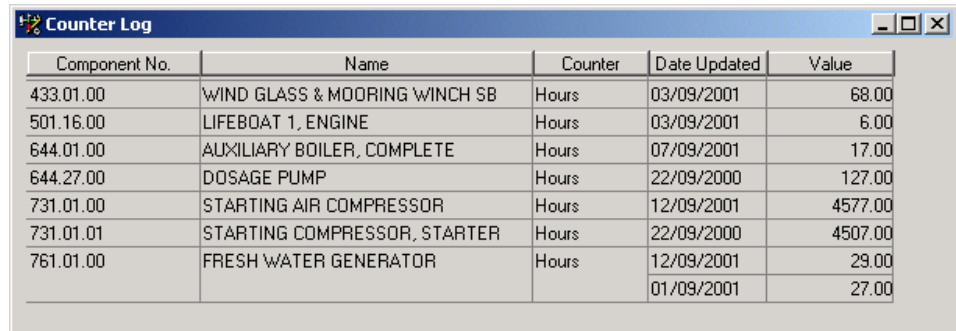
The command **Maintenance/Counters/Counter Log** brings up the following filter dialogue box:



The dialog box titled "Filter" contains the following fields and controls:

- Component No.: Text input field with a search icon.
- Name: Text input field.
- Counter: Dropdown menu.
- Buttons: OK, Cancel, Clear.
- Global Search: Global Search.

The filter is the same as that used in Update counters described in section 4.7.1.



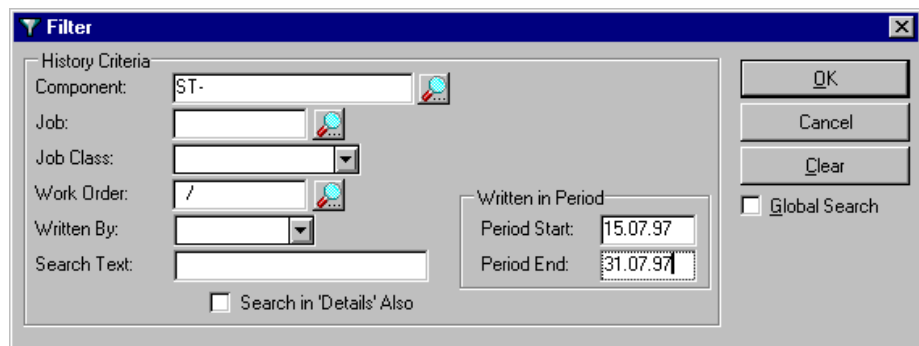
Component No.	Name	Counter	Date Updated	Value
433.01.00	WIND GLASS & MOORING WINCH SB	Hours	03/09/2001	68.00
501.16.00	LIFEBOAT 1, ENGINE	Hours	03/09/2001	6.00
644.01.00	AUXILIARY BOILER, COMPLETE	Hours	07/09/2001	17.00
644.27.00	DOSAGE PUMP	Hours	22/09/2000	127.00
731.01.00	STARTING AIR COMPRESSOR	Hours	12/09/2001	4577.00
731.01.01	STARTING COMPRESSOR, STARTER	Hours	22/09/2000	4507.00
761.01.00	FRESH WATER GENERATOR	Hours	12/09/2001	29.00
			01/09/2001	27.00

The Counter Log is used to store and view all counter updates.

4.8 History

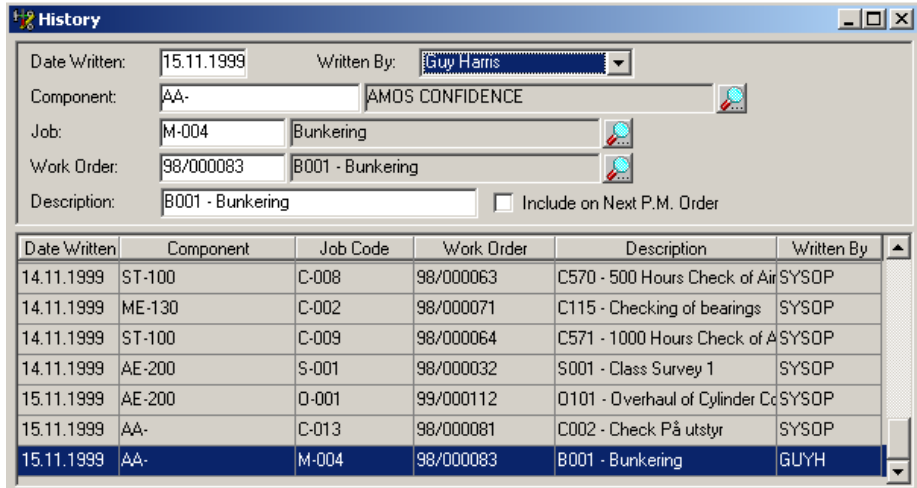
The command **Maintenance/History** may be used to select the work orders for which a history has been registered. This is done on the History tab card in the Report Work window; see section 4.4.3.

The **Maintenance/History** command brings up the following filter dialog box:



The dialog box titled "Filter" contains the following fields and controls:

- History Criteria section:
 - Component: Text input field with a search icon.
 - Job: Text input field with a search icon.
 - Job Class: Dropdown menu.
 - Work Order: Text input field with a search icon.
 - Written By: Dropdown menu.
 - Search Text: Text input field.
 - Search in 'Details' Also.
- Written in Period section:
 - Period Start: Text input field with value 15.07.97.
 - Period End: Text input field with value 31.07.97.
- Buttons: OK, Cancel, Clear.
- Global Search: Global Search.

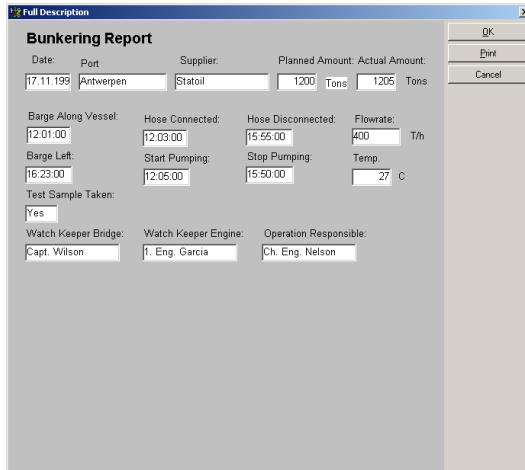


When the filter selections have been made, click OK to bring up the list of work orders containing history information:

To see the Details window for the selected work order select **Details** from the **Options** menu or click the corresponding toolbar button.



This is an example of the Details screen:



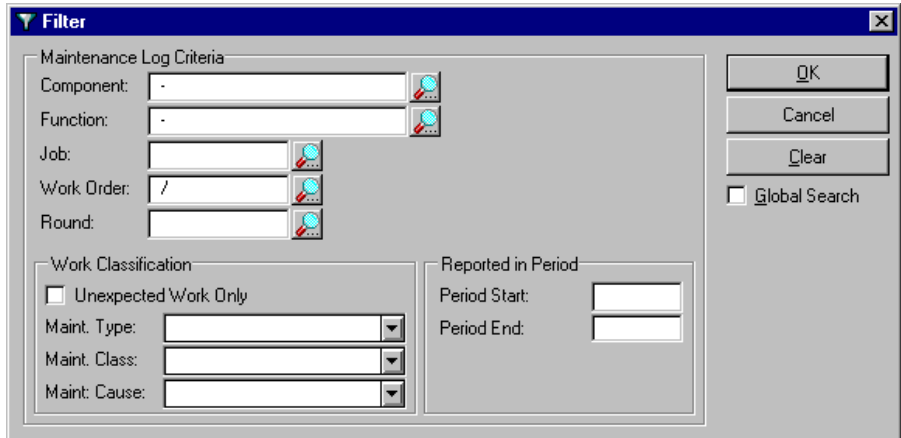
4.9 Log

AMOS M&P automatically logs four types of data during the use of various maintenance functions. The types are:

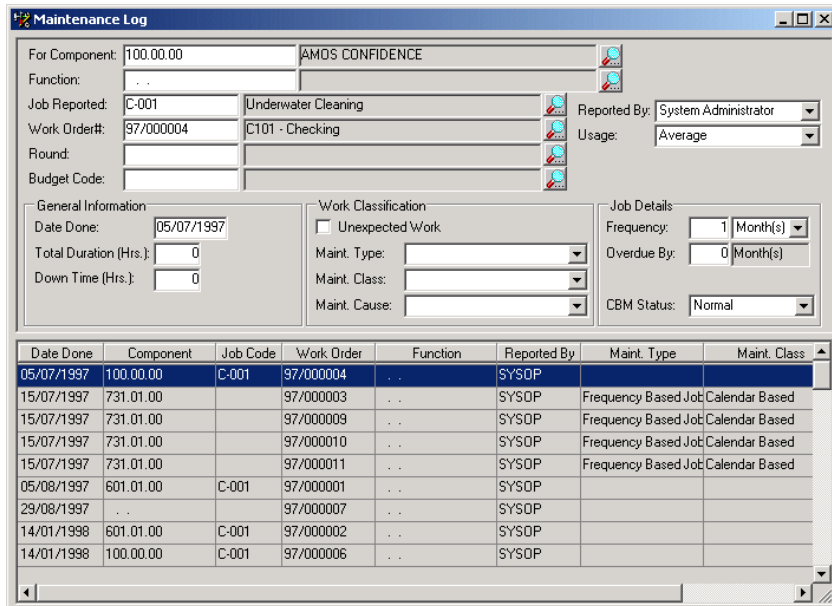
- History
- Stock Used
- Resources Used
- Counter Readings

These types correspond to the tab cards in the Report Work window described in section 4.4.3.

When the command **Maintenance/Log** is selected, the following filter dialog box is presented:



Click OK when the filter has been filled in to open the Maintenance Log window:



The entries are listed at the bottom of the window. The top of the window shows some detailed information for the highlighted list entry.

4.9.1 The Options menu for the Maintenance Log

Once the Maintenance Log window has been opened, one of the list items at the bottom of the window may be selected. The **Options** menu is added, and the commands are described in this section.



There are corresponding buttons in the secondary toolbar:

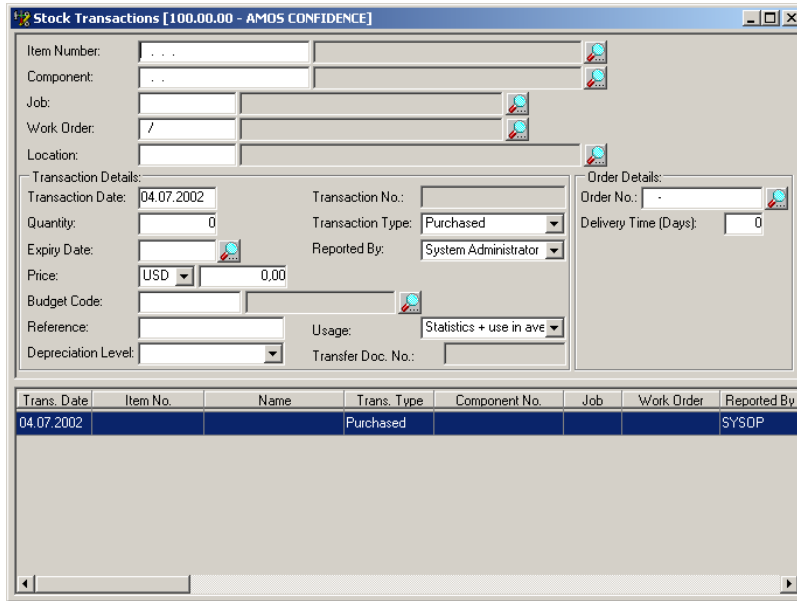
If nothing happens when a command is given or a button is clicked, there was no data for AMOS M&P to display.

History

See section 4.8. for a description of the History of a work order

Stock Used

The **Stock Used** command from the **Options** menu brings up the following window:



The Stock Transactions function is described in section 5.4.

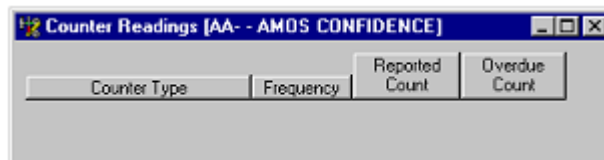
Resources Used

The Resources Used window looks like this:



Counter Readings

The last category of information in the Maintenance Log will display the status of any defined counters for the component of the selected line. If no counters have been defined for the component in question, the window is empty:

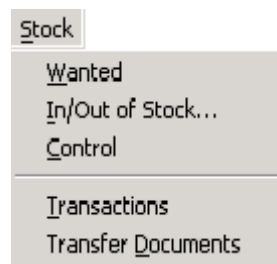


4.9.2 Sorting the Log

Click on the appropriate column titles to sort the maintenance log entries by (for example) date, component, function or work order number

5 The Stock Menu

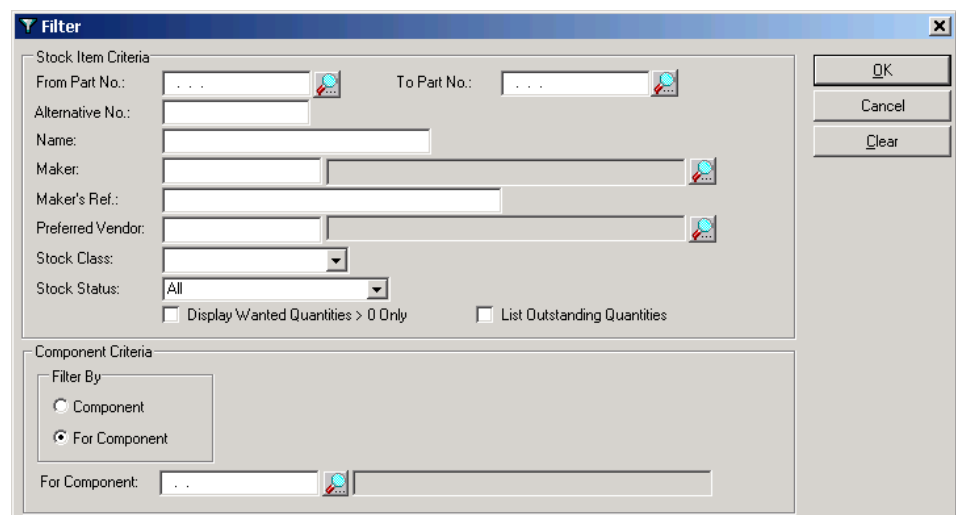
This chapter covers the commands in the **Stock** menu:



5.1 Wanted

The Stock Wanted window gives you a complete overview of your current stock situation and supplies you with the information required to make accurate purchasing decisions.

When you select the Stock/Wanted menu option, you are presented with the following filter window:



Click on OK if you want to list all stock, or enter details in one or more fields first if you want to restrict the list to items of particular interest. The filter can be used to restrict the information you receive by Stock Item Number (individual number or a range), Alternative Number, Name, Maker or Maker's Ref, Preferred Vendor, Stock Class or Stock Status. The visible items can be further restricted by checking the box to show 'Display Wanted Quantities greater than zero only'. Checking the 'List Outstanding Quantities' will provide an extra column in the display window showing requisitioned quantities.

Stock Wanted

Number: 100.00.00.001 Handle
 Maker: CM HAMMAR CM Hammar Handels AB
 Maker's Ref.: 8465
 Preferred Vendor: NYLAND Nyland A.S
 Price: USD 549.00 Unit: Pcs
 Outstanding: 1 Reserved: 33 Total/USD: 0 Reorder Level: 156.00
 For Component:

Number	Name	Pref. Vendor	Wanted	For Component	In Stock	Min	Max	Reorder Level
100.00.00.001	Handle	NYLAND	0.00	..	200.00	125.00	456.00	156.00
100.00.00.002	Gasket	IMD	0.00	..	200.00	123.00	321.00	121.00
100.00.00.003	Gasket	KSB	0.00	..	60.00	54.00	68.00	54.00
100.00.00.004	Cover	HANSE	0.00	..	80.00	60.00	90.00	60.00
100.00.00.005	Program Knob	HATLAPA	0.00	..	50.00	100.00	120.00	100.00
100.00.00.006	Screw	HATLAPA	0.00	..	450.00	120.00	520.00	120.00
100.00.00.007	Shalt	HANSE	0.00	..	400.00	100.00	410.00	160.00
100.00.00.008	Ring	ABB	0.00	..	10.00	5.00	10.00	5.00
100.00.00.009	Ring	IRON	0.00	..	400.00	200.00	500.00	200.00
100.00.00.010	O-Ring	DJJ	0.00	..	38.00	30.00	45.00	30.00
100.00.00.011	O-Ring	B&W	0.00	..	55.00	40.00	60.00	40.00
100.00.00.012	O-Ring	IRON	0.00	..	60.00	40.00	80.00	40.00
100.00.00.013	Screw	HANSE	0.00	..	45.00	30.00	50.00	30.00
100.00.00.014	Washer	IMD	0.00	..	67.00	50.00	80.00	50.00
100.00.00.015	Cover	HATLAPA	0.00	..	58.00	40.00	60.00	40.00
100.00.00.016	Bearing	IRON	0.00	..	100.00	90.00	120.00	90.00
100.00.00.017	Bearing	ABB	0.00	..	98.00	80.00	100.00	80.00
100.00.00.018	Washer	ABB	0.00	..	250.00	200.00	250.00	200.00
100.00.00.019	O-Ring	SPERRE	0.00	..	300.00	120.00	320.00	100.00
100.00.00.020	Guide Sleeve	FRAMK	0.00	..	50.00	45.00	65.00	45.00
100.00.00.021	Driving Sleeve	KSB	0.00	..	59.00	45.00	60.00	40.00
100.00.00.022	Screw	IRON	0.00	..	18.00	15.00	20.00	10.00
100.00.00.023	Retaining Ring	ABB	0.00	..	35.00	20.00	40.00	20.00

The upper section of the Stock Wanted window contains information for the currently highlighted stock item. This information is derived mainly from the Stock Items window described in section 3.1.2.

The lower section is divided into columns, two of which are modifiable. If you want to order stock items manually, you can simply scroll down through the list and enter the required quantities for each stock item in the Wanted column. Any stock items that are below the minimum stock level are highlighted in red.

You can also mark the required quantities that are for use with a specific component by entering its number in the For Component column. If a stock item is already associated with a single component number, that number will appear automatically when you update the quantity wanted.

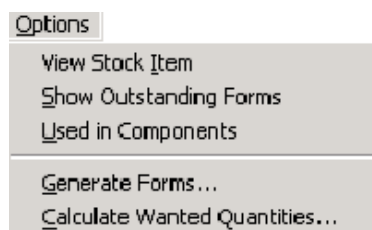
There are two parameters that control the way the 'For Component' works:

The parameter 'Component Search Range in Stock Wanted' can have the values 'Restrict' or 'Any'. If set to 'Restrict', the look-up filter next to the 'For Component' column will only show components associated with the stock item. If set to 'Any', all components will be listed.

The parameter 'Clean-up 'For Component' in Stock Wanted' can have the values 'TRUE' or 'FALSE'. If set to 'TRUE', the 'For Component' column will be cleared once forms have been generated. If set to 'FALSE', the last component number entered in the column will remain until altered.

These parameters are described in section 7.7.4.5.

The Options menu for Stock Wanted



Note: The functions contained in both the Options and Edit menus can be accessed by clicking the right-hand mouse button.

View Stock Item

The View Stock Item command takes you to the same window that can be accessed through the Open register/Stock Items menu option covered in section 3.1.2.

Location	Current Stock	Expiry Date
Forward Frame	80.00	
Store 1 / Shelf A.A	142.00	

Form Type	Form No.	Title	Quantity	Unit	Status
Requisition Form	2000-00080	Spare parts	1.00	Pcs	Active
Transfer Document	01	AA Spare parts transferring	1.00	Pcs	Submitted
			2.00		

Show Outstanding Forms

The Show Outstanding Forms window gives you access to information regarding active forms of type Query, Requisition, Purchase Order and Transfer Documents.

Form Type	Form No.	Title	Quantity	Unit	Status
Requisition Form	2000-00080	Spare parts	1.00	Pcs	Active
Transfer Document	01	AA Spare parts transferring	1.00	Pcs	Submitted
			2.00		

This screen is purely for information purposes and is therefore un-editable.

Used in Components

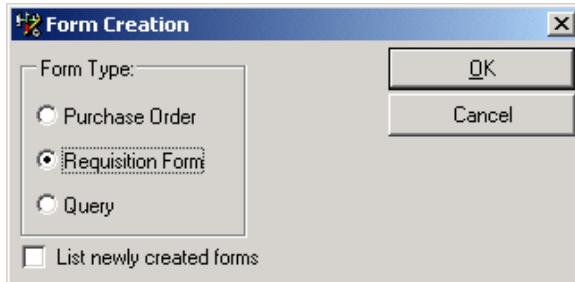
The Used in Components window shows a list of all components in which the selected stock item is used.

Number	Name	In Use	Drawing No.	Positions	Maker	Type
351.01.00	CARGO OIL PUMP 1	5.00	12	1	SHINKO	KV-450 4
351.05.00	CARGO OIL PUMP TURBINE	2.00	19	1	SHINKO	PK2
383.01.00	HOSE HANDLING CRANE	1.00	03	1	CM HAMMAR	MCV2201 15T 27 M
411.01.00	RADAR PLANT	1.00	01	1	SAMSONG	HR3000R + 3000A
433.01.00	WIND GLASS & MOORING W	1.00	16	1	SAMSONG	200 HW 45.15
563.01.00	PROVISION CRANE	2.00	03	1	FRAMK	MCV 1301-5T
644.01.00	AUXILIARY BOILER, COMPLE	1.00	01	1	MSY	MAC 35 B
644.27.00	DOSAGE PUMP	1.00	15	1	IMO	BBH 50 D
703.01.00	ME, FUEL OIL PUMP SYSTEM	3.00	01	U55401	KSB	Borsch 4
711.03.01	LUB OIL PUMP 1	3.00	12	1	IMO	IMO GH23
711.03.02	LUB OIL PUMP 2	1.00	12	1	IMO	IMO GH23
722.03.00	MAIN FRESH COOLING PUM	2.00	15	1	KSB	FEwV-300 D
731.01.00	STARTING AIR COMPRESSC	2.00	02	1	SPPERRE	HV2 240
731.01.02	STARTING COMPRESSOR, E	1.00	05	2	ABB	RBG 2

The non-shaded columns are editable and new component associations can be added or old ones deleted according to requirements. The quantity of the selected stock item in use on any particular component can be altered if needed. The stock item/component drawing number and position number can also be altered from this screen (if you have the required system authority) as an alternative to using the Components/Parts screen described in section 3.1.1.

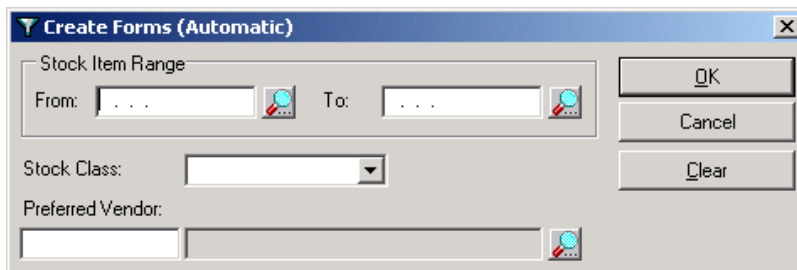
Generate Forms

When you select the Generate Forms option from the Options menu you are presented with the following dialogue box.



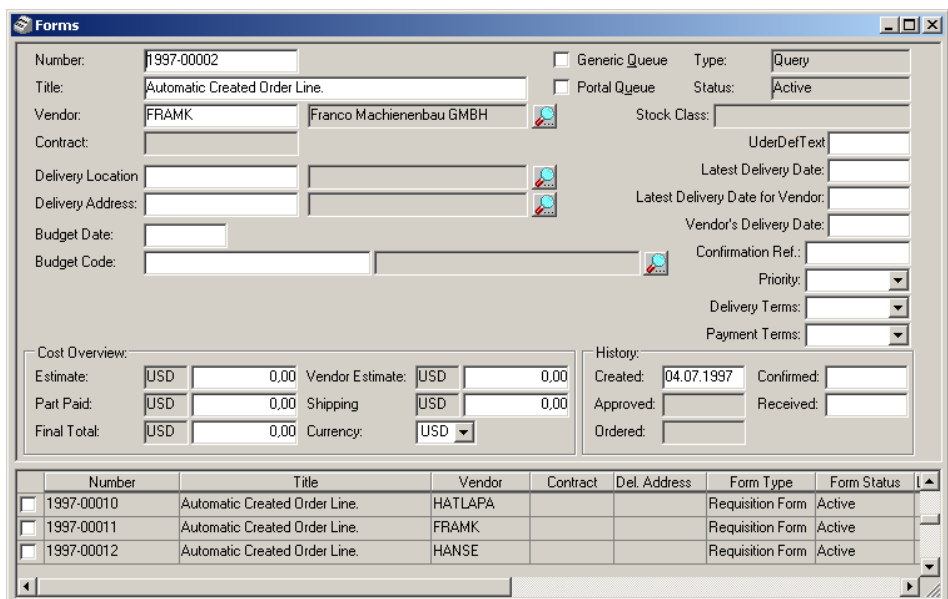
Select the type of form you would like to create and whether you would like to list the newly created forms after they have been created. Click on OK to proceed.

The Create Forms filter window



The Create Forms filter window can be used to restrict form creation to a specific range of stock items, a particular stock class, a preferred vendor or a combination of any of the above. Click on OK to proceed.

If you checked the List newly created forms box earlier, you should see a screen similar to the one below.



The Forms window is described further in chapter 6.

Calculate Wanted Quantities

When you first click on the Calculate Wanted Quantities menu item in the Options menu you will be presented with the following filter screen.

The default setting for the Calculate Wanted Quantities window

The filter allows for the restriction of calculated items by Number, Maker, Preferred Vendor or Stock Class. The radio buttons in the bottom left corner of the window allow you to alter the target quantity. If Reorder Quantity is selected the application will simply calculate which items require ordering and set the wanted quantity to the Reorder quantity as shown in the Stock Items window. If Minimum or Maximum is selected, the application will calculate the quantity required to bring the stock level up to the respective amount. If you choose to un-check the Display Wanted Quantities > 0 Only checkbox you will get a screen display which contains all the stock items in the specified range whether they require ordering or not.

In the example screen display below the default setting of Calculate Wanted Quantities (shown above) was used.

Number	Name	Pref. Vendor	Wanted	For Component	In Stock	Min	Max	Reorder Level
100.00.00.005	Program Knob	HATLAPA	20.00	..	50.00	100.00	120.00	100.00
100.00.00.008	Ring	ABB	5.00	..	10.00	5.00	10.00	5.00
100.00.00.010	O-Ring	DJ	15.00	..	38.00	30.00	45.00	30.00
100.00.00.011	O-Ring	B&W	20.00	..	55.00	40.00	60.00	40.00
100.00.00.013	Screw	HANSE	20.00	..	45.00	30.00	50.00	30.00
651.01.01.005	Hood for cylinder cover	B&W	1.00	..	3.00	2.00	3.00	2.00
651.01.01.007	Ring for Grasp	B&W	2.00	..	3.00	2.00	4.00	2.00
651.01.01.009	O-Ring for Grase	B&W	1.00	..	2.00	1.00	2.00	1.00
651.01.01.021	O-Ring for Fuel Injector	B&W	1.00	..	2.00	1.00	2.00	1.00
651.01.01.023	O-Ring for Valve Guide	B&W	2.00	..	2.00	1.00	3.00	1.00
801.07.01.001	Ballast Pump Housing	KSB	1.00	..	1.00	0.00	1.00	0

Note: AMOS M&P calculates whether a stock item requires ordering by adding outstanding orders to current stock and then subtracting those stock items that are reserved against work orders. The resulting figure (quantity on hand) is then compared to the reorder level figure. If the quantity on hand is less than or equal to the reorder level, a requirement is indicated when the menu item Calculate Wanted Quantities is processed.

5.2 In/Out of Stock

Most stock transactions are related to either a maintenance action or a purchase form, and AMOS M&P captures these transactions and displays them for you with the Stock Transactions window.

However, in some circumstances you may need to register stock in or out of stores manually.

Select the In/Out of Stock function from the Stock menu to bring up the following screen.

Stock Items Filter

Enter the stock item number if known, otherwise click on the icon to the right to bring up the stock items filter and select the number from the list. The default location will automatically be shown in the Location window. An alternate location can be specified if one is available. Enter the required amount in the Quantity field.

The Transaction Date will show the current date. This can be altered if a transaction has been carried out recently but not yet entered into the system. To alter the date you can double click the date window and select the correct date from the calendar facility that opens.

Stock items may be added to, or removed from stock for a variety of reasons. One of the following transaction types must be selected when using the In/Out of Stock function.

- Purchased (Qty. is increased)
- Used (Qty. is decreased)
- Returned unused (Qty. is increased)
- Lost (Qty. is decreased)
- Found (Qty. is increased)
- Sold (Qty. is decreased)
- Transferred in (Qty. is increased)
- Transferred out (Qty. is decreased)
- Delivered back (Qty. is increased)
- Lent out (Qty. is decreased)
- Trashed (Qty. is decreased)

If the stock item is defined as 'perishable' and you are removing items from stock, the expiry date will be imported if there is only one to choose from, or you will have to choose the correct date from a list if there are several expiry dates. If you are adding perishable stock, you will have to enter the expiry date manually. Double click on the expiry date field to use the calendar facility.

The remaining fields can contain further information regarding Work Order No., Component No., Reference or Budget Code if required.

The fields at the bottom of the window contain information on the selected stock item's location, stock levels and quantity on order.

If you wish to record several stock transactions at the same time, click the New Entry button and fill in the fields as before. Please note that all stock item transactions must be of the same type if you are going to use the same form.

5.3 Control

At regular intervals, you should take inventory to ensure that the actual physical stock in store matches the theoretical stock shown by AMOS M&P. This could be annually, monthly, weekly or any frequency as determined by your company.

The Stock Control filter

Click on OK to list all stock items (these will be ordered by stock location alphabetically). If you wish to restrict the display to one or more stock locations, you can enter the required information in the upper part of the filter window. If you would rather restrict the display to one or a range of stock items, you can enter details in the lower part of the window. Click on OK to proceed.

The Stock Control window

Store 1 / Shelf A A							
Number	Name	Maker's Reference	Stock Unit	In Stock	Actual	Expiry Date	Budget Code
651.01.00.014	Spring Plate	U21514	Box of 04	14.00	14.00		
651.01.00.015	Circulating Valve	U21515	Pcs	15.00	15.00		
651.01.00.020	O-Ring	A-5-7/45	Box of 04	21.00	21.00		
651.01.01.006	Grasp for Hood	H 27006	Pcs	9.00	9.00		
651.01.01.009	O-Ring for Grase	H 27009	Box of 06	2.00	2.00		
651.01.01.014	Protective Cap for Cylinder Cover Bolt	H 27014	Pcs	16.00	16.00		
651.01.01.021	O-Ring for Fuel Injector	H 27021	Box of 12	2.00	2.00		
702.05.00.006	Main Spindle	4526-TH-62001	Set	2.00	2.00		
703.01.00.001	Sealing Ring	B-45-12	Set	2.00	2.00		
801.00.00.001	10" Ballast valve	10-563	Box of 04	4.00	4.00		
801.07.01.022	Flat Gasket	786453	Pcs	8.00	8.00		
801.07.01.024	Flat Gasket	848156	Pcs	10.00	10.00		
871.01.00.005	Signal Lamp - Red	48451	Box of 12	10.00	10.00		
871.01.00.008	Bulb	786413 D	Box of 12	10.00	10.00		
871.01.00.014	Terminal Strip	87452-J	Pcs	25.00	25.00		
871.01.00.016	Undervoltage Release	8431.411	Pcs	60.00	60.00		
Total in stock:				899.00			
Store 1 / Shelf A B							
Number	Name	Maker's Reference	Stock Unit	In Stock	Actual	Expiry Date	Budget Code
100.00.00.016	Bearing	45645	Pcs	100.00	100.00		
100.00.00.018	Washer	485-45	Pcs	200.00	200.00		
100.00.00.022	Screw	F-4545549	Box of 12	18.00	18.00		
100.00.00.025	Lower Housing	K-56 48545	Pcs	450.00	450.00		
601.04.01.013	Piston-Piston Rod	2321	Pcs	10.00	10.00		

If you require a printout of the stock list, select Print from the File menu.

Once the stock items have been counted you can enter them by clicking on the 'Actual' quantity and then typing the new quantity (this will replace the original figure). If you have a range of quantities to input, you can start at the top and each time you press enter the cursor moves down to the next row automatically.

Remember to save the new quantities when you have finished entering them. If you attempt to close the Stock Control window without saving, you will be prompted to do so. Note that if you are altering the quantities for perishable stock items you will have to supply an expiry date (if increasing quantity) or choose an existing expiry date (if decreasing quantity).

5.4 Transactions

Since AMOS M&P automatically updates your stock records, based on work reported in Maintenance and on goods marked received in Purchase, there is not much work to do in Stock Transactions.

You can view automatically recorded transactions and correct them or add additional information if necessary. You can also see what items are recorded both in and out of stock through Maintenance and Purchasing functions.

When you first click on Stock/Transactions, the Stock Transaction Criteria filter is displayed.

Click OK to list all stock transactions or enter your selection criteria to restrict the list to the item or items of particular interest.

The Stock Transactions window will open. It will look similar to the one below.

Trans. Date	Item No.	Name	Trans. Type	Component No.	Job	Work Order	Reported By
08.08.1997	651.01.00.001	Frame Cover	Used				SYSOP
29.08.1997	702.05.00.004	Bowl Plate	Lost				SYSOP
02.09.1997	651.01.00.021	Valve Housing	Purchased				SYSOP
02.09.1997	651.01.01.003	Exhaust Valve Bracket	Purchased				SYSOP
02.09.1997	651.01.01.004	Exhaust Valve	Purchased				SYSOP
03.09.1997	651.01.00.021	Valve Housing	Purchased				SYSOP
03.09.1997	651.01.01.003	Exhaust Valve Bracket	Purchased				SYSOP
03.09.1997	651.01.01.004	Exhaust Valve	Purchased				SYSOP
29.01.1998	651.01.00.020	O-Ring	Used	651.01.00	S-001	98/000031	SYSOP

If there are many transactions listed in the lower part of the window, you can select the one you are interested in by clicking on it with the mouse to display the complete transaction details in the upper part of the window. This allows you to alter incorrect information or to add extra details regarding a stock transaction. Remember to save any alterations made. Expiry dates will have to be selected or entered when adjusting stock quantities for perishable items.

The Transactions window Options menu:

Transaction Codes can be used to connect stock transaction expenses to specific budget dimensions such as a particular project or an individual user. They are covered further in sections 7.7.4.7 and 7.7.7.

Reverse Transaction can be used to reverse a transaction that has been made in error or for returning incorrectly delivered goods.

5.5 Transfer Documents

There may be occasions when there is a surplus of certain stock items at a particular Installation that are needed at a different Installation. Using the Stock/Transfer Documents function allows you to create a transfer document for these items and ensures correct stock level updates at both installations.

When you first click on the Transfer Documents menu option, you will be presented with the following filter dialogue box:

The filter default settings are to ignore Approval type and to include documents of status Unsubmitted, Submitted, Pending, Partly Transferred and In Transit. If you want to list other documents, you should check the required box or boxes.

The following screen display was obtained using the default filter settings.

Number	Title	Recipient	Donor	Status	Created	Submitted	Approved	Transferred	Received
<input checked="" type="checkbox"/>	02 AE Spare Parts transferring	001	002	Submitted	10/11/2000	10/11/2000	10/11/2000		
<input type="checkbox"/>	03 ME Spare Parts transferring	001	001	Submitted	10/11/2000	10/11/2000			
<input type="checkbox"/>	04 BA Spare Parts transferring	001	001	Unsubmitted	10/11/2000				
<input type="checkbox"/>	05 ES Spare Parts transferring	001	001	Unsubmitted	10/11/2000				
<input type="checkbox"/>	06 FO Spare Parts transferring	001	001	Unsubmitted	10/11/2000				
<input type="checkbox"/>	07 LO Spare Parts transferring	001	001	Unsubmitted	10/11/2000				
<input type="checkbox"/>	08 ST Spare Parts transferring	001	001	Unsubmitted	10/11/2000				

The Number and Title fields are free text fields and can be used to identify and describe the transfer documents however you choose.

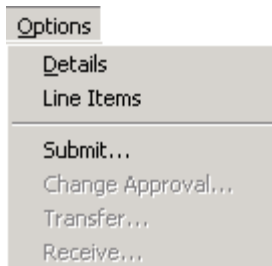
The Recipient Inst. field is grey and cannot be altered. The value is set to the current installation.

The Donating Inst. May be selected from the drop-down list. The list should contain all installations in your organisation. If you are unsure of the donating installation, you should leave this field blank so that the shore-based office can select the donating installation.

The Reason field is a drop down list. You should select whether the transfer is planned or unplanned from the list.

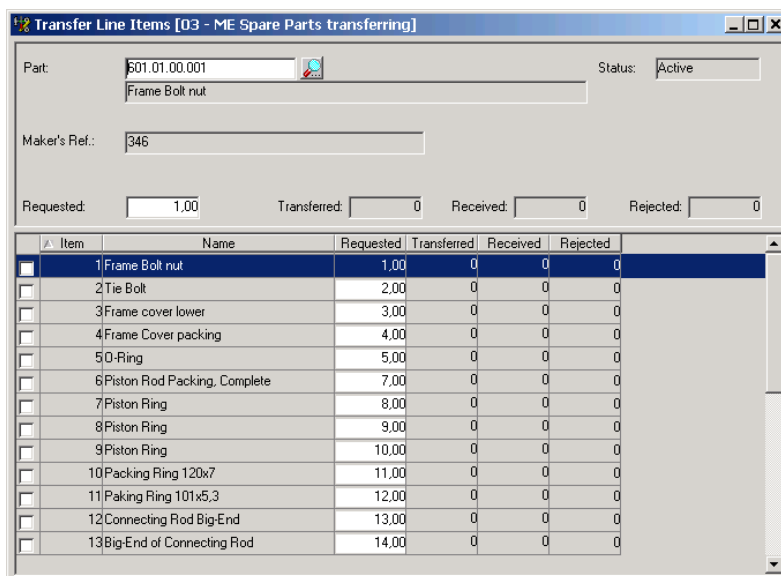
When you are in the Transfer Documents screen, the Options menu becomes available.

The items that you can select from this menu depend on the status of the currently selected record and whether you are from the donating or receiving installation.



The Details menu item brings up a free text screen where you can enter any explanatory details regarding the transfer document

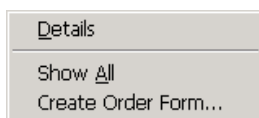
If you click on Line Items, you enter the Transfer Line Items window (shown below). This window allows you to select which stock items are to be included in the transfer document.



To add a new line item click on the 'new' icon on the toolbar or select New Record from the Edit menu.

Type in the stock item number and quantity that you want to transfer. If you do not know the stock item number, click on the magnifying glass icon to go to the stock items filter dialogue box.

Whilst you are in the Transfer Line Items window, the Options menu changes to allow further options.



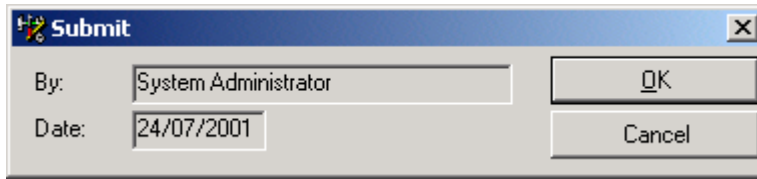
Each line item within a transfer document has a Details screen, accessed through the Options menu, that is a free text area to add relevant line item information.

If the Show All option is selected (preceded by a tick) all line items, including items that have been deleted from the transfer form, will be displayed.

The Create Order Form option allows you to generate order forms for highlighted or tagged line items with most of the order form information already entered. A separate order form will be created for each preferred vendor.

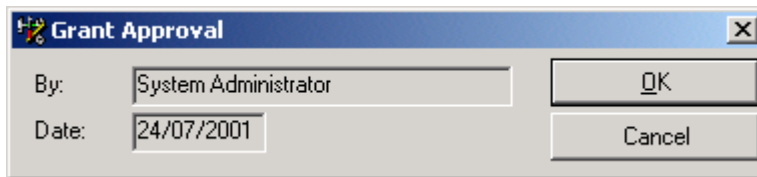
Once all line items have been added and the transfer document is complete, you must save the information in the usual way.

After you have saved the Transfer Document, you can select Submit... from the Options menu.



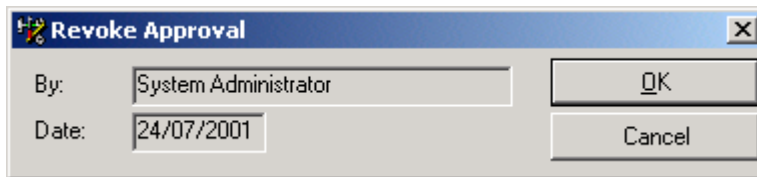
The Submit window allows you to accept or reject submission of the transfer document. The current date and identity of the person logged onto the system are used by default.

Once a Transfer Document has been submitted, someone with the required system authority can grant approval. Select Change Approval... from the Options menu.



The Grant Approval window (like the Submit window) allows you to accept or reject approval of the Transfer Document. Once again, the current date and identity of the person logged on are entered by default.

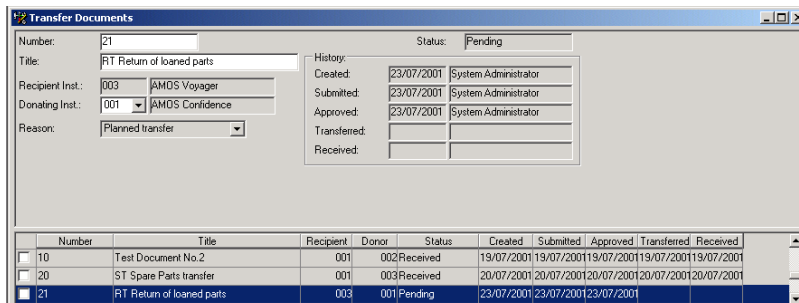
If you mistakenly approve the wrong document or need to reverse an approval, you can select Change Approval... from the Options menu once more.



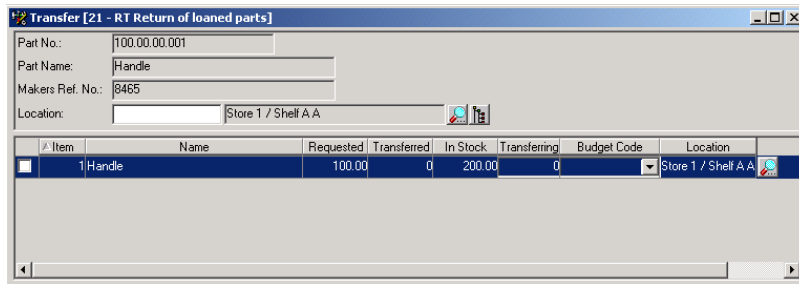
The Revoke Approval window (like the Grant Approval window) allows you to accept or reject revoking of approval of the Transfer Document. The current date and identity of the person logged on are set by default.

Revoking the approval of a Transfer Document does not record the identity of the person who carried out the instruction nor does it record the date on which the approval was revoked, it simply re-sets the approval status to the un-approved condition.

Once the recipient installation has created, submitted and approved a Transfer Document, the donating installation will receive a copy of the same Transfer Document. When the donating installation opens their own Transfer Documents window, the request for transfer will be shown and will have the status 'Pending'. (See below)

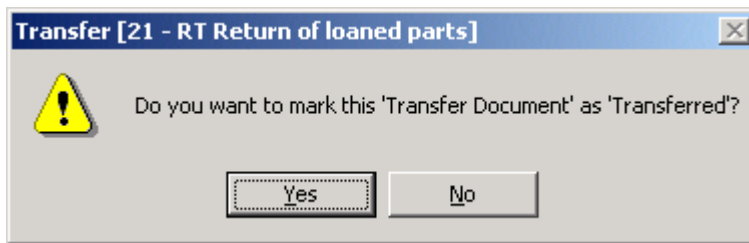


When, as the donating installation, you highlight a Transfer Document with status 'Pending', the Options menu allows you to select Transfer.



If you are going to transfer the amount shown on the Transfer Document, you can select Fill from the Options menu to automatically update the transferring column to the same as the requested column. If you are not sending the complete amount, you can enter each quantity individually.

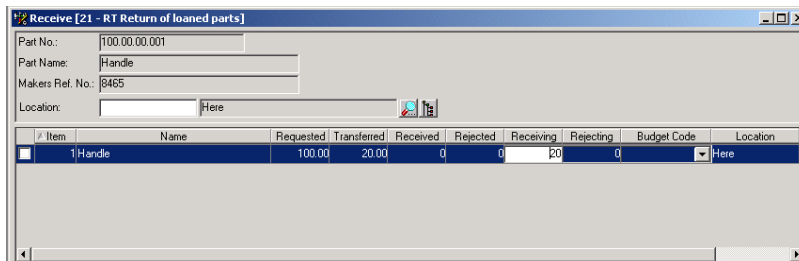
When the Transfer Document is correctly filled out, you should save the information (you will be prompted to do so if you forget). When you save the document, you will be asked if you wish to mark the document as 'Transferred'.



If you do not intend to take any further action on the document (if the document is complete or you do not have the required items) you should click on Yes. If you are making a partial transfer now (with the intention of completing the transfer quantity at a later stage) you should answer No, as this will allow you to re-enter the Transfer Document in order to complete it.

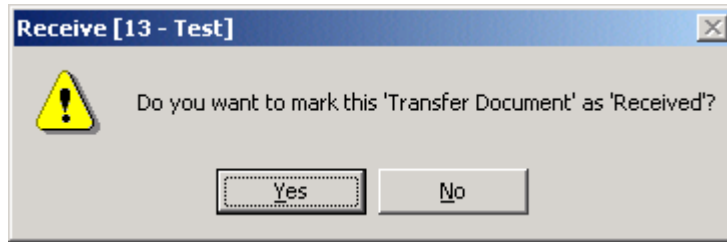
Once the donating installation has marked a Transfer Document as 'Transferred', the recipient installation will see that the Transfer Document has been marked as 'In Transit'.

When the transferred items arrive at the recipient installation, access the Transfer document in the usual way and highlight it. Providing you have selected a document with status 'In Transit', you can then select receive from the Options menu.



Once again, the options menu can be used to select 'Fill' to automatically match the Receiving quantity to the Transferred quantity, or you can enter the figures manually. It is possible to receive/reject and to attach a budget code to the transferred items if required.

When the Transfer Document is complete, you should save the information in the usual way. Once the quantity received matches the quantity transferred you will be prompted to mark the Transfer Document as 'Received'.



Once a Transfer Document has been marked as received, no further action can be taken against it.

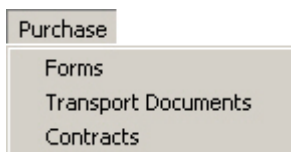
Just to re-cap, Transfer Document progress takes the following steps:

- | | |
|--------------------------------|---|
| 1. Transfer document Created | Recipient status - Unsubmitted
Donating status - (not shown) |
| 2. Transfer document Submitted | Recipient status - Submitted
Donating status - (not shown) |
| 3. Transfer form Approved | Recipient status - Submitted
Donating status - Pending |
| 4. Goods Transferred | Donating status - Transferred
Recipient status - In Transit |
| 5. Goods Received | Donating status - Received
Recipient status - Received |

Note: The visible status of a transfer document is dependent upon the Installation from which you are viewing the information (Recipient installation or Donating installation).

6 The Purchase Menu

This chapter covers the commands in the **Purchase** menu:



6.1 Forms

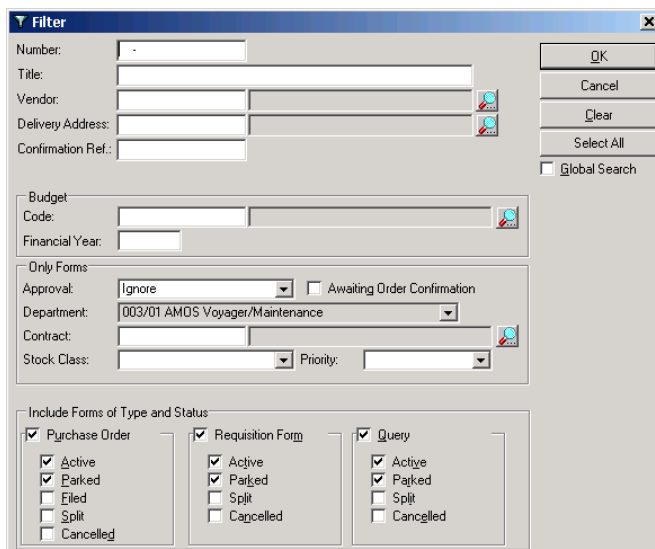
AMOS M&P uses Forms for purchasing stock items. Different form types and statuses can and should be used, but this will depend on the internal processes and policies within your organization.

A standard use for the three types of form could be:

A requisition form is created at a remote installation to request supply of stock. The requisition is then received at a central office where it is converted to a query and sent to vendors for quotations. When the quotations have been received, the central office converts the form to a purchase order and sends it to the selected vendor for supply.

6.1.1 The Forms Filter

The Forms filter allows you to specify exactly what kind of information you wish to view. If you leave the filter unaltered and click OK you will retrieve the default option of all 'Active' and 'Parked' forms currently in the database. If you want to retrieve more specific information you should modify the filter accordingly.



6.1.2 The Forms Window

The Forms window provides a list of all the purchase forms (Query, Requisition Form and Purchase Order) available in the system. From this window, a new form can be created or an existing one can be altered. It is also possible to select one or more forms for processing through the usual purchase functions.

The forms window is divided horizontally with a list of the filtered forms appearing in the lower section. Selecting a form causes the relevant information for that form to be displayed in the upper section.

The screenshot shows the 'Forms' window with the following details for form 2002-00016:

- Number: 2002-00016
- Title: Automatically Created Form
- Vendor: HANSE (Hanse Motorfabrikk)
- Type: Requisition Form
- Status: Active
- Stock Class: con -Spare Part
- Budget Date: 12.07.2002
- Cost Overview: Estimate: USD 7 920,00; Vendor Estimate: USD 0,00; Part Paid: USD 0,00; Shipping: USD 0,00; Final Total: USD 0,00; Currency: USD
- History: Created: 12.07.2002

Number	Title	Vendor	Contract	Del. Address	Form Type	Form Status	Latest Del
<input checked="" type="checkbox"/> 2002-00016	Automatically Created Form	HANSE			Requisition Form	Active	
<input type="checkbox"/> 2002-00017	Automatically Created Form	HATLAPA			Requisition Form	Active	
<input type="checkbox"/> 2002-00018	Automatically Created Form	HATLAPA			Requisition Form	Active	

If you want to process several forms at a time you should 'tag' the required forms by clicking in the checkbox at the left-hand side of each form. If you want to select all the filtered forms, or de-select them, there are corresponding commands in the Edit Menu.

6.1.3 The Forms Options Menu

Once the Forms window has been opened, there is an Options menu added to the menu bar:

- Details
- Additional Info.
- Line Items
- Quotations
- Deliveries
- Vouchers
- Images
- Budget
- Note To Vendor
- Vendor's Note
- Terms and Conditions
- Change Approval...
- Receive... F8
- Convert...
- Estimate Cost...
- Copy...

The commands available in this menu are covered in the following sections.

6.1.3.1 Details

The **Details** command from the **Options** menu opens the Full Description window for the selected form. This screen can be used for adding general information to a purchase form and can also be used in conjunction with a pre-formatted template if required.

6.1.3.2 Additional Info.

The Additional Info. Screen displays the user names of those people who have created, approved or ordered the selected form. User defined fields can be added to this window to allow you to add company specific information. Read about User-Defined fields in chapter 7.

[1997-00001 - Automatic Created Order Line.]

Form Created By: System Administrator

Requisition Approved By:

Purchase Approved By:

P.O. Ordered By:

OK

6.1.3.3 Line Items

The Line Items screen displays the individual stock items contained within the selected form. The individual line items are displayed in the lower part of the window whilst the upper part displays the details of the highlighted line item.

Line Items [1997-00006 - Automatic Created Order Line.]

Part No.: 651.01.00.030 Status: Active

Part Name: Cover Bolts Content: Goods

Component: 601.02.01 ME 1, CYLINDER COVER 1 Budgeted purchase

Maker's Ref.: 560 Include on form

Unit: Pcs Factor: 1,0000 Receipt Status:

Price: USD 211,00 % Discount: 0

Requested: 4,00 Ordered: 4,00 Received: 1,00 Cancelled: 0,00

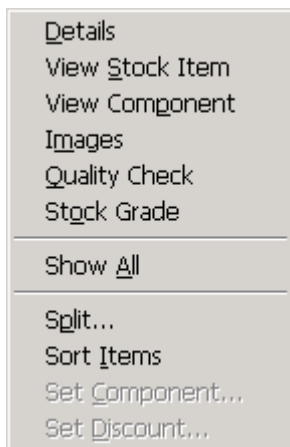
On Order:

From Order:

Item	Name/Title	Quantity	Unit	Curr.	Price	% Discount	Total	Back Order	Budgeted
1	Cover Bolts	4,00	Pcs	USD	211,00	0	844,00	3,00	<input checked="" type="checkbox"/>

Line Items – Options Menu

Whilst viewing the line items of a form, the Options Menu changes to the following:



Line Items – Details

The **Details** command from the **Options** menu opens the Full Description window for the selected line item. This screen can be used for adding general information to a purchase form line item and can also be used in conjunction with a pre-formatted template if required.

Line Items – View Stock Item

Selecting View Stock Item from the Options Menu opens the Stock Items window for the selected line item. The Stock Items window is described in section 3.1.2.

Line Items – View Component

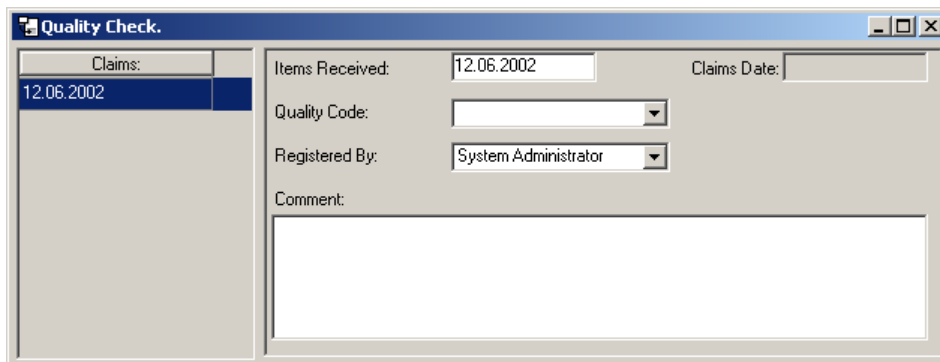
Selecting View Component from the Options Menu opens the Component window for the selected line item. The Componentss window is described in section 3.1.1.

Line Items – Images

It is possible to attach and view images to Purchase Form Line Items using the standard AMOS images interface. The images can also be attached to the order form if required.

Line Items – Quality Check

Selecting Quality Check from the Options Menu opens the window shown below. In this window it is possible to attach one or more comments to each line item regarding the quality of the goods that have been received. There is an option for printing the information entered here in the event that you wish to make a reclamation claim for faulty goods. This function is also available when receiving goods, when quality checks would normally be made. The Quality Codes field contains the information entered in the Quality Codes register described in section 3.1.12.6.



A screenshot of a software window titled 'Quality Check.'. The window has a table on the left and a form on the right. The table has a header 'Claims:' and one row with the value '12.06.2002'. The form on the right contains the following fields: 'Items Received:' with the value '12.06.2002', 'Claims Date:' (empty), 'Quality Code:' (dropdown menu), 'Registered By:' with the value 'System Administrator', and a 'Comment:' text area.

Stock Grade

This displays the supplementary stock information which is copied to the line item if specified at Stock Type or Stock Item level. These codes can be altered in this window if required.

Line Items – Show All

Selecting Show All from the Options Menu displays all the line items that were originally included on the form, including line items that have been cancelled and those that have subsequently been split to other forms.

Line Items – Split

Purchase forms may not always be organized in the most optimal way. To combat this AMOS M&P allows you to split line items to other forms, both new and existing, whilst retaining the original information for reference purposes.

Selecting Split from the Options Menu displays the window shown below. If you want to split the currently highlighted line item to another form you should choose the relevant options from the Form Splitting window.

If you want to split the line item to a new form you should choose sub-form (the form number will have a letter added to the end of it) or new form (the next form number available will be used). If you want to split to an existing form (to consolidate similar items into one order) you will have to select the existing form from a list.

The screenshot shows a dialog box titled "Form Splitting". At the top, there are two input fields labeled "Vendor:" and "Contract:", each with a search icon and a dropdown arrow. To the right of these fields are "OK" and "Cancel" buttons. Below the input fields, there are two checkboxes: "Use Vendor Prices" (checked) and "Copy Form Detail" (unchecked). The "Split To:" section contains three radio buttons: "Sub-form", "Existing form", and "New form - Automatic" (selected). The "Form Type:" section contains three radio buttons: "Purchase Order", "Requisition Form" (selected), and "Query".

If you want to transfer the line item details screen at the same time, you should check the Copy Form Detail checkbox.

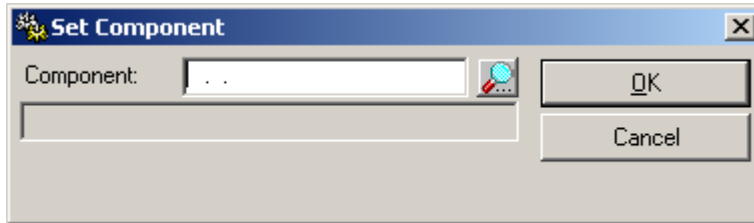
When you split a line item to a sub form or a new form the original purchase form will contain a reference to the form number to which the line item was split. Likewise the new form will contain a reference to where the line item came from. This makes it possible for you to keep track of ordered items even though they may no longer be on the original form you created.

Line Items – Sort Items

This facility re-numbers the line items in a purchase form and should be used in the event of line items being cancelled or split to other orders. If you have 5 line items and decide to cancel line item number 3, using the Sort Items facility will renumber the cancelled line item to number 5 and close the gap on the remaining 'Live' items by renumbering them from 1 to 4.

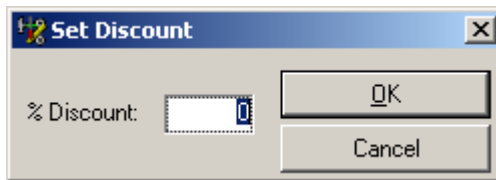
Line Items – Set Component

The Set Component feature can be used to set a single component number against multiple line items. Check the line items you wish to set a component for and then select Set Component from the Options Menu. You can enter the component number manually or use the browse facility to select the number from a list.



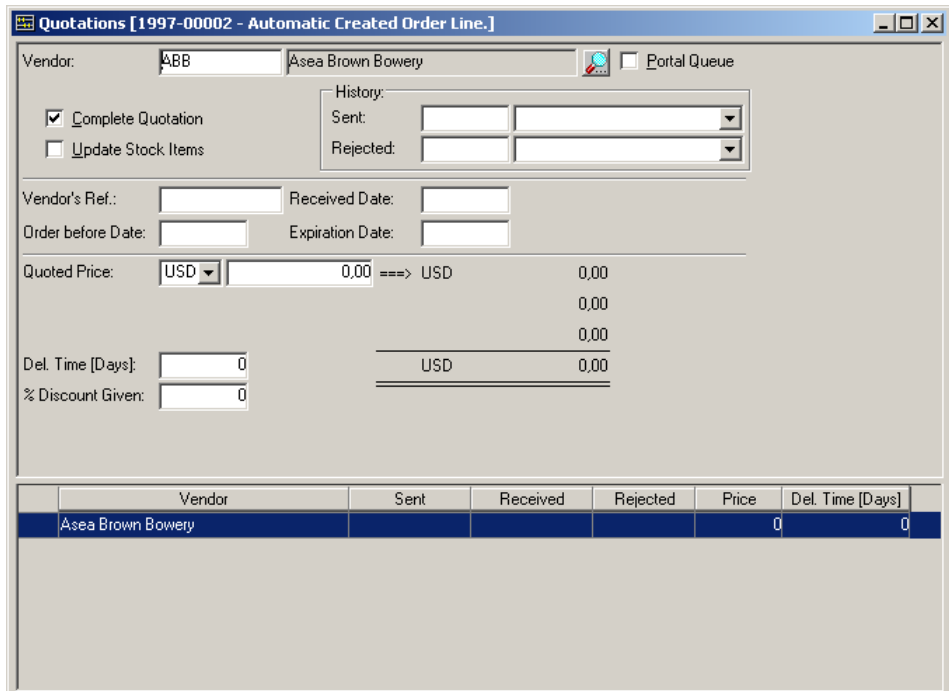
Line Items – Set Discount

The Set Discount feature can be used to set a single discount amount against multiple line items. Check the line items you wish to set the discount for and then select Set Discount from the Options Menu. Enter the amount in the % Discount field and click on OK.



6.1.3.4 Quotations

The Quotations screen is where you enter details of vendors quotations when they have been received. Once all the quotations have been received you can use the comparison tools from the Quotations/Options menu to enable you to choose the price or delivery time that suits your needs.



Quotations – Options Menu

Whilst viewing the quotations associated with a form, the Options Menu changes to the following:

Line Items
Images
Note To Vendor
Vendor's Note
Terms and Conditions
Calculate
Compare
Select

Quotations – Line Items

The Quotations – Line Items screen displays the same lines as the form to which the quotation belongs. This enables you to attach individual prices and delivery times to each line item, which allows AMOS M&P to calculate and compare quotations.

Quotation Line Items [1997-00006 - Automatic Created Order Line. - Asea Brown Bowery]

Part No.: 651.01.00.030 Status: Active
Part Name: Cover Bolts Content: Goods
Makers Ref. No.: 560
Remark:

Item	Name/Title	Quantity	Unit	Currency	Price	% Discount	Del. Time	Total /
1	Cover Bolts	4.00	Pcs	USD	900.00	2.50	12	3 510.00

Quotations (Line Items) – Options Menu

Whilst viewing the line items of a quotation, the Options Menu changes to the following:

Order Line
Show All

Quotations (Line Items) – Order Line

Selecting Order Line from the Options Menu displays the purchase form order line for the quotation line that you are currently viewing

Quotations (Line Items) – Show All

Selecting Show All from the Options Menu displays all the line items that were originally included on the quotation such as line items that have subsequently been split to other forms.

Quotations – Images

This allows you to attach images to the quotation for viewing purposes only.

Quotations – Note To Vendor

This is a details screen intended for use with e-portals to send information regarding the quotation to the vendor.

Quotations – Vendor’s Note

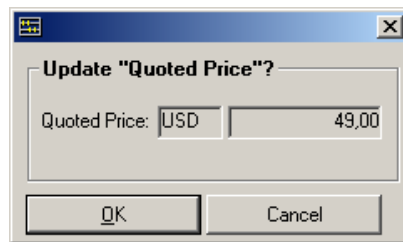
This is a details screen intended for use with e-portals to receive information regarding the quotation from a vendor.

Quotations – Terms and Conditions

This is a details screen intended for use with e-portals to receive the terms and conditions of a quotation.

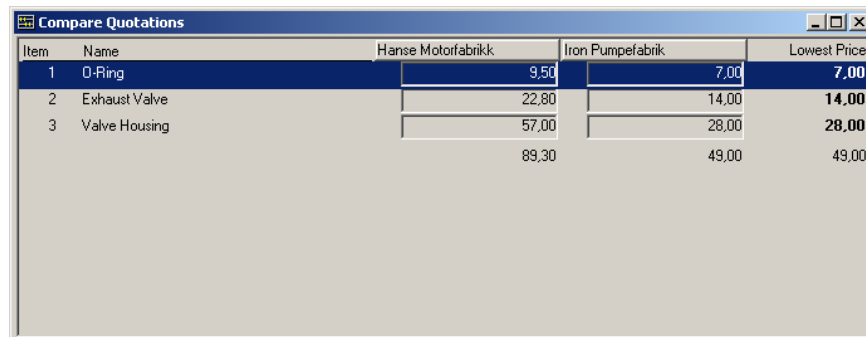
Quotations – Calculate

Selecting Calculate from the Options Menu opens the following window. The “Quoted Price” displayed is the total price of the quotation, line item quantity multiplied by price minus discount, from the highlighted supplier. The correct operation of the Calculate function depends upon quotation prices and discounts being entered at line item level.



Quotations – Compare

Selecting Compare from the Options Menu opens the following window. Each line item of the quotation is displayed with columns for each of the Vendors that are being considered and an extra column at the far right hand side that displays the cheapest price (or shortest delivery time) for each line item. The correct operation of the Compare function depends upon quotation prices and discounts being entered at line item level. The display can compare quotations based on prices or delivery times through use of the Compare Quotations Options Menu.



Item	Name	Hanse Motorfabrikk	Iron Pumpefabrik	Lowest Price
1	O-Ring	9,50	7,00	7,00
2	Exhaust Valve	22,80	14,00	14,00
3	Valve Housing	57,00	28,00	28,00
		89,30	49,00	49,00

Quotations (Compare) – Options Menu

Whilst viewing the Compare Quotations window, the Options Menu changes to the one of the following:



This menu toggles between the two states shown above depending on which state is currently active.

Quotations (Compare) – Del. Time

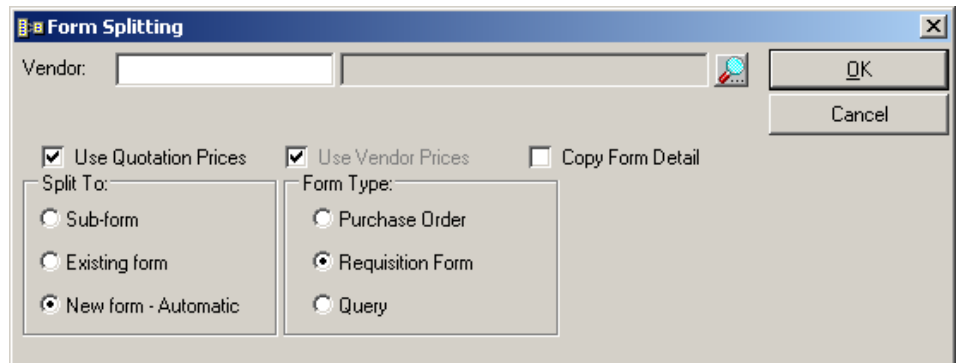
Selecting Del. Time changes the Compare Quotations window to the delivery time comparison function.

Quotations (Compare) – Price

Selecting Price changes the Compare Quotations window to the price comparison function.

Quotations (Compare) – Split

Selecting Split from the Options Menu displays the following window.

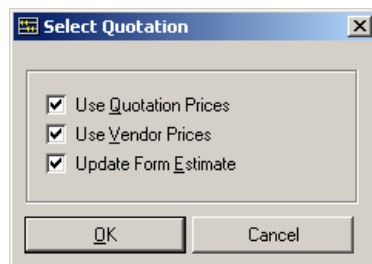


The 'Form Splitting' dialog box features a 'Vendor' field at the top. Below it are three checkboxes: 'Use Quotation Prices' (checked), 'Use Vendor Prices' (checked), and 'Copy Form Detail' (unchecked). The 'Split To:' section contains three radio buttons: 'Sub-form', 'Existing form', and 'New form - Automatic' (selected). The 'Form Type:' section contains three radio buttons: 'Purchase Order', 'Requisition Form' (selected), and 'Query'.

This window is the same as the form splitting window used to split line items in Purchase/Forms/Line Items with the additional checkbox to 'Use Quotation Prices'.

Quotations – Select

Selecting Select from the Options Menu displays the following window. Note that selecting both Quotation Prices and Vendor Prices

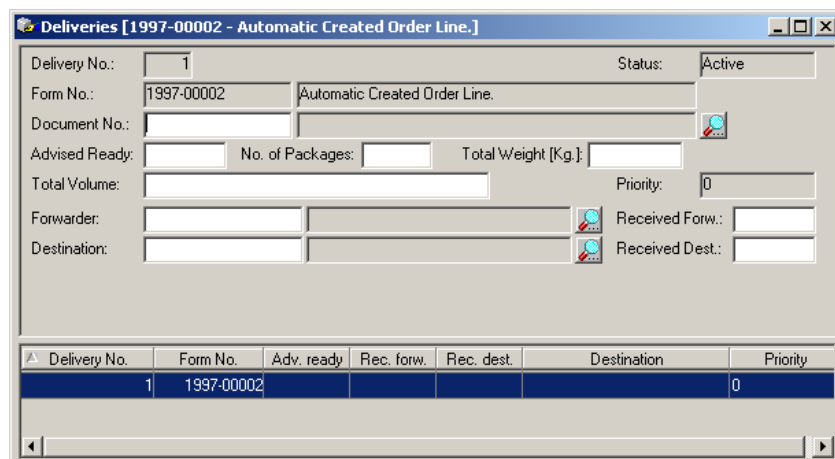


The 'Select Quotation' dialog box contains three checked checkboxes: 'Use Quotation Prices', 'Use Vendor Prices', and 'Update Form Estimate'. It includes 'OK' and 'Cancel' buttons at the bottom.

Selecting a quotation means that you are approving the highlighted line for the basis of a purchase. Depending on a number of parameters several actions can be set to occur when you select a quotation including form type conversion, form status conversion and close quotation. See section 7.7.4 for more information on parameters.

6.1.3.5 Deliveries

Deliveries are forms used to distribute goods in transit to remote locations such as ships. They can be seen as a form of temporary goods received note that will follow the stock items until they have been officially received at the ordering installation



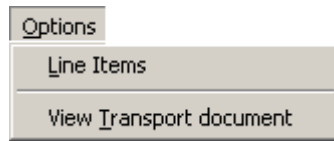
The 'Deliveries' window displays the following fields: Delivery No. (1), Form No. (1997-00002), Document No., Advised Ready, No. of Packages, Total Weight [Kg.], Total Volume, Priority (0), Forwarder, Destination, Received Forw., and Received Dest. Below the fields is a table with the following data:

Delivery No.	Form No.	Adv. ready	Rec. forw.	Rec. dest.	Destination	Priority
1	1997-00002					0

Deliveries can be added to a single transport document or may be split over several documents. Once added to a transport document the delivery is classed as consolidated. Deliveries that have not been assigned to a transport document are classed as unconsolidated.

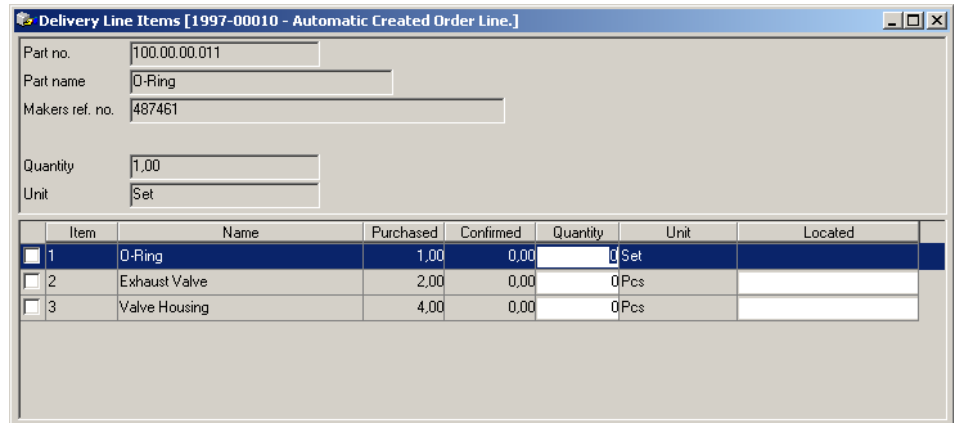
Deliveries – Options Menu

Whilst viewing the Deliveries window, the Options Menu changes to the following:



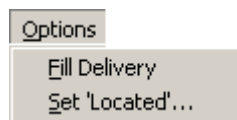
Deliveries – Line Items

Selecting line items from the options menu displays the details of what is included in the delivery.



Deliveries (Line Items) – Options Menu

Whilst viewing the line items of a delivery, the Options Menu changes to the following:



Deliveries (Line Items) – Fill Delivery

Selecting the Fill Delivery option will cause the Quantity column of the Delivery Line Items window to fill with the purchased quantities. You can use this facility to quickly enter the line item quantities if you are certain that they are correct. This can be useful if there are many line items.

Deliveries (Line Items) – Set 'Located'...

If you want to update the 'Located' field for multiple line items you should select the required lines and then use the following window to insert the desired information.



Deliveries – View Transport Document

Whilst adding deliveries to transport documents you can select View Transport Document from the Options menu to see the current status, such as weight, number of packages and total cost. Useful if you have a limit on the weight of the delivery due to transport constraints.

Transport Documents

Document No.: 1 Status: Active

Title: test Date Printed:

Total packages: 0,01 Total Weight [Kg.]: 0,01

Forwarder: Latest Forw.

Destination: Latest Dest.

Forwarding Date: Received Dest.

Currency Code: USD Price per Kg USD 0,00 Total Cost USD 0,00

Arrival Date:

Document no	Title	Forw. date	Received	Arrived	Status
1	test				Active

6.1.3.6 Vouchers

Vouchers are the types of form that AMOS M&P uses to attach invoices or credit notes to purchase forms. When you select vouchers from the Purchase/Forms/Options menu the next available number is assigned to the voucher and the purchase form to which it belongs is listed in the window title bar. If the voucher is for the whole purchase form or it is the last in a number of forms you should check the 'Final Invoice' box.

Vouchers [1997-00001 - Automatic Created Order Line.]

Voucher No.: - Type: Invoice

Issued Date: 05/11/2001 Reference:

Net Amount: USD 0 ==> USD Due Date: Final Invoice

VAT Amount: USD 0 ==> USD Include VAT

Total Amount: USD 0 ==> USD

History: Registered: 05/11/2001 System Administrator

Payment Approved:

Voucher No.	Type	Date	Reference	Cur.	Total Amount	Due Date	Final Invoice
-	Invoice	05/11/2001		USD	0.00		<input type="checkbox"/>

Vouchers – Options Menu

Whilst viewing the Vouchers window, the Options Menu changes to the following:

Options

Line Items

Calculate Net Amount...

Vouchers – Line Items

Each voucher contains the same line items as the purchase form to which it belongs. If you have several vouchers against a single purchase form, the quantity received to date will be updated each time a new voucher is created. This makes it easy to see when a final invoice should be created.

Item	Name/Title	Purchased	Received	Invoiced	Unit	Quantity	Curr.	Price
1	Cover Bolts	4.00	1.00	0.00	Pcs	0.00	USD	0.00

Vouchers – calculate Net Amount...

If you want to add together the net amount of all line items on a voucher, select 'Calculate Net Amount' from the Vouchers/Options menu and AMOS M&P will do the job for you and update the net value of the selected voucher with the resulting figure.

6.1.3.7 Budget

Select budget from the Options menu to view the budget details for the selected form.

	Monthly totals / USD /				Accumulated / USD /		
	Committed	Paid	Total	Budgeted	Total	Budget	Variance
Jan	0.00	0.00	0.00	10,000.00	0.00	10,000.00	10,000.00
Feb	0.00	0.00	0.00	10,000.00	0.00	20,000.00	20,000.00
Mar	0.00	0.00	0.00	10,000.00	0.00	30,000.00	30,000.00
Apr	0.00	0.00	0.00	10,000.00	0.00	40,000.00	40,000.00
May	0.00	0.00	0.00	10,000.00	0.00	50,000.00	50,000.00
Jun	0.00	0.00	0.00	10,000.00	0.00	60,000.00	60,000.00
Jul	0.00	0.00	0.00	10,000.00	0.00	70,000.00	70,000.00
Aug	0.00	0.00	0.00	10,000.00	0.00	80,000.00	80,000.00
Sep	0.00	0.00	0.00	10,000.00	0.00	90,000.00	90,000.00
Oct	0.00	0.00	0.00	10,000.00	0.00	100,000.00	100,000.00
Nov	0.00	0.00	0.00	10,000.00	0.00	110,000.00	110,000.00
Dec	0.00	0.00	0.00	10,000.00	0.00	120,000.00	120,000.00

6.1.3.8 Note To Vendor

This is a details screen intended for use with e-portals to send information to the vendor about the purchase form.

6.1.3.9 Vendor's Note

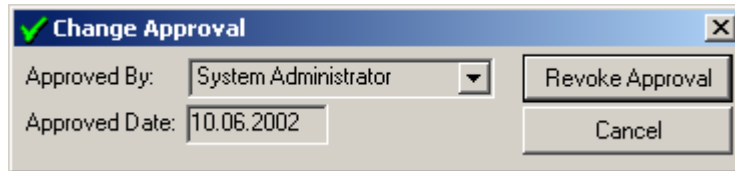
This is a details screen intended for use with e-portals to receive information from the vendor about the purchase form.

6.1.3.10 Terms and Conditions

This is a details screen intended for use with e-portals to receive the vendor's terms and conditions regarding the purchase form.

6.1.3.11 Change Approval...

If you want to grant approval or revoke approval for a purchase form, select Change Approval from the Options menu. The condition of the following window depends on the existing approval state of the form.



The 'Change Approval' dialog box has a title bar with a green checkmark icon and the text 'Change Approval'. It contains two input fields: 'Approved By:' with a dropdown menu showing 'System Administrator' and 'Approved Date:' with a text box containing '10.06.2002'. There are two buttons: 'Revoke Approval' and 'Cancel'.

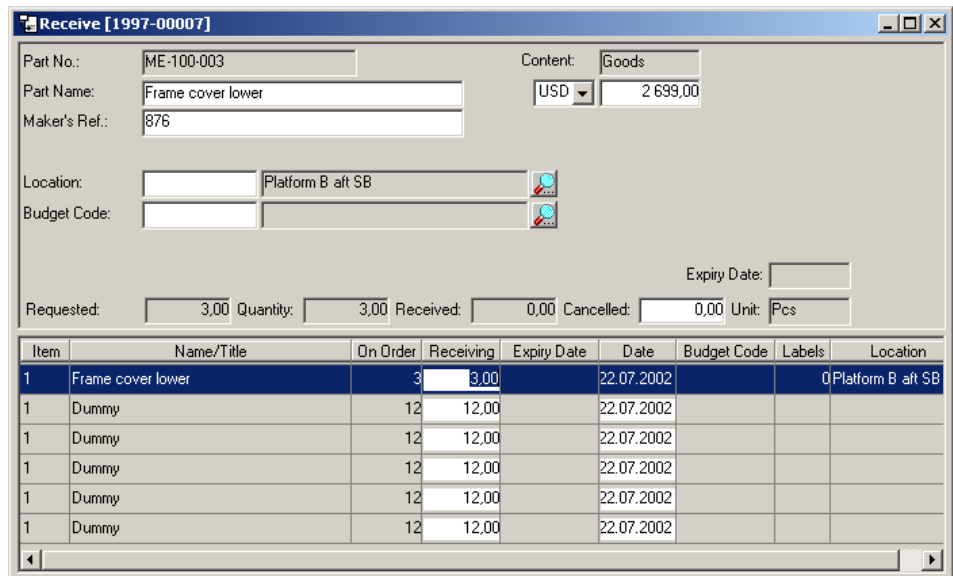
6.1.3.12 Receive...

Selecting Receive from the Options menu opens the following window:



The 'Receipt Options' dialog box has a title bar with a document icon and the text 'Receipt Options'. It contains a checked checkbox labeled 'Receiving the complete P.O.'. Below it are two input fields: 'Receipt Date:' with a text box containing '05/11/2001' and 'Budget Code:' with an empty text box. There are two buttons: 'OK' and 'Cancel'.

If there are many items, and you believe that most of the order has arrived you should check the 'Receiving the complete P.O. box' to open the receive window with the totals already entered. You can alter the ones that are incorrect. If you do not check this box, you will have to enter each total individually.

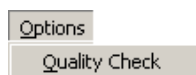


The 'Receive [1997-00007]' window has a title bar with a document icon and the text 'Receive [1997-00007]'. It contains several input fields: 'Part No.:' with 'ME-100-003', 'Part Name:' with 'Frame cover lower', 'Maker's Ref.:' with '876', 'Location:' with 'Platform B aft SB', and 'Budget Code:' with an empty field. There are also 'Requested:', 'Quantity:', 'Received:', and 'Cancelled:' fields with values 3,00, 3,00, 0,00, and 0,00 respectively. A 'Unit:' dropdown is set to 'Pcs'. A table at the bottom lists items with columns: Item, Name/Title, On Order, Receiving, Expiry Date, Date, Budget Code, Labels, and Location.

Item	Name/Title	On Order	Receiving	Expiry Date	Date	Budget Code	Labels	Location
1	Frame cover lower	3	3,00		22.07.2002			0 Platform B aft SB
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			

Receive – Options Menu

Whilst viewing the Receive window, the Options Menu changes to the following:

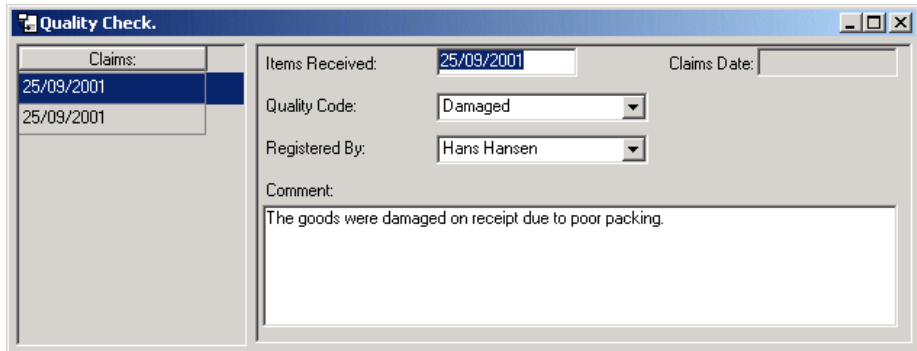


The 'Options' menu is shown with a dropdown arrow and the text 'Options'. Below it is a button labeled 'Quality Check'.

Receive – Quality Check

The Quality Check window allows you to make comments about the quality of goods received. There is a checkbox in the print forms window that allows you to print reclamation claims to send to the supplier.

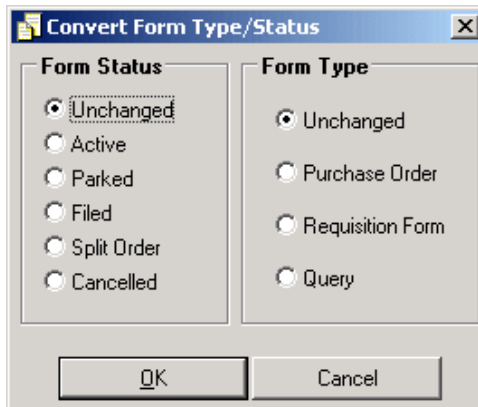
The Quality Codes register is used to store the possible codes available in the drop down window. This register is described in section 3.1.12.6.



Note that more than one quality check can be registered against each receipt if required.

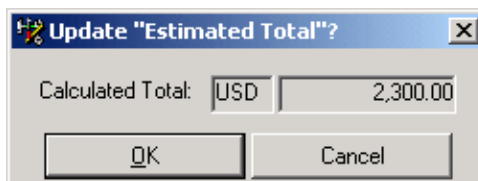
6.1.3.13 Convert...

Selecting Convert from the Options Menu allows you to alter the form status and/or form type. The conversion can be carried out on a single form or on multiple forms if they are tagged.



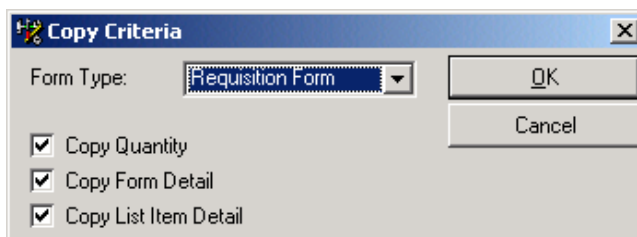
6.1.3.14 Estimate Cost...

Selecting 'Estimate Cost' from the Options menu calculates the total value of the selected purchase form based on the quantities, prices and discounts for the line items of the form.



6.1.3.15 Copy...

If you want to copy a purchase form you can select 'Copy' from the Options menu and fill in the details shown below instead of having to type all the information in again.

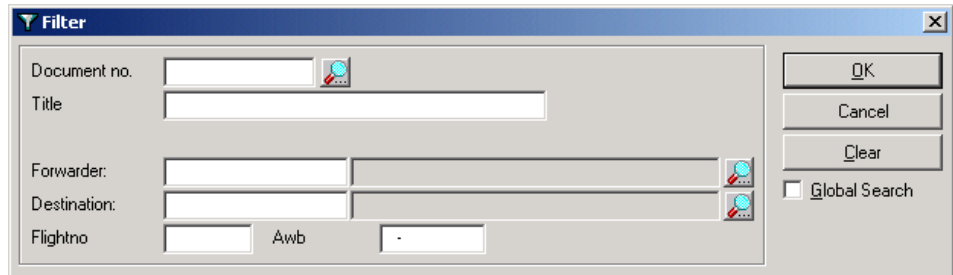


6.2 Transport Documents

Transport Documents are used to group goods that have come into a central location on different purchase forms that need to be forwarded to remote installations. A form with many line items may be split over several transport documents and a transport document may contain line items from several purchase forms.

6.2.1 The Transport Documents Filter

When you click on Purchase/Transport Documents the following filter will open.



The screenshot shows a dialog box titled "Filter" with the following fields and controls:

- Document no. (text input)
- Title (text input)
- Forwarder: (text input)
- Destination: (text input)
- Flightno (text input) and Awb (text input)
- Buttons: OK, Cancel, Clear
- Global Search checkbox

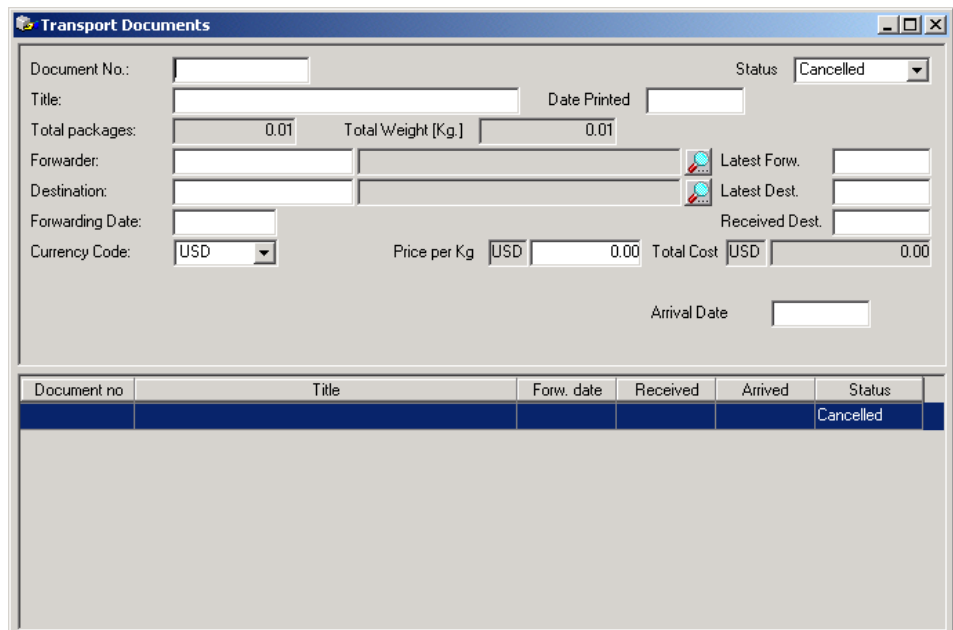
If you want to see all transport documents, click on OK otherwise enter some of the details to restrict the information retrieved.

6.2.2 The Transport Documents Window

The Transport Documents window is used to collate the information regarding shipment of goods from a central location to remote destinations.

Installations that are expecting stock items can view the transport documents destined for delivery to see what will arrive, where it will be sent, when it will arrive and who the freight forwarder is.

If you want to create a new transport document, click on the new button on toolbar. The following window will appear:



The screenshot shows the "Transport Documents" window with the following fields and controls:

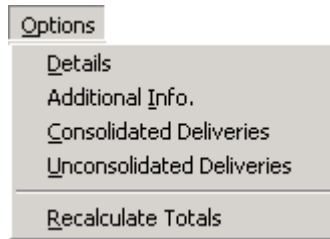
- Document No.: (text input)
- Title: (text input)
- Date Printed: (text input)
- Status: (dropdown menu, currently set to "Cancelled")
- Total packages: (text input, value 0.01)
- Total Weight [Kg.]: (text input, value 0.01)
- Forwarder: (text input)
- Destination: (text input)
- Forwarding Date: (text input)
- Currency Code: (dropdown menu, currently set to "USD")
- Price per Kg: (text input, value USD 0.00)
- Total Cost: (text input, value USD 0.00)
- Arrival Date: (text input)
- Latest Forw. (text input)
- Latest Dest. (text input)
- Received Dest. (text input)

Document no	Title	Forw. date	Received	Arrived	Status
					Cancelled

The document number of a transport document is not automatically generated so you can use your own numbering system to identify it. Enter as much information as possible to make the transport document easier to understand and to assist your remote locations to see when things will arrive.

6.2.3 The Transport Documents Options Menu

Once the Transport Documents window has been opened, there is an Options menu added to the menu bar:

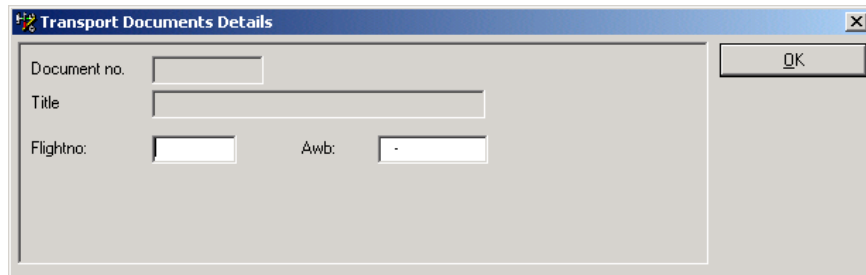


6.2.3.1 Details

The **Details** command from the **Options** menu opens the Full Description window for the selected transport document. This screen can be used for adding general information to a transport document and can also be used in conjunction with a pre-formatted template if required.

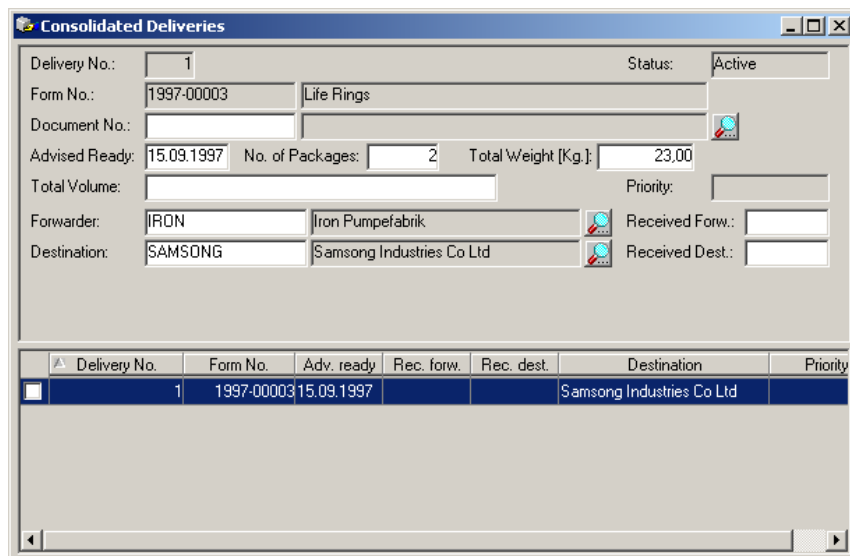
6.2.3.2 Additional Info.

The Additional Info. Screen is used to attach extra transportation details to the document.



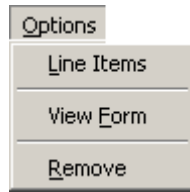
6.2.3.3 Consolidated Deliveries

Consolidated deliveries are made up of purchase form line items that have been attached to Transport documents and are therefore accounted for. Unattached line items are classed as unconsolidated deliveries.



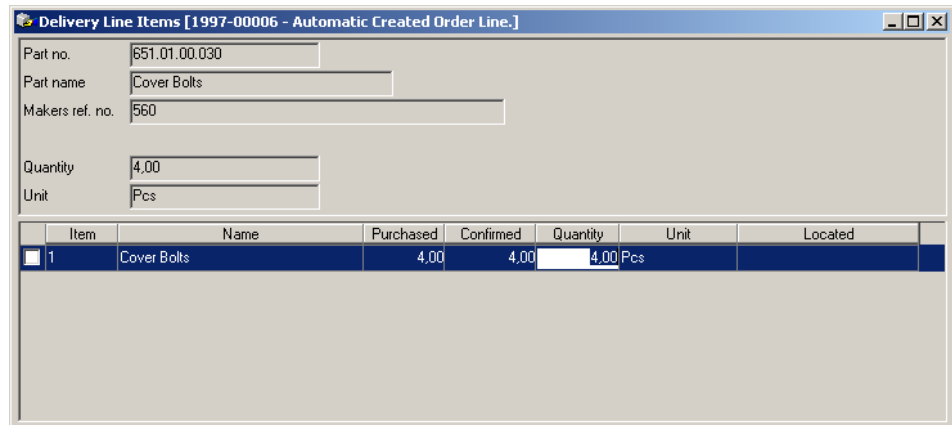
Consolidated Deliveries – Options Menu

Whilst viewing the Consolidated Deliveries window, the Options Menu changes to the following:



Consolidated Deliveries – Line Items

Displays the line items that were included on the purchase form.



Consolidated Deliveries (Line Items) – Options Menu

Whilst viewing the Consolidated Deliveries – Line Items window, the Options Menu changes to the following:

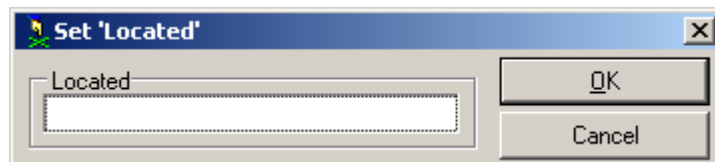


Consolidated Deliveries (Line Items) – Fill Delivery

Selecting 'Fill Delivery' automatically inserts the purchased amount into the quantities column of all the line items in the delivery.

Consolidated Deliveries (Line Items) – Set Located

If you want to update the 'Located' field for multiple line items you should select the required lines and then use the following window to insert the desired information.



Consolidated Deliveries – View Form

This option displays the original purchase form for the selected delivery line item.

Consolidated Deliveries – Remove

This option removes the selected delivery line item from the transport document listed in 'Document No.' and the line item becomes unconsolidated.

6.2.3.4 Unconsolidated Deliveries

Unconsolidated deliveries are made up of purchase form line items that have not yet been attached to Transport documents. Attached line items are classed as consolidated deliveries.

The screenshot shows the 'Receive [1997-00007]' window. It contains the following fields and data:

- Part No.: ME-100-003
- Content: Goods
- Part Name: Frame cover lower
- USD: 2 699,00
- Maker's Ref.: 876
- Location: Platform B aft SB
- Budget Code: (empty)
- Requested: 3,00
- Quantity: 3,00
- Received: 0,00
- Cancelled: 0,00
- Unit: Pcs
- Expiry Date: (empty)

Item	Name/Title	On Order	Receiving	Expiry Date	Date	Budget Code	Labels	Location
1	Frame cover lower	3	3,00		22.07.2002			Platform B aft SB
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			
1	Dummy	12	12,00		22.07.2002			

Unconsolidated Deliveries – Options Menu

Whilst viewing the Unconsolidated Deliveries window, the Options Menu changes to the following:

The Options menu is displayed with the following items:

- Options
- Line Items
- View Form
- Attach

Unconsolidated Deliveries – Line Items

Displays the line items that were included on the purchase form.

The screenshot shows the 'Delivery Line Items [1997-00007 - Splitted Order Line.]' window. It contains the following fields and data:

- Part no.: 601.01.00.003
- Part name: Frame cover lower
- Makers ref. no.: 876
- Quantity: 3,00
- Unit: Pcs

Item	Name	Purchased	Confirmed	Quantity	Unit	Located
1	Frame cover lower	3,00	0,00		Pcs	

Unconsolidated Deliveries (Line Items) – Options Menu

Whilst viewing the Consolidated Deliveries – Line Items window, the Options Menu changes to the following:

The Options menu is displayed with the following items:

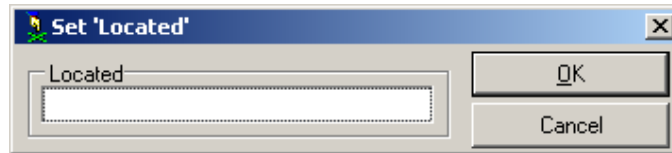
- Options
- Fill Delivery
- Set 'Located'...

Unconsolidated Deliveries (Line Items) – Fill Delivery

Selecting 'Fill Delivery' automatically inserts the purchased amount into the quantities column of all the line items in the delivery.

Unconsolidated Deliveries (Line Items) – Set Located

If you want to update the 'Located' field for multiple line items you should select the required lines and then use the following window to insert the desired information.



Unconsolidated Deliveries – View Form

This option displays the original purchase form for the selected delivery line item.

Unconsolidated Deliveries – Attach

This option attaches the selected delivery line item to the transport document listed in 'Document No.' and the line item becomes consolidated.

6.2.3.5 Recalculate Totals

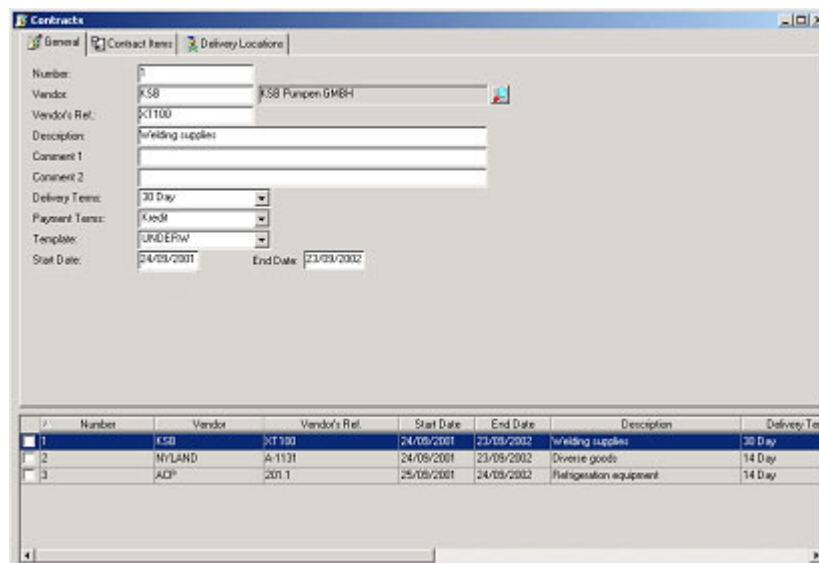
When you have altered the contents of a transport document you can use the 'Recalculate Totals' function to update the 'Total Cost' field which shows the transportation costs of the shipment.

6.3 Contracts

Contracts give you the option of specifying pre-arranged contract purchasing with your vendors. You can have one contract per vendor at any given point in time.

Note that there are several registers for use within contracts called 'Delivery Terms', 'Payment Terms' and 'Delivery Locations'. These registers can be found in section 3.1.14.

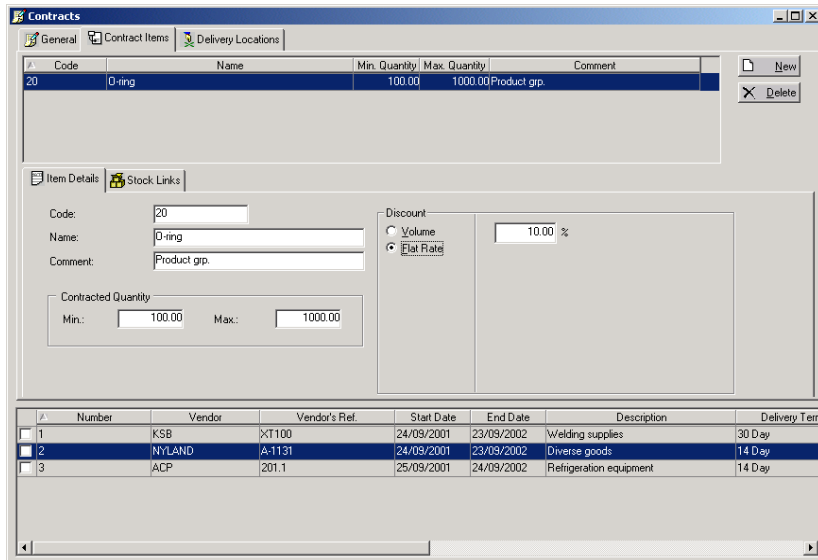
The Contracts 'General' tab:



The contracts 'General' tab is used to set up the basic information for each contract. Most of the information to be entered is 'free text' except for where there are drop down windows or date fields.

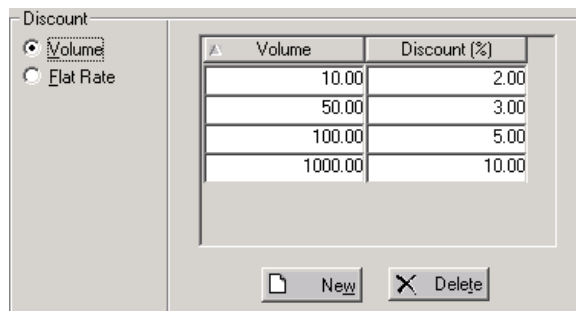
The 'Template' drop down window is used to attach user defined templates to the details screen visible through the Contracts/Options menu.

The Contracts 'Contract Items' tab:

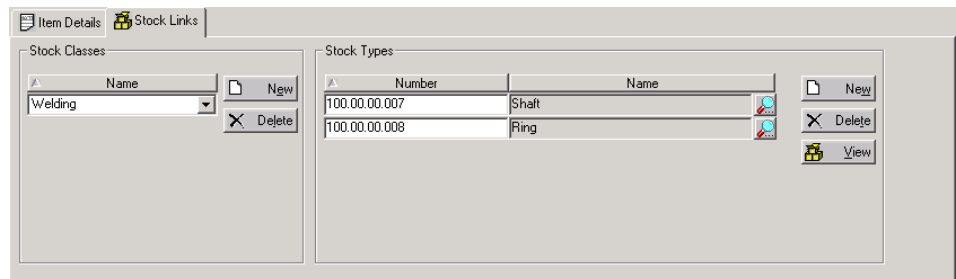


The 'Contract Items' tab is where you can enter contract sub-sections. You create a new subsection using the buttons at the top right-hand side of the window. The details for the sub-sections are entered in the 'Item Details' tab in the lower half of the screen.

The contract sub-section can have 'Volume' or 'Flat Rate' discount rates. If 'Flat Rate' is selected, you enter the amount of discount in the single box to the left. If 'Volume' is selected, you are then presented with the following window variation:

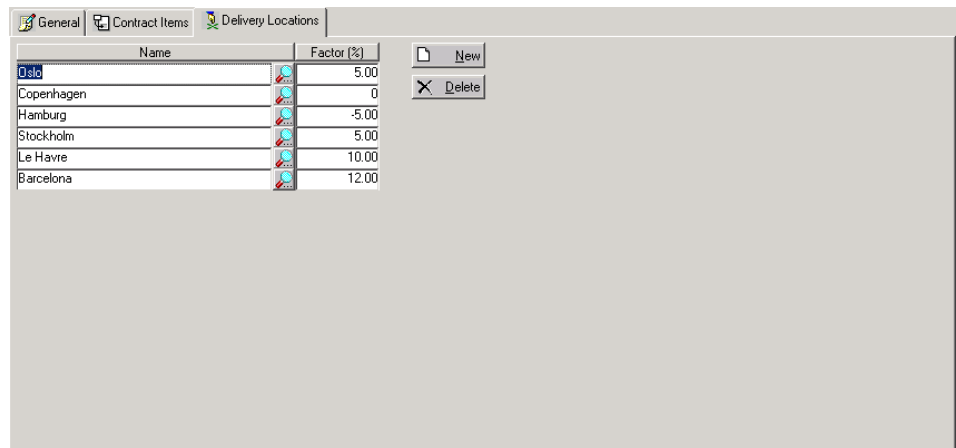


Using the buttons at the bottom of the new window, you can add a variety of different discount rates for different quantities.



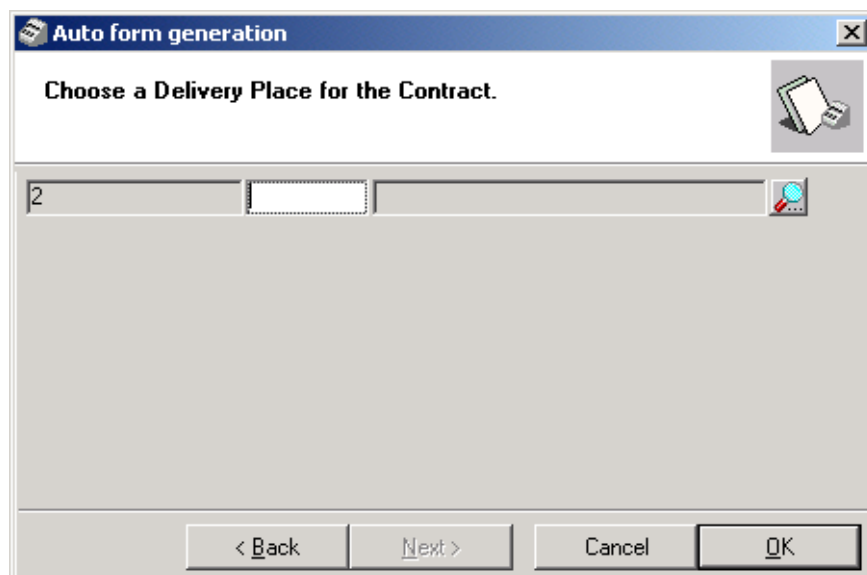
The 'Stock Links' tab allows you to attach Stock Classes to the contract by using the buttons inside the 'Stock Classes' section of the window. Stock Types are added to the contract on the right hand side, again using the buttons within the section. The 'View' button takes you to the 'Stock Items' window of the selected stock number.

The Contracts 'Delivery Locations' tab:



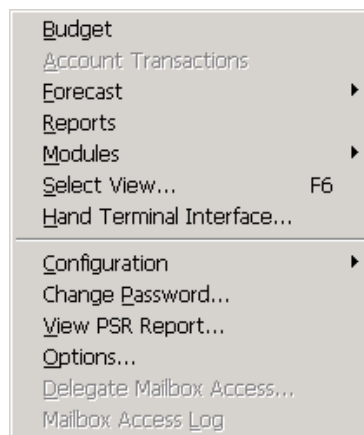
The Delivery Locations tab allows you to attach possible delivery locations to the entire contract using the buttons to the right of the window. There can also be positive or negative price factors included to account for additional delivery costs.

When you use the 'Generate Forms' function, the application will select the cheapest contract option if the stock item is attached to more than one contract. If the chosen contract has more than one delivery location specified, you will be prompted to choose one by the following screen:



The first field contains the number of the automatically selected contract. When you click the search icon, you will be presented with a list of all possible delivery locations attached to the contract. Choose one and click OK to proceed. The purchase form will now be issued against the contract.

7 The Tools Menu

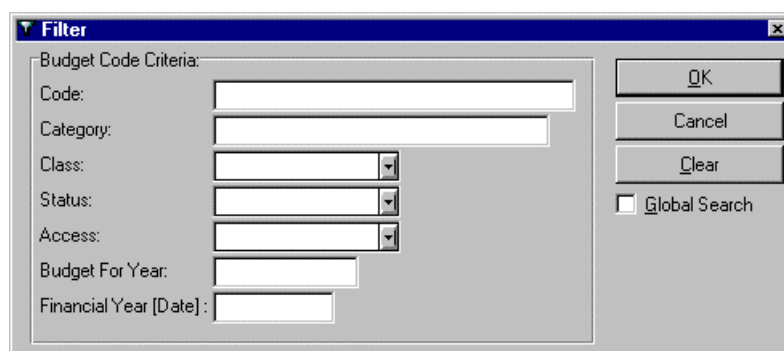


This chapter covers the commands in the **Tools** menu:

7.1 Budget

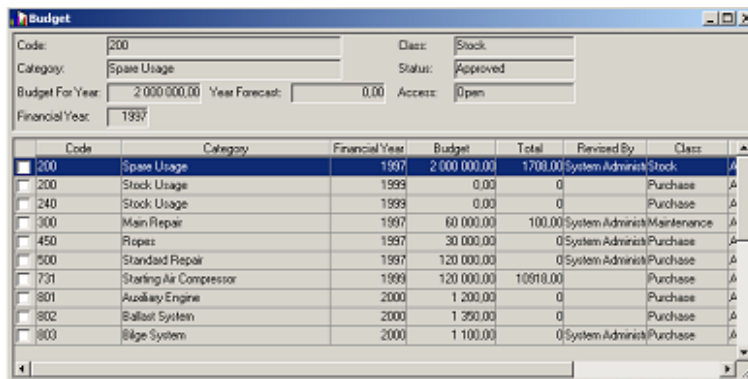
The budget functions in AMOS M&P are described in Chapter 6 of the *AMOS M&P User Guide*

The Budget filter



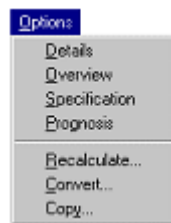
- The Class drop-down list contains the three defined budget classes *Purchase* is for purchased items, and amounts are transferred from purchase orders. *Stock* is for the Spare Parts budget class, and amounts are transferred from Stock Transaction. The *Maintenance* class is for tracking resources spent on maintenance, and amounts are transferred from the maintenance log

The Budget window



- The budget consists of a number of budget codes that are defined by the organisation. The text below explains the various available budget code options. As the screen picture above indicates, it is possible to scroll sideways in the Budget window. For example, a Warning column may be reached by scrolling all the way to the right using the scroll bar at the bottom of the window. To enter the Budget Overview window, double-click the desired budget code.

The Options menu for Budget

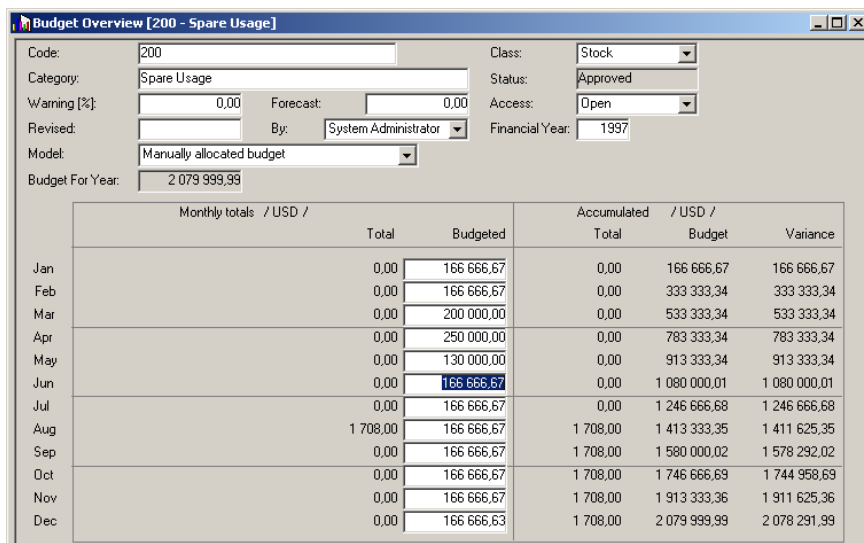


Details

The **Details** command from the **Options** menu in the Budget window opens the Full Description window, which may be used for a full text description of the selected budget code. If a default Budget Code layout is specified, the window will display this layout instead.

Overview

The **Overview** command from the **Options** menu in the Budget window opens the Budget Overview window for the selected budget code. The illustration below shows a budget code based on the Manually allocated budget model.



- The Warning field may be used to enter a percentage. When the specified warning level has been reached, red numbers will be displayed for the budget code. A value of 90% will produce a warning when 90% of the specified budget has been spent. A value of 110% will have the program displaying a warning when the budget code has been overspent by 10%. The warning will be displayed as an asterisk (*).
- The Revised field may be used to enter the date for a revision of a budget code. The By drop-down list may be used to specify who has made the revision.
- The Access drop-down list contains the two values Open and Restricted. If the latter is selected, only user groups to whom access has been granted may update the selected budget code. Access for user groups is described in section 7.7.2.
- The Budget Model drop down list contains three options. Different budget codes may be based on separate budget models.
 - *Budgeted amount* is used to specify a sum for the entire year.
 - *Evenly allocated budget* distributes the budget sum evenly over each period.
 - *Manually allocated budget* makes it possible to enter the budget sum directly in the Budget Overview window, with separate amounts for each month of the budget year.

Specification

AMOS M&P contains optional functionality that allows an organisation to enter budget specifications for the budget codes. Three system parameters control this option, called Use Specification for Stock/Purchase/ Maintenance Budget respectively; see section 7.7.4.5. If the parameters are set to TRUE, the corresponding budget specifications are used to update budget figures for the respective budget classes

The screenshot shows a window titled "Budget Specification [500]". It contains several input fields and a table. The fields are: Code (500), Category (Standard Repair), Model (Manually allocated budget), Class (Purchase), Status (Approved), and Financial Year (1998). Below these are fields for Budget and Actual values for the years 1996, 1997, and 1998. The table below has columns for Description, Cost / USD /, and Period.

Description	Cost / USD /	Period
2 New PCs	10.000,00	February
2 New Printers	4.000,00	April
12 network adapters	850,00	May

- The Budget Specification window is used to add items that are to be charged to the selected budget code.

Prognosis

After the original budget has been established, it may be necessary to make adjustments to the budget. The Prognosis function makes it possible to create new, updated versions of the budget based on actual consumption and turnover.

To enter the Budget Prognosis window, select a budget code and give the menu command **Options/Prognosis**. The following window opens:

The screenshot shows the 'Budget Prognosis [600 - Hardware]' window. At the top, 'Prognosis' is set to 'June' and 'Status' is 'Preliminary'. The 'Budget for year' is 6000.00. Below this is a table of 'Monthly Totals / USD /' with columns for each month from Jan to Dec. The values are: Jan (3000.00), Apr (500.00), Jul (0), Oct (0), Feb (0), May (1000.00), Aug (0), Nov (0), Mar (1500.00), Jun (0), Sep (0), Dec (0). At the bottom is a summary table:

Prognosis	Budget	Status
March	5800.00	Approved
June	6000.00	Preliminary

- A Prognosis budget is controlled by the same mechanisms as the regular budget: described in this section. For example, a budget code uses one of the three budget modes. These are Budgeted amount, Evenly allocated budget and Manually allocated budget.
- If the Specification parameters have been set to TRUE, specifications amounts are used to calculate a budget prognosis. To do so, select the prognosis to work with and give the menu command **Options/ Specification**. Then enter a specification the way described above.
- When working with prognoses, it is possible to copy the relevant specification from the previous versions. For the first prognosis created, data are copied from the budget code itself. For subsequent prognoses, data are copied from the previous version. To copy data, give the menu command **Options/Copy Specification**

The screenshot shows the 'Options' menu with three items: 'Specification', 'Convert...', and 'Copy Specification'. The 'Copy Specification' item is highlighted in blue.

Recalculate

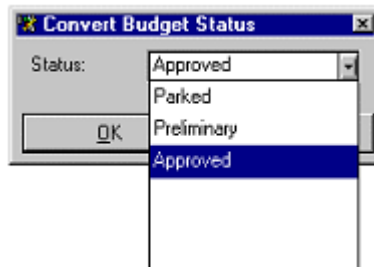
The **Recalculate** command from the **Options** menu in the Budget window may be used to recalculate the budget at any time while working on the budget. The command brings up the following dialog box:

The screenshot shows the 'Recalculate Budget' dialog box. It has three input fields: 'Installation/Name' with the value '001/01', 'Financial Year' which is empty, and 'Budget Code' with the value '500'. At the bottom are 'OK' and 'Cancel' buttons.

- It is possible to perform this operation for selected departments for a specified financial year and/or for a specific budget code. Click OK to have AMOS M&P perform the recalculation for the selections made.

Convert

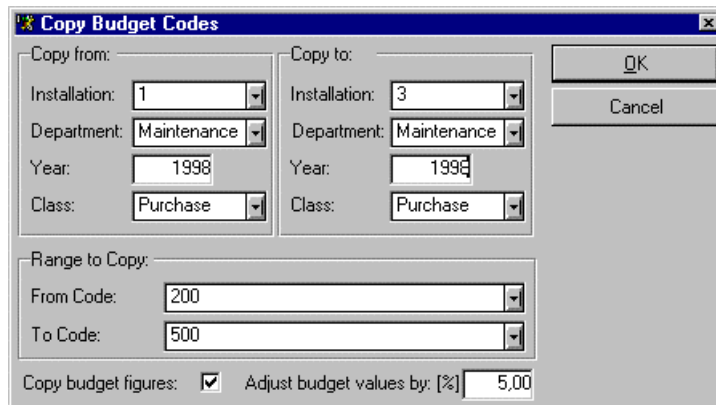
A user with the sufficient access level can convert the status of one or more checked budget codes in the Budget window. The menu command **Option/Convert** enters this dialog box:



- A budget code is given the status *Preliminary* when it is created, typically at an early stage in the budget process. The status is changed to *Approved* when this stage has been reached. If a budget code is to be withdrawn from the budget on a temporary or permanent basis, the status can be changed to *Parked*. A budget Prognosis may not be changed once the status has been set to *Approved*.
- It is possible to change the status of multiple budget codes in the same operation by checking the desired budget codes. The command **Select All** from the **Edit** menu may be used to tag all of the budget codes in order to batch convert them.

Copy

In order to make it easier to create realistic budgets, AMOS M&P contains a function to copy budget information. Select **Copy** from the **Options** menu in the Budget window to enter this dialog box:

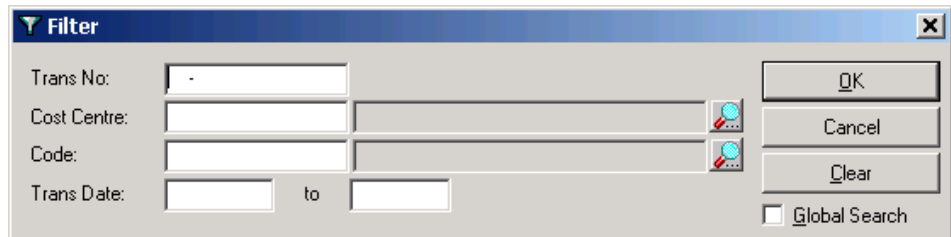


- The drop-down lists at the top of the dialog box are used to specify the source and destination for the copying operation.
- The two drop-down lists in the frame Range to Copy may be used to specify a range of budget codes to be included.
- If the Copy budget figures box is checked, the field Adjust budget values by field becomes available. This may be used to insert a percentage value by which each amount in the target budget will be increased compared to the source budget.

7.2 Account Transactions

If you have a license which includes the Accounting module, you will be able to access this menu option. This gives you the possibility to list selected transactions and alter them if unlocked. You can also generate manual transactions using this feature if you have the correct level of access control. Manually created transactions can be used to correct locked transactions that are incorrect.

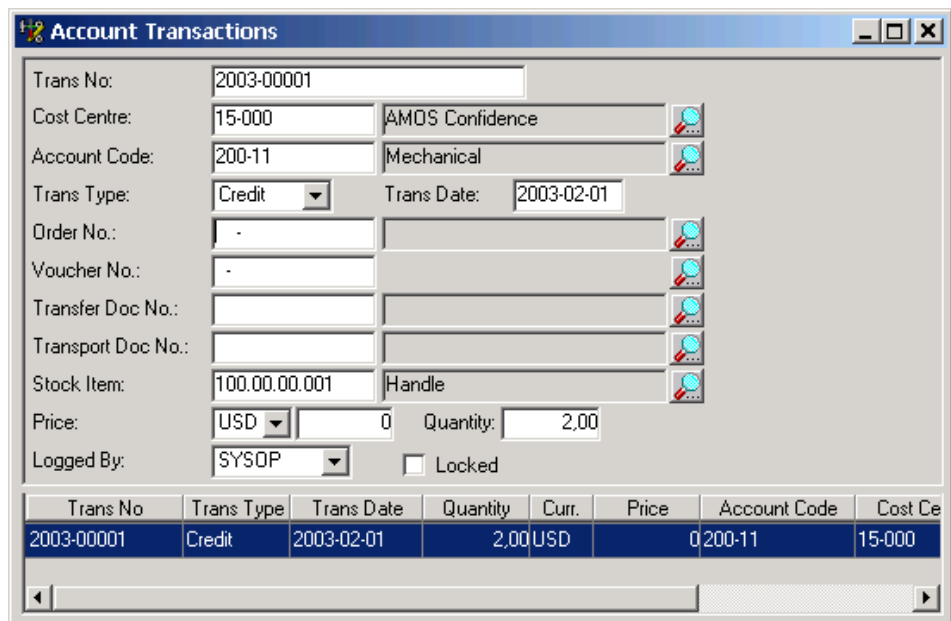
The Account Transactions filter allows you to search for individual transactions, all transactions recorded against a Cost Centre or Account Code or all transactions between two Transaction dates:



The Filter dialog box contains the following fields and controls:

- Trans No:
- Cost Centre:
- Code:
- Trans Date: to
- Buttons: OK, Cancel, Clear
- Global Search:

As you can see from the window shown below, you can create Account Transactions connected to various documents.



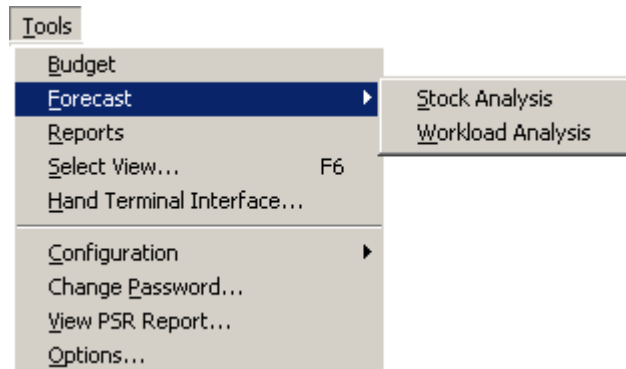
The Account Transactions window displays the following fields and controls:

- Trans No:
- Cost Centre: AMOS Confidence
- Account Code: Mechanical
- Trans Type: Trans Date:
- Order No.:
- Voucher No.:
- Transfer Doc No.:
- Transport Doc No.:
- Stock Item: Handle
- Price: Quantity:
- Logged By: Locked

Trans No	Trans Type	Trans Date	Quantity	Curr.	Price	Account Code	Cost Ce
2003-00001	Credit	2003-02-01	2.00	USD	0	200-11	15-000

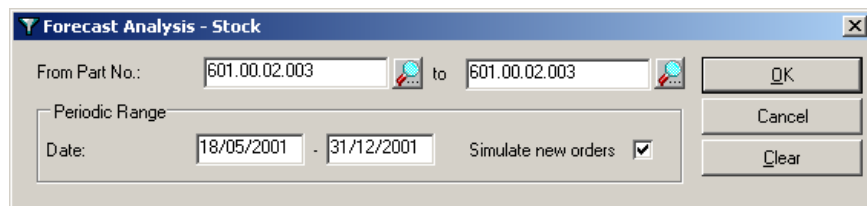
7.3 Forecast

The **Forecast** sub-menu contains commands for Stock and Workload analysis. These features can be used to obtain information for future stock and workload requirements. These forecasts can vary depending on input information.



7.3.1 Stock Analysis

The Stock Analysis filter allows the user to create stock forecasts for individual or multiple part numbers over a variable length of time. If the Simulate new orders field is ticked, the system will also forecast when to order replacement parts due to forecast usage.



The Stock Forecast Analysis window looks like this:

The 'Stock Forecast Analysis' window displays the following information:

Part Info:
 Part Number: 601.00.02.003 Stock Maximum: 20 Reorder Level: 4 Stocked Forecast: 5
 Part Name: O-RING 484 X 12 Stock Minimum: 4 Reorder Quantity: 12 Stocked Item:

Date	Actual Qty	In Qty	Form No.	Vendor Code	Vendor Name/Order Date	Out Qty	Job Code/W/O No.	Job Title/Workorder Title	Component No.
23-05-2001	17	12			(Should be ordered on: 23-05-01)				
23-05-2001	15	0				2	C001	CHECK AND LUBRICATION.	601.15.02
01-06-2001	14	0				1	0001-00242		601.15.02
08-06-2001	13	0				1	C009	CHECK VALVE	601.15.02
09-06-2001	12	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
23-06-2001	10	0				2	C001	CHECK AND LUBRICATION.	601.15.02
01-07-2001	9	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
09-07-2001	8	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
23-07-2001	6	0				2	C001	CHECK AND LUBRICATION.	601.15.02
01-08-2001	5	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
08-08-2001	4	0				1	C009	CHECK VALVE.	601.15.02
09-08-2001	16	12			(Should be ordered on: 09-08-01)				
09-08-2001	15	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
23-08-2001	13	0				2	C001	CHECK AND LUBRICATION.	601.15.02
01-09-2001	12	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
09-09-2001	11	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
23-09-2001	9	0				2	C001	CHECK AND LUBRICATION.	601.15.02
01-10-2001	8	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
08-10-2001	7	0				1	C009	CHECK VALVE	601.15.02
08-10-2001	6	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02
23-10-2001	4	0				2	C001	CHECK AND LUBRICATION.	601.15.02
01-11-2001	16	12			(Should be ordered on: 01-11-01)				
01-11-2001	15	0				1	S000	Driv SURVEY CODES IN GENE	601.15.02

The top area of the window contains the part number, name, and stock control figures from the Stock Items Register window. There is an extra field called stocked forecast that is used to inform the user how many items are forecast to be available at the time of the analysis.

The first two columns on the left hand side contain the forecast transaction date and quantity. If the date is shaded grey then the transaction is forecasted usage, if shaded yellow then it is a suggested order.

Further details for projected transactions are visible in the remaining columns marked In and Out.

7.3.2 Workload Analysis

The Workload Analysis filter allows the user to create workload forecasts for individual staff disciplines over a variable length of time and with a variable number of working days per week.

Forecast Analysis - Work Load

Discipline: 1.ENG

From Date: 01/07/2001 To: 10/07/2001

Working days for week: 7

Buttons: OK, Cancel, Clear

The Workload Forecast Analysis window looks like this:

Workload Forecast Analysis

Discipline Info

Name: 1.ENG External: Hrs. Avail. for selected period: 40.00 Workload for period: 19.86 Perc.: 49.65%

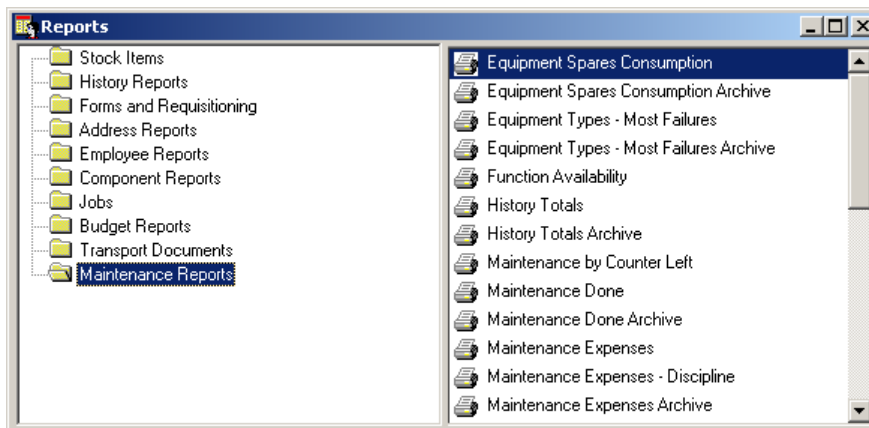
Date	Hours	Job Code	Job Title	W/o no.	Workorder Title	Component no.
01-07-2001	1	6000	DrW SURVEY CODES IN GENERAL			601.15.02
06-07-2001	17.86	W011	CLEANFUEL OIL FILTERS.			651.00.00
09-07-2001	1	6000	DrW SURVEY CODES IN GENERAL			601.15.02

The top row of the window contains the discipline type, whether the discipline is external or internal, hours available, forecasted workload and percentage of available hours required to fulfil the workload.

The lower part of the window contains details of the forecasted workload.

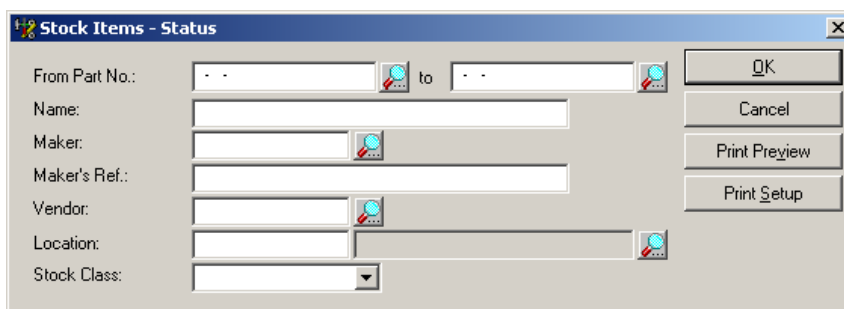
7.4 Reports

The command **Tools/Reports** brings up the report browser that may be used to select pre-defined and user defined reports:

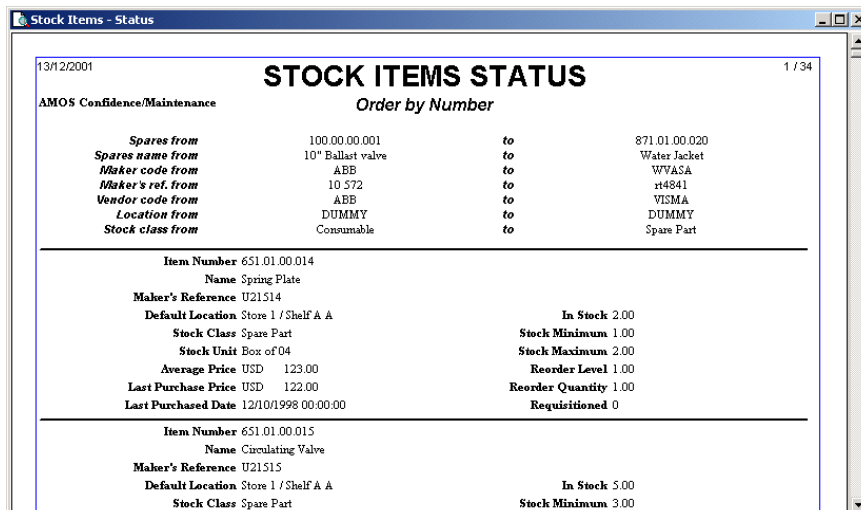


The reports are structured in folders. To view the reports in a folder, simply click on it. When a folder is selected, the defined reports of that category are shown in the list on the right.

To print a report, simply double-click the printer icon for the desired report. This brings up a dialog box containing controls that may be used to further specify what the report should contain. The box is different for each report. Here is an example from the report Stock Items Status:



- Once the dialog box has been used to specify the report parameters it is possible to click Print Preview to preview the report on the screen before it is printed. For example, the preview may look like this:



- The Zoom toolbar button brings up a dialog box to select the zoom level. The four buttons to the right of the Zoom button may be used to browse the report pages: First Page, Previous Page, Next Page and Last Page.
- It is also possible to include user-defined reports in the hierarchy. This means that the user may see more reports than the standard ones. Such user-defined reports are printed the same way as standard reports. Appendix A of this reference manual contains a description of how user defined reports may be added to the report hierarchy, and how layouts and reports may be defined and modified in PowerBuilder or InfoMaker.

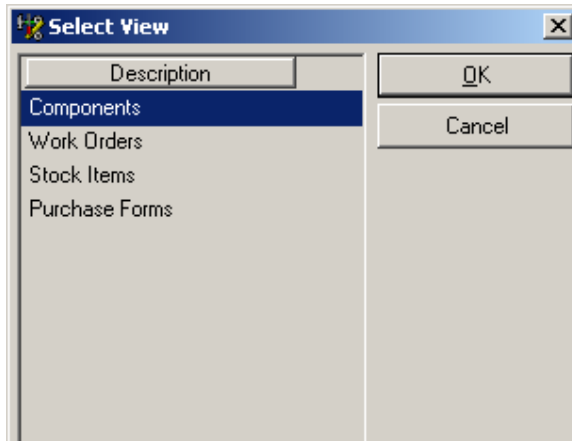
The table below lists the pre-defined reports that are installed with AMOS M&P.

Report Category	Reports
Stock Items	Stock Items – Above Stock Max Stock Items – Below Stock Min Stock Items – Details Stock Items – Inventory Control Stock Items – List by number Stock Items – Most Used Stock Items – Not Used Stock Items – Order By Cost Stock Items – Order By Location Stock Items – Order By Vendor Stock Items – Reorder Stock Items – Status Stock Items – Transactions Stock Items – Value
History Reports	History – Details History – Details Archive History – List History – List Archive History – List Order by Discipline
Forms and Requisitions	Form List order by Type Purchase Order Form List Ind. Currency Purchase Order Form Expediting Purchase Order Form List Base Currency Query Form List Requisition Form List Wanted Stock Items
Address Reports	Addresses – Code Addresses – Full Detail Addresses – Labels Addresses – Name Addresses – Not Used Addresses – QA Graded
Employee Reports	Employees – Address List Employees – Full Detail Employees – List by Code
Component Reports	Components – Components – (Required) Components – Availability Components – Class Code Components – Class Code (Required) Components – Class Code Order by Location Components – Code Components – Details Components – Information Status Components – Jobs Components – Maker Components – Name

Component Reports	<p>Components – Order by Condition Status</p> <p>Components – Parts</p> <p>Components – Parts Order by Location</p> <p>Components – Rounds</p> <p>Components – Rounds Included</p> <p>Components – Rounds Not Included</p> <p>Components – Run Time List</p> <p>Components – Serial No.</p> <p>Components – Serial No. Order by Location</p> <p>Components – Type</p> <p>Components – Vendor</p>
Jobs	<p>Jobs attached to components – Details</p> <p>Jobs attached to components – List by code</p> <p>Jobs description – List</p>
Budget Reports	<p>Budget Codes – Details</p> <p>Budget Codes – Graph</p> <p>Budget Codes – List</p>
Transport Documents	<p>Transport Document Details</p> <p>Transport Document List</p> <p>Transport Documents by Forwarding Date</p> <p>Transport Documents by Received Date</p>
Maintenance Reports	<p>Equipment Spares Consumption</p> <p>Equipment Spares Consumption Archive</p> <p>Equipment Types – Most Failures</p> <p>Equipment Types – Most Failures Archive</p> <p>Function Availability</p> <p>History Totals</p> <p>History Totals Archive</p> <p>Maintenance by Counter Left</p> <p>Maintenance Done</p> <p>Maintenance Done Archive</p> <p>Maintenance Expenses</p> <p>Maintenance Expenses – Discipline</p> <p>Maintenance Expenses Archive</p> <p>Maintenance Expenses Archive – Discipline</p> <p>Rescheduled Jobs</p> <p>Survey Due by Date Due</p> <p>Survey Due by Misc 2</p> <p>Trend Maintenance Costs (Hours)</p> <p>Trend Maintenance Costs Archive (Hours)</p> <p>Trend Mean Down Time</p> <p>Trend Mean Down Time Archive</p> <p>Trend Mean Time to Repair</p> <p>Trend Mean Time to Repair Archive</p> <p>Trend Misc. Expenses</p> <p>Trend Misc. Expenses Archive</p> <p>Trend Number of Failures</p> <p>Trend Number of Failures Archive</p> <p>Trend Total Down Time</p> <p>Trend Total Down Time Archive</p> <p>Trend Total Time to Repair</p> <p>Trend Total Time to Repair Archive</p>

7.5 Select View

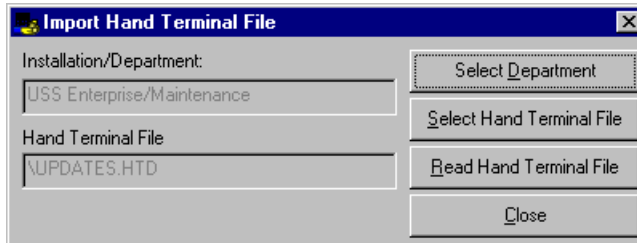
This option is to allow the user to quickly switch between alternative screen set ups using the new user interface. It can also be reached by pressing the F6 key on the top row of the keyboard.



See section 7.10 for instructions on how to set up the different Views and for further details on the 'Outlook' style interface.

7.6 Hand Terminal Interface

In order for AMOS M&P to support several standards, a general file format has been developed. In order for AMOS M&P to support all the hand terminal formats that exist, a converter application has to be written. One such application is already developed, and its source code is available for developers.



When the **Hand Terminal Interface** command has been selected from the **Tools** menu, the dialogue box shown above is presented. The Select Department button may be clicked to select the department, and the Select Hand Terminal File to select the file to import. It is possible to set the default directory for Hand Terminal Files – see section 7.7.4.4. Once the desired file has been selected, click the Read Hand File button to start the import of data from the selected file.

File format

The supported file format is fairly simple. Hereafter called HTD, it is somewhat similar to the .Ini file format found on the Windows platform.

In general, the file format syntax is like this:

```
[Section]
Variable = Value
```

The first section in the HTD file is the header, which tells AMOS M&P what version and the number of the transaction that is expected to be found in the .Htd file.

```
[Header]
Version=1
Transaction=X
```

This states that the .Htd file is version 1, which is the only format AMOS M&P currently supports.

The Transaction number is important. This tells how many Transaction sections that are to be found in the .Htd file.

```
[TransactionX]
PartNo=< Alfa-numeric value >
Type=< in (O, I, C) >
Date=<YYYY-MM-DD>
Quantity=<Numeric value>
```

O = out of stock
I = insert into stock
C = Stock Count

The date format must be in the given format.

File Sample

```
[Header]
Version=1
Transactions=2

[Transaction1]
PartNo=AE-100-001
Type=O
Date=1998-02-24
Quantity=1

[Transaction2]
PartNo=AE-100-003
Type=I
Date=1998-02-24
Quantity=12
```

Hand terminal interface application

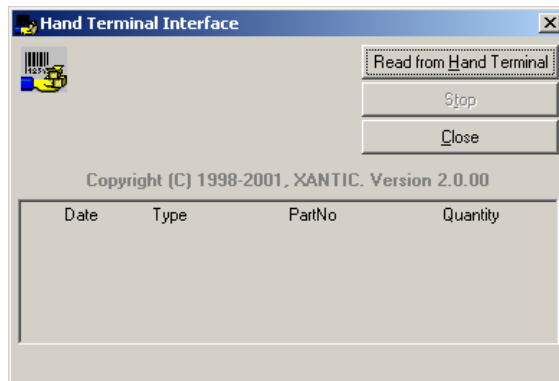
This application takes two arguments, *Directory* and *Filename*.

The directory tells the application where it should store the .Htd file, the filename tells the application what name it should give the .Htd file. If a directory is not specified, the current directory is used. If no filename is specified, Updates.htd is used.

This application assumes that the hand terminal is connected to the keyboard input port of the PC. When the Read from Hand Terminal command button is clicked, keyboard polling starts. Polling is simply done by putting the keyboard input focus into a hidden single line edit control, and by adding code to the keyup event of that window.

The polling may be terminated by clicking either the Stop or Close command button.

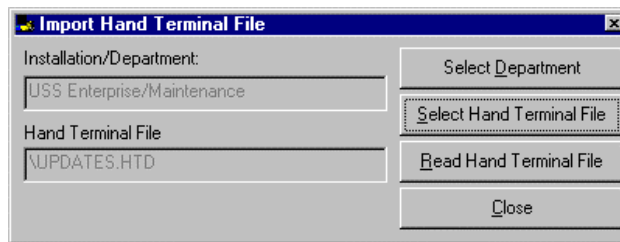
The polling is automatically stopped when the hand terminal unit has sent the Termination sequence and an .Htd file is stored with the given name in the given directory.



It is possible to verify that the correct data is transmitted by inspecting the window control at the bottom of the window (DataWindow).

AMOS M&P interface

The interface is found in the **Tools/Hand Terminal Interface** menu command, which present the user with the following dialog box:

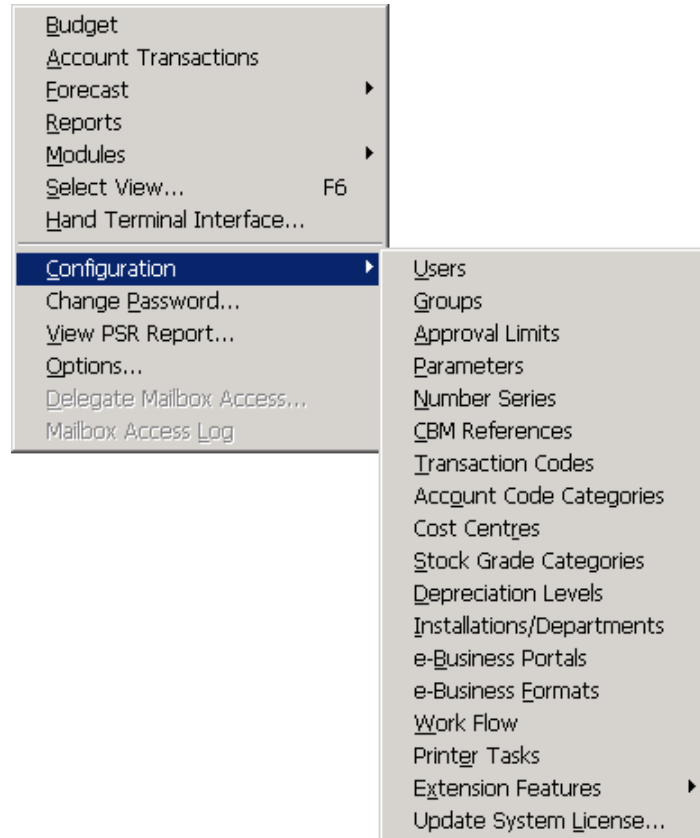


Pre-set values are set for the user convenience, which the user may change. The user is allowed to select a different department. The current department is selected by default. The user is able to select an .Htd file. Updates.htd is selected as default, assumed to be found in the Installation Directory.

By clicking on the Read Hand Terminal File command button, the file is read and the database is updated accordingly. The user will be presented with error messages if any error occurs. All changes in the database will then be undone.

7.7 Configuration

The **Configuration** sub-menu contains commands that give access to windows used to configure AMOS M&P:

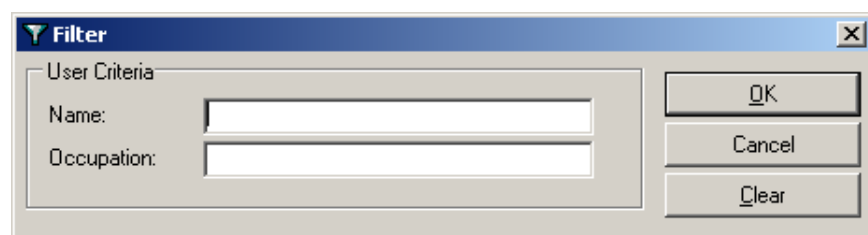


7.7.1 Users

When a user logs into AMOS M&P, a database user called AMOS is automatically used behind the scene. This is done in order to access the table of application users to check that the user logging in is indeed a user with a valid password

Each AMOS M&P user is given a user ID and a password, which are validated at login. Furthermore, it is possible to create user groups, and access to the various functions in the application is determined by the user group. For example, access to user-defined reports may be granted only to users belonging to a specific group, which is explained in section 7.7.2.

The Users filter



The Users window

Group	Active
System Administration	<input checked="" type="checkbox"/>

Login ID	Name
ALEXEY	Alexey Leskov
ATLE	Atle Arnulfson Valland
HANS	Hans Hansen
HORST	Horst Berstein
SYSOP	System Administrator
UWE	Uwe Hansen

- To create a new user, click the New button and fill in the various fields. The entry in the Password field is not displayed in open text.
- The Employee drop-down list will display the contents of the Employees register described in section 3.1.5.
- The upper right area shows the groups that the selected user is a member of. A user may be a member of multiple groups. Please note that it is not possible to check or uncheck the Active box in the Users dialog box; this must be done from the Groups window described in the next section.
- If a user has 'Locked Out' their account the disabled checkbox will be checked, to enable the account uncheck the box. The disabled checkbox can also be used to disable the highlighted user if required by checking it.

The Options menu for Users

- Move User References...
- Change Password... Ctrl+W
- Mailbox Access

Move User References

There is a corresponding toolbar button for this command. In previous versions of AMOS M&P, users were registered by department. This has been changed, and users are currently connected to one or more groups.

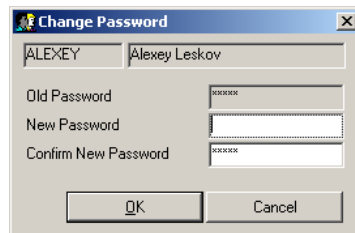
This facility may be used to “clean up” a database. Select the user that is to be removed, and click on the toolbar button or give the command from the **Options** menu. From the dialog box, select the user to which the references are to be moved:

Atle Arnulfson Valland
Hans Hansen
Horst Berstein
System Administrator
Uwe Hansen

Once the references have been moved, the user may be deleted.

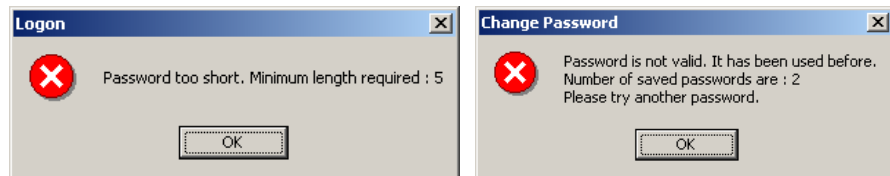
Change Password

The change password function opens the following window.



The old password will be masked for security reasons. The new password must be typed into both of the lower boxes in order to change the existing password.

Depending on how the parameters affecting passwords have been setup, you may encounter one of the following error messages when attempting to change a password.



Either comply with the instructions in the error messages or alter the respective parameters described in section 7.7.4.5.

Mailbox Access

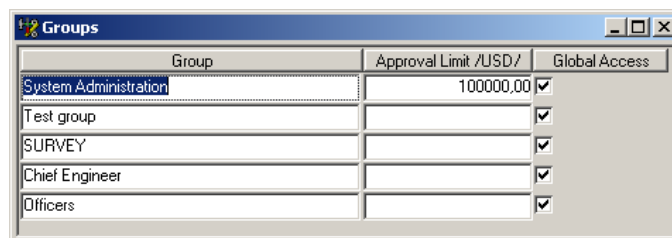
The mailbox access feature works in conjunction with the workflow module and is used to add multiple users to group or departmental mailboxes.

7.7.2

Groups

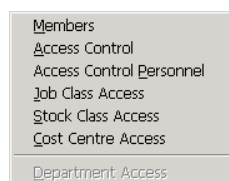
Defined users may belong to one or more user groups, and access to various AMOS M&P modules and functions may be set separately for each user group. A user group may be granted access to a selected department.

The **Tools/Configuration/Groups** command gives access to the Groups window:



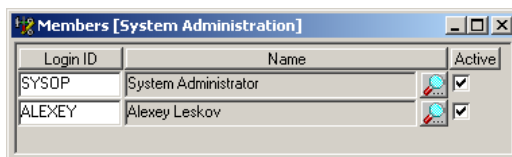
- The Approval Limit field contains a drop-down list with the defined values in the Approval Limit register (see section 7.7.3).
- If the Global Access field is checked for the selected group, it has access to all defined installations and departments. When checked, the **Options/Department Access** command is not available.

The Options menu for Groups



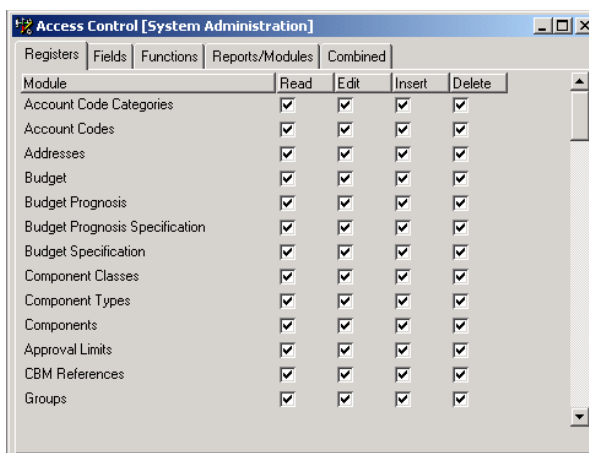
Members

The Members window is used to specify the members of the selected user group:



- Click New to add a new member, and click the Search button (the one with the magnifying glass) to see the list of defined users to select one. Once a user has been added to a group, the access may be temporarily restricted by removing the check mark in the Active field.

Access Control



Actual access to AMOS M&P functions and modules is set for various user groups. To determine the level of access for a specific user group, make sure the group is selected in the Groups window, and give the command **Options/Access Control** or click the corresponding toolbar button to enter this window:

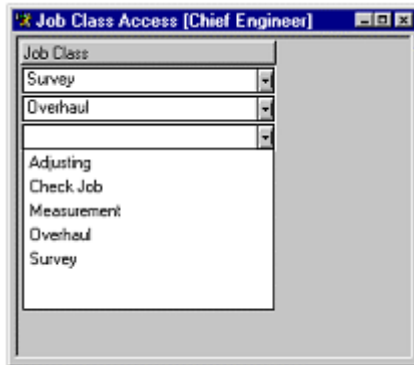
- In the Access Control window, there are five tab cards: Registers, fields, Functions, Reports/Modules, and Combined.
- There are several toolbar buttons that may be used to work in the Access Control window. The first two are Select All and Deselect All, and the third is Invert Selection. The fourth button in the picture below is called Copy from Group. When this is clicked, the list of defined groups is presented. Click the group to copy from and click OK. There is a corresponding **Copy from Group** command in the **Options** menu.
- On the Registers tab card, there is an alphabetical list of the various registers of AMOS M&P. For each register, it is possible to specify which types of access the selected group has. The four access types are Read, Edit, Insert and Delete.
- The *Fields* tab card contains check boxes that decide whether the selected user group has access to the fields listed.
- The *Functions* tab card contains check boxes that may be used to indicate whether the selected user group is allowed to execute a specific function or not.
- The *Reports/Modules* tab card is used to specify which reports the selected group has access to.
- The *Combined* tab card combines the access levels and the right to execute functions. For example, all the five boxes are typically checked for the line Complete System in order to grant the System Administration group all the necessary rights.

Access Control Personnel

This option (if visible) is to grant access to the various parts of the AMOS Express personnel module when used in an integrated system with AMOS M&P

Job Class Access

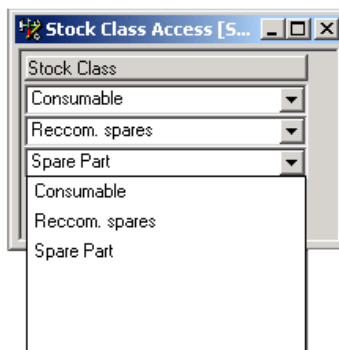
Defined user groups may be granted access to specific job classes. To do so, make sure the correct group is selected in the Groups window, and give the command **Options/Job Class Access** or click the corresponding toolbar button to enter this window:



- When a new item is added to this window (click the New toolbar button), the drop-down list will display the defined job classes. The selected user group may have access to multiple job classes.

Stock Class Access

Defined user groups may be granted access to specific stock classes. To do so, make sure the correct group is selected in the Groups window, and give the command **Options/Stock Class Access** to enter this window:



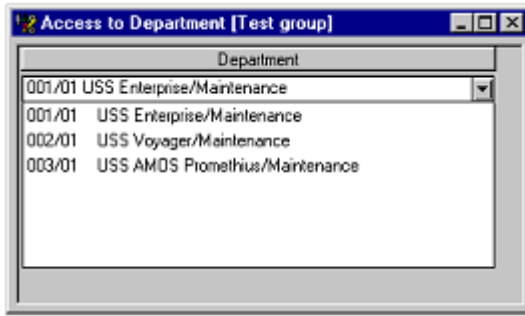
- When a new item is added to this window (click the New toolbar button), the drop-down list will display the defined stock classes. The selected user group may have access to multiple stock classes.

Cost Centre Access

This option (if visible) is part of the accounting module for AMOS M&P. You must use this window to add the cost centres that you want each group of users to be able to access.

Department Access

A user group, which has not been granted Global Access, may be granted access to one or more departments. To grant such access, make sure the correct group is selected in the Groups window and select **Department Access** from the **Options** menu to enter the following window:

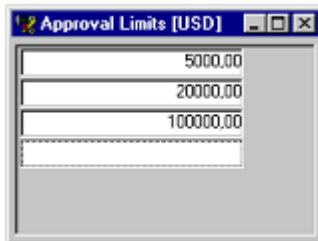


To grant access to multiple departments, click the New toolbar button and select an additional department from the list.

7.7.3 Approval Limits

It is possible to define a set of Approval Limits to define the maximum amount a given group is allowed to approve. The limits are defined in the selected Base Currency Code.

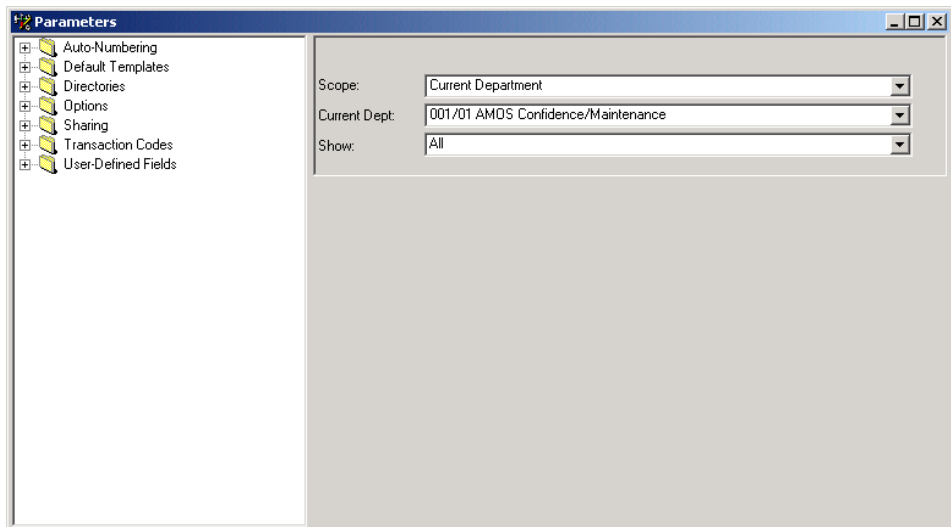
The command **Tools/Configuration/Approval Limits** gives access to the following window:



- The Approval Limits are automatically sorted in ascending order the next time the window is opened.

7.7.4 Parameters

When the **Parameters** command is selected, the user is presented with the following screen:



The above screen shows the System Administrator view. This view gives the user access to all areas of the system. User with lower levels of access will not have such great levels of access. In order to understand the implications of this, it is necessary to first

understand the issues of *hierarchy* and *scope*.

AMOS M&P has a hierarchical view of an installation and is based on the fact that the system has been programmed to handle corporate entities as well as partnered organisations. The layers of this hierarchy correspond to the physical and operational divisions within the organisation itself.

A company is seen as comprising one or more Installations. Now whether these represent factories, office sites, offshore platforms or ships, the defining factor is that they are often geographically separated entities within the same organisation. Each is individually responsible for its own operations and technical administration.

Each Installation is in turn made up of one or more departments. For example, a ship could be divided into departments like Engine Deck and Safety while a production plant might have Production and Transport departments. Here the division typically represents groups at the same site who are separate cost centres and therefore are responsible for their own maintenance expenses.

Alternatively, they may work with different sets of equipment, like, production versus transportation machinery. On the other hand, they may, for any number of other reasons, require specific follow-up or budgeting.

AMOS M&P is designed to handle the requirement for installation and departmental separation, allowing the system to cater to each groups needs, like special component number schemes or division of stock information.

The configuration parameters have therefore been given a *scope* within which they apply. This scope can be either:

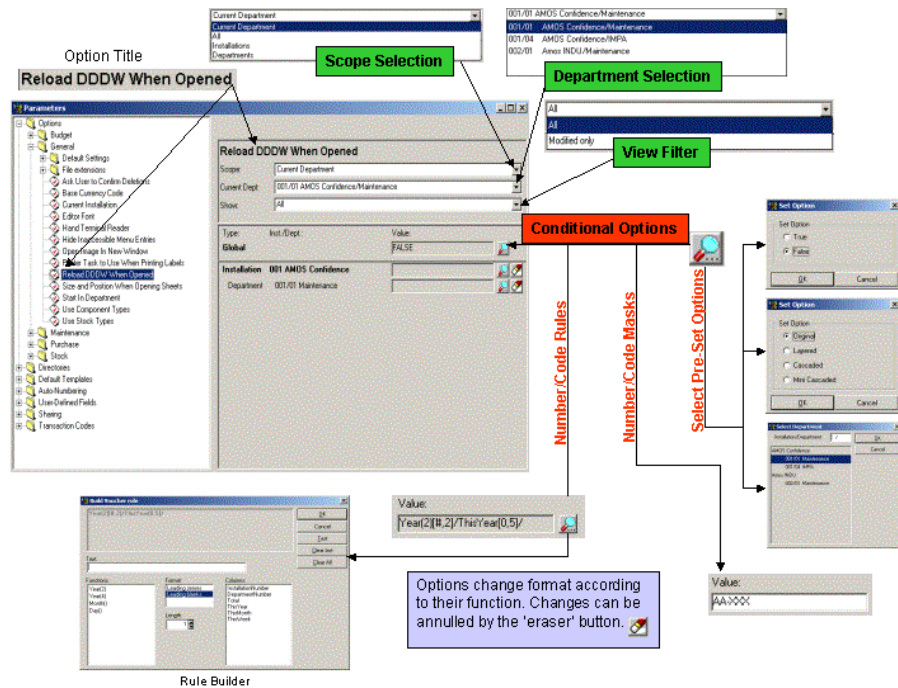
- For a single department
- For all departments in a single installation
- For the entire organisation

In addition to providing scope, this hierarchy also provides for the *inheritance* of parameters. Therefore, if the system does not find a particular parameter setting for the current department, it automatically *looks up the hierarchy* to the installation directly over the department in the hierarchy. If no specific parameter value has been set for the installation, then the system will look for and use the value that has been set at the *global* level.

It is therefore a simple matter to handle exceptions in the system, like a different component numbering scheme for a particular department. The system administrator needs simply first define the numbering scheme at the global level for the whole company, and then define a specific one for that department in question.

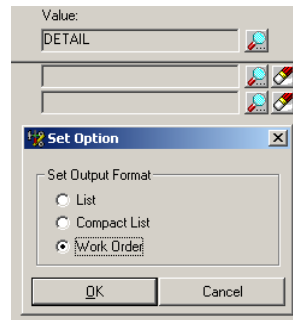
7.7.4.1

The Parameters Interface

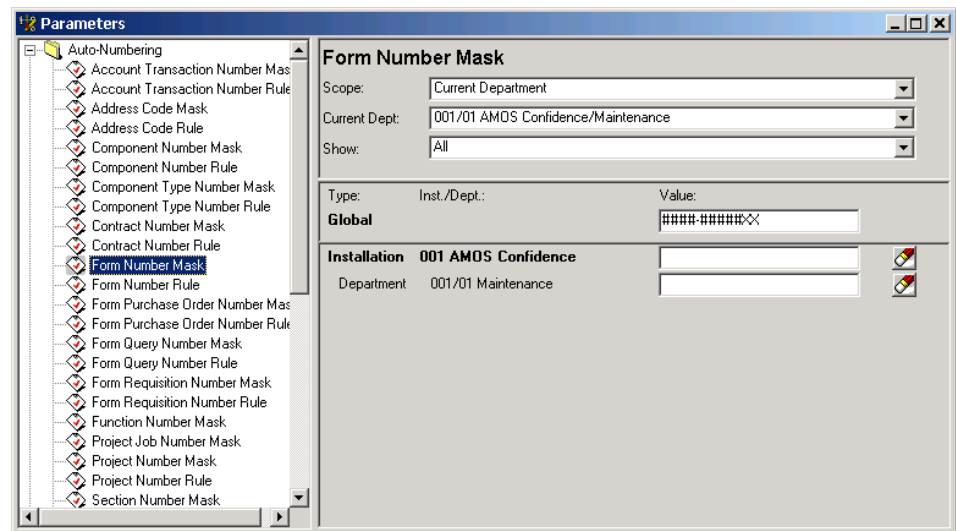


The Parameters interface contains the control room for AMOS M&P and changes made here have deep consequences for the way that the system is run. It is worth taking time to familiarise yourself thoroughly with the logic behind and consequences of changes made in this section. The following sections give you a basic idea of each of the parameters, but due to the complexity of the possible combination of results, it is not practical to document every single parameter fully.

You should also be aware that some pre-set options do not show their apparent setting in the 'Value' field. This is because the value field shows a database field, as opposed to its intended function name. This is illustrated in the example below, where the 'Value' setting of 'DETAIL' corresponds in reality to 'Work Order.'



7.7.4.2 Auto-Numbering



This set of parameters can be divided into two types: Masks and Rules. Masks are used to control how certain fields are displayed by the system, and which characters may be typed when entering information into these fields (e.g. *input mask*). Rules are used to control the format of the system-generated numbers.

In some cases, only a Mask may be defined, as with the definition of the appearance of component numbers. Other numbers allow the definition of both a Mask and a Rule, as is the case of work order numbers – the rule controls how the number is generated by the system, while the mask controls how the number is presented.

In the Mask fields, the following characters can be used to control which characters are valid for each position in the number:

- ! - Any alphabetic character - automatically uppercased by the system.
- ^ - Any alphabetic character - automatically lowercased by the system.
- A - Any alphanumeric character.
- X - Any character
- # - Any numeric character

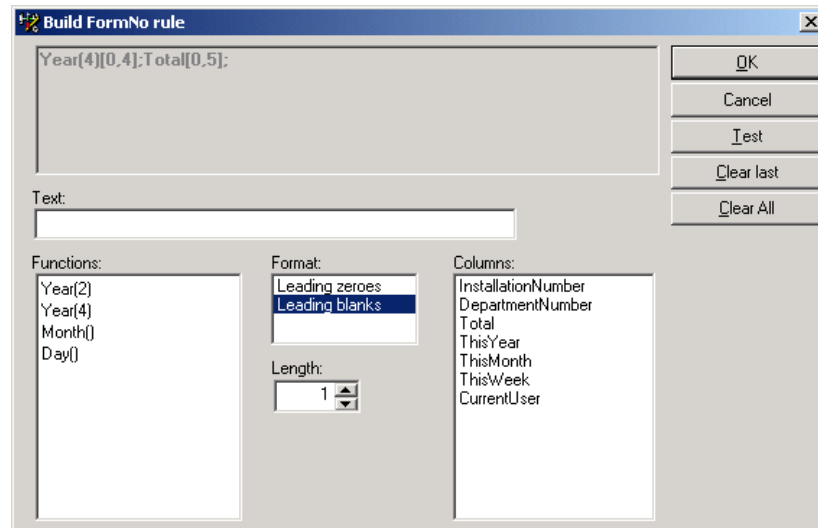
Any other character appearing in the mask will be displayed in the input field as un-modifiable positions.

The work order, purchase form and transport document numbers have both a mask and rule as they are system generated numbers which can have their appearance controlled

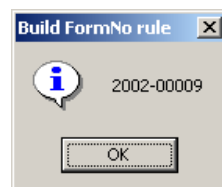
Please note that in the example above, the field Form Number Mask ends with two X-es to facilitate the entry of form numbers that have been split by AMOS M&P. For example, a purchase order may be split into two or more sub-forms, and in that case, AMOS M&P adds the character A to the form number. The two X-es in the Form Number Mask allow the user to enter this modified number.

Creating new rules

AMOS M&P offers help in generating new auto-numbering rules for the relevant fields. When a search button next to a Rule field is clicked, a new window is opened for that Rule field. For example, the Form Number Rule window looks like this:



- To start building a rule, click on one of the Functions on the left. The lengths of the functions are pre-defined, and cannot be changed. Several functions may be used in the same rule. Once a function has been selected, the grey field in the upper part of the window displays the selected function.
- The Format field makes it possible to specify whether the numbers should be preceded by zeroes or not. The expression at the top of the window will show 0 if Leading zeroes has been selected, and # if Leading blanks is used. If the wrong format is shown for a function, click the function again to remove it from the expression, select the desired format, and click the function once more to re-insert it in the expression.
- The second half of the expression consists of values from the listed Columns. For these, it is possible to specify a Length from the field. The length should be specified before the Column name is clicked.
- Once the rule has been entered, it is possible to click the Test button to see how the rule will work.



- The defined Rule will be displayed according to the Mask defined for the field for which the Rule is being created.

If the Rule does not produce the intended result, it is possible to click the Clear Last button to remove the last part of the expression under construction, or click the Clear All button to start fresh to rebuild it.

7.7.4.3 Default Templates

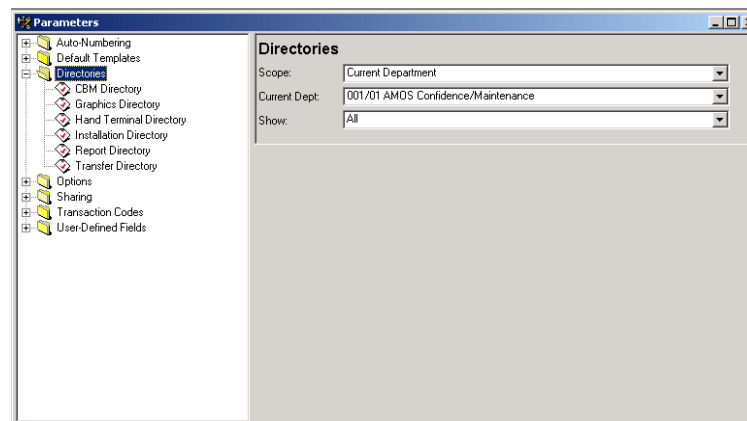
A number of tables in the system contain a memo field otherwise known as the detail page or *full-page description*. These memo fields are present in the component stock item, address, job description and order form tables among others.

AMOS M&P provides a feature called Templates (also called *Layouts*), which makes it possible to define how the memo field should be presented onscreen. Using templates, the memo field can be given the appearance of a specialised input form. These templates are usually attached to the memo field by using the **Edit/Change Template** menu command. However, a template may be attached to a memo field automatically on creation of a new table entry, and these parameters make that possible.

The parameter screen contains an entry for each table containing a memo field, and makes it possible to select from the already defined template list which template is to be used for each register Appendix A describes how new layouts may be created in PowerBuilder.

The default settings for all these fields are Empty.

7.7.4.4 Directories



A number of important directories for the system are defined here.

CBM Directory

Defines the location where CBM *day files* are to be found by the system. The use of Condition Based Maintenance is covered in Appendix B.

Default setting: Empty.

Graphics Directory

Defines where graphic files are located. If this parameter is not set correctly, it can cause problems when you try to display graphic files on the screen.

Default setting: Empty.

Hand Terminal Directory

Defines where files generated by hand terminals are stored. This function is described in section 7.6.

Default setting: Empty.

Installation Directory

Defines where the system itself is installed. If this parameter is not set correctly, it can cause problems with the Import/Export module.

Default setting: Empty.

Report Directory

AMOS M&P allows you to tailor the appearance of the standard work order, planned maintenance work order, purchase order, requisition form, query and transport document printouts. This parameter defines the directory where these tailored reports are located.

Default setting: Empty.

Transfer Directory

Defines the location where selection files and import files are to be found, and where generated export files are to be placed.

Default setting: Empty.

7.7.4.5 Options

This is the most general category of parameters, and contains a variety of switches and values varying from file extensions for the Import/Export module to whether maintenance is to reported back at the employee level or at the group (or discipline) level.

Budget

Budget at Line Item Level

This parameter has four possible values:

- Never
- Seldom
- Often
- Always

If Never is selected, there will be no Budget at Line Item Level check box in the Forms window. If it is set to Seldom, there is an un-checked box, while the box is checked if Often is selected. If the Always option is selected, there is no option in the Forms window, since the option is always used.

Default setting: Never.

Financial Year Early Start

This parameter can be set to true to allow for the early start of the financial year. Many US companies start their financial year in October.

Default setting: False

Month-End Close Period (Days)

This parameter may be used to specify when monthly accounts are closed. For example, a value of 5 means that the accounts are closed 5 days before the end of the month.

Default setting: 0.

Start Date For Financial Year

This parameter allows the start of the financial year to be set according to varying worldwide practices: e.g., the UK starts its financial year on April 6th and France on January 1st. Once this date is set, it can be very complicated to change.

Default Setting: January 1st

Track Maintenance Expenses

This system switch controls the activation of the tracking of maintenance expenses by the Budget module.

Default setting: TRUE.

Track Purchase Expenses

When set to TRUE, this parameter activates the tracking of purchase expenses by the Budget module. If tracking is turned *on*, the system will check that budget codes entered are valid. It will automatically register financial transactions against the specified budget and will signal the user in the case a budget is exceeded by a pre-determined *warning* value.

Default setting: TRUE.

Track Stock Expenses

Similar to the previous parameter, this system switch controls the activation of the tracking of stock/inventory expenses by the Budget module.

Default setting: TRUE.

Use Specification for Purchase Budget

This parameter allows you to specify whether Specifications are to be used to update budget figures for the Purchase budget class.

Default setting: FALSE.

Use Specification for Stock Budget

This parameter allows you to specify whether Specifications are to be used to update budget figures for the Stock budget class.

Default setting: FALSE.

Use Specifications for Maintenance Budget

This parameter allows you to specify whether Specifications are to be used to update budget figures for the Maintenance budget class.

Default setting: FALSE.

Use Voucher to Update Budget

This parameter lets you specify whether vouchers can be used to update the budget.

Default setting: TRUE.

General

Column Width – Truncate Column Width To Version

This parameter is used to ensure column width compatibility through various versions of AMOS M&P and should be set to the lowest version that your organisation is using. The default options here will vary depending on the software version number.

Note: It is important that all your installations of AMOS M&P are of a compatible version to ensure that there are no replication errors due to different column widths.

Default Settings – Budget Code Status

This parameter controls the initial setting for a new budget in general. The default setting is '3.' The figures correspond to the following:

- 1 Parked
- 2 Preliminary
- 3 Approved

Default Settings – CBM Work Order Status

When the CBM (Condition Based Maintenance) module is active, this setting controls the Initial Status of Work Orders. The default setting is '6.' The figures correspond to the following:

- 1 Requested
- 2 Planned
- 6 Issued

Default Settings – Depreciation Level

When the Depreciation feature is activated, this setting controls the initial status of Stock Items. The default setting is '1,' which corresponds to level 1, which is normally 'new,' or 0% depreciation. Up to 5 levels of depreciation can be set.

Default Settings – Form Type

A Purchasing module parameter, this value controls which type of form is to be created (i.e. requisition form, query or purchase order) during automatic form creation. In a shipping scenario, it is normally the case that vessels create requisition forms while shore side offices create purchase orders. Default setting: Purchase Order.

Default Settings – Location for Stock Items

It is possible to define and use multiple stock item locations. If several locations have been defined in the Locations hierarchy, one can be defined as the default location, automatically attached to each newly created stock item.

Default setting: Empty.

Default Settings – Output Format for new Job Related to Components

One of three output formats may be selected in AMOS M&P List, Compact List and Detailed. List gives only one line per selected job Compact list gives a few lines containing the most important information, while Detailed contains the full job description

Default setting: COMPACT LIST.

Default Settings – Output Format for new Rounds

One of three output formats may be selected in AMOS M&P: List, Compact List and Detailed. List gives only one line per selected job, Compact list gives a few lines containing the most important information, while Detailed contains the full job description.

Default setting: COMPACT LIST.

Default Settings – Output Format for Work Requisitions

One of three output formats may be selected in AMOS M&P: List, Compact List and Detailed. List gives only one line per selected job, Compact list gives a few lines containing the most important information, while Detailed contains the full job description.

Default setting: DETAILED.

Default Settings – Periodic Work Order Status

This is used to set the initial status of automatically created periodic work orders.

Default setting: Requested.

Default Settings – Priority for new Job Related to Components

A job can be given a priority of up to three digits, and the organisation may decide which priorities they wish to assign.

Default setting: 5.

Default Settings – Priority for new Rounds

A round can be given a priority of up to three digits, and the organisation may decide which priorities they wish to assign.

Default setting: 5.

Default Settings – Priority for Work Requisitions

A round can be given a priority of up to three digits, and the organisation may decide which priorities they wish to assign.

Default setting: 4.

Default Settings – Requisition Work Order Status

This is used to set the initial status of manually created work orders.

Default setting: Requested.

Default Settings – Round Work Order Status

This is used to set the initial status of automatically generated round work orders.

Default setting: Requested.

Default Settings – Status for New Components

This field is used to set the status of new components introduced in the system. The possible options are: (None), In Use, Available, Repair, Scrapped and Transferred.

Default setting: Available.

File Extensions

These four settings allow you to set the DOS file extensions used in AMOS M&P.

The default settings are as follows:

EXP – Export Files, Import Files

HTD – Hand Terminal Files

OK – Successfully Imported Files

File Extension for Export Files

The system maintains a sequence number for both import and export operations. Since these sequence numbers are used to name the files created by these operations, it is important to be able to differentiate between files created by export and ready for transfer to another site and those received which are ready to be imported. This is done by defining different file extensions for the various files handled by the Import/Export module.

This parameter defines the extension for export files generated by the system.

Default setting: EXP.

File Extension for Hand Terminal Files

A hand terminal may be used to record stock transactions. The data from the hand terminal may be exported in the form of a file, which may then be imported to AMOS M&P stock levels. This parameter specifies the file extension for such hand terminal files.

Default setting: HTD.

File Extension for Import Files

As a complementary parameter to the parameter File Extension for Export Files, this value defines which extension identifies files ready to be imported by the system.

Default setting: EXP.

File Extension for successfully Imported Files

As a complementary parameter to the previous one, this value defines which extension is to be given to import files that have been successfully imported by the system.

Default setting: OK.

Account Lockout Threshold

This parameter determines the number of unsuccessful log-in attempts a user can make before being locked out of the application. If the parameter is set to zero the lockout system will be disabled. A positive number above zero should be entered if you want to use this feature. If you are using this feature you will be informed of the number of any unsuccessful log-on attempts that have been made against your user name once you log-on successfully.

Default setting: 0

Ask User to Confirm Deletions

When this parameter is set to TRUE, the user is asked to confirm the deletion of a record. If set to FALSE, no question is asked, and the record will be deleted when Save is selected.

Default setting: TRUE.

Base Currency Code

AMOS M&P makes it possible to define a base currency at the global, installation and department level. At the global level, this value determines the base against which Current Rates are recorded. In addition, it is also possible to define the *default* currency to be used when recording transactions and presenting reports for the various installations and departments.

Default setting: USD.

Note: If sites are to exchange information from the currency rates table then it is necessary for them to have the same global base currency defined.

Create Component Archive On Transfer In

This parameter when TRUE allows the creation of Archive tables in receiving installations in order for the recipients to view component information created in previous installations. Options are TRUE or FALSE.

Default setting: Empty (no value selected)

N.B. This parameter should be set to the same value as the 'Delete Component Archive On Transfer Out' parameter.

Current Installation

This is one of the most important parameters in the system. All database entries in the system are stamped with unique internal numbers. These numbers are built up of two parts: the installation number and a running counter. The installation number ensures that no two sites can generate the same internal number. The *Current Installation* parameter is used to define the Installation id part of the internal numbers.

Note that once a Current Installation number has been defined and data is entered into the database, no other installation can ever be assigned that number as this would lead to duplicate internal numbers. In addition, once an installation is assigned its Current Installation number then this value should not be changed. This does not restrict the user from changing the id of the Installation as it appears in the Installation list, since this is only a simple visible identifier for this installation within the organisation.

Default setting: 001.

Delete Component Archive On Transfer Out

This parameter when TRUE allows the deletion of Archive tables in donating installations when the component is transferred out. Options are TRUE or FALSE.

Default setting: Empty (no value selected)

N.B. This parameter should be set to the same value as the 'Create Component Archive On Transfer In' parameter.

Editor Font

This parameter controls the display font for all 'details' screens. It is also reflected in printouts of these screens. Click on the magnifying glass icon to access the font selection window. Choose the type, style and size of the font you require and click ok to select.

Fonts can be implemented at a Global, Installation or Departmental level.

Default setting: none (system displays Arial.)

Enforce Password History

This parameter controls how many previously used passwords for each user are retained in the system. When you are prompted to change your password, controlled by the 'Maximum Password Age' parameter, you must enter a password that does not match one of the previously used passwords stored in the database. This also applies to the manual 'Change Password' feature covered in section 7.8. Setting this parameter to zero will disable this feature.

Default setting: 0

Hand Terminal Reader

This option may be used to specify the interface program that is used to transfer data from a hand terminal to AMOS M&P. This function is described in section 7.6.

Default setting: Empty.

Hide Inaccessible Menu Entries

This parameter prevents menu items that are not available to a user, due to his belonging to a group that does not have access to this function, from displaying. If this parameter is left as 'FALSE,' unavailable menu items will continue to appear greyed out.

Default setting: FALSE

Logo Bitmap Used In Report Printout

If you want to include your company logo on printed reports you should use this parameter to navigate to the file you want to use. The supported file types are:
.bmp .gif .jpg .jpeg .rle .wmf

Default setting: Empty

Maximum Password Age

This parameter determines the maximum allowed age, in number of days, of all passwords. This feature is disabled if the value is set to zero.

Default setting: 0

Minimum Password Length

This parameter determines the minimum allowed length, in number of characters, of all passwords. This feature is disabled if the value is set to zero.

Default setting: 0

Open Image In New Window

This parameter determines how a new image is displayed when an image hotspot has been clicked. If the value is set to FALSE, a new image will be opened in the currently open window, and replace the image which is there. When the value is set to TRUE, a new image will be opened in a separate window. This functionality is parallel to the one found in the My Computer program in Windows 95.

Default setting: FALSE.

Printer Task to Use When Printing Labels

This parameter is used to select a Printer Task to use when printing labels from the Stock Items window.

Default setting: NONE.

Reload DDDW When Opened

DDDW stands for *Drop-Down Data Window*, which in plain English are the drop-down lists of currency codes, disciplines units job classes etc. present in the system. The contents of these drop-down lists in a window or dialog box are built when the window or dialog opens up, and are not rebuilt unless the window is closed and reopened. As a result, newly added items to the drop-down tables do not appear in a list until the window containing this list is closed and reopened.

By setting this parameter to TRUE, the system will rebuild drop-down lists each time the list itself is opened by clicking on the drop-down arrow. Please note that this will slow down display of the list, but guarantee that the list is at all times complete.

Default setting: TRUE.

Show Error Messages During Portal Import

This parameter, if set to FALSE, allows Portal Import to continue uninterrupted in the event of errors occurring during import. Any errors encountered are written to the portal log and can be viewed later. If the parameter is set to TRUE you will receive an error message each time an import error occurs and further data import will be stopped until the error message is cleared by the user.

Default setting: FALSE

Single Window Instance

This parameter controls whether or not you can have the same data window open several times. If set to true, a data window such as Components or Work Orders will only be allowed to open once. Any attempts to open the same window again will not work. If you want to view different information within the same window you can use the filter command to do so.

Default setting: FALSE

Start In Department

This parameter allows you to control which department the system logs automatically into when you start the system. When setting this parameter, you can select from a list of the defined departments.

Default setting: 001/01.

Store Imported XML Document In Portal Log

This parameter, when set to TRUE, allows you to see the imported XML document associated with the selected error message in the Portal Log, accessed via the Options menu. If set to FALSE, there will be no Options menu available and no XML documents will be stored.

Default setting: FALSE

Use Component Types

This parameter may be set to TRUE when the Component Types function is used in an organisation. This functionality makes it possible to define types of components at the head office. All components used at the various sites may then be assigned to the correct component type and data about the component type is automatically inherited.

Default setting: FALSE.

Use Stock Types

This parameter may be set to TRUE when the Stock Types function is used in an organisation. This functionality makes it possible to define types of stock at the head office. All stock used at the various sites may then be assigned to the correct stock type, and data about the stock type is automatically inherited.

Default setting: FALSE.

Maintenance

Auto-File Completed CBM Work Order

If this value is set to TRUE, CBM work orders are filed automatically when the status is set to Completed. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: FALSE.

Auto-File Completed Periodic Work Order

If this value is set to TRUE, automatically generated periodic work orders are filed automatically when the status is set to Completed. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: FALSE.

Auto-File Completed Requisition Work Order

If this value is set to TRUE, manually requisitioned work orders are filed automatically when the status is set to Completed. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: FALSE.

Auto-File Completed Round Work Order

If this value is set to TRUE, automatically generated work orders are filed automatically when the status is set to Completed. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: FALSE.

Auto-File Controlled CBM Work Order

If this value is set to TRUE, CBM work orders are filed automatically when the status is set to Controlled. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: FALSE.

Auto-File Controlled Periodic Work Order

If this value is set to TRUE, automatically generated periodic work orders are filed automatically when the status is set to Controlled. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: TRUE.

Auto-File Controlled Requisition Work Order

If this value is set to TRUE, manually requisitioned work orders are filed automatically when the status is set to Controlled. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: TRUE.

Auto-File Controlled Round Work Order

If this value is set to TRUE, automatically generated work orders are filed automatically when the status is set to Controlled. If the value is set to FALSE, it is necessary to manually file such work orders.

Default setting: TRUE.

Allow Negative Value Of Counters

This parameter, when set to TRUE, will allow a user to enter a lower counter value than the one previously recorded. This facility can be used to correct values when counters are changed or if an error has been made during the reading or inputting of the previous amount. Note that this may affect certain counter based maintenance procedures. If the parameter is set to FALSE a user will be prevented from entering a lower amount and an error message will appear.

Default setting: TRUE

Auto Inherit Counters

If this parameter is set to TRUE, components installed in sub-functions will automatically inherit counter updates from the component installed in the respective parent function.

Default setting: False

AutoFilter WO By Discipline

When set to TRUE, the list of work orders is automatically restricted to the discipline that the user who is currently logged on belongs to.

Default setting: FALSE.

Automatically Reschedule Work Orders

This parameter is useful during the process of establishing the AMOS M&P database in the organisation. By setting the value to FALSE, the program will not automatically generate work orders as components, counters and jobs are defined. This makes the process of entering such information more efficient. When this is completed, the parameter value is changed to TRUE, and the **Maintenance/Generate Work Orders** menu command is given in order to 'kick-start' the generating of work orders.

Default value: TRUE.

Calculate Estimates for Component Jobs

This parameter may be set to Average or to Never. If set to Average, the program automatically updates the component job estimates. The values for Total Duration and Total Cost are estimated based on the duration and the cost of required parts and/or resources that have been reported

Default setting: Never.

Default Preference When Reporting Work

This parameter determines which default value is checked in the Report Work dialog box which appears when the command **Maintenance/Report Work** is selected. The possible values are Component, Function and Work Order.

Default setting: COMPONENT.

Log Counters For Non-Counter Based Jobs

If this parameter is set to 'TRUE', reporting work against non-counter based jobs will require a mandatory counter value to be entered, providing that the component has a counter association.

Default setting: FALSE

Log Job Rescheduling

This parameter, when set to TRUE, enables the rescheduling log. Every time a work order is rescheduled the reschedule log will be updated with information regarding the rescheduling. If the parameter is set to FALSE there will be no recording of rescheduling information in the log.

Default setting: FALSE

Log Work With Employee

This switch makes it possible to select the level at which to record work carried out. This may be either at the employee level, where reported work is attributed to a specific worker. In some organisations, it may be more suitable to register maintenance done per discipline (e.g. mechanic, electrician, etc.) instead. If this parameter is set to FALSE, reporting will be done using Disciplines instead of on an individual employee basis.

Default setting: FALSE.

Maintenance Log Modification Warning

This parameter, when set to TRUE, ensures that accidental modifications to the maintenance log cannot be made. If the user tries to alter information in the maintenance log a warning message alerting the user will appear. If set to FALSE the user can modify information without warning.

Default setting: FALSE

Report History by default

This parameter controls whether the Report History option when reporting maintenance is switched on or off by default.

Default setting: TRUE.

Report Resources by default

This parameter controls whether the Report Resources Used option when reporting maintenance is switched on or off by default.

Default setting: TRUE.

Report Stock Usage by default

This parameter controls whether the Report Stock Used option when reporting maintenance is switched on or off by default.

Default setting: TRUE.

Require Reason For Job Rescheduling

This parameter, when set to TRUE, enforces the user to input a reason for job rescheduling. If set to FALSE there is no requirement to enter a reason. Note that this parameter is ineffective if the parameter 'Log Job Rescheduling' is set to FALSE.

Default setting: FALSE

Restrict Replanning Of Started Work Orders

If set to TRUE, it is not possible to re-plan (to move) a work order in the work planning timeline once the Started date has been set. This occurs the first time a user reports maintenance work against the work order.

Default setting: FALSE.

Seconds Between each CBM Check

This parameter allows you to control the frequency at which the system checks for CBM activity.

Default setting: 180.

Stock reservation trigger

This parameter controls whether stock items required for work orders are shown as reserved whilst the work order continues to be active (Status), or whether the stock items are reserved only during the 'window' time period prior to the due completion date of the work order (StatusWindow).

Default setting: StatusWindow

View Counter From Functions Perspective

This parameter controls whether the Update Counters facility covered in section 4.7.1 is filtered and viewed from a functions perspective rather than a component perspective.

Default setting: False

Work Order Tracking Accuracy

This parameter controls the level to which Work Orders are tracked. The two possible parameters are 'Date Only' and 'Date/Time'. Date Only lets you plan work by date whereas date/Time lets you plan to the nearest 15 minutes.

Default setting: Date Only

Purchase

Auto-Calculate Form Estimate

This parameter is used to determine if the form estimates are automatically calculated and updated if the amount is changed. If the parameter has been set to FALSE, it is possible to perform the calculation manually by selecting **Estimate cost** from the **Options** menu.

Default setting: FALSE.

Auto-File Fully Received Form

If this parameter is set to 'TRUE', forms that have been fully received will be filed without prompting.

Default setting: FALSE

Auto-Fill Delivery Details

This parameter is used to automatically transfer Forwarder and Destination details within the Deliveries function in **Purchase/Forms**.

Default setting: FALSE

Auto-Set 'Budget Date'

If this parameter is set to TRUE, the field Budget Date is set to the current date (Today) when a user prints an original purchase order. If setting the Budget Date to Today means that the budget code is not valid on that date, the form will not be printed.

Default value: FALSE.

Auto-Update Multi-Vendor Details from Line Item

This parameter allows the system to update the details for all vendors that sell a particular item, with details entered in a Line Item.

Default value: TRUE

Auto-Update Stock Details from Line Items

This parameter allows the system to update Stock Details with details entered in a Line Item.

Default value: TRUE

Billing Address

The Billing Address parameter is where the code for the address where purchase invoices should be sent is maintained. When you enter the Billing Address filter you will be presented with the Addresses window from which you can choose the correct address. The chosen address will be shown as an eight digit code.

Default value: Blank

Clean Up ‘For Component’ In Stock Wanted

This parameter, when set to TRUE, will clear any entries made in the ‘For Component’ column of the Stock Wanted window once the desired forms have been generated. If the parameter is set to FALSE the component number in the ‘For Component’ column will be set as the default value for that stock item and will be automatically entered in the column each time the Stock Wanted window is opened. To select a component to be used as default you should use the ‘look-up’ facility. The parameter ‘Component Search Range in Stock/Wanted’ determines whether you are presented with a list of components associated with the selected stock item or a list of all existing components when using the ‘look-up’ facility. This parameter can be found in the Parameters/Options/Stock section.

Note: If a stock item has only one component associated with it, the component number will be automatically inserted into the ‘For Component’ column regardless of the value of this parameter.

Default setting: TRUE

Close Quotation After Query Select

This parameter, when set to TRUE, will automatically save all changes and close the quotations window once the user ‘Selects’ a vendor. If the parameter is set to FALSE the user will have to save changes and then exit the window in the normal way.

Default setting: FALSE

Commodity Purchase

If this parameter is set to TRUE, Purchase Forms (of all types) can be grouped according to Stock Class. This allows organisations to process each form according to stock class instead of having forms with multiple stock classes.

Default setting: FALSE

Component Search Range in Order Lines

When adding a line item to a form in the Purchasing module, the stock number for the item to be purchased must be entered. Then define which specific component to purchase it for.

By default this parameter is set to Any which has the effect that if you press the Search button (the one with the magnifying glass) next to the line item *Component* field, a complete list of components is presented.

However, AMOS M&P allows you to attach a list of stock items to a component if you wish, tying for example spare parts to a piece of equipment. By setting this parameter to Restrict, only those components to which the selected stock item is attached are listed.

Default setting: Any.

Create New Form On Form Conversion

If this parameter is set to true, performing the following conversion will create a new form containing the order information and the existing one will take the status Filed.

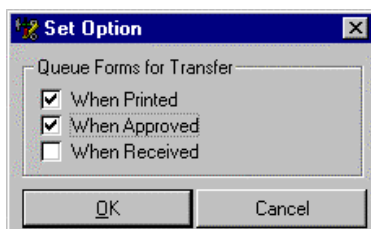
Note: If you wish to utilise this feature you should specify separate number series for each type of form to avoid having duplicate numbers for different forms.

Default setting: FALSE

Form 'Generic Queue' field

This parameter facilitates the interface between AMOS M&P and other systems used to handle purchasing and/or accounting data. When the option When Printed is checked, the Forms Queued For Transfer indicator is set when an original purchase order is printed. When the option When Approved is checked, a form is queued for transfer when it is approved.

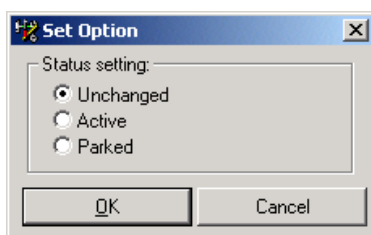
When you click on the Search button, the Set Option dialog box looks like this.



Default setting: 0 (no value checked).

Form Status After Query Select

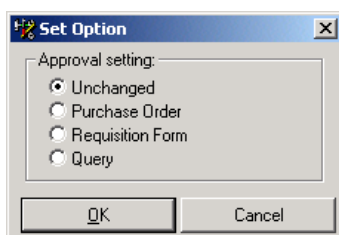
This parameter allows for the automatic status conversion of Query forms through the **Purchase/Forms/Quotations** window using the Select function.



Default setting: Unchanged

Form Type After Query Select

This parameter allows for the automatic form type conversion of Query forms through the **Purchase/Forms/Quotations** window using the Select function.



Default setting: Unchanged

Level of Approval

AMOS M&P supports three methods of form approval:

- None
- Signing
- Actual approval

With None selected, approval is not required before an original purchase order can be printed. With Signing selected, someone with password authority to approve forms can approve the form using any legal user name. With Actual Approval selected, someone with password authority to approve forms can approve the form using only their own user name.

Default setting: None.

Lock Approved Purchase Orders

If this parameter is set to TRUE, any purchase orders that have been approved are locked for all editing. This includes all the line items for the form. The Functions tab card of the Access Control dialog box (see section 7.7.2) contains the field Edit Approved Purchase Orders. If the field is checked, members of the selected group are allowed to edit a locked purchase order. Once a purchase order has been locked, it is not possible to use the Convert function to convert it to a different type of form.

Default value: FALSE.

Lock Approved Requisition Forms

If this parameter is set to TRUE, any requisition forms that have been approved are locked for all editing. This includes all the line items for the form. The Functions tab card of the Access Control dialog box (see section 7.7.2) contains the field Edit Approved Requisition Forms. If the field is checked, members of the selected group are allowed to edit a locked requisition form. Once a requisition form has been locked, it is not possible to use the Convert function to convert it to a different type of form.

Default value: FALSE.

Lock Exported Requisition Forms

If this parameter is set to TRUE, any requisition forms that have been exported are locked for all editing. This includes all the line items for the form. The Functions tab card of the Access Control dialog box (see section 7.7.2) contains the field Edit Locked Requisition Forms. If the field is checked, members of the selected group are allowed to edit a locked requisition form. Once a requisition has been locked, it is not possible to use the Convert function to convert it to a different type of form.

Default value: FALSE.

Lock 'Ordered' Form Fields

If this parameter is set to TRUE, it is possible to lock fields in order forms with the status Ordered. The Functions tab card of the Access Control dialog box (see section 7.7.2) contains the field Edit Locked Form Fields. If the field is checked, members of the selected group are allowed to edit locked form fields. When the parameter is set to TRUE, the fields Budget Date, Budget Code, Ordered, Estimate and Currency are grey and inaccessible for editing, as is **Options/Estimate Cost**.

Default value: FALSE.

Note: Even if Restrict is selected, you can still enter the number of any component by hand if you wish.

Multiple Departments In Order Forms

This parameter, if set to TRUE, determines whether Order Forms originating from other departments can be viewed and modified from the current department. The Department drop down window in the Purchase/Forms Filter window will be available to select the desired department. This does not allow for the creation of new Order Forms and the number of departments available depends on the users global access rights.

Default setting: False

Restrict Original PO Printing

If set to TRUE, this parameter restricts the printing of original purchase orders without a valid budget code or an estimate.

Default setting: FALSE.

Set Date Automatically During Receipt

This parameter is used to control whether the *Receipt Date* field of a purchase order is filled in automatically during receipt. When set to FALSE (which is the default) then the user must enter the receipt date manually.

Default setting: FALSE.

Use Latest Delivery Date of Order Lines

When adding items to an order form, the system automatically fills in the latest delivery date from information contained in the stock item register if this is set to TRUE.

Default setting: FALSE.

Use Quotation 'Discount Given'

This parameter is used to determine whether the field Discount Given in a Quotation is to be used by the function **Options/Calculate** to calculate the Quoted Price. If set to TRUE, this function will reduce the Quoted Price by the percentage specified in the Discount Given field.

Default setting: FALSE.

Use Vendors' Price

When adding items to an order form, the system automatically fills in the line item details from information contained in the stock item register. If the vendor of the order form is known, the system by default looks up the item price in the multi-vendor list and uses that price in the line item. However, this behaviour is only suitable if you are keeping you multi-vendor prices up to date.

By setting this parameter to FALSE, the system will instead use the last purchased price in the line item.

Default setting: FALSE.

Use Work Flow

If this parameter is set to true, the **Purchase/Forms/Options** drop down window expands to include the Workflow function. The Workflow function allows users to pre-define and automate the process sequence of purchase forms.

Default setting: FALSE

Validate Order Form Dates

If this parameter is set to true, all dates entered on purchase forms will be checked to make sure they follow a logical date sequence.

Default setting: FALSE

Stock

Allow Removal of more Items than in Stock

This parameter controls whether a user is allowed to use or remove a greater quantity of an item than is actually registered as being available in stock. This is relevant in some installations where a strict reporting of stock movement is not practised, or when stock items may be removed directly from transit storage or received shipments before they have been registered as received in stock.

Default setting: TRUE.

Approval Required For Stock Transfer

This parameter determines whether approval is required for transfer of stock items between installations. If the parameter has been set to TRUE, a receiving installation will not be able to see a transfer document until the status has been set to Approved at the donating installation.

Default setting: TRUE.

Component Search Range in Stock/Wanted

When modifying a quantity in the Stock/Wanted window, the component number that the stock item is required for may be entered. If there is only one component associated with the stock item then that number is automatically inserted in the 'For Component' column. If, however, there are several components associated with the stock item, you can use the 'look-up' filter (magnifying glass) to choose the component number you require.

If this parameter is set to Any, clicking on the look-up button causes a complete list of all components to be shown. If this parameter is set to Restrict, only the components associated with the stock item will be shown.

Default setting: Any.

Note: Even if Restrict is selected, you can still enter the number of any component by hand if you wish.

Inherit Full Description From Parent

If this parameter is set to TRUE, 'child' stock types that do not have a full description of their own will automatically inherit that of the 'parent' stock type. If the description for the 'child' stock type is subsequently altered it will be saved as the new description for the 'child' stock type only.

Default setting: FALSE

List All Transfer Documents

If this parameter is set to TRUE, the installation may list all the transfer documents that have been submitted from all installations. This may be quite useful at the main location if the parameter Approval Required for Stock Transfer has been set to TRUE. At the main installation, it will then be possible to list all the transfer documents in order to evaluate which should be approved.

Default setting: FALSE.

Propose Work Order Required Parts

Allows the system to suggest values when performing an In / Out of Stock transaction for a Work Order.

Default setting: FALSE

Record Stock Usage When Reporting Work

Parameter restricts the ability to report stock usage against a work order, in order to stop double reporting of stock usage, both in reporting Work Orders and In / Out of Stock functions.

Default setting: FALSE

Stock Price Logged

This parameter indicates whether you want the average or last stock price to be used when calculating stock values.

Default setting: AVERAGE

Use Stock Class Access

This parameter, when set to TRUE, allows you to restrict the various stock classes that can be accessed by each group of users. The access control is to be found in the menu option Tools/Configuration/Groups/Options/Stock Class Access. Note that if you want to restrict a groups Stock Class Access, you must define the stock classes available to every group otherwise a group without defined stock classes will only be able to access stock items with unspecified stock class.

Default setting: FALSE

Use Stock Item Depreciation

This parameter, which must be set before any stock items are entered into the system, tells the system whether to use stock item depreciation. Depreciation levels are set at **Tools / Configuration / Depreciation Levels**.

Default setting: FALSE

7.7.4.6 Sharing

Although some information may appear to be available from only within a single installation or department, all information is actually stored in the same set of database tables regardless of which installation or department they belong to. For the system to be able to show information belonging to a particular department, it has been necessary to stamp all table entries with a marker indicating which department they belong to. This mechanism works well for departmental types of information such as components, stock items job descriptions etc., but does not suit for information to access at a more global level e.g. addresses disciplines, job classes and the like.

This set of parameters, one for each table in the database, control how the information contained/owned by one department is shared out such that it can be accessed by other departments.

There are also three special parameters controlling how the work order form and transport document counters are shared between departments.

For example, an address register has been established in Inst/Dept 001/01, all addresses will have been stamped as owned by that department. Unless sharing is defined, these addresses will only be accessible from Inst/Dept 001/01. To share these addresses such that all departments have access to them, select to modify the Global Sharing parameters. Then choose the Sharing tab and on the parameter entry reading Addresses, specify Inst/Dept 001/01 from the list of defined departments. The addresses will now be accessible from every department.

The same feature can also be used to share information across all departments of a particular installation by defining sharing at the Installation level, or even at the department level thereby sharing a single set of data between two departments.

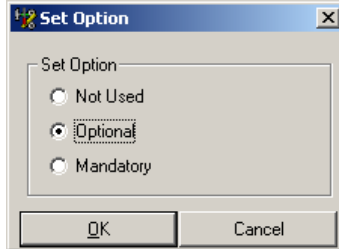
As described at the beginning of this section, parameter values are *inherited downwards* from the global to the department level. For example, if a user logs onto to Inst/Dept 002/03, the system first checks to see whether sharing has been defined for department 002/03. If nothing is defined, the system then checks to see whether sharing has been defined for installation 002. If nothing is defined, the system then checks to see whether sharing has been defined at the global level. If no sharing definitions are found, the system then defaults to fetching information stamped as owned by department 002/03 (e.g. the current installation and department).

If you intend to use the component transfer facility within AMOS M&P, you will need to ensure that global sharing is allowed for the following tables:

Address	Component Class
Component Type	Counter Type
Discipline	Employee
Image Reference	Image Reference/Hotspots
Image Reference Links	Image Source
Job Class	Job Description
Maintenance Cause	Maintenance Class
Maintenance Criteria	Maintenance Type

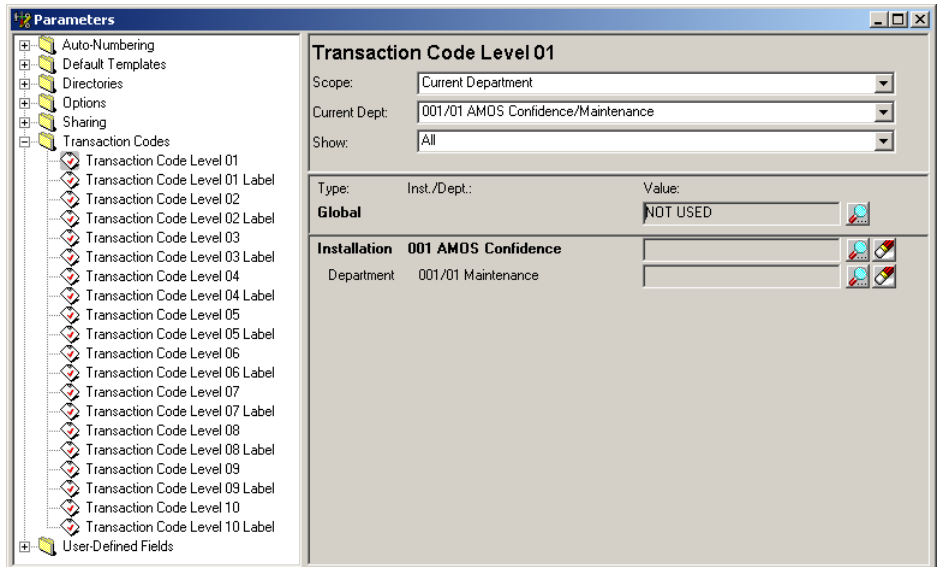
7.7.4.7 Transaction Codes

The Transaction Codes parameters may be used to connect expenses to an element such as a Project or a Responsible. The transaction codes are not directly connected to the budget. Click the magnifying glass for a transaction code you are defining to get a dialog box to specify which status the transaction code should have:



The Transaction Codes window looks like this:

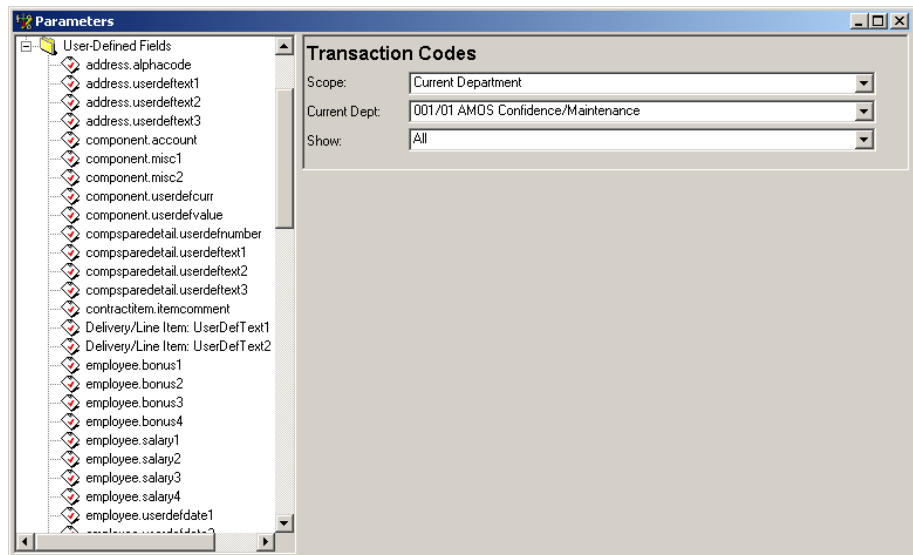
Default values may be set for transaction codes.



7.7.4.8 User Defined Fields

In many of the data *objects* in the system have a number of fields with no predefined function or title, and can be used as required in order to meet company or department specific needs. These are called *User Defined Fields*, and may be found on most data screens throughout the system.

This set of parameters allows the user to define the screen leader texts of the user-defined fields when shown onscreen. Unless they are in use, such fields should be empty.

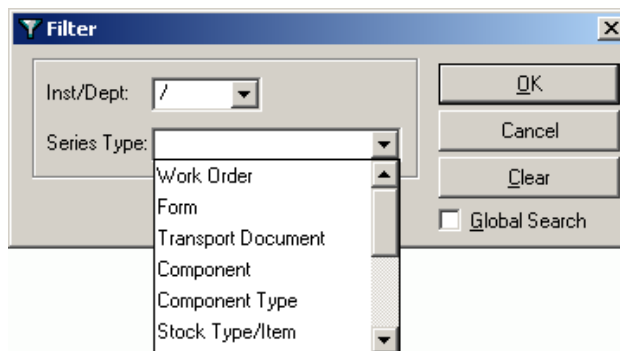


7.7.5 Number Series

Several items registered in AMOS M&P are automatically numbered by the system. Among other things, new Work Orders and Components are assigned numbers by the system.

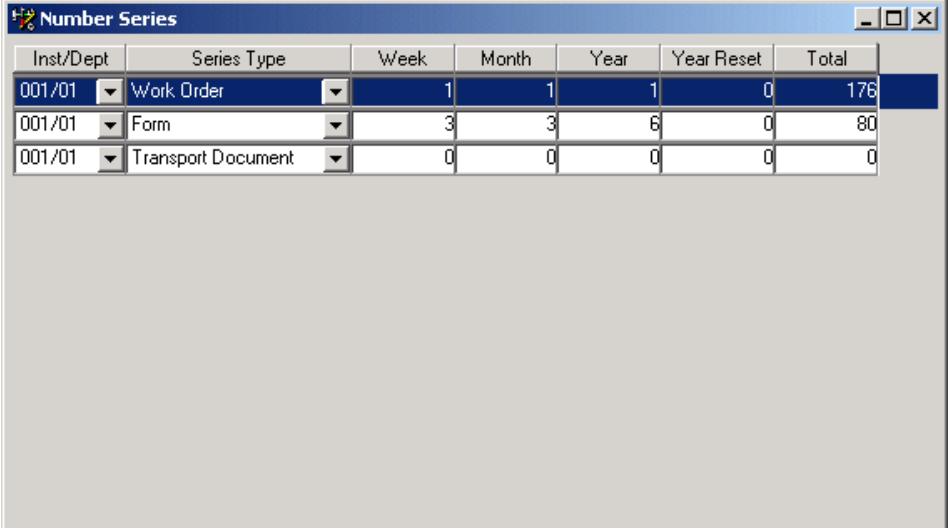
Two main factors determine the use of such numbers. The menu command **Tools/Configuration/Number Series** gives access to the Number Series window described below. This window is used to initialise the various number series. The Auto-Numbering tab card in the Options dialog box (described in section 7.7.4.2) may be used to define *input masks* to determine which characters may be used when registering data of the different types and *rules* to determine how numbers are generated by AMOS M&P.

The Number Series filter



- The Inst/Dept drop-down list may be used to specify a department, and the Series Type list contains the different types of number series available in the system.

The Number Series window



Inst/Dept	Series Type	Week	Month	Year	Year Reset	Total
001/01	Work Order	1	1	1	0	176
001/01	Form	3	3	6	0	80
001/01	Transport Document	0	0	0	0	0

- The columns Week, Month and Year will display how many numbers have been issued in the respective number series in these periods.
- The Year Reset column is used to enter the number to which a number series will be reset at the start of a new year. Normally, the value is set to 0, but there are situations where it is relevant to choose a different value. For example, different department may have different series for issued Forms. The main office may use numbers from 0, while one installation may use the Year Reset value 1000, and have the system assign numbers from that starting point at the beginning of the New Year.
- It is possible to sort the contents of the window by clicking header field of the column by which you want to sort. Click it once more to toggle the sorting between descending and ascending.

7.7.6

CBM References

Condition-based Maintenance (CBM) provides a means of integrating various equipment measurements and monitoring systems with the maintenance features of AMOS M&P. Appendix B in this reference manual gives an overview of the CBM functionality.

The CBM Reference filter

The Filter dialog box contains the following fields and controls:

- System ID: [Text Input]
- CBM Code: [Text Input]
- Inst/Dept: [Dropdown Menu]
- Type: [Dropdown Menu]
- Buttons: OK, Cancel, Clear
- Global Search:

- Each CBM piece of equipment is given a System ID and a Code. The Type drop-down list in the Filter dialog box contains the two defined types of CBM references, which are Job and Counter.

The CBM References window

ID	CBM Code	Inst/Dept	Component	Type	Job Code	Counter
1	ME-1	001/01	601.01.00 MAIN ENGINE 1	Counter		Hours

7.7.7

Transaction Codes

The Transaction Codes parameters may be used to connect expenses to a specific budget dimension, like Responsible or Project. These parameters are described in section 7.7.4.7.

Once transaction codes have been defined, the menu command **Tools/Configuration/Transaction Codes** is used to access the window to enter values for the defined codes:

The Transaction Codes window displays a drop-down menu for 'Responsible' and a table of defined codes:

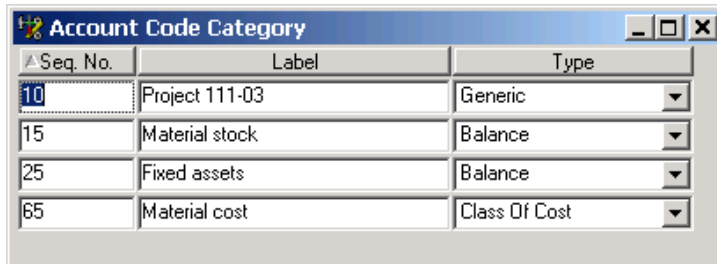
Code	Title
PERA	Per Arlov
DJJ	Derek J. Johnstone

- The drop-down list at the top of the window is used to select the transaction code category to enter values for.
- Transaction codes may have the status of Not Used, Optional or Mandatory, as described in section 7.7.4.7.
- The **Options** menu of the Components window contains the **Transaction Codes** command, which may be used to select a transaction code and a value for a

selected component This is described in section 3.1.1. It is also possible to access the Transaction Codes window by clicking the corresponding command button from the window In/Out of Stock described in section 3.1.2.

7.7.8 Account Code Categories

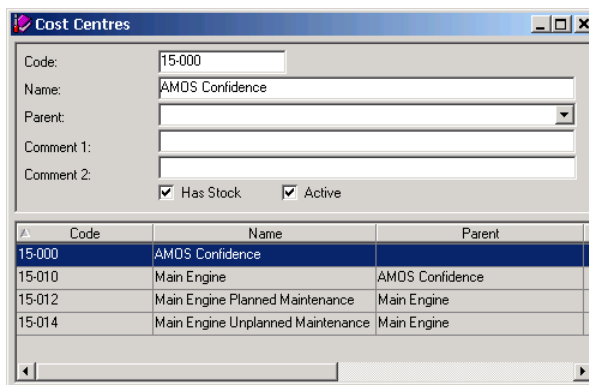
The Account Code Category window enables the user to define unique numbers and labels for account codes that are used in the 'Account Codes' register covered in section 3.1.14.2. These codes can later be used for accounts reporting. The Sequence number must be numerical while the label field is free text. The Type drop down window is used to set the account type.



Seq. No.	Label	Type
10	Project 111-03	Generic
15	Material stock	Balance
25	Fixed assets	Balance
65	Material cost	Class Of Cost

7.7.9 Cost Centres

Cost Centres allows you to create and administer Cost Centres. The checkbox for 'Has Stock' defines the initial type of account applicable to the cost centre, when receiving goods for example. The 'Active' checkbox can be used for temporary cost centres such as a project and can be unchecked once the cost centre is no longer required. The 'Parent' drop down window allows you to create a hierarchy of cost centres.



Code	Name	Parent
15-000	AMOS Confidence	
15-010	Main Engine	AMOS Confidence
15-012	Main Engine Planned Maintenance	Main Engine
15-014	Main Engine Unplanned Maintenance	Main Engine

7.7.10 Stock Grade Categories

The Stock Grade Category window allows you to create and maintain the categories available in the Stock Grades register.

7.7.11 Depreciation Levels

The Depreciation Levels window enables users to define their own rates of depreciation independently of depreciation time periods. This is particularly useful where regional accounting methods demand such flexibility.

Level	Description	Depreciation	Useful
1	New	0	<input checked="" type="checkbox"/>
2	Level 1	25.00	<input checked="" type="checkbox"/>
3	Level 2	50.00	<input checked="" type="checkbox"/>
4	Level 3	75.00	<input checked="" type="checkbox"/>
5	Level 4	100.00	<input checked="" type="checkbox"/>

7.7.12 Installations/Departments

AMOS M&P contains functions that make it possible to handle complex organisations.

The command **Tools/Configuration/Installations-Departments** gives access to the following window:

Inst.	Installation	Comments	Site Code
001	AMOS Confidence		
002	AMOS INDU		
003	AMOS Voyager		

Dept.	Department	Comments
01	Maintenance	
04	MPA	



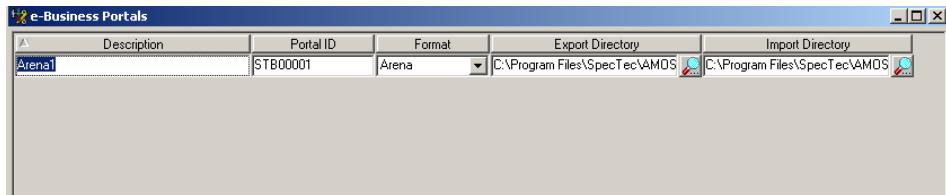
- When the New command button is clicked, AMOS M&P presents a dialog box which allows the user to select whether to create a new Installation or a new Department in the currently selected Installation:

New	
New	
<input checked="" type="radio"/>	Installation
<input type="radio"/>	Department
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

- There are two separate Comments fields available for any suitable textual information the organisation wants to connect to the selected installation or department.
- The command **File/Switch Department** is used to select which department is to be currently active. The command is described in section 3.3.

7.7.13 e-Business Portals

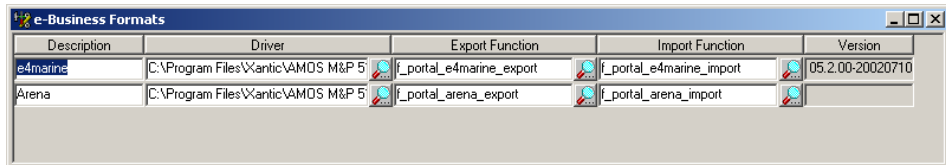
AMOS M&P allows for purchasing functions to be channelled directly to e-Business portals. The following window allows the user to input the required information in order to set up the portal transaction.



- The Description field allows the user to give a name to each available portal.
- The Portal ID field contains the membership identification number issued by the portal provider to identify where the transaction request comes from.
- The Format field takes information from the e-Business Formats option in the **tools/configuration** menu described in section 7.7.14.
- Export and Import Directory fields contain the source and destination file details on the local PC. Clicking on the magnifying glass icon brings up a window that allows the user to browse through the local machine in order to locate the correct directory.

7.7.14 e-Business Formats

The e-Business Formats window



- The Description field contains the name of the portal provider.
- The Driver field contains the name of the pfd (portal format driver) file usually pre-installed to customer requirements. If the file is missing or incorrect you can navigate to the correct file by using the 'look-up' button at the right hand side of the column.
- Export and Import Function fields contain the necessary commands to activate the required function from the driver file. If these fields are empty and you have the correct driver file installed you should click on the 'look-up' buttons at the right of these columns and the application will automatically import the function files from the driver file.
- The Version field contains the identification code for the driver you are using. Driver files may be periodically updated and you can check this code to ensure that you are using the most up to date drivers.

7.7.15 Workflow

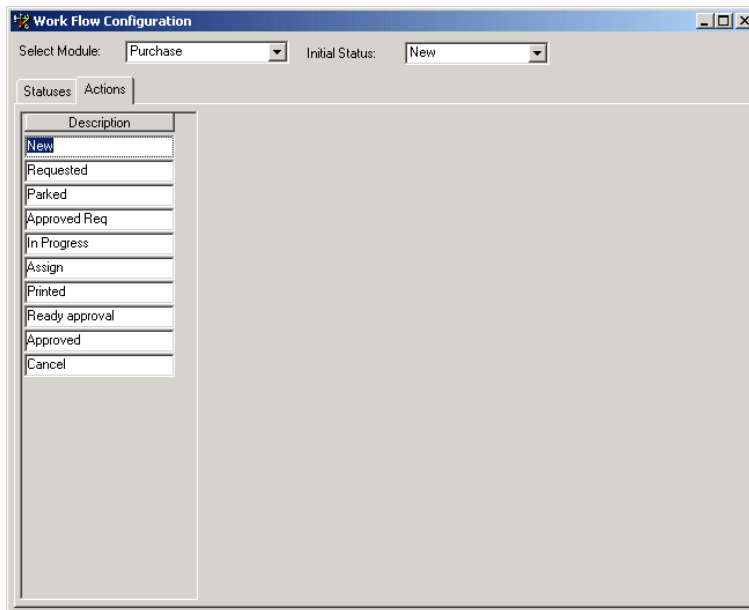
Configurable work flow is a feature that allows you to recreate the steps that your company work flow takes in each stage of a process. For the examples shown below, we have used a 'Purchase' scenario.

The work flow process can be divided into the following six categories:

Actions	A list of all possible purchase actions
Statuses	A list of all possible purchase form statuses
Status Action	A list of actions that can be performed against a status
Resulting Status	The status that follows a performed Status Action
AMOS Action	The equivalent action to be carried out by AMOS
Access to action	Who has access to a particular action

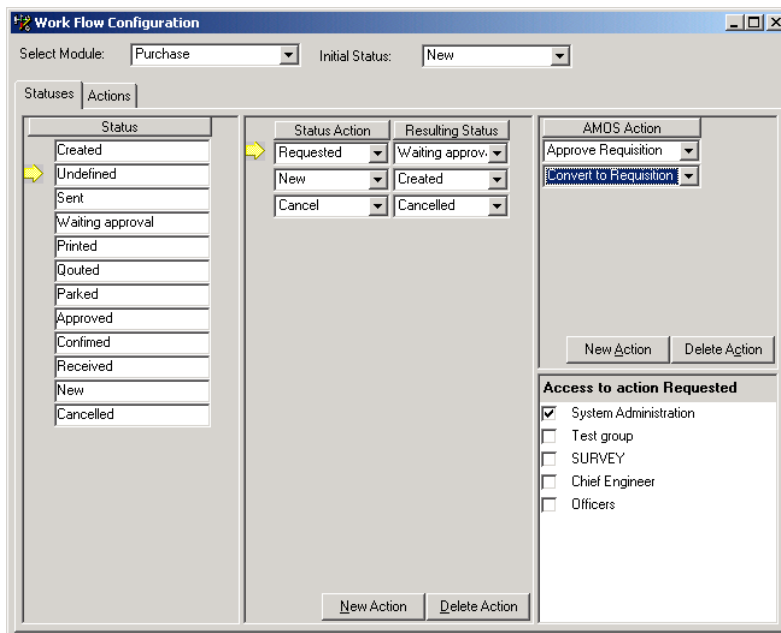
Use the menu option **Tools/Configuration/Work Flow** to access the 'Work Flow Configuration' window.

The following screen shows the Actions tab. This is where the list of all possible actions is maintained. They are user defined and should be used to mimic your own company processes.



Use the secondary toolbar or the Edit menu to add and delete actions.

Once actions have been defined you can go to the 'Statuses' tab shown below.



The Status column is where the list of all possible statuses is maintained. Once again, they are user defined and should be used to mimic your own company statuses.

Again, use the secondary toolbar or the Edit menu to add and delete actions.

The middle column of the Work Flow Configuration window is where you link the status action (taken from the list on the 'Actions' tab) to the Resulting Status (taken from the 'Status' column). Use the buttons at the bottom of the column to add or delete.

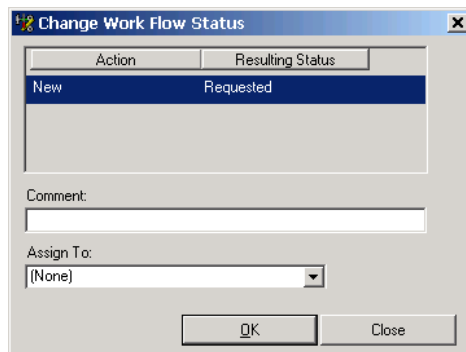
The upper right column is used to assign AMOS actions that reflect what would normally happen in the middle column. Use the buttons at the bottom of this column to

add and delete actions.

The lower right section has a check box of all 'Groups'. This can be used to define who has access to view and edit the information at each stage in the process.

Once you have configured the workflow process you can select 'Work Flow' from the 'Options' menu whilst looking at purchase forms to use the configuration you have created.

The following screen shows an example of what you may see when using work flow to process a purchase form. If there are multiple actions listed, you can select the one you want to use and add a comment. Click on OK and the purchase form will be automatically progressed to the next stage in the work flow procedure. If you wish to assign the form to a new mailbox, you should select the users mailbox from the Assign To drop down window.



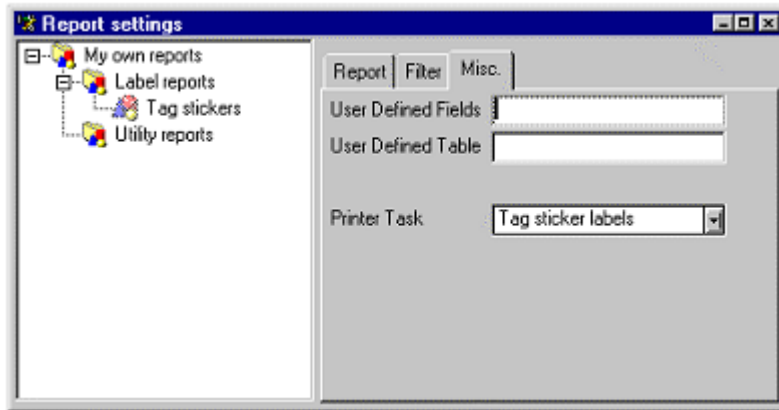
Options – Convert Work Flow Status

There is a conversion window for users who wish to convert to using workflow. In the menu option Tools/Configuration/Workflow/Options/Convert Work Flow Status there is a window to allow you to apply different initial workflow statuses to each type of purchase form status.

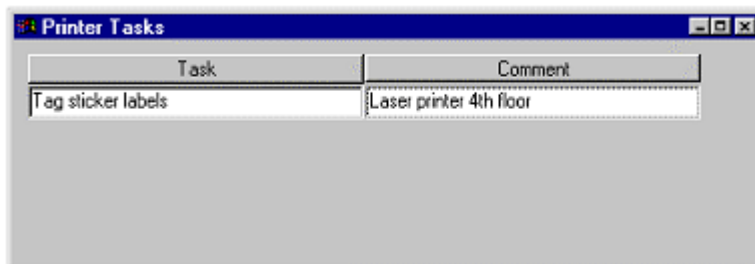
7.7.16 Printer Tasks

AMOS M&P makes it possible to tailor reports, and to add these reports to the report hierarchy. A full description of these options is found in Appendix A in this reference manual.

Once reports have been defined and added to the report hierarchy, it is possible to define printer tasks to handle the printing of the report on a selected printer. The Report settings window, which is described in section 7.7.17.1, contains a tab card called Misc. to name a printer task for a selected report. This is done in the Printer Task field



The command **Tools/Configuration/Printer Tasks** opens the corresponding window. Each task must be given a name, and it is also possible to add a comment describing the task further:



Once the task has been named and saved, the **Options** menu command **Printer Task Configuration** becomes available:

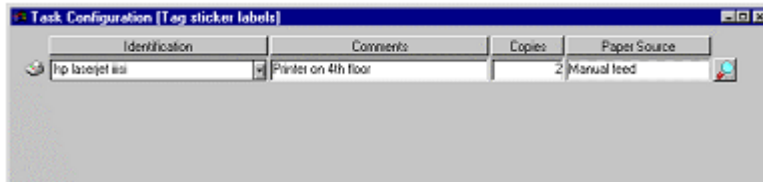


The Task Configuration window opens, and the name of the selected task appears in the title bar of the window.

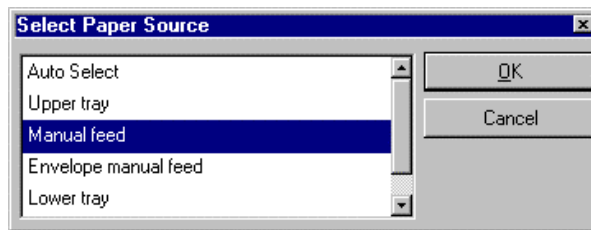
If no printer names appear when the drop-down list in the Identification field is opened, it is necessary to select **System Printers** from the **Options** menu in order for AMOS M&P to add the printer definitions available on your PC into its own database



When this command is selected, it takes some time for AMOS M&P in order to import the necessary information. After the process is completed, the desired printer may be selected from the drop-down list. An icon appears to the left of the field to indicate the type of selected printer. For example, there are different icons for local and network printers.



- The Comments field is optional, but may typically be used to describe the selected printer.
- Use the Copies field to specify how many copies are to be printed in the selected printer task.
- It is possible to click the Search button next to the Paper Source field in order to get a window to select the paper source. This window displays the defined paper sources in the selected printer.



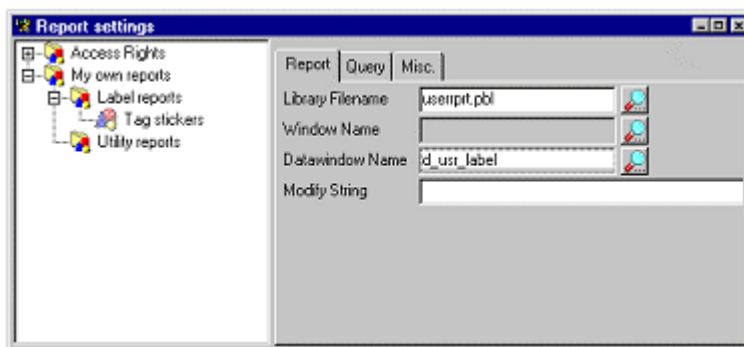
7.7.17 Extension Features

In addition to the pre-defined reports found in AMOS M&P, it is possible to create tailor made reports for the organisation. This is done in one of the tools PowerBuilder or InfoMaker. When the report has been created and stored in a .Pbl library file it is possible to include the user defined report in the AMOS M&P report hierarchy described in section 7.4.

A description of how to create reports, to include them in the report hierarchy and grant access to them is found in Appendix A of this reference manual.

7.7.17.1 'Reports' Menu

The command **Tools/Configuration/Extension Features/Reports Menu** gives access to the hierarchy of user-defined reports:

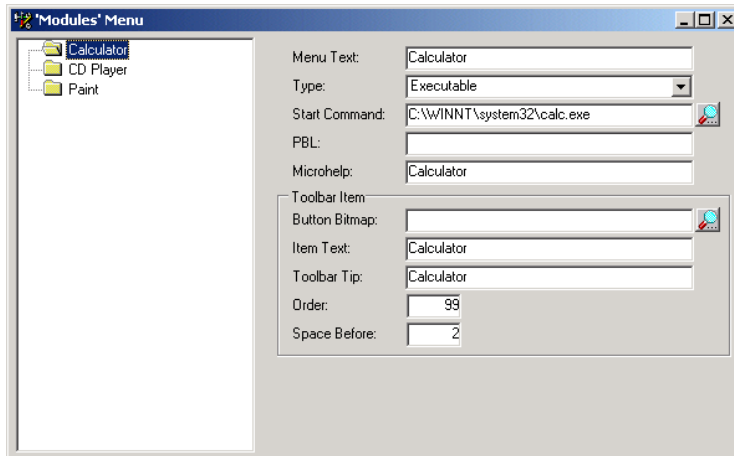


- The report hierarchy works similar to other hierarchies in AMOS M&P. The + and – buttons may be clicked in order to expand and collapse hierarchy levels. Corresponding commands are found in the **Options** menu.



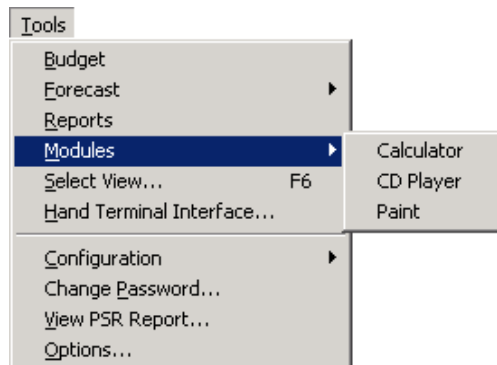
7.7.17.2 'Modules' Menu

The command **Tools/Configuration/Extension Features/Modules Menu** opens the window to work with external programs and user-defined Power Builder modules:



If you make any alterations to the Modules menu, you must re-start AMOS M&P to show the changes.

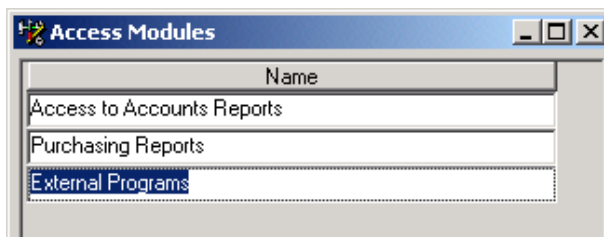
When there are modules or programs available and you have the correct access level within the system, the Tools menu will contain an extra entry called **Modules**, which will have a sub-menu containing the modules available to you as below:



You can organise the modules in any way you choose by using 'drag and drop' methods to create a hierarchy structure.

7.7.17.3 Access Modules

Access Modules allows the user to create new types of user-defined modules within the Reports/Modules function of Access Control, see section 7.7.2.

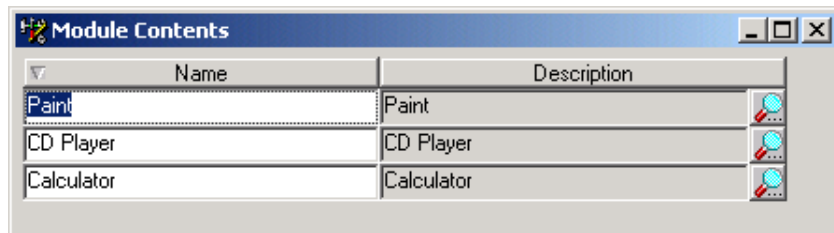


The **Module Contents** command from the **Options** menu gives access to the window to select the reports or external programs that are to be available for the particular module.



It is also necessary to grant the relevant user-groups access to the reports or programs in

the module.

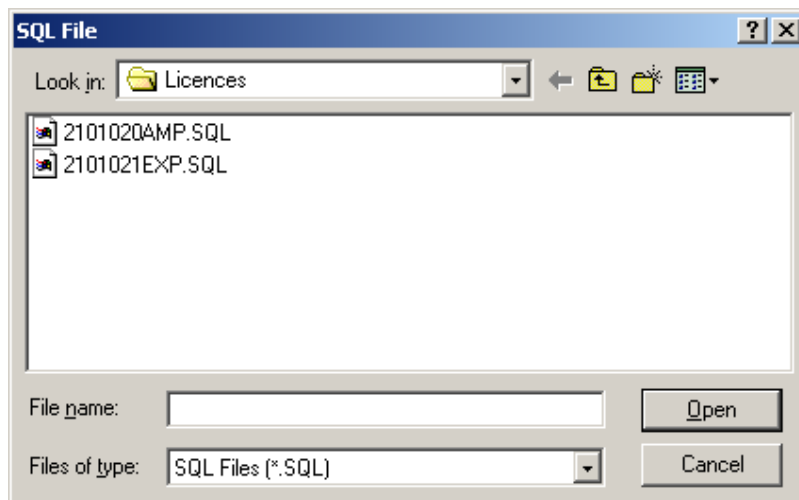


In the above examples, checking the box by the side of the entry 'External programs' within Access Control will allow the selected user access to the programs or reports shown in the Module Contents window.

7.7.18 Update System License

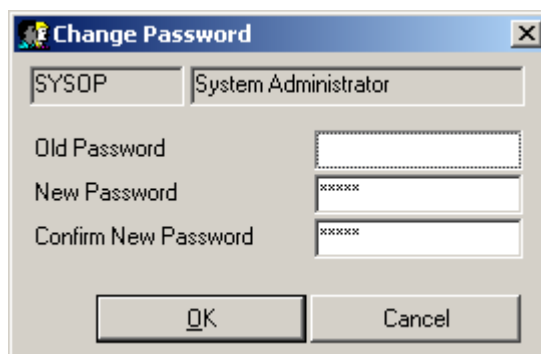
In order for AMOS M&P to function, a valid system license must be available. The license file contains information about the organisation, about which modules have been purchased, and so on.

If the system presents an error message stating that the system licence must be updated, a new system licence file must be obtained from the AMOS M&P distributor. In order to update the license, give the menu command **Tools/Configuration/Update System License** to enter the SQL File dialog box. Use standard Windows techniques to locate the folder with the .Sql file, and double-click it to update the license.



7.8 Change Password

To change the password of the user who is currently logged on, give the command **Tools/Change Password**. The following dialog box is presented:

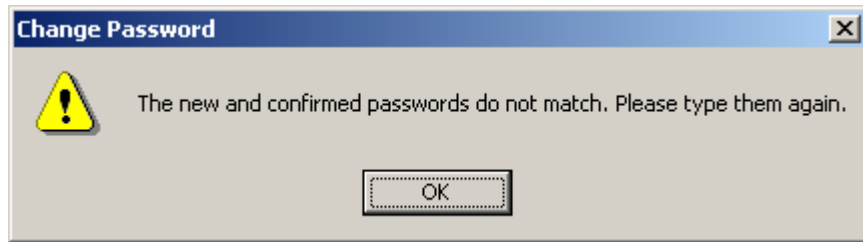


Enter the existing password in the first field and the new password in the second and third fields. Since the actual passwords are not displayed for security reasons, it is necessary to enter the new password twice to ensure that there are no spelling mistakes.

If you typed the old password incorrectly you will see the following window:



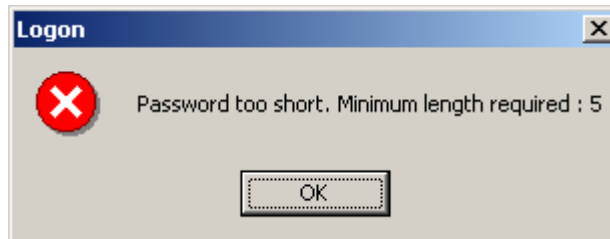
If the two new password fields do not match, the following dialog box is presented:



Depending upon the parameter settings that have been implemented by your organisation, you may also see the following error messages:



The above message informs you that the 'Enforce Password History' parameter is set to 2 and therefore prevents you from entering the 2 previously used passwords.

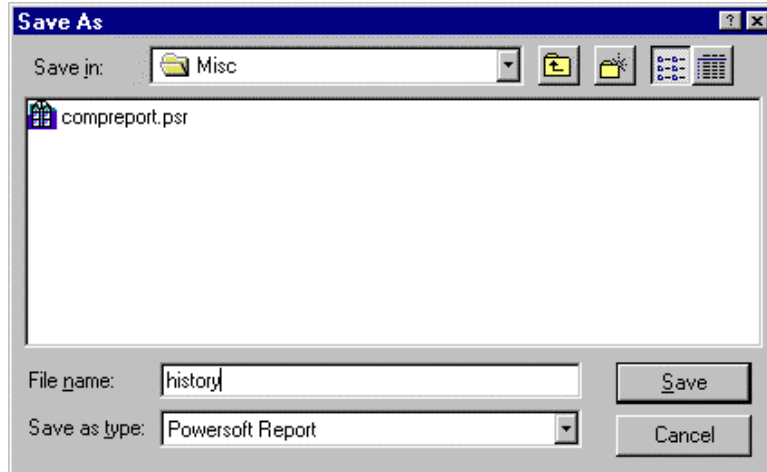


The above message informs you that the 'Minimum Password Length' parameter is set to 5 and you must therefore enter a password of at least 5 characters.

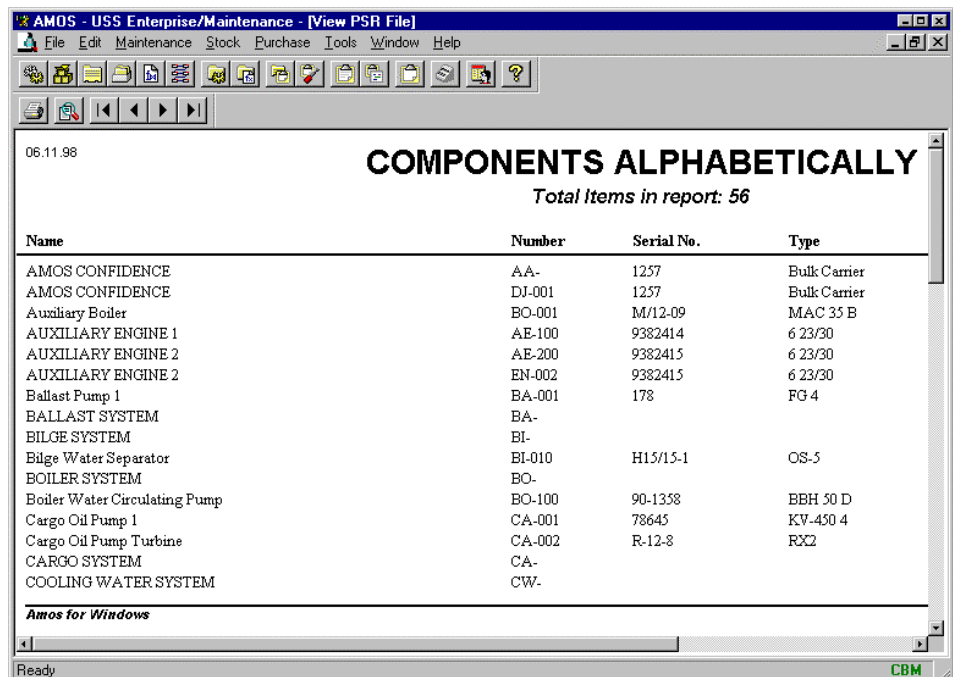
Note that you should ensure that all users belong to groups that have access rights to change password if you intend to use the advanced security options. Set this through the menu option Tools/Configuration/Groups/Options/Access Control. The checkbox for change password can be found on the Functions tab.

7.9 View PSR Reports

The pre-defined reports of AMOS M&P are described in section 7.4. It is possible to create electronic versions of a printed report. To do so, preview the report as described in the previous section, and then give the command **Edit/Save As**. Select Powersoft Report from the Save as type drop-down list in the Save As dialog box:



After the preview version of the report has been saved, it is possible to give the menu command **Tools/View PSR Reports** in AMOS M&P in order to see the report on the screen, as shown in this screen picture:

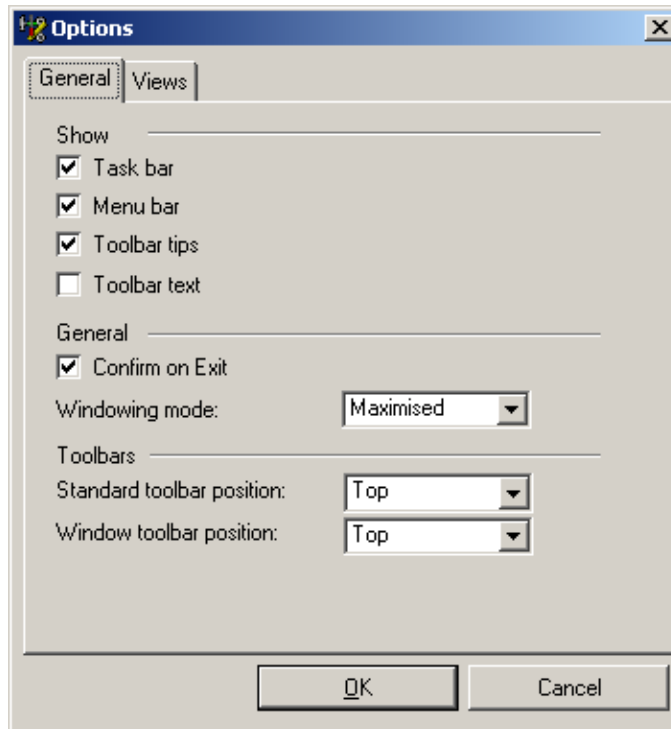


7.10 Options

7.10.1 The General tab

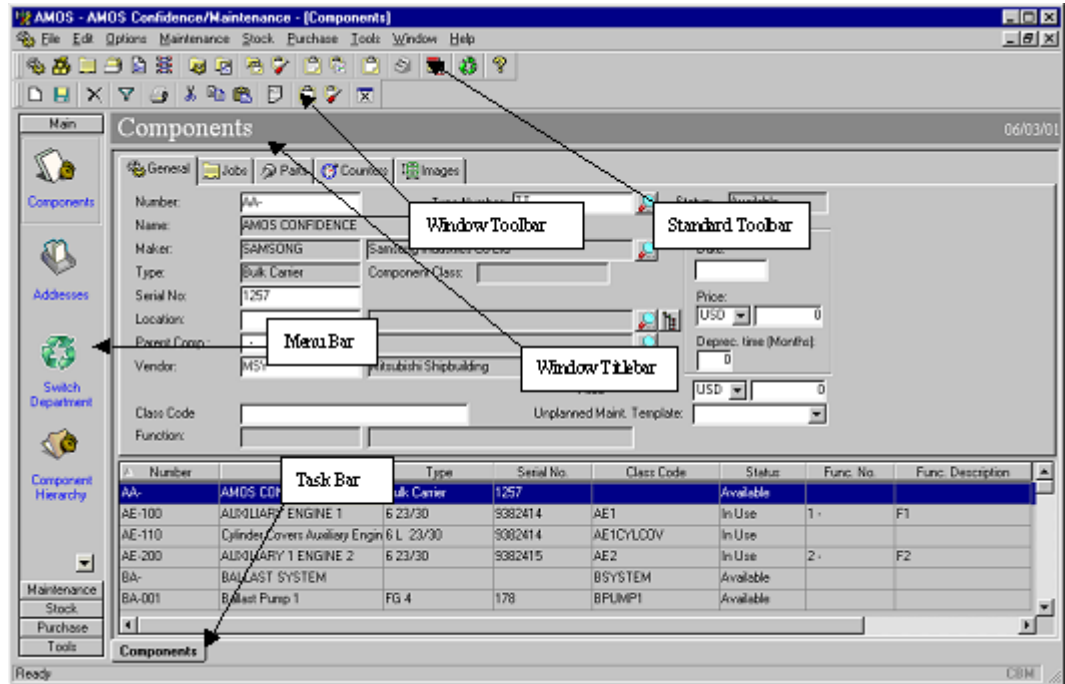
Under the menu **Tools/Options**, the General tab provides options allowing you to personalize the appearance and behaviour of the AMOS M&P user interface.

Control of access to these features can be found within the Access control entry 'user options' which has been added to the Access Control 'Functions' tab.



Please refer to the screen shot on the next page for visual references.

- The Task bar option controls whether the Task Bar and Window Title-bar are displayed.
- The Menu bar option controls whether the left hand side Menu Bar is visible.
- The Toolbar tips option controls whether a text description appears when the mouse cursor is positioned over an icon on either the Standard Toolbar or the Window Toolbar.
- The Toolbar text option controls whether toolbar icons are displayed with a text description below them. This feature can be particularly useful for new users.
- The Confirm on Exit option controls whether the application requests confirmation prior to exiting.
- The Windowing mode option gives the user the choice of opening windows as Maximized or Cascaded. All open windows must be closed to activate this option.
- The Standard toolbar position option controls the onscreen position of the Standard Toolbar i.e. Top, Bottom, Left, Right or Hidden.
- The Window toolbar position option controls the onscreen position of the Window Toolbar i.e. Top, Bottom, Left, Right or Hidden.



As can be seen in the above illustration, the Standard and Window toolbars are in the default position (they can be moved elsewhere on screen or removed altogether). In addition, the Menu and Task Bars have been activated. The Task Bar displays a tab for each open window allowing the user to quickly switch between windows. When the Task Bar is active, the Window Titlebar also becomes active in order to easily identify the current window.

The Menu Bar contains large buttons which provide access to commonly used functions within the application. There are five separate tabs (Main, Maintenance, Stock, Purchase and tools) which each contain buttons to various parts of the application.

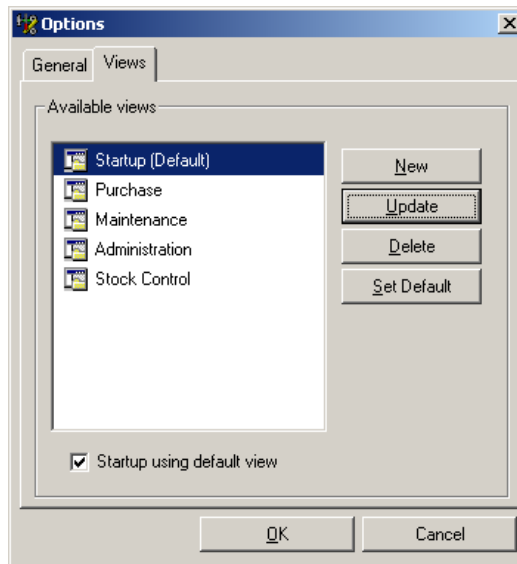
<u>Tab Name</u>	<u>Buttons Available</u>
Main	Components Addresses Switch Department Component Hierarchy Function Hierarchy Exit
Maintenance	Work Orders Work Planning Requisition Work Update Counters History Log
Stock	Items Wanted In/Out of Stock Control Transactions
Purchase	Forms Transport Documents Contracts
Tools	Budget Reports Help

7.10.2

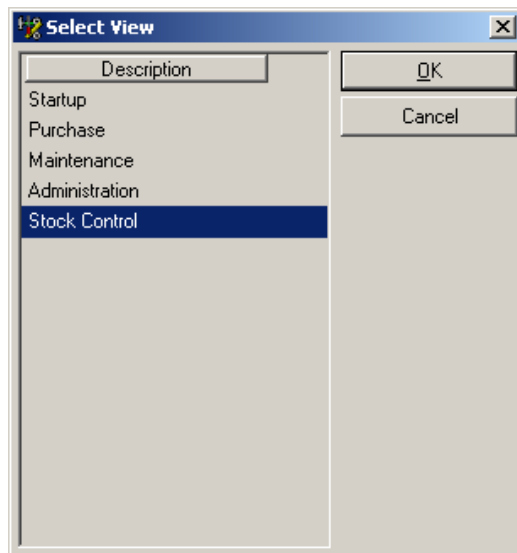
The Views tab

AMOS M&P has the facility to save frequently used screen configurations, otherwise called 'Views'. Each view is capable of recording which screens are open, which screen is active and which filter criteria are defined. Each saved 'view' can be restored as and when required.

Under Tools/Options, the 'Views' tab provides options to create New views, Update existing views, Delete views that are no longer required and to set one of the views as the Default view. If the 'Startup using default view' box is selected, the application will automatically open with the default view opened.



On selecting 'Tools/Select View...' or pressing the F6 key, the select view window opens with a list of available views that have been registered. Select a view by clicking on it and then click on OK. This will restore the various windows and filter criteria associated with that view.

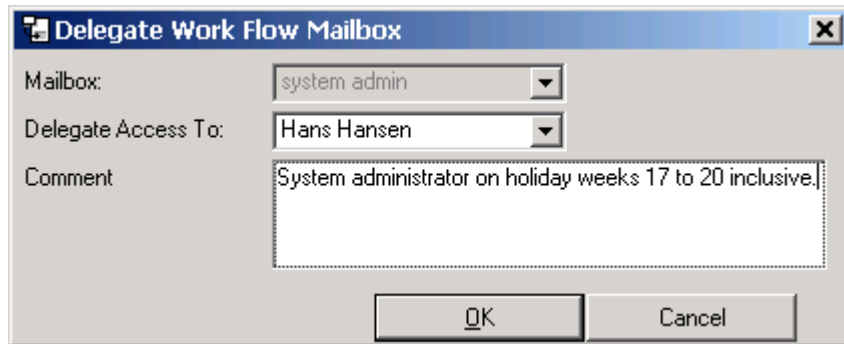


In the above screen shot, the 'Stock Control' view has been selected. When you click on OK the open windows you have associated with the view will automatically open

7.11 Delegate Mailbox Access

The Delegate Mailbox Access is part of the Workflow module.

Users can delegate their mailbox access (if the delegate private mailbox access control is enabled) to another user for periods of holiday etc. and then un-delegate their mailbox on return to work.



If the access control entitled delegate mailbox access is enabled for the user, they will be able to delegate any users mailbox to any other user.

7.12 Mailbox Access Log

The Mailbox Access Log is part of the Workflow module.

If the access control entitled delegate private mailbox access is enabled for the user, they will be able to view all access history for their personal mailbox.

If the access control entitled delegate mailbox access is enabled for the user, they will be able to view all mailbox access history for any users mailbox.

A Layouts and Reports

A number of the AMOS M&P registers contain a field called Full Description. It is possible to create *layouts* to make it easier for the user to enter the correct data in such fields in a faster and more efficient way.

AMOS M&P offers a number of pre-defined reports that present data about components, stock items jobs etc. It is possible to create new reports for the organisation if needed, and to edit the pre-defined reports.

The programs PowerBuilder or InfoMaker from PowerSoft may be used to create and tailor layouts and reports. The latter is basically a “light” version of the former, but it contains all the necessary functions to create layouts and reports. Below, the description is based on using PowerBuilder, but those instances you use different techniques in InfoMaker are pointed out in the text.

Note:

This chapter has been written for use with PowerBuilder/InfoMaker 5.5 and is intended as a basic introduction to creating your own layouts and reports. Future versions of PowerBuilder/InfoMaker may differ in appearance and operation to the following sections and we therefore recommend that you read any related documentation supplied with the software.

A.1 Brief introduction to PowerBuilder and InfoMaker

PowerBuilder is the development tool used to create AMOS M&P. InfoMaker is a reduced version of the same program, but it contains all the same functions to create forms and reports to interact with a database. Extensive documentation is available for these products, and it is beyond the scope of this manual to describe all the PowerBuilder and InfoMaker features.

The text will focus what needs to be done in order for AMOS M&P to handle layouts and reports. However, a brief description will be given of the basic PowerBuilder and InfoMaker techniques. If you only need to make small modifications to existing layouts or reports, or to create simple new layouts or reports, you will probably find the information you need in this chapter.

A.1.1 Making and using layouts

These are the most important steps involved in the process of making and using layouts as Full Description field templates:

- The tools in PowerBuilder are used to create the layout that is going to be presented to the user, with the desired fields, texts and other controls.

- The layout is stored in a .Pbl file, a library file that may contain several layouts. Appendix A.1.4 includes a description of how a new .Pbl file may be created.
- AMOS M&P contains a register that used to name the various templates in use. The process of importing a layout to template is covered in section 3.1.12.1. When the user updates information that contains a Full Description field with a connected layout, that information is stored in BLOBs in the database. This means that the data from the form is transferred to the database in the defined field sequence. If the field sequence is changed, data will be displayed incorrectly to the user. Once a form has been used to input data, it should not be changed.

A.1.2 Working with reports

AMOS M&P provides a number of reports that present data according to selected criteria when they are run. Section 7.4 in this reference manual contains an overview of the available reports and how they are used.


- It is also possible to create new reports if necessary. Like layouts, reports are stored in .Pbl files. The reports may display data stored in AMOS M&P tables and fields.
- Once a report has been defined, it should be included in the report hierarchy to be available to users who want to run it. This is described in Appendix A.5.

A.1.3 Creating a database profile

The first time PowerBuilder is used, it is necessary to define a database profile.

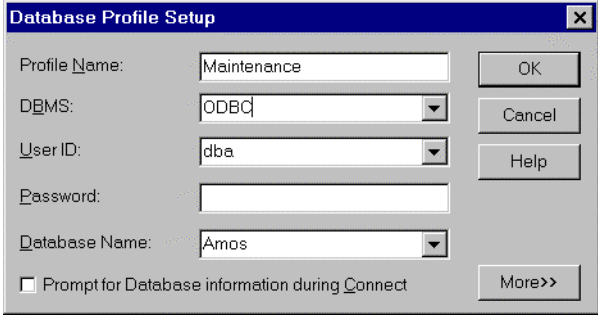
Note: In PowerBuilder, the amos user should always be used.

To define a database profile:

1. Click the DB Profile button. 
2. In the next dialog box, click New to enter the Database Profile Set-up dialog box.
3. Fill in the fields as follows:

Profile Name:	maintenance
DBMS:	odbc
User ID:	dba
Password:	
Database Name:	amos
4. Click OK to enter the SQL Data Source dialog box.
5. Select Maintenance from the list, and click OK twice. Give the user name amos wherever applicable.

You are then connected to the database with the correct profile, and are ready to start the actual work on the form.



If an error message occurs on trying to connect to the database, a `ConnectionString` must be defined:

1. In the Database Profile Setup shown above, click More>> to expand the dialog box.
2. In the field DBPARM, enter the following:
ConnectString='DSN=Amos'
3. Click OK to connect to the database.

A.1.4 Creating a new .Pbl file

When AMOS M&P is installed, a \PBL folder is created within the AMOS M&P program folder. It is recommended that new .Pbl files be placed in this folder.

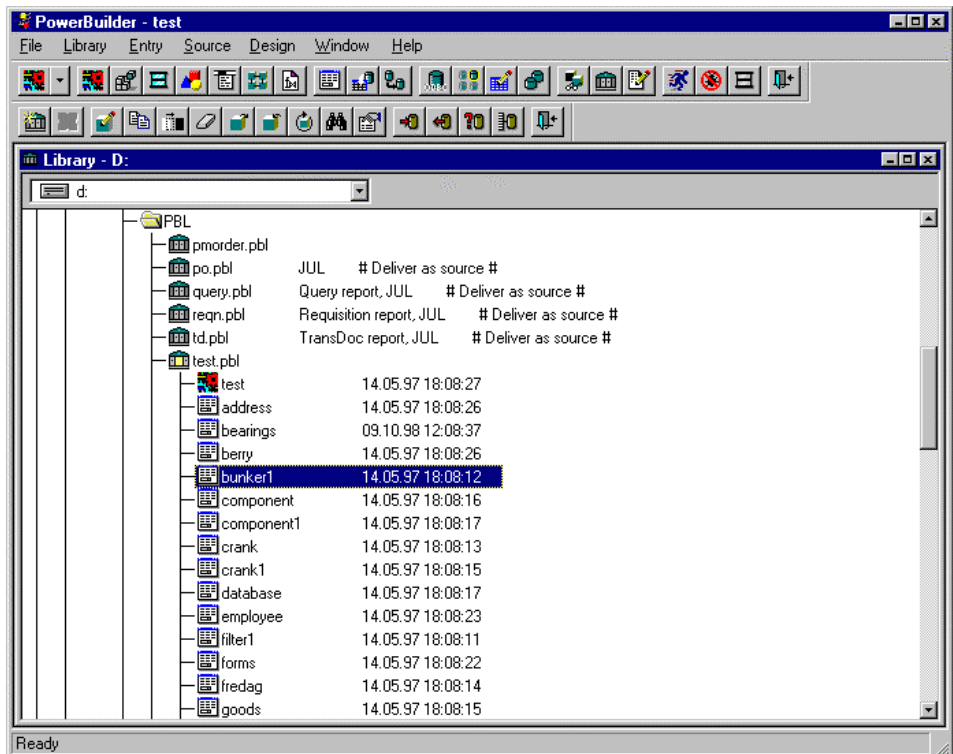
At this point in the process, there are some differences between PowerBuilder and InfoMaker. There are two main aspects:

- Reports and layouts are stored in files of the type .Pbl. When working in InfoMaker, you select an Environment, which is the .Pbl file that you want to work with. In PowerBuilder, you select an Application and the application may access reports stored in different .Pbl files
- In PowerBuilder, you can get an overview of the various .Pbl files for the application in a Library window. This resembles the Explorer program in Windows 95. This option is not available in InfoMaker.

In PowerBuilder, you can press the Library button to get a graphical representation of the .Pbl files in the application:



The Application icon looks like this:

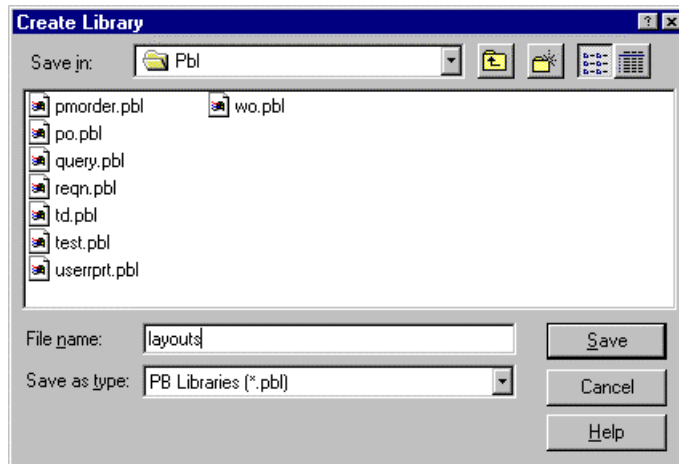


If you are working in InfoMaker, start by clicking the Environment button:



You will see a list of reports in the currently selected report library. If you need to open a different library, select **Open** from the **File** menu to do so.

If you want to create a new library in PowerBuilder, select **Create** from the **Library** menu and select the name and location for the new library.



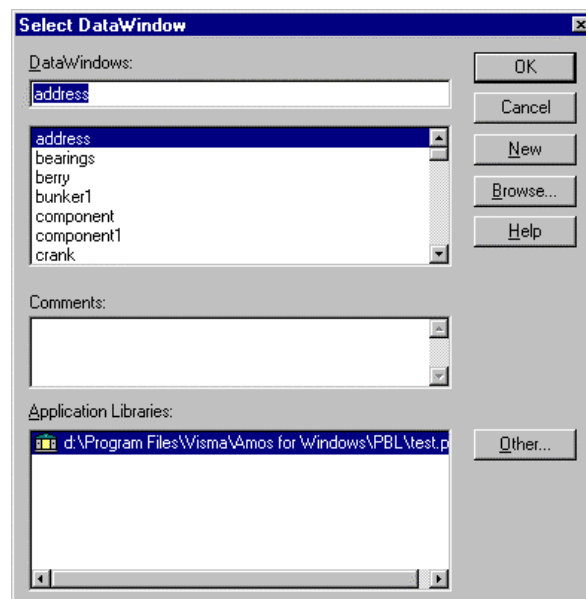
A.2 Designing layouts

Below is a description of the necessary steps involved in the process of creating a layout to be used in a Full Description field

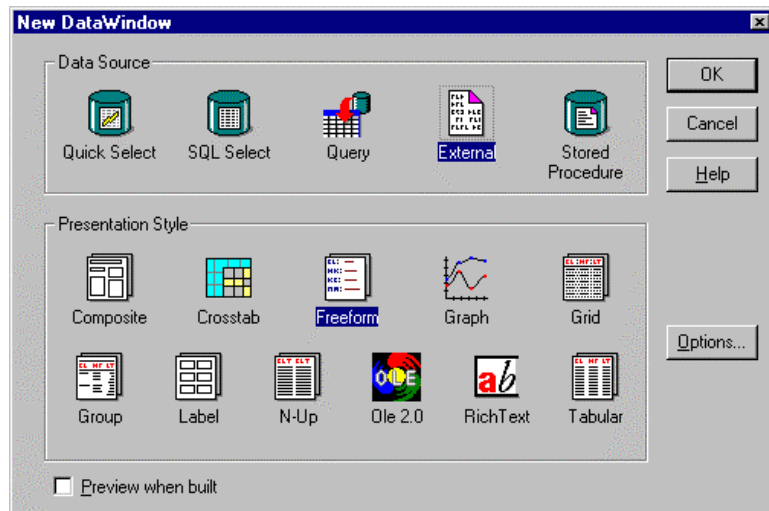
1. Start PowerBuilder and double-click the Library icon for the library in which the layout is to be stored.



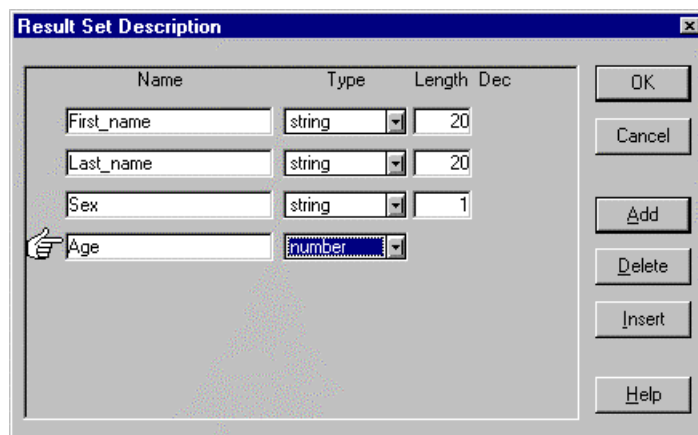
2. Click the DataWindow button to open the Select DataWindow dialog box, and click New to create a new data window.



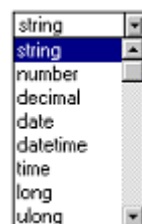
- In the New DataWindow dialog box, select External in the Data Source area of the dialog box and Freeform from the Presentation Style area.



- Click OK to enter the dialog box called Result Set Description.
- Specify the Name, the Type and the Length for the first element in the layout to be created, and click Add to add a line for a new element.



- Continue to add the elements in the layout.
The Type drop-down list contains the various possible choices for the elements that may be defined:

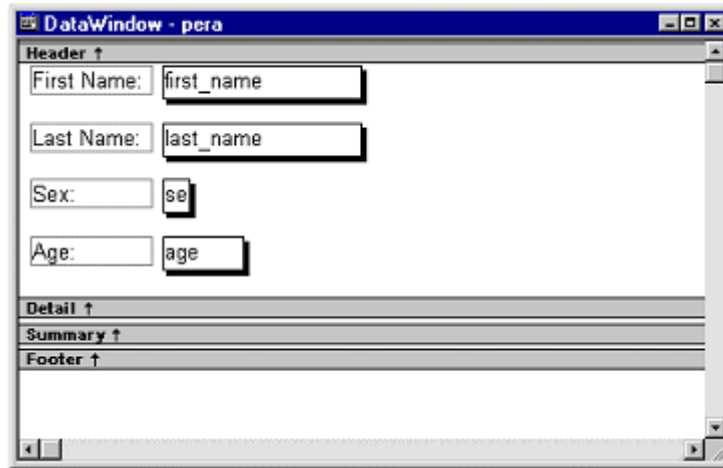


- When you have added the elements to be used in the layout, click OK display the data window.

It is possible to add new elements to the layout later, so it is not absolutely necessary to add all the layout elements at this point.

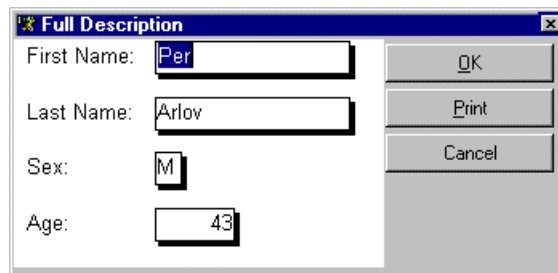
- Click Save to name the layout and save it in the currently open library file Then use the available design tools to format and design the layout, and remember to save the layout at regular intervals during the process.

A description of some of the design functions available is included in section A.4.



9. Use AMOS M&P in order to connect the created layout to a Template definition, as described in section 3.1.12.1 of this reference manual.
10. Test the layout that has been created by entering or editing an item in the register to which the layout has been connected.

For example, a Full Description field may look like this:



A.3 Making and tailoring reports

Once AMOS M&P has been set up in the organisation and has been in use for a while, its database will contain large amounts of useful data. A number of pre-defined reports have been created in order to present data from the database.

It is also possible to tailor new reports to extract and display data from the AMOS M&P database. Once a new report has been created, it may be added to the report hierarchy, from which it may be used the same way as the pre-defined reports. The process of adding a user defined report to the report hierarchy is described in Appendix A.5.

A.3.1 Creating a new report

Here is a description of how to create a new report:

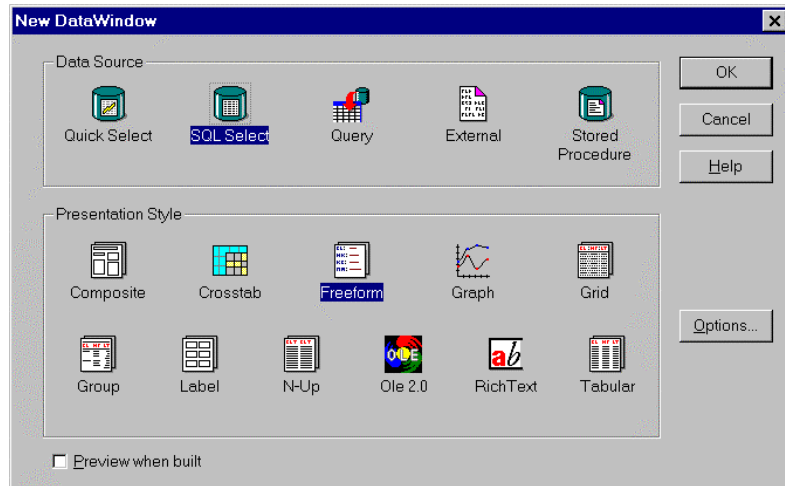
1. Select the .Pbl file in which the report is to be stored, and click the Data window button in PowerBuilder or the Form button in InfoMaker.



The Select Data Window dialog box will be displayed.

2. Click New to create a new report.

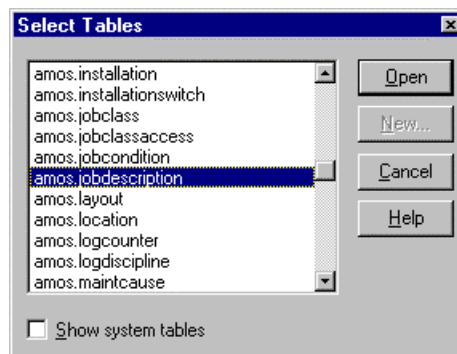
You enter the New DataWindow dialog box to set up the new report:



The New Form dialog box in InfoMaker contains somewhat fewer options but the ones you need for your reports are available.

3. Select SQL Select as Data Source and Freeform as the Presentation Style/Form Style.
4. Click OK.

The Select Tables dialog box is displayed.

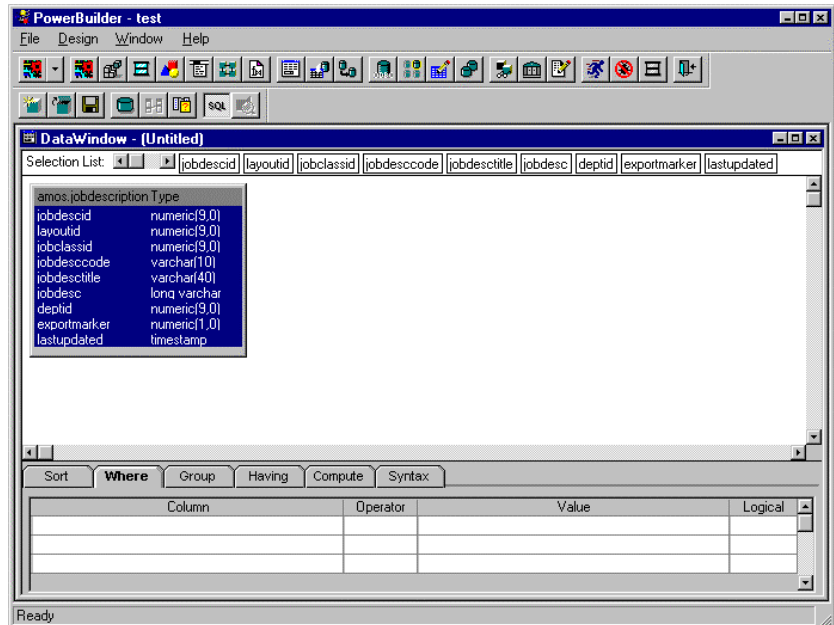


5. From the list of tables, select the one you want to use, and click Open.

It is possible to select multiple tables and define necessary join relationships between them in order to create complex reports. It is beyond the scope of this manual to describe such complex reports.

6. Select each column in the small table window in the middle.

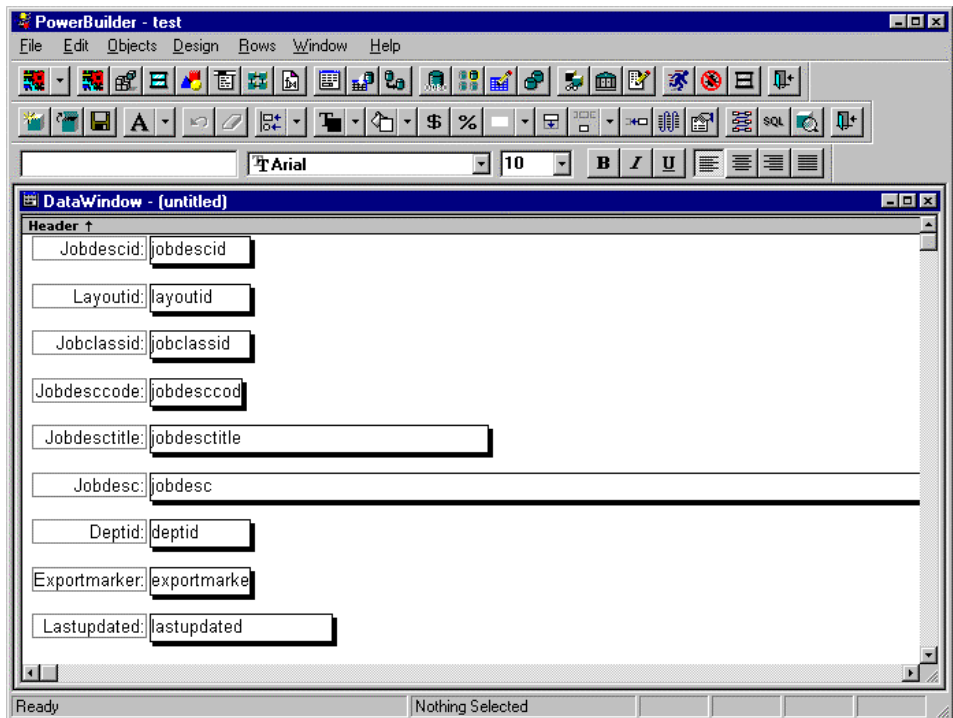
As you do, you notice that the column names appear near the top of the window, below the title bar, as shown in the picture below.



- Click the SQL button, which by now should be pressed, and will actually come back “out” when you click it.



Finally, it is time to edit the actual report. The screen now looks something like this:



Note: When you make a new report, AMOS M&P and PowerBuilder might be working on the same library. Unfortunately, this can cause conflicts and you will not be notified about them before you try to save your changes. Save the report at this point, before too much work has been put in it. See the next section. Then start designing the report.

A.3.2 Saving the report

It is a good idea to save the report early in the process, and then repeat saving it at regular intervals.

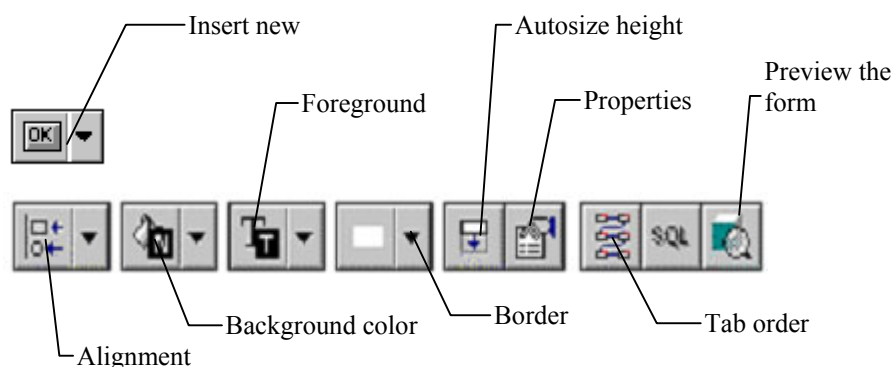
To save the report use the following procedure:

1. Select **Save** from the **File** menu or click the corresponding toolbar button.
The Save DataWindow/Save Form dialog box will be displayed.
2. Type the desired name of the report.
We recommend that the report be given a name that consists of a report prefix plus the name of the table upon which the report is based.
3. Click OK and the report will be stored in the currently active report library.

A.4 The window to design the report or layout

The illustration in the previous section shows the PowerBuilder window that is used to create and design the report. All the columns in the selected database table are automatically placed in the report. There are two elements for each table: A data field and a text field. The latter contains the Column Name.

In the window, there is a toolbar that contains the tools used in the design work. The most important buttons are named in the illustration below:



Use standard Windows techniques to design the report. For example, an object may be dragged to a different position and dropped there. The buttons in the toolbar shown above can be used to select alignment, colour and other object properties.

A.4.1 Moving and aligning fields

To move an object, click it and drag it to the new location. To select multiple objects, draw a selection box that partly covers the objects you wish to select, and drag them as a group. To select multiple objects that cannot be selected with this method, press CTRL and click each object to include.

It is easy to align fields. Select the fields you wish to align, and open the list of alignment options from the toolbar.

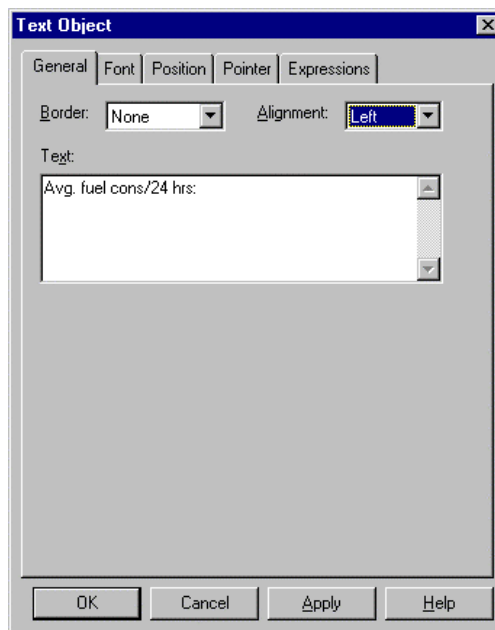


It is fairly simple to interpret the function of each individual icon and which effect it will have on the selected objects. If in doubt, let the mouse pointer rest on a button for a short while. A tool tip will appear, informing you about the function of that icon.

A.4.2 Setting field properties

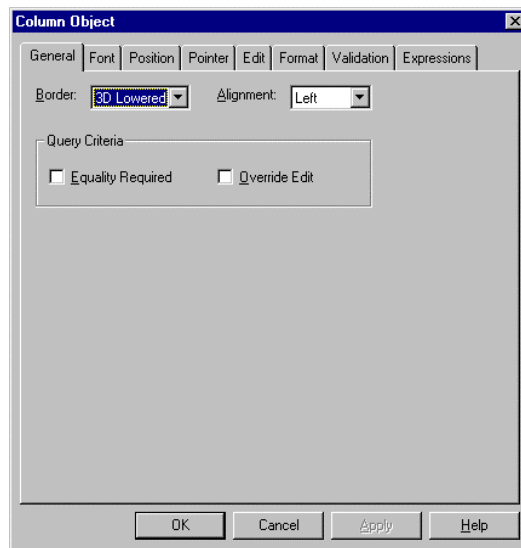
The properties can be set for each individual field in the report. To open the properties window, select the object to work with and click the Properties button, or simply double-click the object.

The properties window for a Text Object looks like this:



Use the various tab cards to enter or edit properties for the selected object. In the example above, the Text field on the General tab card is used to change the actual text of the field. The Font tab card is used to set font, size and other textual properties, etc.

The properties window for Column Objects looks like this.



It is beyond the scope of this manual to describe all the possibilities offered to you by InfoMaker/PowerBuilder: Refer to the relevant documentation or online help for more information. However, here are some tips about function available on the different tab cards:

- **Edit** makes it possible to make different presentation styles, such as drop down lists, check boxes and radio-buttons. Edit masks force the user to type data in a special format (for example a telephone number or a date, described in the next section).
- **Validation** is useful to test the legality of the data the users type in: For example, it is possible can make certain that a number always is positive.
- **Expression** is the most complex: It makes it possible to change the colour of the text depending on what is typed. For example, negative numbers can be displayed in red. Certain fields may be made invisible.

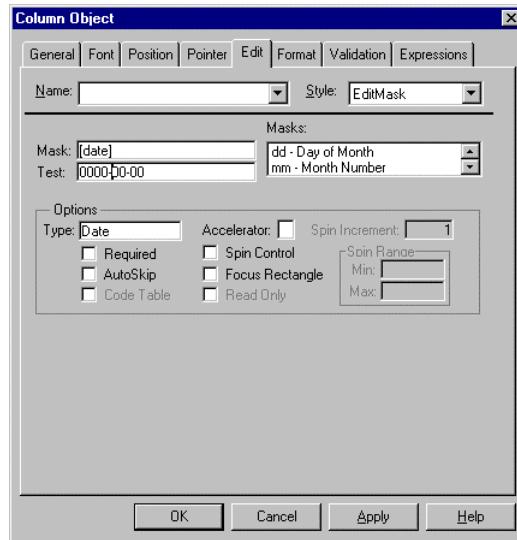
If the main concern is with the look of a report, it is probably sufficient to manipulate items on the General and Font tab cards. The Position tab card may be used to specify the exact position of an object. Other properties require a deeper knowledge of PowerBuilder, InfoMaker and database applications, and such topics fall beyond the scope of this reference manual.

A.4.3 Setting date format masks

Whatever format you use in the database for dates, they will always be stored in an internal format. By default, PowerBuilder will show the date according to the system default, so it is not necessary to bother about date formats. If the user is to be presented with a mask only permitting to type legal dates, follow these steps:

1. In design mode, select the actual date field and choose the **Properties** from the **Edit** menu.
A screen shot of the column-object property tab is found in the Appendix A.4.2.
2. Select the Edit tab, and set Style to EditMask.
3. In the Mask field, type **[date]**. Do not forget to type the brackets. By typing **[date]** instead of a string like dd/mm/yyyy, it is certain that your reports behave coherently with the system set-up.

In the example below, the system date is set to year-month-date (yyyy-mm-dd), that is why the Test: box contains 0000-00-00. For your system, it could be 00/00/0000.

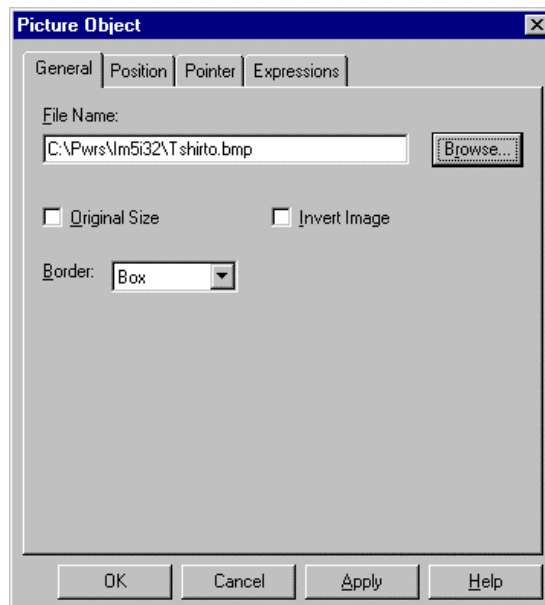


A.4.4 Inserting new objects

It is also possible to add other objects to the report in order to make it look good and be easy to use. Open the drop-down list from the tool for inserting new objects to see which object types may be inserted.

For example, to insert a new static text field, click the Static text button (with the capital A). The pointer turns into a cross hair, and the text field may be drawn at the location in the report where it should be placed. Later, the new object may be manipulated in the ways described above.

To insert a picture, for example a company logo, click the Picture button and draw the location for the picture. A dialog box to specify the file name of the picture is opened.



Click Browse to find the picture file, locate the correct folder, select the file to use and click OK twice to return to the report.

Note: In order for such a report to work properly at the site, make sure that the picture file is available on the PC where the report is to be used, and that it is located in the specified folder.

A.4.5 Previewing the report

To look at the report itself, click the Preview button in the toolbar. Note that if there are no data records containing data in the previewed report, the report appears to be empty when the preview mode is entered. However, the Insert Row toolbar button may be clicked to see what the report looks like.

A.4.6 Setting the tab order

When all the fields have been placed as desired, specify the tab order of the report. When the report is actually used, this information is used by AMOS M&P to determine into which field the cursor should move when the user presses TAB in a given field. Press the Tab order button in the toolbar, and PowerBuilder shows the current tab order of the report.

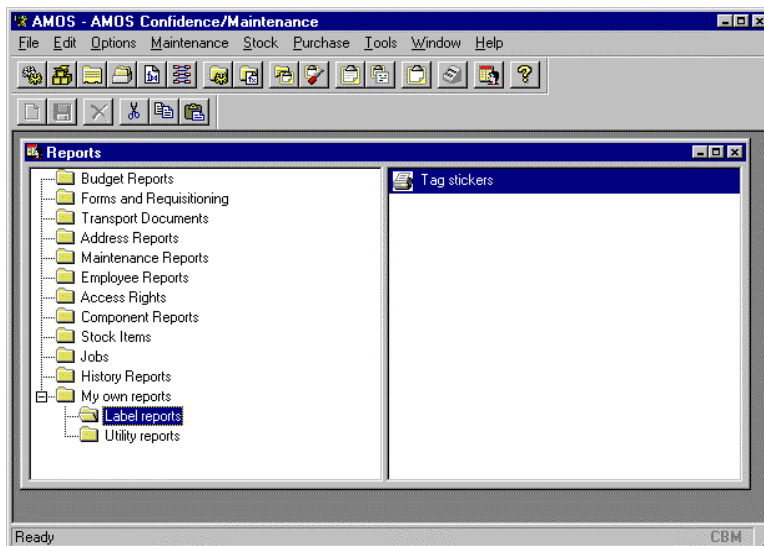
A small, red number appears in the upper right corner of each field. To change a number, simply click it and enter the desired value. If the tab order is edited, it is necessary to keep track of the numbers. The same number must not be used for two or more fields. All values must be higher than 0. If a field has the value 0, it will be protected from editing. Save the new tabbing order before exiting PowerBuilder.

A.5 Adding user defined reports

AMOS M&P contains a set of standard reports, and it is also possible to include user-defined reports. A Report Browser is used to select the report to be run.

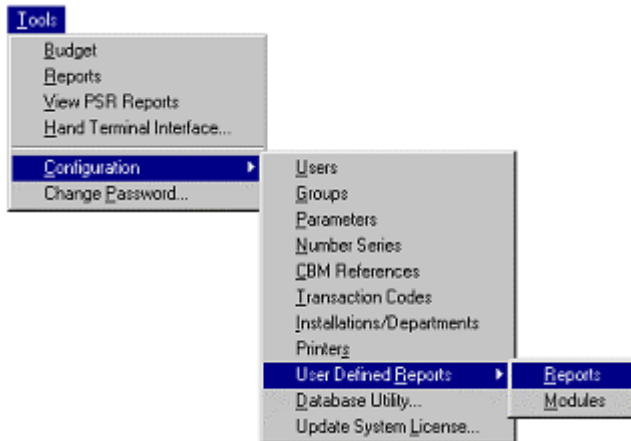
A.5.1 The Report Browser

To access the report browser, select the command **Tools/Reports** and select the desired report folder in the hierarchy on the left. Then double-click the icon for the desired report. The report hierarchy may look like this:

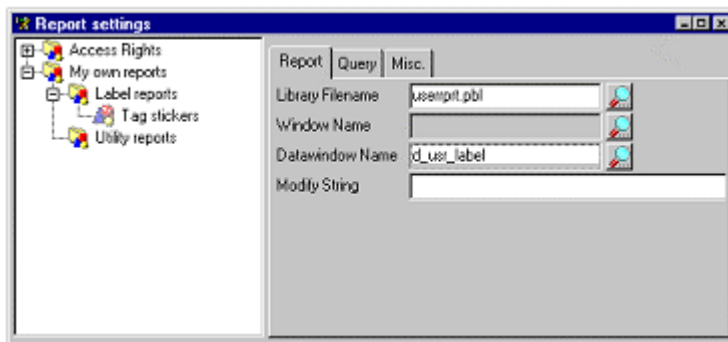


In the example above, the item “My own reports” has been added to the hierarchy. The command contains the two sub-commands Label reports and Utility reports, and the former contains the actual report called Tag stickers. The section below explains how this is done.

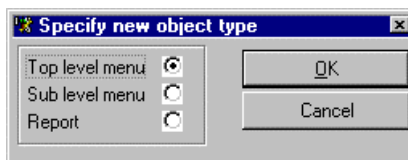
First, specify where in the report browser the reports are to be placed with the command **Tools/Configuration/User Defined Reports/Reports**.



The screen for user-defined reports opens. It contains a tree structure that is similar to the hierarchy functions found, for example, elsewhere in AMOS M&P and in Windows Explorer. Click on the plus and minus sign to open or collapse levels, or double-click the icons in the tree structure. The Options menu contains the corresponding menu commands.



Click the New button on the left-hand side of the secondary toolbar to insert a new record. The dialog box that opens is used to choose the type of object to create:



Select whether to create a Top-level menu, a Sub-level menu or a Report, and click OK. If a menu item is selected, a new folder will appear in the tree structure where the cursor was located. To change the name, click in the name field and type the name to use.

When a Report is inserted in a menu or a sub-level menu, a report icon appears in the tree structure. A report is named in the same way as a menu item, by clicking in the name and typing in the desired name. The tab cards to the right in the window may be used to specify more information about the report.

- Click on the search button to the right of the Library Filename in order to locate the folder where the report definition is stored. A library file with the file extension .Pbl or .Pbd may be used. If a library file stored in the Report directory (see section 7.7.4.4) is selected, only the file name is used in the field. If the file is stored elsewhere, the full path name of the library file is used.
- If a library file of the type .Pbd is used, the functions in AMOS M&P will not be able to list the contents of the file. This means the fields Window Name and Datawindow Name must be filled in manually without using the search buttons.
- The Window Name field may be used to name the window to display the report. The field is optional.

- The Datawindow Name field is for the name of the data window of the report, and must be filled in. The search button may be clicked to see a list of available windows in the selected library. Select one in order to get access to the last field on the tab card.
- It is possible to set up AMOS M&P to make modifications on a report when it is run. To do this, use the Modify String field to specify editing and display masks. For example, it is possible to specify that the report should use the number mask defined in the system. This is done on the Auto-Numbering tab described in section 7.7.4.2.
- These are the mask names and the corresponding modify strings that may be used:

Component Number Mask	#CompNoFormat#
Form Number Mask	#FormNoFormat#
Function Number Mask	#FuncNoFormat#
Stock Item Number Mask	#PartNoFormat#
Transport Number Mask	#TransDocNoFormat#
Work Order Number Mask	#WONoFormat#

Please note that the Modify String text is case sensitive.

When a mask is specified, enter the name of the field in the data window where the modification should be applied. The same applies to the property of the field that should be changed. For example, a data window called d_test may contain a column field called formno. This shows the form number associated to a Purchase Order. This makes it logical to display the number with the mask defined in the system. Enter the following value in the Modify String field:

- formno.format=#FormNoFormat#

This will tell AMOS M&P that the field property of the formno field is the mask defined as the Form Number Mask.

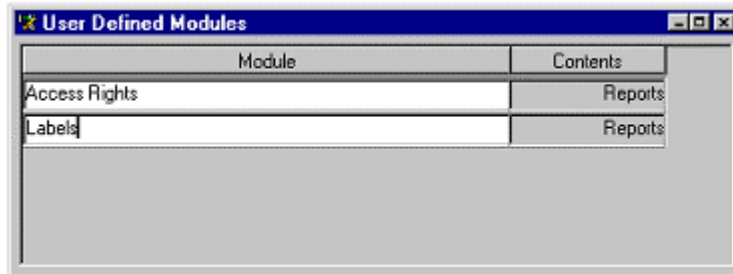
- It is also common to define an edit mask for query data windows. Such a mask is used when the user enters numbers in a field. The property is called editmask.mask. If you have a number field and want it to use the Form Number Mask, you use the following field value:
 - formno.editmask.mask=#<Xxxx/No>#

It is possible to define multiple text strings in the Modify String field by separating them with spaces.

- The Query tab card is used to specify an optional filter window. The tab card contains the same fields as the Report tab card.
- The Misc. tab card contains the two optional fields User Defined Fields and User Defined Table. The field Printer Task may be used to specify a printer task to be executed for the report.

A.5.2 Defining a new Module

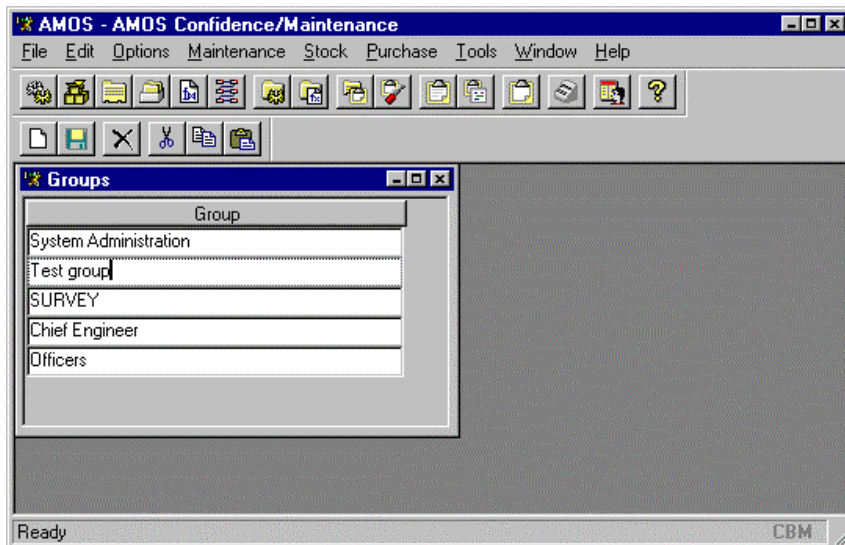
The next step involves defining a module for access control purposes. Give the command **Tools/Configuration/User defined reports/Modules** and click New to create a new one.



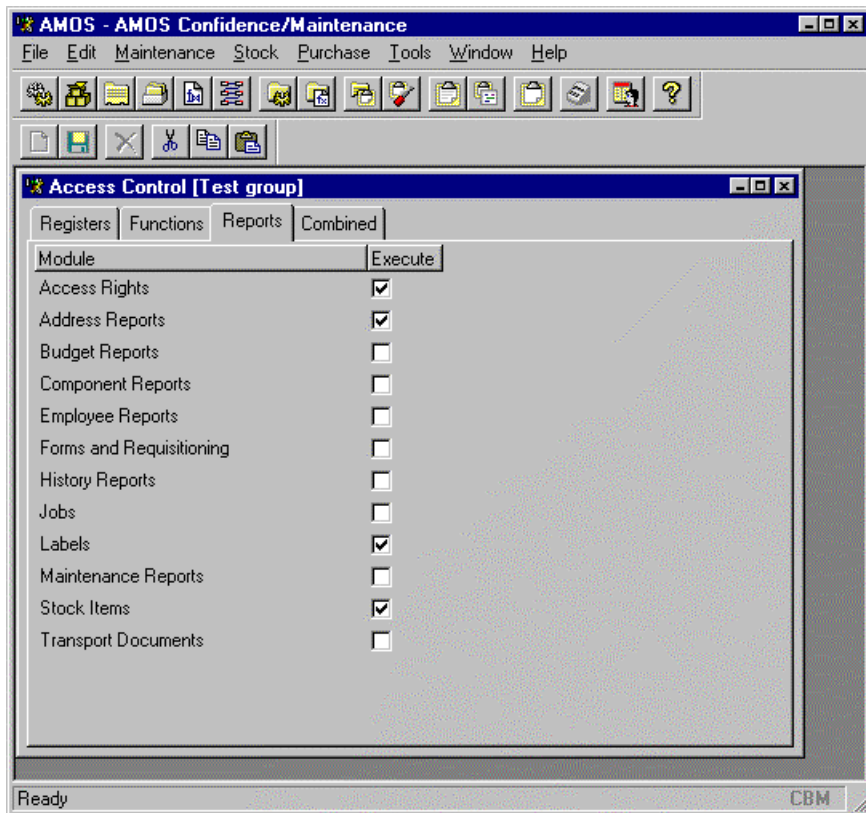
Enter the report name in the Module column and click the Save icon. Make sure the module is selected, and give the command **Options/Module Contents**. Click New to add a new line in the window, place the cursor in the Name field and press Enter. From the Select list, select the report to use and click OK. Remember to save the information, and close the User Defined Modules window.

A.5.3 Grant Access to a Report

Then give the menu command **Tools/Configuration/Groups**, and select the user group to which access to the report is to be granted.



Now, select **Access Control** from the **Options** menu to enter a screen to specify access for the chosen group:



A.5.4 Testing a New Report

After saving, the selected group now has the necessary access. To test this, give the command **Tools/Reports**, click My own reports and Label reports, and double-click the icon for Tag stickers to enter the report preview window. It is possible click Zoom to change the view and Print to print the report.

B Condition Based Maintenance

Condition-based Maintenance (CBM) provides a means of integrating various equipment measurements and monitoring systems with the maintenance features of AMOS M&P. Any or all periodically planned jobs can be activated prior to their normal due date, as dictated by the deterioration of the equipment. In this way, planned and condition-based work can be completely integrated.

In addition, the CBM module also offers an automated mechanism for updating counters in the system (like running hours). These can be discreet values (like temperature or pressure), or accumulated ones (e.g. running hours, take-offs, etc.).

Finally, AMOS M&P supports a CBM dialog from several sources at the same time, allowing the system to simultaneously connect the various data capture systems installed at the site.

Note: It is important to remember that the CBM is not an alarm system. CBM-active values should indicate non-critical states as compared with alarm levels; therefore, the monitoring system must make a distinction between these two degrees of severity. The principle behind the CBM module is to stop the trend before the alarm level is reached. Since the CBM module is designed to provide a signal prior to the alarm level, maintenance periods can then be stretched as far as possible without endangering the equipment.

B.1 Overview

The CBM solution is based on the transfer of special information files between the data capture system(s) and AMOS M&P. These files are called *CBM day-files*, as they are named according to the date when they are written.

These day-files are written by monitoring and other data capture systems to a directory shared with AMOS M&P and contain the id's of measurement points or values which have either reached a pre-defined *CBM-active* threshold, show an unwanted trend or simply have updated counter information.

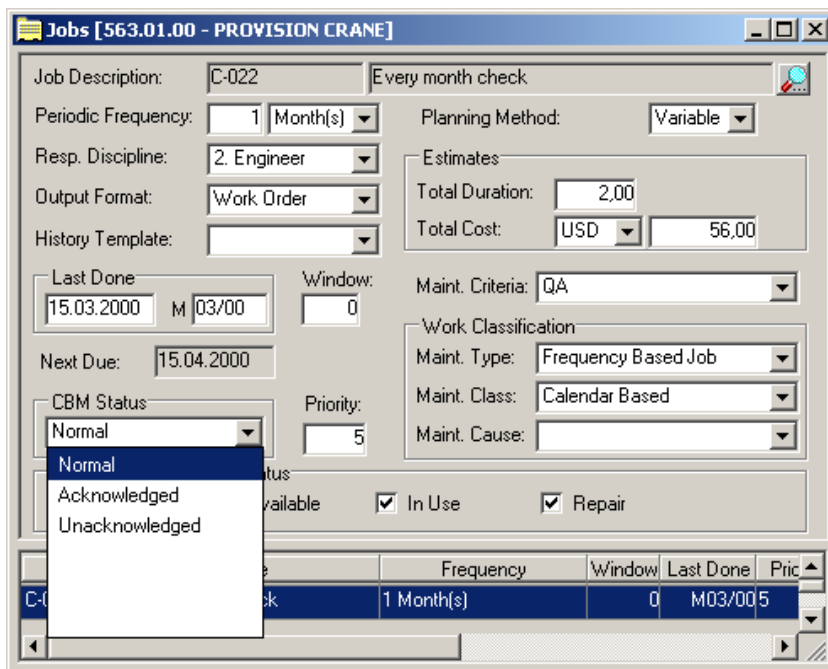
The shared CBM directory must be on a file server which is accessible to the various systems, and where AMOS M&P has been instructed to search for day-files at pre-defined intervals. As day-files are found, they are processed and deleted if the operation went without error. Otherwise, they are renamed to prevent the system from attempting to process them again and the user is alerted.

During day-file processing, each line in the day-file is read by AMOS M&P and matched to one or more components in the system. At this point maintenance work is flagged as *CBM-active* and/or counters are updated with new values.

B.2 CBM Jobs

All periodic jobs registered in AMOS M&P have an attribute called CBM Status. This value reflects the current state of the job with regards to condition-based maintenance signals received. In other words, any scheduled job in the system can be activated by an external monitoring system via the CBM module interface, causing it to appear in a checklist or Work Order printout regardless of its normal schedule.

In order to view the CBM Status of a job, simply bring up the job (using the **Options/Job** selection from the Component window).



The three CBM status values have the following meanings:

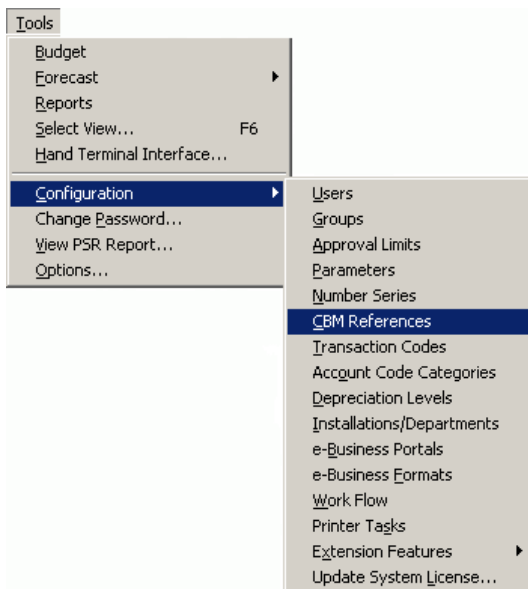
Normal	Indicates that this job is not <i>CBM-active</i> , and that it is included in the maintenance plan according to its schedule.
Acknowledged	This is the value set for <i>CBM-active</i> jobs that have been included in a maintenance printout (e.g. checklist or Work Order).
Unacknowledged	When a job is first triggered by the CBM module due to information in a day-file, then its CBM status is set to <i>Unacknowledged</i> . The job will keep this status until it is included out in a maintenance printout, or manually reset.

AMOS M&P signals the user of the general CBM status through the CBM state indicator at the bottom right-hand corner of the screen.

This indicator will be red if there is a single job with the CBM status of *Unacknowledged*. If there are no unacknowledged jobs, but some have the status *Acknowledged* (e.g. *CBM-active*, but included in a maintenance printout), then the indicator will be yellow. Otherwise, green shows that there are no CBM jobs which need immediate attention, or which are pending.

B.3 CBM References

Each line of information in the day-file contains a code identifying the measurement point from which this data was read. In order to match the measurement point code with the correct components, jobs and/or counters in AMOS M&P, the system needs some sort of “look-up” or reference table. Give the menu command **Tools /Configuration/CBM References** to use this function.



The register contains a list over all known CBM measurement points along with the components to which they are attached.

ID	CBM Code	Inst/Dept	Component	Type	Job Code	Counter
1	ME-1	001/01	601.01.00 MAIN ENGINE 1	Counter		Hours

Each entry in the reference table has the following fields:

ID	Two-character code identifying which data capture system this entry applies to, as described at the start of this chapter.
CBM Code	Here comes the id of the measurement point in the data capture system.
Inst/Dept	Contains the installation and department number of the component that this measurement point is linked to.
Component	This is for the number of the component whose counter is to be updated, or whose CBM work is to be activated (or both).
Type	This field tells whether this entry is of the counter update or job activation type.
Job Code	If this reference is for activating CBM work, then this field will contain the code of the job attached to the specified component that is to be triggered.
Counter	For counter update references, this field will indicate which counter to update.

This table is a *global* one, applying for the entire company, and specifying references to components in any or all installations and departments.

Note: There may be several references for the same CBM code, allowing a single signal from the data capture or monitoring system to activate any number of jobs, or update any number of counters for different (or the same) components. Similarly, the same component may appear in several references, again facilitating both job activation and counter updates for the same piece of equipment.

B.4 Day-files

As mentioned above, day-files are used to transfer CBM information between data capture and equipment monitoring systems and AMOS M&P. As was also mentioned above, day-files are named after the date when written:

19970428.%NC

The filename is a date in the form YYYYMMDD with an extension made up of a percent sign (%) followed by a two-character code called the *CBM id*. This CBM id tells the system which data capture system created the day-file.

CBM id's are issued by Xantic and are unique for every supplier of data capture and equipment monitoring systems. Some examples are NC for NorControl and SP for SPM Instrument International. Since day-files created by systems from different suppliers have dissimilar extensions, then these files can co-exist in the same CBM directory without conflicting with each other.

Each day-file contains the CBM information accumulated for a single day from a single monitoring system. When this system needs to register additional information for the same date, it must append this data to the same day-file. CBM day-files are in ASCII text format, each line ending with a carriage return character. These lines may be in one of two formats:

<code>	Containing only the measurement point code, this type of day-file entry indicates that one or more jobs need to be flagged as <i>CBM active</i> .
<value>,<code>	Indicates a change to one or more counters tied to the specified <code>.

Where the <value> field shown above is a numeric value followed by a Counter code (like "H" for "Hours").

Therefore, the following examples are all valid CBM day-file entries:

- MAIN_EXH_VALVE
- TEMP_POINT_3
- +10.5,DIESEL_GEN_1
- =53.25,MAIN_COMPRESSOR
- =1054H,PACKING_MACH_1

The first two lines above would be signals from the monitoring system that related CBM jobs needed to be carried out. The third line specifies that 10.5 be added to the counter registered for the measurement code DIESEL_GEN_1. The next line sets the counter for MAIN_COMPRESSOR to 53.25 (using the default counter which is *Hours*). Finally, the last line also sets the total value of the *Hours* counter, this time updating the PACKING_MACH_1 counter to 1,054 hours.

i Index

A

Address
 move referances 37
Address Reports 155
Archive 26

B

Budget
 copy specification 150
 details 148
 Models 149
 Overview 148
 prognosis 150
 reports 156
Budget codes
 copy 151

C

CBM
 referances 190
 status definitions 222
Change template 14, 23, 169
Client/Server 3
Component
 Change Status 28
 classes 19, 43, 58
 transfer In 28
 Transfer out 28
 types 16, 20, 43, 48, 69, 73, 176
Component transfer 186
Component types
 advantages 17
 using 15

Condition based maintenance
 criteria 79
Condition Based Maintenance 78, 79,
 107, 221
Configuration 160
Convert address status 38
Copy 14, 18
 component 28
 component type 46
 work order 85
Counter Readings 112
Counter types 57
Counters 107
 log 109
 overview 108
 tab card 22, 45
 update 107
Creating a new report 209
Criteria 60

D

Database 204
 create a profile 205
Date format masks 214
Delivery locations 63
Department access 164
Departments 191
Design
 window 212
Details
 screen 20, 23, 30, 34, 46, 48, 82
Dialog
 box 19
Directories 169
Directory
 CBM 169
 graphics 169
 hand terminal 169
 installation 170
 report 170
 transfer 170
Disciplines 56
 refresh 89, 94
 required 84, 88
Disciplines tab, the 92
Down time 103

Drop down list 22, 30

E

Employee reports 155

Employees 38

Export 70

Export / Import 70

Export log 75

External viewers 53

F

Field properties 213

File menu, the 18

Filed 85, 95

Filter 10

- addresses 36

- budget 147

- CBM references 190

- component types 43

- components 19

- create forms 116

- definition 10

- employees 38

- functions 40

- job descriptions 33

- number series 188

- rounds 41

- stock analysis 152

- stock control 119

- stock items 29

- stock transactions 120

- stock types 47

- transfer documents 121

- users 160

- work orders 79

- work planning 86

- work planning, enhanced 89

- workload analysis 153

Fit to window 49

Forms

- inserting new objects 215

Full description

- definition 23

- window 23

Function criticality 59

Function hierarchy 65

- options menu, the 66

Functions 65

G

General tab

- component types 44

- components 20

- text object 213

- tools/options 201

- vendor 24

Generate work orders 106

Global access 162

H

Hand terminal

- directory 169

- file extension 173

- interface 157

- interface application 158

- reader 175

Hand terminal reader

- read file 157, 159

History

- component 66

- maintenance 109

- maintenance log 110

- reporting work 25

History tab

- reporting work 102

Hotspots 50

- button 51

- types 50

I

Image

- component 34, 45

- connecting 52

- hotspots 50

- job description 84

- menu 49

- open in new window 175

- references 53

- sources 53

- tab card 22

- viewing 49

- window 49
- work order 83
- workspace 51
- Images
 - Browsing between windows 51
 - connecting to stock,component or job 52
- Import 74
- Import log 76
- Infomaker
 - a brief introduction 204
- Installations 191
- Internal viewer 49
- Issue
 - multiple work orders 85
 - work order 85

J

- Job description 33, 83
 - image 84
- Jobs
 - CBM 222
 - included in rounds 85, 88
 - tab card 20, 44

L

- Layouts
 - designing 207
- Location
 - default 172
- Locations
 - hierarchy 68

M

- Maintenance
 - causes 61
 - CBM referances 190
 - classes 61
 - condition based 221
 - criteria 60
 - log 26, 35, 67, 85
 - menu 78
 - parameters 177
 - registers 60
 - types 61

- Maker
 - address 24, 31, 46, 48
- Multiple work orders
 - selecting 87

N

- Number series 188
 - window 189

O

- Open Register 18
- Options menu
 - job description 33
 - jobs 21
 - maintenance log 67, 111
 - report work 104
 - rounds 42
 - stock items 30
 - stock types 47
 - work orders 82
 - work planning 87
- Oracle 74

P

- Parameters 165
 - interface 166
- Parts
 - tab card 21, 45
- Password 160
 - change 198
- PBL
 - creating a file 206
 - selection 55
- Planned
 - work orders 85
- PowerBuilder 155, 204
 - a brief introduction 204
- Preferred vendor 31, 46, 48
- Print labels 32
- Product types 57
- Products
 - tab card 37

Q

- QA grades 59

R

Register

- component types 16
- stock types 16

Report

- saving 211

Report work 27, 67, 85, 99

- tab cards 100
- window 100

Reports 154, 155

- component 155
- forms and requisitions 155
- history 155
- jobs 156
- maintenance 156
- stock items 155
- transport documents 156

Requested disciplines 80

Requested parts 80

Required parts 84, 88

Resources used 112

- tab card 101

Rotation log 41, 68

Rounds 41

- full reporting 103
- simple reporting 102
- summary 103
- window 42

S

Setting field properties 213

Status

- cancelled 95
- completed 95
- controlled 95
- filed 95
- issued 95
- pending 95
- planned 95
- postponed 95
- requested 95

Stock

- in/out 31, 118

Stock items 29

- window 29

Stock types

advantages 17

hierarchy window 69

register 47

using 15

window 47

Stock used 111

tab card 101

Switch department 70

Switch installation 70

T

Templates 55

default 169

import definition 55

Timeline

work orders 86, 90

Transaction codes 187, 190

U

Units 58

User defined

fields 188

modules 197

reports 209

V

Vendor 24

W

Window

components 20

job description 33

Work order

Change status 88, 93

Work Order

Auto-File 177

Work orders 78

details screen 110

generate 106

printing 81

status 95

tagging 80

window 79

Work Orders Filter

Basic tab 79

Work planning 86
 details 91
Workspace
 of an image 50, 51

Z

Zoom
 sub-menu 49
 toolbar button 155