Test and Calibration Workbench 11

Test and Calibration: Workbench 11

Workbench Compliance and Standards Management Solutions

Workbench Professional and Quality Workbench are the flagship products of Ideagen Software Limited, who have been leading the way in software solutions aimed at Document, Compliance and Standards management since 1993.

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1 Introducing Workbench

Workbench is a collection of software modules designed to assist in the implementation and smooth operation of day to day management control. The overall system consists of the following:-

- Audits
- Customer Care
- Document Control
- Nonconformities
- ReportQuest **
- Test and Calibration
- Training

** ReportQuest is different in concept to the other modules; it is a 'plug-in' rather than a 'stand-alone' module. It integrates with any or all other modules and utilises the information stored in them.

Each module (apart from ReportQuest) has been carefully designed to be a powerful individual management aid and for many organisations it may be entirely appropriate to run any on a 'stand-alone' basis. There is, however, considerable integration between the different modules and this could offer many benefits to organisations running a comprehensive quality or other compliance management system. Any company that wishes to adopt a 'phased' implementation can add modules to the system as and when required.

The **System Manager** and **Personnel** modules are installed as an integral part of all other modules. The System Manager module handles most of the system's security and it is envisaged that access to this module will be restricted to the system administrator and/or personnel with the highest security clearance. The Personnel module maintains a centralised database of personnel that can be accessed by every installed module; again it is suggested that access to this module be restricted.

Each module has its own electronic reference manual and on-screen Help system that is context-sensitive; these guides should not, however, be seen as a substitute for professional advice and training. Workbench is designed to be extremely easy to use in its daily operation but the preliminary setting up of a module can be relatively complex. We urge taking appropriate advice in these circumstances wherever possible, particularly where some doubt exists as to the best method of achieving specific business aims with the software.

The Help files assume that you have either Workbench Professional or Quality Workbench with all optional areas licensed. Any areas not licensed, will not be available.

1.1 Overview of the Test and Calibration module

Test and Calibration is a key module of Workbench, a system designed to assist organisations in the smooth implementation and running of Standards Management Systems. For manufacturing and service operations particularly, the maintenance of items of equipment is central to the overall Quality System.

The Test and Calibration module is used for tracking the use and testing of equipment within an organisation, ensuring the equipment meets required standards of accuracy and reliability. The module is designed to make the administration of an equipment register as easy as possible. It allows you to associate tests with equipment items very quickly and to schedule forthcoming test requirements; it also allows you to record test results. In addition to this, the module generates all the records and information required to manage these tasks in a highly efficient manner.

There are five main areas of importance in the module:-

1. Equipment register
2. Test templates and schedules
3. The test process and entering of results
4. Tracing where equipment has been used
5. Reports on equipment and tests.

The following list gives examples of some of the issues and areas of management concern that are addressed by the Test and Calibration module:-

- expected current location of the equipment
- how long the equipment has been in situ at any given location
- all records regarding testing of that equipment
- scheduling of tests
- recording test results
- allotment of pass certificates
- current equipment status
- remedial actions to be taken when equipment fails a test
- withdrawing and re-instating items of equipment
- links to job records.

Additionally the Test and Calibration module offers a great deal of flexibility in the setting up of user defined analysis categories, a key feature throughout Workbench. This allows you, for instance, to attach as many analysis categories as you wish to the equipment register. Examples might include colour codes, enhanced status codes and asset register categories.

The system also allows the recording of ‘Unscheduled Events’ - unpredictable events such as breakdowns and failures that are not part of the normal test cycle but which affect the status and availability of items of equipment.

Finally, Test and Calibration shares the security features common to all Workbench modules. These give the system administrator an extensive degree of control over which system users are permitted to perform certain operations and also over which information they are given access to.

1.1.1 Access and security

The module can be configured so that only individuals or groups with appropriate access can view test records. Access is controlled by the administrator via the System Manager module where unauthorized personnel can be prevented from viewing specific records if this is contrary to company policy. If you are the system administrator for Test and Calibration it is advised that you familiarise yourself with the security and access features of Workbench as a whole; these are tremendously powerful and are explained fully in **Access and administration** in the System Manager module.

1.1.2 Test & Calibration and messaging

The Test and Calibration module fully supports the mail and messaging mechanisms found throughout Workbench. These allow the processing of messages through external e-mail systems, originally set up per user by the system administrator - and an extremely powerful internal messaging system using the Tasks and Notifications buttons on the main toolbar. Figures alongside these buttons are constantly up-dated and a yellow light bulb indicates when new messages arrive. These messages are automatically generated by the program and may be for either action or information only purposes.

As all messaging mechanisms are highly configurable, a close fit to your preferred way of working and communicating can always be achieved. See Test & Calibration messages.

1.2 Updates for Workbench 11

Workbench 11 includes several updates that have been introduced at the request of current users and are intended to enhance the product and give greater ease of working. None of the existing functionality of Workbench has been removed. Access settings for each area of configuration have been retained; visibility and access to changes will still depend on access rights.

NB. Wherever reference is made (in Help topics) to the 'system administrator' this includes any user who also has access to the relevant options in the System Manager module. However, because the configuration options are so many, we strongly advise that access to the System Manager is very strictly controlled.

Each relevant Help topic covers any changes in detail, but the main new system-wide updates and those affecting the Test and Calibration module specifically are listed here.

System wide - general updates

The following general system updates have been added to Workbench 11.

- A new workflow setting *Automatically delete completed tasks* is switched off by default; if checked, then all completed tasks will automatically be deleted.
- A warning appears if the Caps Lock is on whilst typing a Password. This applies to the Workbench Login dialog and all other dialogs where a password is required.
- User Defined Analysis labels have been increased to accept up to 255 characters.

Test and Calibration module

The following feature has been added to the Test and Calibration module for Workbench 11. For full details, please see the relevant Help topic.

- You may now search 'within Type' (F7) when searching through equipment.

1.3 Test and Calibration menus

After logging in to Workbench, a window will appear, allowing access to all licensed modules. A right-click menu enables you to show or hide the Calendar button, Menus, Modules, Notifications button, Speedbar (Speed buttons) Tasks button and/or Web Page independently. NB. The option to display a Web Page as a back-drop to Workbench is controlled by workflow settings.

Click on the Test and Calibration module button to view its main window. The main menu has eight headings - three of which (File, Module and Help) are common to all modules. The other five menus and their options run the module and are described briefly below.

Record

The Record menu allows you to record all details of equipment and jobs. The Withdrawn Equipment option is also part of this menu, where all withdrawn equipment items are listed and can, optionally, be re-instated.

Test

The Test menu covers all aspects of testing, from the creation of test templates through to the recording of test details and results. Here you may also schedule or re-schedule tests with the aid of the Workbench calendar that integrates with all other installed modules in the system.

This menu also allows you to assign specific tests to equipment and/or named equipment to specific tests.

Finally in this menu you may view the history of previous tests.

Traceability

This menu allows the recording of unscheduled events that may affect the status of equipment.

The Equipment Usage option supports forward booking of items to jobs / personnel and the viewing / amending of equipment usage. Providing that a finish date is entered, double-booking can be prevented. The Equipment Usage option can also record full details of specified equipment so that all items are traceable.

Settings

Here you may set up information that is likely to be needed when making detailed records of equipment etc. - equipment types, manufacturers, locations, sites, products, suppliers and user-definable analysis for equipment, manufacturers and suppliers.

The dialog for suppliers also allows you to record details of specific contacts.

Reports

The Reports menu makes provision for different types of report to be viewed, saved to file and/or printed. The flexibility of the reporting system allows for virtually any information on tests and equipment to be searched for, sorted and presented in many different ways.

Reports supply only information that meets certain precise, selected criteria - freeing managers to proceed with more constructive work.

1.4 System menus

Several menu options in Test & Calibration are common in other Workbench modules:-

- The File, Module and Help menus are always present on the main menu structure, irrespective of the particular modules you have purchased and installed.
- The Product option (**Settings** menu) is used by the Customer Care, Nonconformities, Test & Calibration modules.
- The Suppliers option (**Settings** menu) is used by the Audits, Customer Care, Nonconformities, Test & Calibration, and Training modules.

- The User Defined Analysis (UDA) option is also found in the **Settings** menu of individual modules and can be set up for different areas ie. Personnel UDA in the Personnel module, Supplier and/or Course UDA in the Training module. The only modules that do not use User Defined Analysis are ReportQuest and the System Manager module.
- User Defined Reports can be accessed from all modules apart from Personnel and System Manager.

1.5 Personnel module


This module is installed as an integral part of all other modules. It is dedicated to maintaining a centralised database of all personnel, accessible to every other installed module. It is responsible for setting up and maintaining the history of all personnel including Workbench users.

It is highly recommended that you establish your personnel records before beginning to use other modules in the system as the records are referred to and used throughout Workbench.

1.6 System Manager module


This module is installed as an integral part of all other modules. It is a vital area of Workbench as it handles much of the system's security by granting or revoking access to menu items for individual users or groups of users (Access Templates). After granting access at menu level you may have a further option to determine what rights the user has in a given dialog (eg. read-only, ability to add new records etc.). Overall this gives you extremely tight control over which users can access which part(s) of the system. The dialog used to control access is designed to make this administration task as easy as possible.

An additional benefit of such tight control is the sheer convenience it offers. Presenting users with precisely the menu options they need to do their work is much clearer and less confusing for them than being faced with a whole list of irrelevant (for them) menu options.

The **Workbench Configuration Centre** is also housed within the System Manager module and presents all Workbench globally configurable options in a single dialog. This means that the administrator can locate the required function quickly and will soon become aware of all elements that are configurable.

The Configuration menu also controls the maintenance of user passwords, the organisation of departments and personnel groups, the prioritising of tasks and the menu option allowing the reassigning of responsibilities, especially useful when a user is leaving the company. Locked out users are also restored here.

NB. Wherever reference is made (in Help topics) to the 'system administrator' this includes any user who also has access to the relevant options in the System Manager module.

2 Common features and routines

Workbench uses certain common routines and techniques throughout the system; a familiarity with these will greatly assist your initial explorations of the software.

2.1 Altering the width or order of columns

On certain dialogs in Workbench, mainly **Select** dialogs, you may grab the lines separating columns **in order to make the columns wider or narrower...**

1 Using the mouse, point the arrow at the chosen line within the title bar.

2 When the head of the arrow changes to a small double vertical line with black arrows pointing outwards, click on the line.

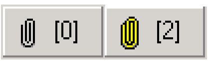
3 Drag the thickened line to its new position and the chosen column width.

It is also possible in some dialogs to arrange the columns in a different order...

1 Click and hold down on the heading of the column you wish to move. A black vertical line will appear at the left hand side of the column.

2 Drag to the right or left until the column jumps to its new position.

2.2 Attachments



The Attachments button appears throughout Workbench and will usually be situated at the top right of a dialog and shows a paper-clip symbol with a number in brackets alongside. When no attached files exist, the 'paper-clip' will be black and the figure will be (0). When attachments exist, the paper-clip is yellow and the figure alongside shows how many attachments there are.

Files may be attached to a number of records in Workbench; these files are stored within the normal Workbench database and are accessible via the record to which they belong. Examples of the usage of attachments might be scanned evidence for NCRs, customer letters in the Customer Care module, external certificates in the Test and Calibration module, feedback forms and certificates in the Training module etc.

Access to attachments relates entirely to the access rights to the parent record. **New**, **View**, **Edit** and **Delete** buttons will be visible and active dependent upon the logged-in user, the status of the parent record and whether attachments already exist. You may only add, edit or delete attachments if you have edit rights to the parent record. Users with **View** rights may view attached files but cannot edit or delete them.

Regardless of the module and routine you are accessing the Attachments Form from, the dialog works the same. The header changes according to the appropriate module / routine - **Complaint Attachment Form**, **Change Request Attachment Form**, **Review Attachment Form** etc.

2.2.1 Adding a new attachment

Files may be attached to many records in Workbench; these files are stored within the normal Workbench database and are accessible via the record to which they belong.

1 Click on the Attachments button in any relevant dialog. The **Attachment Form** will open. The top part of the dialog gives details of the complaint / change request / review etc. that the Attachment relates to.

2 The middle part of the form, Attachments, shows a list of files (if any) already attached to the Complaint / CRQ / Nonconformity etc. To add an Attachment, click on the **New** button. An Attachment Number will be generated by the system and will appear in the bottom part of the form, Attachment Details. The **File Name**, **Attachment Title** and **Extension** fields will then all become mandatory.

Every area where Attachments apply will start from '1' and further Attachments will be numbered sequentially. If an Attachment is deleted there will be a gap in the run of numbers, ie. each Attachment keeps its original number for its 'life-time'.

(The Attachment Number and Attachment Title in the middle part of the form will be entered automatically once the bottom part of the form has been completed and the Attachment saved.)

3 You may also import a Workbench document (subject to required access rights) as an Attachment. These may then be used and edited to highlight changes (when raising a change request) or reasons for rejection (when rejecting a document).

Click on the **Workbench Documents** button to invoke the **Select Document as Attachment** dialog from where you may select the relevant document to attach.

All the fields on the bottom part of the **Attachment Form** will be filled in automatically if a Workbench Document is selected as an Attachment, but all may be amended apart from the *Attachment Number* and the *File Name*. Copy in red will also be added, stating that the Attachment is a copy of a Workbench Document and giving the date and time when the copy was taken. Be aware that the Attachment is a COPY and any subsequent amendments to the actual document still stored within Workbench will not be updated to the Attachment.

IT IS VERY IMPORTANT TO NOTE THAT BY ATTACHING WORKBENCH DOCUMENTS IN THIS WAY, USERS WHO MAY NOT NORMALLY HAVE ACCESS RIGHTS TO THE ATTACHED DOCUMENT MAY NOW BE ABLE TO SEE IT. ‘Normal’ document access rights will be surrendered once a Workbench document becomes an Attachment - the access rights governing whatever it is attached to, take over control of who may view the copy.

4 If you are not attaching a Workbench document, go to the bottom part of the form, Attachment Details, and enter a mandatory **File Name** and **Extension**. (If you use the **...** button to browse and select the file name, the extension will be entered automatically.) Editing and Viewing Options (if applicable - see Document Control **| Master templates**) will also be entered automatically once an extension has been entered.

5 Give the attachment a mandatory **Attachment Title**; this can mimic the File Name or be something much simpler. The Attachment will be referred to by this title throughout its life.

6 Add any **Notes** and **Save**. The Attachment Number and Attachment Title will be copied up to the middle part of the dialog.

To cancel the new attachment before saving, use the **Cancel New** button.

When a new attachment is added, an appropriate entry will be made to the document's History log.

2.2.2 Modifying an existing attachment

You may only edit or delete attachments if you have edit rights to the parent record.

1 Click on the Attachments button in any relevant dialog. The **Attachment Form** will open. The top part of the dialog gives details of the complaint / change request / nonconformity etc. that the Attachment relates to.

2 The middle part of the form, Attachments, lists existing attached files. Highlight the required Attachment to edit (if more than one) and click on the **Edit** button. Remember to save the changes to the actual Word document after you have edited it and then save again for the Attachments change in Workbench.

  If the list of attachments is long, use the Search button to search either Attachment Number (F3) or Attachment Title (F4).

3 To edit Attachment Details, simply highlight the required Attachment (in the middle part of the form) to bring up its details in the bottom part of the form.

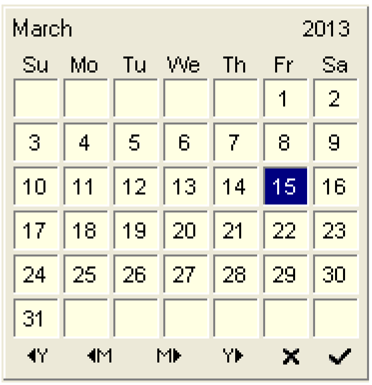
4 Modify the selected attachment / attachment details as required and / or add further notes. Any edits to the actual attached document will not be saved until the **Attachment Form** itself is saved.

The **View** button allows you to view the attached document. The **Delete** button (if present) allows users with edit rights to the parent record to remove an attached document.

Modifying or removing an attachment will write an appropriate entry to the History log of the relevant document.

2.3 Date button

This button gives you a visual aid to plan dates; it displays the current date when first opened.



To alter the date, click on the relevant new day in the main window.

Browse previous months(M) or years(Y) with the bottom left arrows.

Browse future months(M) or years(Y) with the bottom right arrows.

Click the tick to enter the selected date in the box next to the Date button (in the correct format). Click the cross to close without entering a date.

Alternatively you can simply select the correct month and year and then double-click on the required day. The calendar will close and the chosen date will be entered automatically in the box next to the Date button.

2.4 Double-clicking & right-clicking

When first getting to know the module it is worth checking to see if double-clicking will save time in any of the operations. Most Workbench programs support double-clicking in a variety of ways; it is left to the user to decide which of these may benefit their way of working.

Right-clicking on the window of a record sometimes displays a pop-up menu offering an option to print, or direct access to other parts of the module or to other modules.

2.5 Four figure year dates

The Workbench system year dates are always shown as four figure numbers, ie. 2013, not just 13. It will be easier if your version of Windows is configured in the same way; if you are not sure how to do this, please refer to your Windows manual.

NB. If your Windows settings are set to two digit year dates, the system will force you to use four digits when a date is entered.

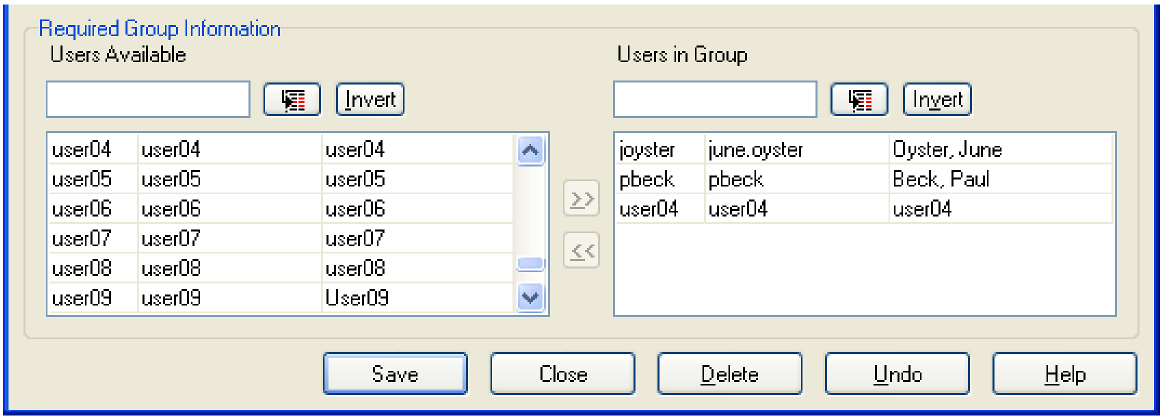
2.6 Grey type and closed fields

When type appears grey rather than black, it signifies that it cannot be edited. Similarly, fields that appear solid or ‘closed’ cannot be entered.

Both these cases occur when their use would not be appropriate, eg. grey type because a record cannot be altered; closed boxes when the field is not applicable in certain circumstances.

2.7 Groups / Lists

Workbench uses a common routine to add / remove names to / from lists. This routine is used for setting up groups, templates, departments, suppliers etc.



1. In the left hand list (eg. Users Available), highlight the name(s) you wish to add to the selected right hand list (eg. Users in Group). More than one consecutive name can be highlighted at the same time using the keyboard **Shift** key; highlight more than one name not listed consecutively, using the **Ctrl** key.
2. Click on the central add **>>** button and the name(s) will transfer to the right hand side.

Alternatively, simply double-click on the required name(s) to move them from one side to the other.

Where the list of names is long, you may use the Search button to search for known personnel. If you wish to select the majority of names from a list, use the Invert button.

To remove selected names, highlight in the right hand list and click on the central remove **<<** button (or double-click).

2.8 Invert button

There are many situations in Workbench where you may wish to select one or more records from a list of available ones. For instance, you may be asked to select all users in a specific group from a list of all available users. Selecting such a group is simply a matter of highlighting the names you require.

The Invert button reverses the selection you have made, ie. it 'de-selects' the highlighted records and highlights the rest. This is very useful when you wish to include the majority of a list - you can select a few records on an exclusion basis and then quickly invert the list.

Where appropriate, you may select a consecutive group of names by depressing the keyboard **Shift** key whilst making the selection; names which do not fall consecutively can be selected at the same time using the keyboard **Ctrl** button.

2.9 Mandatory fields

Certain fields throughout Workbench are essential or mandatory; ie. until they are completed you will not be able to save the record you are working on.

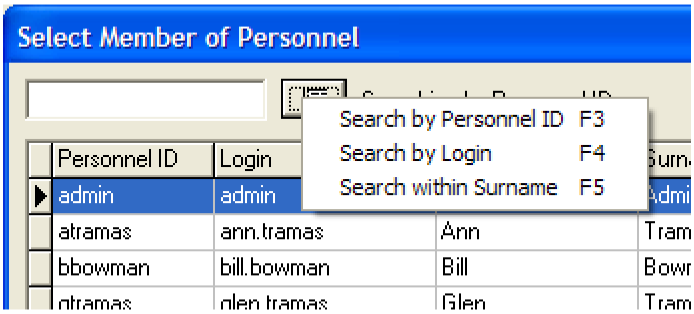
Such fields are shown in blue and are underlined, giving an immediate visual indication that they are compulsory eg. **Login to which database?** and **Login** in the **Log on to Workbench** dialog.

Until all mandatory fields are completed, **Save** or **OK** buttons will be disabled.

2.10 Search button

The search button is probably the single most widely-used feature throughout Workbench. Its purpose is to allow you to browse easily through records and locate the one you are seeking by whatever methods are appropriate to that information.

These search options will differ depending on the kind of information you are searching through. For example, searching for personnel offers searches by Personnel ID, Login or within Surname; simply use whichever is most convenient.



Right clicking on a Search button displays the search options available in a 'pop up' menu. Each option on the menu has a keyboard shortcut; this may be quicker to use as you become more familiar with the system and its search options.

Simply left clicking a Search button defaults to the search method last employed.

To locate a specific record or set of records you must first key in the characters you wish to search on in the selection box to the left of the Search button. Then use the search method required from the menu (or the function key equivalent). For instance, typing in 'Hard' on a personnel search and choosing F5 (Search within Surname) will return all users with the characters 'Hard' within their surname, eg Hardy, Harding etc. If no matching records are found, a message is displayed.

Most search types look for exact matches to their respective fields. However some, as the example above, look for the string anywhere within the field. A good example of this is the search for a document 'within Title'. Here the system looks for whatever you have keyed in anywhere within the document's title. Thus a search for 'procedure' will find any document with that word in its title. This can be extremely useful when you are unsure of the exact wording of a document title.

Unlike the other search types, a search within a field is not case sensitive. The above example therefore will pick up documents with 'Procedure' or 'PROCEDURE' embedded somewhere within the title.

NB. To ensure that the whole list of records appear in any search dialog, the search field alongside the search button must be cleared before starting a new search. To do this, highlight any text there, delete it and then click on the Search button or activate one of the keyboard shortcut keys.

2.11 Search routines

The method for locating personnel records is a good example of the generic search routines found throughout Workbench. The Select User, Select Complaint Type, Select Tester dialogs etc. use the same routine. On certain Select dialogs there is an additional check box:-

- in **Select Member of Personnel** the extra check box determines whether the records returned by the search should include Leavers or be limited to just current employees. The system defaults to include only current employees, but Workbench does not delete leaving personnel; they are marked as having left and their records retained for historical purposes. The records are therefore available for this type of search should you need them (see example below).
- in **Select Departments**, **Select Document Categories** and **Select Document Types** (when accessed from the Settings menu) there is a check box at the top of the dialog that allows records that have been hidden to be shown. By default, hidden records will not be shown in search grids. To reveal all records, including those that have been hidden, click on the check box marked Show *hidden Department* (or Category etc.)

Searching for a record in any Select dialog (eg. Select Member of Personnel)

1 From the **Record** menu in the **Personnel** module, choose **Personnel**. The **Select Member of Personnel** dialog will appear.

2 Anyone who has a leaving date entered in their records will not, by default, be included in the search. If you wish to include Leavers, please check the box - *Include personnel who have left.*

3 Select the required member of personnel (or Complaint Type, Category etc. if appropriate) using one of the following three methods:-

- use the Search button to search for a known member of staff (or Complaint Type, Personnel ID etc.)
- highlight the required name (scroll if necessary) and click **OK**
- double-click on the required name.

The chosen record will then open.

There is normally a **New** button on **Select** dialogs, allowing you to set up new records. This is not possible for personnel records; these must be set up in the Personnel module.)

2.12 Sorting and ordering

The symbols shown on the column headers below show which column is controlling the sort - and whether this is in ascending or descending order. The column that has an arrow and one short horizontal line alongside (as opposed to two short horizontal lines) is the one controlling the sort and the arrow indicates whether the order is ascending or descending. In the example shown below, the grid would be sorted by the Search Code, alphabetically from A to Z.

ID	Search Code	Name	Course	Type	Start Date
5	allnewstaf	All new staff	First steps		12/05/2008
1	firstaidat	First Aid at Work	First Aid at Work	F_AID	24/07/2008

To move the sort to a different column, click on the required column header and click again to toggle between ascending and descending order. In the example shown below, the grid would be sorted by the Name column, alphabetically Z to A.

ID	Search Code	Name	Course	Type	Start Date
8	qualitywor	Quality Workbench	Quality Workbench	Management	15/05/2008
7	producttes	Product Tester	Product Tester	IT	07/04/2008

2.13 Screen display & keyboard shortcuts

- You may configure the main Workbench screen by moving different menu bars - to do this grab the vertical line on the left of any individual menu bar and drag the bar to its new position. Moves are saved locally so that an individual user's set-up will be retained.
- On every menu title in each module there is an underlined letter; this is the keyboard letter to press in order to invoke that menu. For example, the letter **F** in all **File** menus is underlined. Press the keyboard **F** (or **f** - it is not case sensitive) to open the **File** menu. In the Document Control module, the **D** is underlined in the **Documents** menu signifying that this is the key to press to open the **Documents** menu.

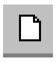
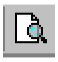
  You may then use the keyboard 'up' and 'down' arrows to select the menu option you require and then hit the **Enter** key to open the dialog, In this way you may move around the modules, menus and menu options without having to use the mouse.
- A right-click menu on the screen enables you to show or hide the Calendar button, Menus,

Modules, Notifications button, Speedbar (Speed buttons), Tasks button and/or Web Page independently. **NB**. There are several workflow settings covering the usage and display of web pages, see Personal workflow settings.

2.14 Speed buttons

The most commonly used menu items in each module have speed buttons. These are shown on the main toolbar for each module and alongside the relevant menu item. If a user does not have access to a menu item that has a speed button, they will not be able to see the speed button.

Speed buttons used in the Test and Calibration module are shown below.

 Record equipment  Enter test results  Test result history

3 Setting up basic information

The **Settings** menu controls records of Equipment Types, Manufacturers, Locations, Sites, Products, Suppliers and User Defined Analysis. In most instances this type of information cannot be added 'on the fly' so must be set up in the Settings menu first; however, Manufacturers and Suppliers may be added ‘on the fly’.

The Products and Suppliers records are used by other modules such as Nonconformities, Customer Care and Training; entries/edits made in these other modules, if installed, will also take effect in the Test and Calibration module. If a user does not have access to either of these menu options in other modules, they will not be able to gain access here.

User defined analysis is a particularly powerful mechanism that can be found throughout Workbench. In this module it literally allows you to attach as many analysis categories as you wish to the Equipment Register, Manufacturers and/or Suppliers.

3.1 Equipment types

This dialog allows the maintenance of user-specified equipment types. Its function is simply to allow you to group equipment items into meaningful categories for management and reporting purposes. If your analysis and categorisation needs are more sophisticated, you should also make use of the very powerful User defined analysis option.

Adding a new equipment type

1 From the **Settings** menu, choose **Equipment Types**.

2 In the **Select Equipment Type** search grid, click the **New** button. The **Create Equipment Type** window will appear.

3 Enter a Description (mandatory field) of the new equipment type. The Search Code will automatically echo the first ten characters of the Description, in lower case and without spaces. You may change this manually if you wish, by deleting and typing in the new code.

4 Click **Save**.

5 Enter as many further equipment types as required and then **Close**.

The system returns to the **Select Equipment Type** search grid where the types you have just set up will now be listed in alphabetic order.

Editing or deleting an equipment type

1 From the **Settings** menu, choose **Equipment Types**.

2 From the **Select Equipment Type** search grid, select the required entry (see Search routines).

3 Make edit changes as required.

4 Click **Save**.

Use the **Undo** button to undo any edits in the current session. To delete an existing Equipment Type simply hit the **Delete** button.

NB. You cannot delete any record which is in use elsewhere, for example, in the **Equipment Register**; any attempt to do this will result in the message ‘Cannot delete this record as it is referenced elsewhere’. Technically, this is known as referential integrity and ensures that data cannot be ‘orphaned’. This applies to all the files maintained under the **Settings** menu option.

3.2 Manufacturers

The equipment register allows you to record manufacturer details for equipment items as well as supplier information (the two will sometimes be the same).

The **Create / Edit Manufacturer** dialogs are divided into two pages, **Manufacturer** and **Analysis**. The dialog enables you to add new manufacturers, edit current manufacturer details or browse/search for existing records of manufacturers. The categories and values available for selection on the **Analysis** page will reflect those set up in **Settings | User Defined Analysis | Manufacturers**.

From Workbench 2006 SP2 onwards the **Equipment Register** dialog allows you to add details of new manufacturers 'on the fly'. You must, however, use the **Manufacturers** menu option if you wish to edit details of existing manufacturers.

NB. If the manufacturer is also the supplier of a piece of equipment, you will also need to enter them under the **Record | Suppliers** option if you wish to maintain a fully comprehensive record for that equipment item.

Setting up manufacturer records

1 From the **Settings** menu choose **Manufacturers** (or from the **Equipment Register** dialog click on the Search button alongside the **Manufacturer** field).

2 In the **Select Manufacturer** window click on New. The **Create Manufacturer** window will appear.

3 The Manufacturer ID and Name are mandatory fields. The **Search Code** will follow the Name automatically but can be changed.

4 Enter as many or as few other details as are relevant.

5 Enter any **Notes**.

6 Go to the **Analysis** page if you wish to attach any user-defined analysis categories to this manufacturer.

7 **Save**.

NB. All manufacturers’ information may be edited at any time in the future except the Manufacturer ID that cannot be altered once saved.

Editing an existing manufacturer's records

1 From the **Settings** menu, choose **Manufacturers**.

2 In the **Select Manufacturer** search grid, select the record you require using any method (described in Search routines). The **Edit Manufacturer** dialog will appear.

3 Amend any details on either page (apart from the **Manufacturer ID**). Add (further) **Notes** if required.

4 **Save**.

Use the **Undo** button to undo any changes made in the current session. To delete an existing Manufacturers' record simply hit the **Delete** button.

NB. Manufacturers' records cannot be deleted once they have been attached to other records such as the **Equipment Register**.

3.3 Locations

Location records can be used either 'stand alone' or in conjunction with Site records to monitor the movement of equipment. Changes in location are recorded as part of an equipment item's usage history. The normal 'home' location of an item is recorded in the equipment register in the **Base Location** field - see Equipment register - main page.

NB. It is entirely up to you as to how locations and sites are used and what relationship they have, if any, with each other. As far as the system is concerned, there is no relation defined between them, ie. locations are not part of sites or vice versa - they are quite independent.

For your own purposes, however, you may find it useful to think of them in this way; 'Location' could be used for broad geographical areas such as regions or regional offices and 'Sites' for specific points within those, eg. different areas of a factory or service facility.

Adding a new location

1 From the **Settings** menu, choose **Locations**.

2 In the **Select Location** search grid, click the **New** button. The **Create Location** window will appear.

3 Enter a Description (mandatory field) of the new location. The **Search Code** will automatically echo the first ten characters of the Description, in lower case and without spaces. You may change this manually if you wish, by deleting and typing in the new code.

4 Click **Save**.

5 Enter as many further Locations as required and then **Close**.

The system returns to the Select Location search grid where the locations you have just set up will now be listed in alphabetic order.

Editing or deleting a location

1 From the **Settings** menu, choose **Locations**.

2 From the **Select Location** search grid, select the required location (see Search routines).

3 Make edit changes as required and click **Save**.

Use the **Undo** button to undo any changes made in the current session. To delete an existing Location simply hit the **Delete** button.

NB. You cannot delete any record which is in use elsewhere, for example, in the **Equipment Register**; any attempt to do this will result in the message 'Cannot delete this record as it is referenced elsewhere'. Technically, this is known as referential integrity and ensures that data cannot be 'orphaned'. This applies to all the files maintained under the **Settings** menu option.

3.4 Sites

Please refer to Locations for guidance on how site records can be used in conjunction with the equipment register and its equipment usage histories.

NB. Any equipment item can have a base site defined for it as well as a base location. This is the normal 'home' for the item concerned as opposed to where it might be currently booked out.

Maintenance of site records follows exactly the same pattern as that for **Equipment Types** and **Locations**.

Adding a new site

1 From the **Settings** menu, choose **Sites**.

2 In the **Select Site** search grid, click the **New** button. The **Create Site** window will appear.

3 Enter a Description (mandatory field) of the new site. The **Search Code** will automatically echo the first ten characters of the Description, in lower case and without spaces. You may change this manually if you wish, by deleting and typing in the new code.

4 Click **Save**.

5 Enter as many further Sites as required and then **Close**.

The system returns to the **Select Site** search grid where those you have just set up will now be listed in alphabetic order.

Editing or deleting a site

1 From the **Settings** menu, choose **Site**.

2 From the **Select Site** search grid, select the required site (see Search routines).

3 Make edit changes as required.

4 Click **Save**.

Use the **Undo** button to undo any changes made in the current session. To delete an existing Site simply hit the **Delete** button.

NB. You cannot delete any record which is in use elsewhere, for example, in the **Equipment Register**; any attempt to do this will result in the message ‘Cannot delete this record as it is referenced elsewhere’. Technically, this is known as referential integrity and ensures that data cannot be ‘orphaned’. This applies to all the files maintained under the **Settings** menu option.

3.5 Products and suppliers

Whenever a specific product is involved, for example in a nonconformity, a customer care issue or for test and calibration purposes, it is useful to record the details of the product and those of its supplier, if known. Workbench makes independent provision to record full details on suppliers - including name, address, telephone numbers and information on named contacts.

In normal business practice training courses are sometimes provided by external suppliers; likewise it may be necessary to carry out an audit on external suppliers. The Training and Audits modules therefore use the same Suppliers records dialog (see **Scheduling courses** in the Training module and **Compiling a checklist** in the Audits module).

Details of products and suppliers are recorded in the **Settings** menu. A product code (ID) is allocated when details are first set up and this is searched for using a Search button in dialogs where a product is to be recorded. Products cannot be entered 'on the fly' - they must always be created in the Settings menu first. Suppliers records may be set up 'on the fly' in the Test and Calibration module only.

NB. The same Product and Suppliers dialogs are used by all Workbench modules. If you are denied access to either of these menu options in any module, you will automatically be denied access in all other modules.

3.5.1 Product records

The same product records are used by the Customer Care, Nonconformities and Test & Calibration modules. If you are denied access to this menu option in any module, you will automatically be denied access in all other modules.

Setting up a new product record

1. Choose **Product** from the **Settings** menu to open the **Select Product** dialog.
2. Click on **New**.
3. In the **Create Product** dialog enter a mandatory product **ID** and a **Name** - the **Search Code** will automatically follow the Name but can be changed.
4. If you wish to nominate a product to supersede the named product - eg. if it becomes impossible to obtain supplies or if there is a known defect in the original product, an alternative product can be registered in the **Supersession** field. Use the Search button to select from the full list of products.
5. The *Manufactured* radio button will be selected by default; if appropriate, enter a **Manufacturing Cost**.
6. If the product is *Externally Supplied*, select this radio button instead; the **Manufacturing Cost** field will close but the **Suppliers** page will be activated where you may select suppliers appropriate to the product (see Selecting suppliers).
7. Enter any **Notes**.
8. Complete the **Suppliers** page where relevant.
9. Click **Save** and continue inputting any further products or **Save** and **Close**.

Editing an existing product record

1. Select **Settings** from the main menu.
2. Choose **Product** from its pull-down menu and you will be presented with the **Select Product** window.
3. Select the required record using any method (see Search routines).
4. In the **Edit Product** dialog all fields may be edited, apart from the product **ID**. You may also add notes and amend supplier(s) on the **Suppliers** page if required.
5. **Save**.

3.5.2 Selecting suppliers

Supplier records may be set up in several modules; lists of Suppliers will include suppliers recorded in any other module that contains this menu item. If you are denied access to suppliers in any module, you will automatically be denied access in all other modules.

Selection of suppliers uses a routine common throughout Workbench (see Groups / Lists for help with this if required).

1. Click on the **Suppliers** page (in **Settings | Product** the Suppliers page will only become active after you have completed the mandatory fields and selected the *Externally Supplied* radio button on the **Product** page).
2. Select suppliers by moving them from the left hand side of the window to the right.

3 When you have selected all the appropriate suppliers, **Save** and **Close** or continue to input other products and select suppliers.

If you need to set up new suppliers, close the Select Product window to return to the main menu. Then see Setting up new supplier records.

If selecting suppliers via the **Search** button and the **Select Supplier** dialog, see Search routines for help if required.

3.5.3 Setting up new supplier records

The same supplier records are used by the Audits, Customer Care, Nonconformities, Training and Test & Calibration modules. If you are denied access to this menu option in any module, you will automatically be denied access in all other modules.

Setting up a new supplier record

1 Select **Settings** from the main menu and choose **Suppliers** from its pull-down menu. (**NB**. In the Test and Calibration module only, Suppliers may be set up 'on the fly' from the **Equipment Register** dialog.)

2 In the **Select Supplier** dialog click on **New**.

3 The **Supplier ID** and **Name** are mandatory fields. The **Search Code** will automatically follow the Name but can be changed. The Supplier ID cannot be edited in any way, once saved.

4 Enter as many or as few other details as are relevant for the supplier - on all pages.

5 Enter any **Notes** and **Save**.

All suppliers' information (apart from Supplier ID) may be edited at any time in the future using the Suppliers menu option in the Settings menu only.

Analysis page

User-definable analysis displayed on the **Analysis** page is initially set up in the **Settings** menu (**User Defined Analysis | Suppliers**). Analysis categories displayed here can be attached to the currently selected supplier in the following ways:-

- select (or de-select) check box categories by clicking in them
- select predefined values from the drop-down list in combo boxes
- add values 'on the fly' using additive combo boxes (or select from a predefined value in the drop-down list). Any new value set up here will be added to the drop-down list and available for future selection.
- enter a 'one-off' value using a free text box.
- enter a date or date and time (using the Date button if preferred).
- enter currency and/or numeric fields (up to the specified number of characters).

You can select only one value per field (in drop-down lists or combo boxes); boxes should be left blank if neither the field nor any of its values apply.

When you have completed the page, **Save**. If no UDA is applicable, move on to the next page.

Contacts page

Specific contacts within firms of suppliers can be recorded on the Contacts page.

3.5.4 Recording new contacts

1 Select the **Contacts** page in the **Create Supplier** dialog (after specifying a **Supplier ID** and **Name** on the **Supplier** page); details of contacts already recorded will be listed here.

2 To enter details of a new contact, click on **New**.

3 **Surname** is the only mandatory field. Enter as many or as few other details as you wish.

4 Enter any **Contact Notes** if appropriate.

5 Click on the **Save** button to save the contact and continue adding further new contacts or **Save** and **Close**.

The Contact(s) you have just recorded will now appear in the list on the first **Contacts** page window in the **Create Supplier** dialog.

6 Click on **Save** and close all dialogs.

3.5.5 Editing details of suppliers and/or their contacts

1 Choose **Supplier** from the **Settings** menu; the **Select Supplier** window will appear.

2 Select the appropriate supplier, edit any details on the **Supplier** and/or **Analysis** pages (apart from the **Supplier ID**) and click on **Save**.

3 Click on the **Contacts** page to edit details of contacts.

4 Highlight the appropriate contact and click **Select** (or double-click on the required contact).

5 Edit the contact’s details, click on **Save**.

A contact's records may only be deleted (using the **Delete** button) if they are not used in any supplier records in any installed module.

6 Save in the **Edit Supplier** dialog and then **Close** the **Select Supplier** dialog.

3.6 User definable analysis categories

The ability for you to determine your own analysis categories and their associated values is present throughout Workbench and is a very powerful customisation feature. The User definable analysis element is licensed separately and, if purchased and installed, UDA will always be set up in the **Settings** menu of each individual module. Wherever a module offers more than one type of analysis category, this is offered from a walk-right menu. Different categories must each be set up separately, but this is done in exactly the same way; the various categories then become available for selection in appropriate **Analysis** dialogs.

The same user-defined analysis records are referenced by all installed modules that use UDA; for example, the same Suppliers UDA will be used in Test and Calibration, Training and in NCRs.

The Test and Calibration module enables you to define separate analysis categories for Equipment, Manufacturers and Suppliers.

Analysis can be categorised in eight different ways:-

- the Drop Down List gives a set of predefined values for a given attribute. This list is used whenever you wish to associate a set of predefined values with a category. These might be used to record, for example, the make of an equipment item, chosen from a drop-down list of alternatives when the equipment item is first registered.

- the Check Box offers a straightforward on/off toggle for attributes that either apply or do not apply. An example might be ‘Inform Health & Safety?’. You then simply check or uncheck this box as appropriate when entering records.
- an Additive Combo box lists certain predefined values that may be added to ‘on the fly’. These values are produced as a drop-down list and any value added in this way becomes 'global' and is added to the list for future use.
- the Free Text box. This allows you to add specific text (up to 255 characters - user definable) that may apply to a nonconformity or document on a one-off basis (eg. the name of an external reviewer).
- Date Only. Choose this category if you wish to add an analysis field that will allow you to attach a specific date to the record. The field will automatically incorporate a date button.
- Date and Time. Choose this category if you wish to add analysis fields that will allow you to attach a specific date and time to the record. The field will automatically incorporate a date button.
- Currency. Choose this category to add a currency analysis field (eg. price in sterling, dollars, lire etc.). The field can be sized to allow for up to 20 characters; you may also stipulate the number of digits after the decimal point.
- Numeric. Choose this category to add a numeric analysis field. The field can be sized to allow for up to 20 characters; you may also stipulate the number of digits after the decimal point.

3.6.1 Setting up user defined analysis

User-definable analysis can only be set up in the **Settings** menu; the required analysis categories must then be selected on **Analysis** dialogs whenever appropriate. The process of setting up analysis categories is identical for all modules.

Creating user defined analysis fields and values

1. From the **Settings** menu, choose **User Defined Analysis**.
2. In modules where there is a choice of user defined analysis, choose one from the walk-right menu. The **Analysis Maintenance** dialog will open.
3. To enter a new **Analysis Field** (of any type) click on the **New Field** button (in the left side of the window).
4. Type in a new **Analysis Field** where the cursor is blinking - field labels may contain up to 255 characters.
5. Press the return key to enter another analysis field or continue to define the type and values (if appropriate) for the current field.
6. With the required analysis field highlighted, select the Field Type ‘radio’ button. For all analysis fields except Drop Down List or Additive Combo this completes the input required.
7. To define field values for Drop Down Lists or Additive Combos, click the **New Value** button (on the right hand side of the window).
8. Enter the initial **Field Value** for the selected analysis field.
9. Press the return key to save the new **Field Value** and prepare to enter another. Repeat this process until all the relevant entries have been made in the *Values* field.
10. Highlight another **Analysis Field** in the left hand side of the window to add values to if required; click on **Save** when all fields/values have been entered.

The **Maximum Field Length** for analysis fields defaults to 255 characters; currency and numeric fields default to 20 characters maximum; date/time fields are pre-defined and automatically incorporate a date button; check boxes offer a simple on/off choice. To alter a maximum field length, simply delete the shown number and type in the preferred length. The **Number of Digits after a Decimal** point may also be specified (where appropriate).

You may enter as many different fields and values as you wish and relevant fields may have as many values attributed to them as required. If the number of defined categories fills up the screen, a scroll bar will appear allowing you to scroll down and continue inputting information.

Fields and/or values may only be edited or deleted if they have not been 'attached' to a record. However, a check box near the bottom of the left hand side of the dialog, *Hide Field?*, allows you to 'hide' any highlighted analysis field. As hidden fields can't be seen they can no longer be selected on Analysis pages, but previously stored information may still be used for reporting purposes.

The ▲ Up and ▼ Down buttons are used to navigate the lists of fields and values and to determine their order.

NB. Please avoid using ampersands (&) in this dialog; spell out the word in full where necessary or use a back-slash - eg. Health and Safety or Health\Safety.

3.6.2 Selecting user defined analysis

User defined analysis categories originally set up in the **Settings** menu are available for selection on **Analysis** pages.

NB. In the Document Control module, user defined analysis is classed as a Document Attribute (Document attributes / Analysis page).

Selecting user defined analysis

1. Click the **Analysis** page on the main dialog.
2. Select appropriate predefined values from drop-down lists.
3. Relevant check boxes should be checked or un-checked.
4. In additive combo boxes you may select from a predefined value in the drop-down list or add a new value. Any new value set up like this will be added to the drop-down list and available for future selection.
5. In free text boxes you may enter a one-off value that will apply to the currently selected record only.
6. Enter a date or date and time (using the Date button if preferred).
7. Enter currency and/or numeric fields (up to the specified number of characters).

   You can select only one value per field (in drop-down lists or combo boxes); boxes should be left blank if neither the field nor any of its values apply.
8. When you have completed the page, click on **Save**.

4 Recording equipment and jobs

The **Record** menu allows you to record all details of equipment and jobs. In many ways the Equipment Register constitutes the core of the Test and Calibration module. It maintains key information on all items of equipment in your system and provides invaluable feedback on that equipment's condition, usability and whereabouts.

The register also maintains crucial history files detailing the test history for any given item. If details have been recorded regarding the location, job and member of personnel to whom the equipment has been booked out, these are also logged on the History page.

Provided the register is kept up to date, any user given access to it can immediately examine the location of an equipment item, its current status, its test history, its forthcoming test schedule and its usage history. Details of the manufacturer and supplier are also recorded. Items of equipment can be withdrawn here; when this happens, associated forward bookings and scheduled tests will automatically be deleted. All of this is accessible through the same routine.

The equipment register relies on the maintenance of certain 'subsidiary' files. These allow you to categorise items by referencing this information when equipment records are being added or updated. They include supplier and manufacturer records, and definition of equipment types, locations and sites where equipment may be held; these are all administered under the main **Settings** menu header. Extensive cross-references are made to personnel files (maintained by the Personnel module) that are included in all Workbench systems.

In the same menu is the routine that allows you to maintain your files of Jobs - another crucial source of subsidiary information in keeping the register accurate and current.

If you use the full capability of the equipment register, virtually anything relating to an equipment item can be found without referring to other dialogs in the system. However there are few mandatory fields.

Depending on your access rights, this dialog enables you to:-

- add new equipment to the register
- delete equipment records
- withdraw equipment records, automatically deleting associated forward bookings and scheduled tests
- update information on existing equipment records
- browse/search for equipment by a number of methods
- assign tests to equipment
- maintain forthcoming equipment test schedules and enter results
- study equipment test result histories
- study equipment usage details.

Entering a new record or updating existing equipment details

1. From the **Record** menu choose **Equipment**.
2. From the **Select Equipment** search grid, click on the **New** button if you wish to create a new record; or select an existing equipment record using any of the three methods described in Search routines. The **Create / Edit Equipment** dialog (depending on whether you click on the **New** button or select an existing record) will now appear, divided into six pages - Main / Analysis / Test Schedule / Test Results / Usage / History.
3. When entering a new record, complete the three mandatory fields and as much other information as you require. If editing an existing record, make any amendments and **Save**.

4.1 Equipment register - main page

The **Main** page on the **Equipment register** shows details of the selected piece of equipment. When entering a new record there are three mandatory fields that must be completed; then you may record as much or as little other information as required. An explanation of each field follows.

When editing an existing equipment item, most fields may be amended apart from the original Equipment ID and Status.

Equipment ID is mandatory and must be unique. Once you have typed in the Equipment ID and moved to another field, the **Base on Equipment** button will be enabled. When selected, it invokes a typical search window listing existing equipment.

If you select any of these equipment items then all that item's attributes will be copied over to the Main equipment window, but none will be saved away to the database at this point and can therefore be edited. A confirmation dialog will be displayed asking if you want to copy across all the item's UDA information as well.

NB. If using the **Base on Equipment** button whilst editing, be aware that all the attributes of the new equipment item selected from the **Select Equipment To Base On** dialog will overwrite any information previously entered in corresponding fields of the equipment you are editing.

The Attachments button allows the addition and/or modification of files attached to an equipment record. Access rights for the Equipment dialog determine whether the attachments may be viewed, added, edited or deleted.

The current **Status** of the piece of equipment is another mandatory field. It is selected from a drop-down list when setting up a new record and can only be entered when inputting new records. From then on the status cannot be edited but is maintained by the system and will change according to the results of tests or unscheduled events; appropriate History entries will be made if this happens.

The three initial choices are:-

- **OK** - equipment can be safely assigned to a job.
- **Not OK** - equipment has failed a test and requires attention. It can still be assigned to a job but the system will present a warning and will record in the history file that the equipment has been used whilst in this status.
- **Unknown** - equipment test is invalid because a required environment variable was not met. The equipment is still available for jobs but a warning will be given. A record will be made in the history file that equipment has been used whilst in this status.

There is a further status, **Withdrawn**. This is applicable to equipment items that are currently withdrawn from use and have had all associated forward bookings and scheduled tests deleted. Equipment items with Withdrawn status may be re-instated at any time.

A basic **Description** (up to 40 characters) is also mandatory.

The **Search Code** is automatically derived from the first ten characters of the Description (excluding spaces and in lower case) when equipment is first added to the database; the code can be edited manually if required.

Manufacturer - enter the manufacturer's ID if known or click on the Search button and choose from the search grid. Use the **New** button to enter details of a new manufacturer if necessary.

Supplier - enter the supplier's ID if known or click on the Search button and choose a supplier from the search grid. Use the **New** button to enter details of a new supplier if necessary.

Owner - the person with ultimate responsibility for this equipment item; enter their ID if known or click on the Search button and choose from the search grid (personnel here originate from records in the Personnel module). The Owner will automatically be informed of any change to the status of the equipment.

Type - what type of equipment is this? Enter a description if known or click the Search button and choose from the search grid. (Types are originally set up in **Settings |** Equipment Types). Although this is not a mandatory field, it is useful to record an equipment Type as the information can be used in reports and also as a search filter when looking through a large number of records.

Base Site - refers to the usual site for this equipment item. Enter a description if known or click the Search button and choose from the search grid. (Sites are originally set up in Settings | Sites).

Base Location - the usual location of this equipment item. Enter a description if known or click the Search button and choose from the search grid. (Locations are originally set up in **Settings |** Locations).

Document Ref. - only applicable if you have the Document Control module installed (and appropriate access). If there are any documents relevant to this equipment, the document serial number may be entered here - or click the Search button and select from the search grid. Once a document has been entered here, the **View** and **Attributes** buttons will be enabled, allowing you to view the document and/or its attributes at any time. The document may appear as a PDF or in its original format, depending on the configuration of its workflow settings.

Date Acquired - the date that the equipment item was acquired. Click on the Date button and select from the pop-up calendar.

Cost - the acquisition cost of equipment. This field accepts numeric entries only.

Serial number - enter the serial number of the equipment (if one exists) up to a maximum of 20 characters. Any characters are acceptable including spaces and hyphens.

Notes - enter any free format notes relevant to this equipment.

The **Delete** button deletes the current equipment item following a Warning / Confirmation. The **Undo** button undoes current edits.

The **Withdraw** button (**Edit Equipment**) allows you to withdraw existing equipment and delete associated tests (see Withdrawing an equipment item).

NB. Workbench will only allow you to delete equipment items which have never been referenced elsewhere in the system.

See also information on Analysis / Test Schedule / Test Results / Usage / History pages

4.2 Equipment register - other pages

The Main page on the Equipment register shows details of the selected piece of equipment. The remaining five pages give secondary information regarding the equipment item, but cannot be accessed until the three mandatory fields on the Main page have all been completed.

Analysis page

This page enables you to select from your own customised analysis fields initially set up in **Settings | User Defined Analysis** for **Equipment**.

Analysis categories in check boxes should be ticked if appropriate; those in drop-down lists should be selected from the pull-down menus. You may add a new value to an 'additive' combo box and/or enter a one-off value in a 'free text box'.

Dates and times can be entered using the Date button if preferred.

Currency and/or numeric fields (up to the specified number of characters) should be entered if relevant.

See User-definable analysis categories for full information if required.

Test schedule page

This page lists all forthcoming tests scheduled for the selected equipment item. Select any test by highlighting it and clicking the **Select** button to enter results for that test. **NB**. The **Select** button will not be present for newly created equipment items; you must close the dialog, re-select the required equipment item and then select its **Test Schedule** page again to enter test results.

The **Assign tests to equipment** button takes you straight to the **Assign Tests to Equipment** dialog where you may schedule tests.

See also: Assigning tests to an equipment item - and Test result recording for information on entering test results.

Test results page

This page lists tests that have been completed and any unscheduled events that affected the equipment's status. The two together form a complete history for the selected item.

To view the test results or the details of the unscheduled event, highlight the relevant item and click the Select button. See Unscheduled events for a complete explanation of unscheduled event processing.

Usage page

This page lists all jobs to which the equipment item has been assigned, along with relevant dates. It also displays any changes in the equipment's location and/or reassignment of the equipment between different members of personnel.

NB. To view the full scope of this dialog, use the horizontal scroll bar (several columns may be hidden).

History page

The History page gives detail of when and by whom a record was first created and tracks any changes made to that record.

4.3 Withdrawing an equipment item

The Equipment register allows users with appropriate access rights to mark an equipment item as withdrawn and the option to re-instate this equipment at a later date. You must provide a reason for the withdrawal along with your password. Withdrawing an equipment item deletes all forward bookings and open scheduled tests against it (until re-instated).

On re-instatement, the withdrawn item of equipment reverts to its status prior to withdrawal (see Re-instating an equipment item).

Withdrawing an item of equipment

1. From the **Record** menu, choose **Equipment**.
2. In the Select **Equipment** search grid, select the item of equipment you wish to withdraw (using any method described in Search routines).
3. Click on the **Withdraw** button at the bottom of the dialog. You will be warned that this action will delete any related scheduled tests and/or forward bookings. If you then select **No** the action will be cancelled; if **Yes**, you will be asked to give a mandatory reason for withdrawal and your password.

All forward bookings and scheduled tests against this equipment will then be deleted and removed from the calendar.

Withdrawn items are excluded from equipment lists, scheduling/rescheduling lists, the unscheduled events list and the equipment awaiting calibration report.

The **Withdrawn Equipment History** report will show full details of when and by whom the equipment was withdrawn (and re-instated where applicable). This report will also show the reason for withdrawal / re-instatement.

See also:

Re-instating an equipment item

Withdrawn equipment history report

4.3.1 Viewing withdrawn equipment items

Users with appropriate access rights may view equipment items that have been marked as Withdrawn.

Viewing a withdrawn item of equipment

1 From the **Record** menu, choose **Withdrawn Equipment**.

2 The **Select Withdrawn Equipment** dialog lists all currently withdrawn equipment. Select the item of equipment you wish to view (using any method described in Search routines).

3 The full equipment dialog for the selected item will then appear, in read-only form. If you have appropriate access rights, a **Reinstate** button will also be included on the dialog. Using this you may put the withdrawn equipment item back to its status prior to withdrawal (see Re-instating an equipment item).

NB. The **Withdrawn Equipment History** report gives full details of when and by whom the equipment was withdrawn plus the reason for its withdrawal.

4.3.2 Re-instating an equipment item

Users with appropriate access rights may re-instate equipment items that have been marked as Withdrawn; the re-instatement will allow the withdrawn item of equipment to return to its status prior to withdrawal.

Re-instating an item of equipment

1 From the **Record** menu, choose **Withdrawn Equipment**.

2 The **Select Withdrawn Equipment** dialog lists all currently withdrawn equipment. Select the item of equipment you wish to re-instate (using any method described in Search routines).

3 The full equipment dialog for the selected item will then appear (**Reinstate Withdrawn Equipment**), in read-only form. If you have appropriate access rights, a **Reinstate** button will also be included on the dialog.

4 Click on the **Reinstate** button at the bottom of the dialog. The **Approve Reinstatement** dialog will then appear where you will be asked to give a mandatory reason for re-instatement and your password.

The equipment's status will be changed to what it was prior to withdrawal.

The **Withdrawn Equipment History** report will show full details of when and by whom the equipment was withdrawn and re-instated. This report will also show the reason for withdrawal / re-instatement.

See also:

Withdrawing an equipment item

Withdrawn equipment history report

4.4 Jobs

This option allows the maintenance of job records and is vital if you wish to fully exploit the traceability features of the Test and Calibration module. **Traceability | Equipment Usage** maintains full details of equipment usage in terms of where it has been used (location and site), who it has been assigned to and on which jobs it has been used.

Before equipment can be allocated to a job, that job record must first be set up using the **Record | Jobs** option. This allows you to add new jobs, edit current jobs or browse/search for existing jobs.

Creating a new job

1. From the **Record** menu, choose **Jobs**.
2. In the **Select Job** search grid, click the **New** button. The **Create Job** window will appear.
3. Enter the Job ID (mandatory).
4. Enter the job Name (mandatory). The **Search Code** will automatically follow but can be changed manually.
5. Add any **Notes** if required.
6. Click **Save**.
7. Enter another job if required following points 3 - 7 above.
8. Click **Close** to quit the **Create Job** dialog.

The job(s) you have just set up should now be listed alphabetically in the Select Job search grid and are available for editing at any time.

Editing an existing job

1. From the **Record** menu, choose **Jobs**.
2. In the **Select Job** search grid, select the record you require using any method (described in Search routines). The **Edit Job** window will appear.
3. Amend any details apart from the Job ID (that cannot be altered). Add (further) **Notes** if required.
4. **Save**.

Use the **Undo** button to undo edits made in the current session.

NB. Jobs may be deleted from the system (using the **Delete** button) providing that they have not been referenced elsewhere.

5 Test templates and schedules

The test definition, planning, scheduling and implementation cycle is at the heart of Test and Calibration. The methods employed here make this whole process as smooth as possible, allowing for both accurate record keeping and test histories, and for the assessment and planning of forthcoming workloads generated by test schedules. This core component of the system allows you to define tests which are generic and are not initially attached to any individual equipment items. Therefore any test template can, in due course, be linked to as many or as few equipment items as appropriate.

The use of Test Templates greatly reduces the need to input repetitive information and should prove an invaluable time-saving feature for most organisations; you simply set up the test template only once and then repeatedly apply it to as many equipment items as necessary. Each time it is applied you can make any alterations required for that individual equipment item; these can include measurements to be taken, schedule frequencies and the personnel who are to perform the test. Conversely, any number of items of equipment can be allocated to any given test template.

When a test template is linked to a piece of equipment, a schedule may be set up for recurring tests. The schedule allows you to specify how frequently that test is required for that equipment and to then automatically generate a schedule of specific test dates up to some date in the future (also determined by you). Schedules generated in this fashion are not ‘cast in stone’ and can be varied to reflect the availability of testers and their workloads. They do, however, give a useful indication of forthcoming work required and serve as a useful reminder of when tests are due. Forthcoming tests are represented in the Workbench calendar that is used by all installed modules. Rescheduling tests can be done very simply using standard drag and drop techniques.

A Test and Calibration workflow setting, if checked, allows a task message to be sent to testers automatically; the system administrator specifies the number of days before the test date start that this task should be sent.

As tests are carried out, the results are input to the system and compared with expected readings. Expected readings can also be given a tolerance band within which a measurement is deemed acceptable. All measurements, expected readings and tolerances can be set up as part of the test template and then overridden if necessary when the template is applied to individual equipment items, or can be input on a ‘one off’ basis when a test is scheduled. In this way the system becomes widely applicable and extremely flexible. An unlimited number of measurements may be included as part of each test or test template.

All measurements may optionally be assigned a number of ‘environmental variables’ that allow you to record both acceptable and actual recorded values of any prevailing conditions when the test was carried out. Typical examples are the ambient temperature and humidity levels. Again the definition of these is entirely in your hands and as many environmental conditions as desired can be attached to a test or test template.

Test Templates and Schedules - a Summary

- Generic test templates can be set up and then linked to as many equipment items as desired. When the link is made, a specific instance of that test is scheduled in the future. A recurring schedule can also be defined and written to the calendar.
- Once the template is linked to equipment items, any of the template’s definitions can be overridden for that individual instance.
- A test or test template can specify as many measurements as desired. Each measurement will have a defined expected reading and tolerance band. The units that the measurement is recorded in will also be defined.
- Optionally, as many environmental variables as necessary can be attached to any measurement; expected readings and tolerances are also specified for these.
- Environmental reading and test results are recorded when the test is carried out; success or failure at this stage then determines the status and usability of the equipment item.

5.1 Test templates

Before exploring the details of test template definition and creation, it may be helpful to briefly outline the types of information that can be set up in a template; however, only a **Template ID** and a **Name** are compulsory.

It may be, for instance, that you have no idea in advance which member of personnel will be conducting a given test. In this case there is little point in assigning it to someone in the template.

However, if you can predict with some confidence that an individual will be conducting the test most of the time, with perhaps someone else deputising for holidays, sickness and so on, then it is well worth setting that individual up at the template definition stage. Remember that you can always override this when a deputy needs to step in for whatever reason - the ultimate test record will show clearly who actually carried out that individual test, not the person to whom it was assigned in the template.

The broad areas covered by a template are:-

- who is responsible for conducting the test; this may be either internal (a member of personnel) or external (a supplier)
- expected cost and duration of the test
- if you have licensed the Workbench Document Control module and have appropriate access to this, you may attach an associated document to a test template
- any required measurements and their acceptable tolerance bands against which test results are entered (**Measurements** page)
- any environmental variables relevant to test measurements, eg. a measurement may be need to be conducted within a certain ambient temperature range (**Environment** page)
- free format notes describing the test itself, instructions on how it is to be carried out and the remedial action to be taken in the event of an equipment item failing the test (**Test Details** page).

Creating a new test template or editing an existing template

Test templates are established using the **Test | Test Templates** menu option. This displays the normal Workbench search grid, from which you can either opt to create a new record or select an existing one for updating or viewing (see Search routines).

The search options and their keyboard shortcuts for a test template are Search by Template ID (F3), Search by Search Code (F4) or Search within Description (F5).

1 From the **Test** menu choose **Test Templates**.

2 Click on **New** in Select **Test Template** (or select an existing record). The **Create/ Edit Test Template** dialog will appear. It is divided into pages, some of which will only appear in edit mode or after test(s) have been carried out:-

- Main page - basic details
- Test Details page - test description, test instructions and remedial actions to be taken if the test is failed
- Measurements page - all measurement details for this test
- Environment page - any environmental variables and conditions for either the test as a whole or for any individual measurement
- Result Notes page - for notes specific to the test results
- History page - keeps track of changes made to the test template.

NB. The lower row of buttons in the **Create / Edit Test Template** dialog refers to the template as a whole. The **Save** button, for instance, saves the whole template definition. You can freely make changes in any page and move around them at will without worrying about saving as you go - just ensure that the **Save** button is clicked at the end to save all changes that you have made. If you make changes and then forget to click **Save**, a warning is issued by the system and you are given a further chance to save the work you have done.

5.1.1 Test template - main page

This page allows the input and editing of a test template's base information. Only two fields are compulsory - the test **Template ID** and its **Name**. If you leave any other fields blank, a further opportunity is given to complete them when the template is assigned to an equipment item; at that stage any information from this main page, with the exception of the ID and the test template Name, can be overridden if appropriate.

1. Enter a unique **Template ID** for this template (up to 12 characters).
2. Give the template a **Name**. The **Search Code** automatically follows the first ten characters of the Name but can be changed manually.
3. Select a **Tester -** the dialog has a toggle between internal and external testing. If the test is internally conducted you may enter (via the Search button) the personnel member who will normally conduct it. If the test is external, check the box marked *Is External* and the system will prompt for an external tester from the list of recorded Suppliers (again via the Search button).

   When a test based on this template is actually scheduled, the Tester will receive a notification informing them of the date(s) of the scheduled test(s). The Tester will also receive a *Please run test* task message on the actual test date. However, If the workflow setting *Number of days before test start date is sent to the tester* is configured to a setting greater than zero, then the Tester will receive the *Please run test* task message at the specified number of days before they are required to run the test (rather than on the actual day).

   The owner will receive notification when a test is due on the equipment.

   If the tester is changed at any point, the superseded tester is notified and if this affects a piece of equipment, the owner of the equipment will also be notified.
4. Enter any other details as relevant - see notes below.

   Expected Cost - enter as appropriate.

   Duration - how long is this test expected to take? Enter as appropriate.

   Document Ref. - if you have the Workbench Document Control module installed (and appropriate access) and there is a document relevant to this Test template, you may associate the document here. The document may appear as a PDF or in its original format, depending on the configuration of its workflow settings.

   To update all tests based on this template, tick the relevant check box at the bottom of the dialog. If this is not checked, any updates or amendments to the test template will not be reflected in any tests already scheduled and based on the template. **NB.** Be aware that if this check box is ticked at a later stage, all changes you have made to all the tests based on this template will be lost. A warning will be given and a History entry made if you decide to proceed.
5. Move on to the other pages (Test Details, Measurements, Environment) and enter the required information. Result Notes and History pages will also be available in edit mode.
6. **Save**.
7. After saving you may continue to create further new templates or **Close** to return to the **Select Test Template** search grid. The template(s) you have just created should now be listed there.

5.1.2 Test template - test details page

On the **Test Details** page, notes relating to the current template can be entered for the following categories:-

- Test description
- Test instructions
- Remedial action to be taken if an equipment item fails this test.

These detailed notes are carried through from the template to individual test schedules at which point they can be retained in their original format, amended, added to or otherwise overridden in whatever way you choose.

5.1.3 Test template - measurements page

The Test Template **Measurements** page allows you to assign measurements and their respective tolerances to the test template you are creating.

Any measurements established at this stage, ie. the test template, can be overridden or added to later when this template is used to schedule individual tests. Because of this it is well worth exploring potential areas of overlap in the tests and measurements you normally conduct. Identifying tests which have just one measurement in common and using a template to set that up can save significant amounts of time without any sacrifice of flexibility in defining an individual test or test schedule.

Creating measurements for a test template

1. From the **Test** menu, choose **Test Templates**.
2. After giving the new test template an **ID** and **Name** in the **Create Test Template** dialog, click on the **Measurements** page. Measurements shown in the **Select measurement** box are currently attached to this test template - to edit these, see below.
3. The **Delete** button on the Select measurement box allows you to delete a highlighted measurement from this test template. To add a new measurement, click on the **New** button.
4. Enter a brief description of the new **Measurement** in the bottom half of the window. If the test template already has defined environmental variables which are common to all current measurements (see Environment page), the system will ask whether these should also be applied to any new measurement. If you click Yes, Workbench will apply the environmental variables currently common to all measurements to this new measurement.

   If you choose No, no environmental variables will be automatically attached to this measurement. You can, however, add specific environmental variables if required; since the measurements in this test template no longer share common environment variables, the confirmation message will not be repeated for further measurements.

   NB. If the system recognises a name you enter in the **Measurement** field as an existing one for this template it will warn you that two measurements cannot share a name within a template; in this case you should choose a new name.
5. Enter the **Units** of the measurement (eg. mm., cms.)
6. The **Tolerance** field allows you to enter the tolerance margins for this measurement. The + tolerance defaults to read the same as the - tolerance. Both are independently editable.
7. The **Expected value** field allows you to enter an expected value for the test measurement. This value will appear in the **Test results history** and any deviation from this outside the acceptable tolerance band will determine equipment failure or otherwise.

8 By selecting the appropriate **Tolerance** radio button, you can choose to have the tolerance displayed as absolute units or as a percentage deviation from the expected result. If you have already entered units in the tolerance fields, Workbench will convert these to a percentage when you click the **Percent** radio button. The reverse applies if you have already entered percentages.

9 **Save**.

The **Close** button closes the test template dialog. If **Save** has not been previously selected and there have been some edits, the system will ask if you wish to save those edits before closing.

The **Undo** button will undo the edits in the current edit session.

The **Delete** button will delete this test template. This is only allowed if the template has not been allocated to any items of equipment.

Editing/ adding further measurements for a test template

NB. In order to see/edit a measurement's details in the Edit group (bottom part of the window) the relevant measurement must first be highlighted in the top part of the window.

1 From the **Test** menu, choose **Test Templates**.

2 From the **Select Test Template** search grid, choose the test template to be edited (see Search routines).

3 In the **Edit Test Template** dialog, click the **Measurements** page.

4 Select the measurement to be edited (or click the **New** button to create a new one).

5 Edit/create the measurement details as required.

6 After making edit changes on any of the other pages be sure to finally click the **Save** button to save your work.

You may require a measurement to be carried out under particular environmental conditions - if so, you can associate environmental variables with measurements on the Environment page.

Measurements, like all test template information, are totally configurable at the time the template is used to generate an actual test schedule. At this stage you will be allowed to add new measurements, change data for measurements established by the template and/or remove measurements present in the scheduled test without affecting the template itself.

5.1.4 Test template - environment page

This page allows you to specify or edit optional environmental variables for any given measurement. A common set of environmental variables can also be applied to all measurements in the test where appropriate.

Environmental variables are optional and may not be applicable to your business requirements at all. If this is the case they can simply be ignored and omitted from your test template designs. This will have no effect whatsoever when you subsequently come to apply those designs to the actual test scheduling process.

However, tests are often required to be undertaken within a defined set of background environmental condition parameters. The Test and Calibration module gives you complete freedom to define these on either a template and/or individual test basis.

NB. When you select the Test Templates **Environment** page, Workbench defaults to those environment variables which apply to all measurements. If there are no common environment variables, the Selected Variables list box will be empty.

It is particularly important to differentiate between adding environmental variables common to all measurements in the test and those applicable to individual measurements only. The following notes will help clarify these differences and explains how to add and edit environmental variables in general.

- If the *Apply to all measurements* check box is selected (ticked), the environmental variable will apply to all measurements in this test template. If *Apply to all measurements* is not checked, the environmental variable applies only to the selected record displayed in the **Measurement** field.
- The **Measurement** field is only available when the *Apply to all measurements* check box is not checked (ticked). When this has been done, click the Measurement drop-down list to access the measurements you have entered for the test template. Highlighting any measurement will display its environment variables in the Selected Variables list box. Any environmental variables you set apply only to the selected measurement displayed in the **Measurement** field.
- When the *Apply to all measurements* is checked (ticked), the Selected Variables list box presents only those environment variables common to all measurements in this test template. Any environment variable values you set will apply to all the measurements in this test template. The Available Variables box shows all environmental variables currently in your database. Select any variable and click the central add button (**>>**) to add the selected variable to this measurement.

Adding a new environment variable

1. Click the **Add** button on the **Create/Edit Test Template** dialog. The **New Environment Variable** dialog will appear.
2. Give the new variable a Name (mandatory field). If the system recognises the name as an existing one it will warn you that two variables cannot share a name; in this case you should choose a new name.
3. You may also specify the units that the variable should be measured in.
4. **Save**.

The new variable will be added to the list of Available Variables and will then be available for all measurements in all test templates.

Adding values to a new environment variable

1. Select the appropriate variable from the Available Variables list and add it to the Selected Variables list.
2. Highlight this variable from the Selected Variables list. The Edit box below will now allow you to enter/edit values for the variable. The **Variable** field shows the name for this variable; it cannot be edited.
3. Enter (or edit) the **Units** of measurement for this variable.
4. Enter (or edit) the **Expected Value** for the variable.
5. Enter (or edit) the tolerance for this environment variable. The + tolerance defaults to the same value as the - tolerance; they are, however, capable of being independently edited. They can be set optionally as either unit or percentage deviations from the expected reading figure (by selecting the appropriate radio button).

Displaying the variables for an individual measurement

1. De-select the *Apply to all measurements* check box.
2. Click on the **Measurement** drop down list (now available).

3 Select the measurement desired.

4 The Selected Variables box now displays the variables applied to this measurement.

5 Highlight a variable to view or edit its details in the Edit group box.

Editing an environment variable

1 Highlight the required variable in the Available Variables box and click on the **Edit** button.

2 The **Edit Environmental Variable** dialog will appear allowing you to make the necessary amendments.

Editing an environment variable value for a specified measurement

1 De-select the *Apply to all measurements* check box.

2 Select the relevant measurement from the **Measurement** drop down list.

3 Highlight the Selected Variable and the values in the Edit box will appear.

4 Edit as required and **Save**.

Attaching an environment variable to a test template

1 From the **Test** menu, choose **Test Templates**.

2 From the **Select Test Template** search grid, choose an existing template or click on **New** to create a new test template.

3 In the **Edit/Create Test Template** dialog, choose the **Environment** page. (If you are creating a new test template you must first specify a Template ID and Name).

4 De-select the *Apply to all measurements* check box or leave it on if you wish to apply the environmental variable to all measurements in this test template (continue with instruction 7 in this case).

5 Click the **Measurement** drop-down list to access the measurements in this template. (Measurements must first be specified on the Measurements page.)

6 From the list, choose the measurement to which you wish to attach an environment variable.

7 From the Available Variables list box, highlight the variable to be attached to the current measurement (or all measurements if the *Apply to all measurements* check box is ticked).

8 With the required variable highlighted in the list box, click the central add button (**>>**).

9 In the Selected Variables list box, highlight the relevant variable.

10 In the **Edit selected environmental value** box, edit/create the variable details (see above).

11 Click **Save**.

5.1.5 Test template - result notes page

On this page you may enter any free format notes relating specifically to the performing of this test and the recording of its results. It is envisaged that notes about the test itself are recorded on the Test Details page.

5.1.6 Test template - history page

The History page effectively displays an 'audit trail' for the test template; it records all changes to it, along with who took the action and the date / time of occurrence. The page is strictly read-only as it is maintained by other routines within the Test and Calibration module that write entries to the history file as appropriate.

Note that the most recent history is displayed first.

5.2 Test schedules

There are two fundamental ways of creating test schedules:-

- assigning multiple test templates to an item of equipment
- assigning multiple equipment items to a test template.

These routines perform the same operations from a different starting point. Use whichever is more convenient and less time consuming. The starting point for all options is the **Select** dialog where the required equipment item or test template is selected - see Search routines.

When tests are scheduled, the nominated 'tester' will be sent a task message asking him to run the test. The owner of the equipment will also receive a notification that the equipment is due for testing.

If the workflow setting, *Number of days before test start date that task is sent to the tester* is checked it will trigger a notification to the Tester at the specified number of days before the test is due to start. This setting can be found in the Workbench Configuration Centre | System Wide | Module Settings | Test and Calibration Settings.

The due dates of the tests are automatically entered on the tester's calendar.

Assigning tests to an equipment item

Choosing this menu option offers two sub menu choices:-

- New Schedule - use this option to create a new schedule of tests by assigning specified equipment item(s) to a test template
- Reschedule - use this option to set up another round of tests based on the same schedule and template.

Assigning equipment items to a test

Choosing this menu option offers two sub menu choices:-

- New Schedule - use this option to create a new schedule of tests by assigning a test template to selected equipment item(s)
- Reschedule - use this option to set up another round of tests based on the same schedule and template.

5.3 Assigning tests to an equipment item

The **New Schedule** option allows you not only to assign a test template to an equipment item but also to determine whether the test involved is a 'one off' exercise or will be a recurring requirement with a defined frequency.

It is also possible to set up a recurring test without creating a schedule for it. Each time the test is completed you may define its next test date on an ad hoc basis. This can be invaluable if a test needs to be performed on a recurring basis but does not conform to a tightly structured schedule.

When a test based on this template is scheduled, the Tester will receive a notification informing them of the date(s) of the scheduled test(s). The Tester will also receive a 'Please run test' task message on the actual test date. However, If the workflow setting *Number of days before test start date is sent to the tester* is configured to a setting greater than zero, then the Tester will receive the 'Please run test' task message at the specified number of days before they are required to run the test (rather than on the actual day).

The owner of the equipment (if one has been specified) will also be notified when tests are due.

The Assign Tests to Equipment Item dialog can also be reached via a button on the **Test Schedule** page of the Equipment register (**Record | Equipment**); in this case, proceed from point 3 onwards.

Assigning a test template to an equipment item

1 From the **Test** menu, choose **Assign Tests to Equipment Item**.

2 From the **Select Equipment Item** search grid, select the required equipment using any method (see Search routines). The **Assign Tests to Equipment Item** dialog will appear.

3 The **Equipment ID** field shows the selected equipment item.

4 Highlight the required test(s) for the equipment. Highlight multiple tests using the Shift and/or Control keys. Use the **Search** and/or **Invert** button(s) to search for specific test template(s).

5 Click the central add button **>>** to assign the selected test(s) to the named equipment item.

6 Make sure you highlight a template in the 'Selected' list box in order to create or edit a schedule for that **Test Template**...

Scheduling a one-off event

1 In the 'Selected' list box, highlight the test or tests against which you wish to assign a schedule.

2 In the **Test Date** field, type the specific date, eg. 12/03/2013, or use the Date button.

3 Make sure the *Recurring Test* box is not checked.

4 **Save**.

Scheduling a single event in a recurring schedule

1 In the 'Selected' list box, highlight the test or tests against which you wish to assign a schedule.

2 Make sure that the *Recurring Test* box is checked (ticked).

3 Click the **Frequency** period drop-down and choose from days, weeks, months or years.

4 Enter the Frequency desired.

5 In the First **Test Date** field, enter the first test date or use the Date button to select a date. (When the *Recurring Test* box is checked, the first test date for the recurring schedule defaults to the current date but this can be edited.)

6 Ensure the **Test Until** field is left blank.

7 **Save**.

This assigns a test or multiple tests to a single date. However, once the test results have been entered, the test(s) will appear in the **Reschedule** selection dialog. This allows the convenient rescheduling of tests which do recur but perhaps not in a highly predictable manner. This approach means the next test date can in effect be allocated manually each time, while preserving the reminder mechanism in the Reschedule list - see Rescheduling tests.

Scheduling multiple tests in a recurring schedule

Proceed as described above for a single recurring schedule but this time enter a date in the **Test Until** field. This will assign a series of multiple tests at the specified frequency.

NB. If Workbench cannot reconcile the frequency with the end date you have stipulated, a warning dialog box will offer an alternative date. Once you have set up all the schedules desired, remember to **Save**.

These tests will now be added to the Workbench Test and Calibration Schedule and will also appear on the Calendar. The date that the test(s) was scheduled will be recorded and displayed in the **Test Result History** dialog.

5.4 Assigning equipment items to a test

This routine is the converse of assigning tests to an equipment item but may be much more convenient and time saving in many situations.

The **New Schedule** option allows you not only to assign an equipment item to a test template but also to determine at that point whether the test involved is a ‘one off’ exercise or will be a recurring requirement with a defined frequency.

It is also possible to set up a recurring test without creating a schedule for it. Each time the test is completed you may define its next test date on an ad hoc basis. This can be invaluable if a test needs to be performed on a recurring basis but does not conform to a tightly structured schedule.

When a test based on this template is scheduled, the Tester will receive a notification informing them of the date(s) of the scheduled test(s). The Tester will also receive a *Please run test* task message on the actual test date. However, If the workflow setting *Number of days before test start date is sent to the tester* is configured to a setting greater than zero, then the Tester will receive the *Please run test* task message at the specified number of days before they are required to run the test (rather than on the actual day).

The owner of the equipment (if one has been specified) will also be notified when tests are due.

Assigning an equipment item to a test template

1 From the **Test** menu, choose **Assign Equipment Items to a Test**.

2 From the Select **Test Template** search grid, select the required template using any method (see Search routines). The **Assign Equipment Items to Test** dialog will appear.

3 The **Test ID** field shows the selected test template.

4 Highlight the required equipment for test. Highlight multiple items using the **Shift** and/or **Ctrl** keys. Use the **Search** and/or **Invert** button(s) to search for specific equipment item(s).

5 Click the central add button **>>** to assign the selected item(s) to the named test template.

6 Highlight equipment item(s) in the 'Selected' list box to create or edit a test schedule. You may schedule different frequencies of tests for each selected equipment item if required.

Scheduling a one-off event

1 In the 'Selected' list box, highlight the equipment item(s) against which you wish to assign a test schedule.

2 In the **Test Date** field, type the specific date, eg. 12/03/2013, or use the Date button.

3 Make sure the *Recurring Test* box is not checked.

4 **Save**.

Scheduling a single event in a recurring schedule

1 In the 'Selected' list box, highlight the equipment item(s) against which you wish to assign a test schedule.

2 Make sure that the *Recurring Test* box is checked (ticked).

3 Click the **Frequency** period drop-down and choose from days, weeks, months or years.

4 Enter the Frequency desired.

5 In the **First Test Date** field, enter the first test date or use the Date button to select a date. (When the *Recurring Test* box is checked, the first test date for the recurring schedule defaults to the current date but this can be edited.)

6 Ensure the **Test Until** field is left blank.

7 **Save**.

This assigns a test or multiple tests to a single date. However, once the test results have been entered, the test(s) will appear in the **Reschedule** selection dialog. This allows the convenient rescheduling of tests which do recur but perhaps not in a highly predictable manner. This approach means the next test date can in effect be allocated manually each time, while preserving the reminder mechanism in the Reschedule list - see Rescheduling tests.

Scheduling multiple tests in a recurring schedule

Proceed as described above for a single recurring schedule but this time enter a date in the **Test Until** field. This will assign a series of multiple tests at the specified frequency.

NB. If Workbench cannot reconcile the frequency with the end date you have stipulated, a warning dialog box will offer an alternative date. Once you have set up all the schedules desired, remember to **Save**.

These tests will now be added to the Workbench Test and Calibration Schedule and will also appear on the Calendar. The date that the test(s) was scheduled will be recorded and displayed in the **Test Result History** dialog.

5.5 Rescheduling tests

If recurring tests have been assigned to a specified equipment item and all those tests have been completed and their results entered into the system, **Test | Assign Tests to an Equipment Item | Reschedule** allows you to set up another round of tests based on that same schedule and template.

Likewise, where recurring tests have been set up for test templates involving specified equipment items and those tests are complete and the results entered into the system, **Test | Assign Equipment Items to a Test | Reschedule** allows you to set up another round of tests based on the same schedule and equipment items.

This is a very useful reminder mechanism that a test cycle has been completed and should now be renewed. This is particularly relevant where a recurring schedule has been set up but only one test date defined (see **Scheduling a single event in a recurring schedule** | Assigning tests to an equipment item or Assigning equipment items to a test. In this case, each time a test is completed the system will prompt for the next date.

5.6 Editing a scheduled test

The linking together of test templates and equipment is used to generate test schedules. The dates of forthcoming tests, however, can be individually edited, along with other test details, by use of the **Test | Test Details** option. This does not alter the test template, only the specific scheduled instance of the test with which you are concerned.

NB. Test details cannot be changed once results have been entered.

Changing a scheduled test's date or other details

1 From the **Test** menu, choose **Test Details**.

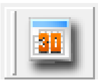
2 Select the test to be edited from the search grid of scheduled tests, using any method described in Search routines.

3 In the **Edit Equipment Test** dialog most fields may be amended; make changes on any page and amend/add notes if required. Full details of all test template fields are given in Test Templates.

4 **Save**.

NB. You can also change scheduled test dates directly in the calendar by the use of drag and drop techniques - see Test schedules and the calendar.

5.7 Test schedules and the calendar



All scheduled tests, whether planned or completed, are shown on the calendar.

The Calendar button is located on the main toolbar and gives access to a calendar that is used by all modules; this means that schedules and reminders generated by any installed module will be shown on the same calendar.

Planned tests are shown in black type and completed tests are grey. Icons are also used to show the differing status of the tests...

 Planned

 Completed test with pass status

 Completed test with invalid status

 Completed test with fail status

Tests can be accessed directly by double-clicking on a day to call up that day's events and then double-clicking on the specific test to access the details.

The calendar can de displayed as a back drop as you continue to work and it 'refreshes' automatically as new events are added or, say, a test status changes. It is not necessary to close and re-open the calendar to force this kind of update.

Test and Calibration task message shown on the Calendar

When tests are set up using the following menu options, a task entry *Test <template name> on Equipment <equipment name>* will be created on the calendar for the nominated **Tester** on the **Test Template**:-

- **Assign Tests to an Equipment Item** - **New Schedule** and **Reschedule**
- **Assign Equipment Items to a Test** - **New Schedule** and **Reschedule**.

The tester will then be able to double-click on the calendar entry to invoke the **Enter Test Results** dialog where they may enter results for the test.

Re-scheduling test schedules

You can re-schedule a Planned test simply by highlighting and dragging it to the new date; Completed tests cannot be moved.

If the re-scheduled date is in a different month, the ‘dock’ (situated next to the **Close** button) must be used...

1. Click on the test to be moved and drag it to the dock.
2. The original date and test name will be displayed in the dock.
3. Go back or forward until the actual required Month and/or Year is showing and drag the test in the dock to the re-scheduled date.

The re-scheduled date will automatically be updated in the main **Test Details** dialog.

6 Test results

The Test and Calibration module allows you to record test results in three ways:-

- using the menu option **Test | Enter Results**
- by double clicking on a planned test in the calendar
- by double-clicking on a test on the **Test Schedule** page of the equipment register (see Equipment register).

Selecting the **Test | Enter Results** menu option initially presents a search grid from which you can select the test for which you wish to enter results (using any method described in Search routines). Otherwise, the **Enter Test Results** dialog invoked by all three methods is exactly the same, so you have complete freedom in choosing between which is most convenient for your working methods.

A key feature of the Test and Calibration module is that testers entering results are not shown expected values until the results are entered and committed. Therefore, if the tester does not have access to other areas of the system, he or she will not know the anticipated values for the test(s) they are performing.

6.1 Entering test results

The **Enter Test Results** dialog allows you to enter actual test results for a test. It can be reached in one of three ways:-

- using the menu option **Test | Enter Results**
- by double clicking on a planned test in the calendar
- by double-clicking on a test on the **Test Schedule** page of the equipment register (see Equipment register).

Selecting the **Test | Enter Results** menu option initially presents a search grid from which you can select the test for which you wish to enter results. Otherwise the **Enter Test Results** dialog invoked by all three methods is exactly the same - simply choose the most convenient method for the way you work.

Appropriate History entries are made if a Tester is changed, if an NCR is raised, when results are entered etc.

A key feature of the Test and Calibration module is that testers entering results are not shown expected values until the results are entered and committed. Therefore, if the tester does not have access to other parts of the system, he or she will not know the anticipated values for the test they are performing.

As results are entered, Workbench computes any variance from the expected result and automatically enters this figure in the Variance field.

The **Enter Test Results** dialog has six pages:-

- Main - for entering details such as certificate, document and equipment references, actual test cost, duration and date.
- Test Details - for information only; displays test description, instructions and remedial actions for test failure.
- Environment - enter any environment variable values recorded at the time of testing.
- Results - enter measurement results and the equipment used to record those results.

- Result Notes - enter any notes relevant to these test results.
- History - is read-only and tracks any changes to scheduled tests.

The dialog cannot be successfully saved until all the results are entered. If any results are missing, Workbench will warn you and take you back to the missing field.

When all results have been entered and saved, the system presents a summary of the results in the **Test Results** dialog...

1 Check the test results; if any are incorrectly entered, double-click on the incorrect entry to be taken directly to that field for correction. Alternatively, highlight the incorrect entry and click on the **Correct it** button (that will then be active).

2 Save any corrections (if necessary) and then click **OK** to accept the displayed test results.

3 Now see Passing or failing a test.

NB. If no **Environment** or **Measurement** values are valid for this test, a test cannot actually 'fail' so the **Save** button will automatically be enabled. As there are no measurements to calibrate, it is not possible to produce a certificate but the fact that the test was carried out will be recorded and details available for viewing in the **Test Result History** dialog.

This flexibility allows you to schedule a set of tests, say, to check telephone equipment at user-defined intervals. The tests will appear on the calendar and the Tester will be informed of the relevant dates. When the scheduled tests are carried out, this will be recorded.

6.1.1 Test results - main page

The **Main** page of the **Enter Results** dialog gathers the ‘header’ information for the test before going on to acquire actual results of measurements taken.

The **Attachments** button (similar to a paper clip, at the top right of the dialog) allows the addition and/or modification of files attached to an equipment record. Depending on access rights, attachments may be viewed, added, edited and/or deleted. See Attachments for full details.

1 Enter or edit the **Tester**'s details as appropriate - the person who actually carried out the test may differ from the planned tester. If the *Is External* check box is not ticked, the tester is internal (a member of staff); if checked (ticked), the tester is external (a supplier). The **Search** button alongside the **Tester** field takes you to the **Select Tester** search grid (personnel members) if the check box is unchecked; if checked, this Search button will take you to the **Select External Tester** (Suppliers) search grid.

2 Enter a user-defined **Certificate reference** if relevant.

3 The **Template** and **Equipment Doc. Refs** are read-only and stem from the **Create Test Template** and **Create Equipment** dialogs.

4 In the **Date Done** field enter the actual date of the test (mandatory) - the system defaults to the current date. The **Date Due** is the scheduled test date entered when the test was assigned and it cannot be changed. The **Test Dates Variance** is entered automatically as the variance between the **Date Due** and the **Date Done**. The **Date Created** is the date and time that the test was assigned (and cannot be changed).

5 The **Expected Cost** is as entered in the test template or individual test details. Enter the **Actual Cost**, if known. The **Test Cost Variance** is entered automatically as the difference between the **Expected** and **Actual Cost**.

6 The **Expected Time** is as entered in the test template or individual test details. Enter the **Actual Time** taken if relevant. The **Time Taken Variance** is entered automatically as the difference between the **Expected** and **Actual** duration.

NB. Where variances may be involved for the test due date, the cost of the test and/or the duration of the test, these are calculated by the system and cannot be edited manually.

You will not be able to save this test result until all required fields and pages are completed. If you attempt to **Save** before all pages are complete, any outstanding fields will be indicated by Workbench and you will be taken directly to them.

6.1.2 Test results - test details page

This page is for information only. It shows the test detail notes as entered in the test template or overridden when the individual test was scheduled:-

- Test Description
- Test Instructions
- Remedial actions to be taken if equipment fails this test.

These detailed notes are carried through from the template to individual test schedules at which point they can be retained in their original format, amended, added to or otherwise overridden in whatever way you choose.

6.1.3 Test results - environment page

The **Environment** page allows you to enter any required environment variable values recorded at the time the measurements in the test were taken.

NB. If a specific environment variable is common to all measurements but uses different units, it will not appear in the list box. There may also be individual measurements in the test which have environment variables associated with them.

Entering values for shared variables

1 The page defaults to list the environment variables which are common to all the measurements in this test.

2 Leave the *Apply to all measurements* check box ticked and follow the procedure below from point 3 onwards.

Entering values for environmental variables associated with specific measurements

1 In the **Enter Test Results** dialog click the *Apply to all measurements* check box to turn it off.

2 From the **Measurements** field drop-down list, select the measurement for which you wish to enter the recorded environmental variable values.

3 In the list box below, highlight the **Variable** for which you wish to enter a value.

4 In the **Value recorded** field, enter the environment variable value recorded at the time of the test.

5 Repeat this operation for all measurements and all environments.

6.1.4 Test results - results page

Here you may enter the recorded measurement values for this test. The **Value recorded** and **Equipment used** fields remain unavailable until one of the measurements is highlighted.

Entering the recorded values for a scheduled test

1. In the **Test | Enter Results | Results** page, click over the required measurement to highlight it. The cursor will automatically be positioned in the **Value recorded** field.
2. Enter the recorded value.
3. Press the tab key to move on to the **Equipment used** field
4. Enter the **ID** of the **Equipment used** to perform the test or click the Search button and select from the search grid.
5. When you have finished entering all measurement results and any associated environment readings, click **Save**.

From the results entered, Workbench will compute whether the equipment has passed or failed the test. If one or more of the measurements was taken whilst an associated environmental variable was out of range, the test will be registered as 'Invalid' and the status of the equipment will be logged as 'Unknown' - see Passing or failing a test.

NB. If you have not entered any required Variable values, the system will prompt you to do so before allowing you to save the overall test result.

6.1.5 Test results - result notes page

On this page you may enter any free format notes relating specifically to the performing of this test and the recording of its results.

6.1.6 Test results - history page

This page gives details of when and by whom a test was created and tracks any changes made to scheduled tests. History entries include:-

Test results entered for test <xx> by <staff id>

Test details changed by <xx>

Date due changed from <date> by <staff id>

Expected cost changed by <staff id>

Document reference changed by <staff id>

Duration changed by <staff id>

Tester changed from <staff id> by <staff id>

Is external changed by <staff id>

Measurement variable modified by <staff id>

Environment variable modified by <staff id>

6.2 Passing or failing a test

When you click the **OK** button in the **Test Results** dialog, provided that this is the most recent of the tests scheduled for this item of equipment, Workbench will update the **Status** field of the **Equipment Register** with the overall test result. If this is not the most recent of the test results for this item of equipment Workbench will not alter the status of the equipment. This is to allow for the input of historical results without interfering with the equipment's current status.

NB. The 'Owner' of an item of equipment will be informed (via a Notification on the toolbar and an external message) if the status of the equipment is changed as a result of any test.

If the equipment has passed the test...

the status will be registered as 'OK' and an option is provided to print a **Calibration Certificate** for the equipment. You are then returned to the test selection dialog.

When a test is failed...

Workbench displays the **Test Failure** dialog...

The results from the test are reported in blocks, each relating to a specific measurement, in the 'Bad results' list box.

There are two 'failure' modes:-

- the test registers as 'Invalid' and sets the equipment status to 'Unknown'. This arises when one or more environment variables are out of range
- the test registers as 'Failed' and sets the equipment status to 'Not OK'. This happens when at least one measurement has been recorded outside its acceptable tolerance range.

If you have the Workbench **Nonconformities** module installed and have appropriate access to it, you may at this stage raise a nonconformity as a result of the test failure. Simply click the **Nonconformity** button and this will take you directly to the Report Nonconformity routine. The History log of the raised Nonconformity will record that the Nonconformity emanated from the Test and Calibration module.

The **Print** button allows you to print the results of the test.

The **OK** button returns you to the **Select Equipment Test** (results) dialog where you may select other records and enter further test results, or **Close**.

6.3 Test result history

This option displays a list of all completed tests. It is strictly a read-only routine as it is not possible to edit test results once they have been saved.

Examining the test history of a completed, scheduled test

1. From the **Test** menu, choose **Test Result History**.
2. In the **Select Equipment Test** search grid, select the required test using any method described in Search routines.
3. Select the required page(s) from the **View Test Results** dialog to access information on the specified test. On the **Environment** and **Results** pages, entries must be highlighted in order to reveal their values / results etc.

The pages and fields in the **View Test Results** dialog are similar to those in the **Enter Test Results** dialog; however, please note the following differences:-

- they are not editable
- details of expected values and tolerances are shown
- the **Environment** and **Results** pages have radio buttons in the bottom right hand corner indicating the pass/fail status of any highlighted measurement and/or variable.

See also: Test result history report

7 Traceability

A central element of all Quality Standards as far as equipment is concerned is the ability to trace where an item has been used should it fail a test. Obviously where a piece of equipment has been found faulty this might cast doubt on the accuracy or reliability of the jobs on which it has been used since its last test. You need therefore to be able to identify these jobs and, if necessary, take remedial action or institute further checks on the jobs themselves.

To facilitate this type of checking, the module allows the recording of all jobs, locations and personnel to which an item of equipment has been issued or checked out. This allows you to build up a full equipment usage record that can be examined on screen or in a printed report. The equipment usage option also lets you monitor where equipment is at any given time; this can be very useful when equipment needs to be recalled for any reason, perhaps because a test is due.

The **Equipment Usage** grid (and the **Usage** page of the **Equipment Register**) is automatically updated if any changes are made.

You are also able to record ‘Unscheduled Events’ which may affect equipment status. These will include equipment failures and breakdowns which fall outside the scheduled test cycle but which can clearly have a major effect on equipment usability and therefore availability.

7.1 Unscheduled events

The term 'Unscheduled event' covers unforeseen and unscheduled occurrences which may affect the status and usability of equipment. For example, it is envisaged that the breakdown of a piece of equipment which rendered it unusable is most likely to be recorded under the Unscheduled Events routine. An appropriate History entry will be made.

The key point here is that the recording of an unscheduled event *lets you change the equipment status and automatically updates this in the equipment register*. Anyone viewing the latter will then be immediately aware of the change that has occurred.

An extra benefit of this is the ability, in controlled circumstances, to use this routine to override an equipment item’s status. This might be done, for instance, if a test result had been input incorrectly and resulted in the equipment status being changed. If this has to be done it will always be clear from the equipment history audit trail what has occurred.

Use unscheduled events to:-

- log any unscheduled events which affect equipment items
- change the status of an equipment item
- view details of any past unscheduled events (read-only).

NB. The ‘Owner’ of an item of equipment is informed (via external mail and a Notification) of any change in Status due to an Unscheduled Event.

Withdrawn equipment items are excluded from the Unscheduled Events selection list.

Recording an unscheduled event

1. From the **Traceability** menu, choose **Unscheduled Events**.
2. In the **Select Unscheduled Events** search grid, click on **New**.
3. Complete the first three fields (mandatory). Use the **Search** button to select the Equipment affected; enter a Description of the event (up to 40 characters); use the Date button to enter the date that the unscheduled event occurred**.**
4. The **Search code** will automatically follow the Description but can be changed.

5 Enter a **Cost** incurred if known or relevant.

6 Click on the relevant radio button to record the new status of the equipment if known.

7 Enter any **Notes** on the incident if required and **Save**.

The record will now be listed in the **Select Unscheduled Event** search grid and available for viewing (read-only) at any time in the future. The record cannot be edited in any way.

7.2 Equipment usage

Traceability is a core concept in all Quality Standards. Fundamentally if anything goes wrong you need the ability to go back and analyse the causes and potential side effects of the problem. Use the **Traceability | Equipment Usage** option to:-

- view details of equipment usage
- assign equipment to personnel
- log an equipment item's current site / location
- book equipment on / off a job.

After selecting the relevant equipment item, the **Equipment Usage** dialog lists all jobs that the selected equipment has been allocated to (if any). From here you may view / amend details of a selected job (depending on the status), book the equipment item to a new job, or complete a job - so freeing up the equipment for use on other jobs.

Equipment items may only be booked out to one job during the same time period. If you attempt to book an equipment item for dates when it has already been committed to another job, you will receive a warning.

If items of equipment have been withdrawn, this is shown in red at the top of the Equipment Usage dialog; equipment with 'withdrawn' status cannot be booked out on new jobs.

All jobs are recorded by the system and are shown in the Equipment usage report.

Viewing or amending the usage of an equipment item

1 Choose **Equipment Usage** from the **Traceability** menu.

2 In the **Select Equipment Item** (Usage) search grid, select the required equipment item (see Search routines).

3 The **Equipment Usage** dialog will appear showing a list of jobs that the selected equipment item has been / is currently booked out to (if any). The site, location, assignee, start / finish dates and the current status of the job will also be shown, if recorded.

4 To view or update details of a job, highlight and click on the **Select** button:-

- if the job is 'Completed' the **View Booking** dialog will appear allowing you to view all details

- if the job is 'Booked' the **Edit Booking** dialog will appear where you may change any of the details including the mandatory start date.

5 Users with appropriate access may delete assignments with 'Booked' status, using the **Delete** button. Completed assignments cannot be deleted.

6 If you want to mark the job as complete, enter a **Finish Date** and click on the **Completed** button. Various warnings will be given if the dialog has not been completed correctly and you will also be warned that after a job is marked as Completed, details will be read-only. If you are happy with this, click **Yes** and the job will be marked as complete.

7 If you want to book the equipment item for a new job, click on the **New** button and see Booking equipment on / off a job.

The **Undo** button (in **Edit Booking**) will become available if any edits are made to this dialog - use the button to revert to the original saved booking.

The **Usage** page of the equipment register will automatically be updated with any changes made in the **Edit Booking** dialog.

7.3 Booking equipment on/off a job

The **Equipment Usage** menu option is used to book equipment out to a job and also to mark jobs as complete. As equipment can only be booked out to one job at a time it is a good idea to mark the job as 'Complete' as soon as possible. This frees up the equipment for use on other jobs.

History entries will be made to the Equipment register when jobs are booked on a job and also when jobs are completed.

Booking a job

1 Choose **Equipment Usage** from the **Traceability** menu.

2 In the **Select Equipment Item** (Usage) search grid, select the required equipment item.

3 The **Equipment Usage** dialog will appear showing a list of jobs that the selected equipment item has been / is currently booked out to (if any). The site, location, assignee, start / finish dates and the current status of the job will also be shown if recorded. To book the equipment out to a new job, click on the **New** button.

4 The **Create Booking** dialog will appear. If there are any tests overdue on the equipment a red warning will be shown at the top of the dialog.

5 Select a job Name (if required) using the Search button. Jobs cannot be entered 'on the fly' so must be set up first in the **Settings** menu (see Jobs). All fields (apart from the **Equipment ID** and **Status** at the top of the dialog) can be edited at any time until the job is completed.

6 The **Start Date** of the job is the only mandatory field. This should be entered in order to book the equipment. Enter a **Finish Date** if known - if no **Finish Date** is recorded the equipment can be booked out to another job from the day following the **Start Date**.

7 Use the Search button to search for (or edit) an **Assignee**; personnel listed here originate from records in the Personnel module.

8 The **Base Site** and/or **Location** will automatically be entered in the relevant fields if these have been registered in the **Equipment** dialog (see **Record | Equipment**). Alter if required using the **Search** button. See Sites and Locations for adding new records if necessary.

9 **Save**.

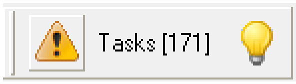
When the dialog is set up as required and saved, this equipment item is now booked and cannot be used on any other job during recorded start and finish dates. An appropriate entry is made in the equipment history file (**Record | Equipment** / **Usage** page).

Completing a job

To mark a job as complete, enter a **Finish Date** in the **Edit Booking** or **Create Booking** dialog and click on the **Completed** button. Various warnings will be given if the dialog has not been completed correctly and you will also be warned that after a job is marked as 'Completed', details will be read-only. If you are happy with this, click **Yes** and the job will be marked as complete.

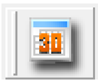
8 Tasks, Notifications and the Calendar

The main screen displays three buttons in addition to those showing installed Workbench modules.



The Tasks button advises personnel that they are being asked to perform a task.

The Notifications button is used to inform personnel that certain events have taken place.

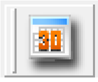


The Calendar button gives direct access to a calendar recording all important events / deadlines in this module and all other installed modules.

8.1 Messages generated by the Test & Calibration module

	Message & Type	**When Sent**	**Sent to**
1	Please run test assigned to equipment item (T)	When a single test is scheduled	Tester
2	Test <xx> due on equipment <xx> (N)	When a single test is scheduled	Owner
3	Please run test assigned to equipment item (T)	When a new tester is assigned or a test is moved to a new date	New Tester
4	Test <xx> due on equipment <xx> (N)	When a new tester is assigned or a test is moved to a new date	Owner
5	Test schedules assigned to equipment item (N)	When recurring tests are scheduled	Tester & Owner
6	Status of equipment item changed (N)	When the status is changed as a result of an unscheduled event or test result	Owner
7	Test assigned to multiple equipment items (N)	When recurring tests are scheduled	Tester & Owner
8	You have been assigned as tester for test <xx> (N)	When updating test details with changes made to the test template	Tester & Owner
9	You are no longer tester for test <xx> (N)	When updating test details with changes made to the test template	Superseded Tester
10	Tester has been changed (N)	As above	Owner

8.2 Test schedules and the calendar

 All scheduled tests, whether planned or completed, are shown on the calendar.

The Calendar button is located on the main toolbar and gives access to a calendar that is used by all modules; this means that schedules and reminders generated by any installed module will be shown on the same calendar.

Planned tests are shown in black type and completed tests are grey. Icons are also used to show the differing status of the tests...

 Planned

 Completed test with pass status

 Completed test with invalid status

 Completed test with fail status

Tests can be accessed directly by double-clicking on a day to call up that day's events and then double-clicking on the specific test to access the details.

The calendar can de displayed as a back drop as you continue to work and it 'refreshes' automatically as new events are added or, say, a test status changes. It is not necessary to close and re-open the calendar to force this kind of update.

Test and Calibration task message shown on the Calendar

When tests are set up using the following menu options, a task entry *Test <template name> on Equipment <equipment name>* will be created on the calendar for the nominated **Tester** on the **Test Template**:-

- **Assign Tests to an Equipment Item** - **New Schedule** and **Reschedule**
- **Assign Equipment Items to a Test** - **New Schedule** and **Reschedule**.

The tester will then be able to double-click on the calendar entry to invoke the **Enter Test Results** dialog where they may enter results for the test.

Re-scheduling test schedules

You can re-schedule a Planned test simply by highlighting and dragging it to the new date; Completed tests cannot be moved.

If the re-scheduled date is in a different month, the 'dock' (situated next to the **Close** button) must be used...

1 Click on the test to be moved and drag it to the dock.

2 The original date and test name will be displayed in the dock.

3 Go back or forward until the actual required Month and/or Year is showing and drag the test in the dock to the re-scheduled date.

The re-scheduled date will automatically be updated in the main **Test Details** dialog.

9 Reports

The Test and Calibration module is supplied with a number of standard reports covering the equipment register and its associated tests, schedules and histories.

Within the system you have a great deal of flexibility in determining which set of equipment records goes into a report and the order in which those records are reported (by the setting of both primary and secondary sort orders).

All criteria are inclusive, ie. they are joined together by an ‘and’ type relationship. If you specify, say, a given supplier and equipment type, the records returned will have to meet both conditions, ie. equipment records from this supplier and of this equipment type. Reports will only be issued when information matches all the criteria selected; all report output can be directed to the screen, to a printer or to file (where it may be saved in a variety of formats).

9.1 Report options

Some reports show **Report Options** on the Report Criteria dialogs; for others, these Options appear after clicking the **OK** button. The system then gives various options including where the report output is to be directed. Select or de-select options for the way in which the report is presented:-

Print Date/Time produced? - select this option if you want the date and time that the report was produced to be shown on the report itself.

New Page on Group Break? - this option is shown and enabled when you choose to group the report. Ticking this option forces the report to start on a new page each time a new ‘group’ is reported on.

Tick **Print Attachment information?** if you want to include information regarding any files attached to equipment records.

Select the report’s destination from the drop-down list:-

Screen (print preview) - sends the report to the screen. If there are multiple pages for the report this will be indicated at the window base. The report window gives options to zoom in and out, browse and print the report’s contents.

Printer - opens the **Print** dialog that may vary depending on the network system you are connected to. Here you may send the report to a printer of your choice or print to file.

File - also opens the **Print** dialog. At the bottom of the dialog select the type of file you wish to save the report as and where to save it.

When you have set up the options as required, click **OK**.

9.2 Equipment register

The **Equipment Register** report essentially provides a snapshot of the register at a point in time. It does not produce any schedule or history information. The range of selection criteria allows you to narrow the scope of the report as much as you want. Alternatively, if all selection criteria are left blank, every equipment record in the register will be included on the report.

Running a report on the Equipment Register

1 From the **Reports** menu, choose **Equipment Register**.

2 In the **Equipment Register Report Criteria** dialog complete the required fields (using the notes below) to determine the report content.

3 Click **OK** and the **Equipment Register** window will appear.

4 In the **Equipment Register** window, de-select the check box if you do not want the current date/time to appear on the report and choose the required destination of the report from the drop-down list - see Report options.

5 Click **OK** to generate the report after you have selected all required criteria.

Equipment Range - specify a range of equipment to be filtered on by either search code or ID. The **From / To** range then selected will be inclusive of start and end points and will be in alphabetical order. If the **To** field is not completed, all equipment with a code alphabetically greater than or equal to the **From** field is selected.

Equipment Status - select the relevant radio button to signify the current status of the equipment. **All** is the Workbench default; this selects all equipment regardless of its working status.

Manufacturer - use the Search button to select a manufacturer (set up in the **Settings** menu).

Supplier - use the Search button to select a supplier (set up in the **Settings** menu).

Assignee (if applicable) - use the Search button to select the current user - personnel listed here originate in the Personnel module.

Owner - use the Search button to select the equipment ‘owner’ - again, personnel listed here originate in the Personnel module.

Type - use the Search button to select an equipment type (set up in the **Settings** menu).

Acquired since - enter a date (using the Date button if required). The report will show only equipment acquired on or after the entered date.

Base site - use the Search button to select the equipment site (set up in the **Settings** menu).

Base location - use the Search button to select the equipment location (set up in the **Settings** menu).

Check the box marked *Include unscheduled events* if you want these to be included in the report. See Unscheduled events for further information.

Sort by - Primary - choose, from the drop-down list, the primary field for sorting this report.

Sort by - Secondary - choose, from the drop-down list, the secondary field for sorting this report.

NB. If no **Sort by** field is chosen, Workbench will default to ordering by **Equipment ID**.

9.3 Equipment summary

This report simply returns a list of equipment that meets all the selected criteria. Report Options here are included in the main selection dialog rather than in a separate dialog and offer options to group and/or order the information.

Running an Equipment Summary report

1 From the **Reports** menu, choose **Equipment Summary**.

2 Complete the required fields in the **Equipment Summary Report Criteria** dialog to determine the report content. The check box *Exclude withdrawn equipment items*, if checked, filters out withdrawn equipment items from the report; (the default is unchecked). For explanations of other fields, see the Equipment register report.

3 Select the required Report Options.

4 Click **OK** to generate the report.

Report Options - Group by - information in this summary report may be grouped by Type; select this option from the drop-down list if required. If selected, the *New Page on Group Break?* check box also becomes available for selection.

Report Options - Order by - information in this report may be ordered by Equipment, Owner or Site; select the preferred option from the drop-down list.

See Viewing, printing or saving reports

9.4 Withdrawn equipment history

This report simply returns a list of withdrawn equipment that meets all the selected criteria.

Running a Withdrawn Equipment History report

1 From the **Reports** menu, choose **Withdrawn Equipment History**.

2 In the **Withdrawn Equipment History Report Criteria** dialog, complete the required fields to determine the report content. For explanations of each field, see the Equipment register report.

3 Click **OK** and the **Withdrawn Equipment History Report** window will appear.

4 De-select the check box if you do not want the current date/time to appear on the report and choose the required destination of the report from the drop-down list - see Report options.

5 Click **OK** to generate the report.

See Viewing, printing or saving reports

9.5 Test result history

This report allows you to interrogate your equipment test result history records and produce a report listing test results and notes for any equipment within any period you specify. The report includes the following details for each equipment item:-

- equipment name
- details of all tests within the specified date range
- all measurement details for those tests
- environment details for those measurements
- overall test result and equipment status resulting from this.

The building of this report is virtually the same as the Equipment register report. However, you may now select a **Test Range** to specify a range of tests and/or a **Date Range**.

Date Range selection is available for all schedule and/or history type reports (but not for the **Equipment Register** report). It enables you to narrow down the period of the history that you wish to see. Enter the required date range (using the Date buttons if preferred) and also indicate (via the radio buttons) whether the stipulated dates are expected or actual.

9.6 Equipment usage

This report lists all changes of equipment assignment and usage for any given period that you specify.

The building of this report is virtually the same as the Equipment register report; however, you may now select a **Job Range** and/or a **Date Range**.

Date Range selection is available for all schedule and/or history type reports (but not for the **Equipment Register** report). It enables you to narrow down the period of the history that you wish to see. Enter the required date range (using the Date buttons if preferred) and also indicate (via the radio buttons) whether these are start or finish dates.

See also: Viewing, printing or saving reports

9.7 Test schedules

This report shows all scheduled tests (past or present) that match the chosen criteria and fall within a specified time period. The building of this report is virtually the same as the Equipment register report but with the addition of the **Test Range** and **Date Range** selection groups.

9.8 Tests by equipment used

This report is intended to list all equipment using a particular piece of test equipment.

Running a report for Tests by Equipment Used

1 From the **Reports** menu, choose **Tests by Equipment Used**.

2 Select the **Test Equipment** using the Search button.

3 Select a **Test Date From** and **To** range(using the Date buttons if preferred).

4 Select the required Report Options.

5 Click **OK**. Providing that there are records that meet your search criteria the report will be generated and sent to the chosen destination.

See also: Viewing, printing or saving reports

9.9 Equipment awaiting calibration

This report returns details of all equipment awaiting calibration ie. equipment that needs testing because its status is either 'Unknown' or 'Not OK' - or where the item has a scheduled test date that has passed. Various filters allow you to make a very specific search if required.

Running a report for Equipment Awaiting Calibration

1 From the **Reports** menu, choose **Equipment Awaiting Calibration**.

2 Select which records you wish to include using the Search buttons. Choose by Base location, Base site, Equipment type or Owner - or a combination of any.

3 Select a **Calibration** date range (**From... To**) if required or known.

4 Use the radio buttons to select the status of the equipment, either OK, Not OK or Unknown - or any combination.

5 Select the required Report Options.

6 Click **OK**.

Providing that there are records that meet your search criteria, the report will be generated and sent to the chosen destination.

9.10 User defined reports

For users with appropriate access, this dialog gives read-only access to the **ReportQuest** module (if you have it installed).

Please refer to the ReportQuest Help system for full details on this module.

9.11 Viewing, printing or saving reports

An Information message will appear when no records can be found which meet the search criteria that you have set up. If you still wish to find records that may match your criteria closely, go back to the selection criteria window and broaden your original selection.

When there are records that match your search and depending on which report destination you chose, ie. Screen (print preview), Printer or File, either the Print Preview or the Print dialog will appear.

Screen (print preview)

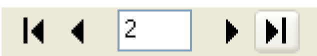
The **Print Preview** dialog will appear when you select the Screen (print preview) destination option for a report (or in any other dialog). If you hold the pointer tool at the bottom of the toolbar, yellow pop-up bars will appear, explaining the feature of each button.

The Print icon allows you to print any material shown in the print preview.

By clicking on the middle of the three magnification buttons, the page will be shown full width.

By clicking on the right of the three magnification buttons, the page will be shown at actual size.

The left magnification button shows the whole page.



The outside arrows take you back to the first page or on to the last.

The single arrows allow you to turn the pages of a report backward or forward.

The number of the current page is shown in the centre.

If, in Report Options, you ticked *Print Date/time produced?* this information will appear on the report itself.

After previewing, use the **Close** button to close the record or print it by clicking on the small printer icon in the top left hand corner. If you elect to print, the **Print** dialog will appear.

Printer

If you selected the **Printer** destination on Report Options or clicked on the print icon in Print Preview, the **Print** dialog will appear. It may differ according to the type of printer you have installed and in some cases you will not have the option to *Print to File*.

1 Configure the printer if necessary.

2 Select the number of copies required and the Page Range.

3 Click **OK** to print the report.

In most instances you may still print to file from this dialog; to do this, click in the *Print to file* check box and then select the type and destination of the file (see **File**, below).

Each report will differ slightly according to the type and information shown but all will follow a similar format. All printed reports are A4 and have a wide left hand edge margin for binding.

File

If you chose the **File** destination option in Report Options the **Print** dialog will appear with the *Print to file* check box in the bottom part of the dialog already checked.

1 Tick the *Print to file* check box if it is not ticked.

2 Select the **Type** of file required from the drop-down list; this list may differ depending on the computer / network system you have installed.

3 Enter **Where** to save the file or select its destination using the **…** button.

4 Click **OK** to save to file in the selected destination (from where it may be e-mailed in the selected format if required.

10 Menus at a glance

The purpose and scope of each menu item in the Test and Calibration module is explained, briefly, below.

File

Where Am I? Allows you to verify the currently selected database. This is also displayed at the lower right side of the Workbench main window.

Who Am I? Shows your current Login ID and whether access rights are granted individually or via templates.

Login to Database... Here you may switch to another database without having to exit the system and re-enter. You will, however, still have to log in to the new database as users may have different access rights between databases. If you are already logged in to the system and wish to change who you are logged in as, while remaining connected to the same database, you may do so here.

User Preferences... If viewed in its entirety, this is a four-page dialog allowing you to set up various preferences covering the look and workings of your own machine. Here you may also change your own password and decide which other user(s) should be allowed to process tasks on your behalf, in case of absence. However, access to this menu item and to each individual page is controlled by the system administrator so the whole menu item or aspects of it may not be present.

View Issued Document... Allows you to view issued documents to which you have access (appears only when the Document Control module is also installed).

Quick document links Providing that the Document Control module is installed, the Use document quick launch facility setting is set in the Workbench Configuration Centre | Workflow Settings (New User/Personal) and the Number of links... setting is set between 1 and 10, then the last viewed documents (up to a maximum of 10 and dependent on the Number of links setting) will also be available for viewing here. They will be listed most recent first.

Workstation Settings... Allows the setting up of a default database and login that are automatically selected on future start-up. The default dictionary is also set here. Finally you may select which Workbench server to connect to and, optionally, whether the list of servers displayed should be restricted to only those that are running.

Exit Exit the program. A confirmation message is displayed first.

Record

Equipment… Allows the setting up and maintenance of equipment register records.

Withdrawn Equipment… Lists all items of equipment that are currently withdrawn and allows the re-instatement of selected items.

Jobs… This item allows you to create and edit jobs where the equipment may be used.

Test

Offers menu items that will define, assign, schedule and enter results for tests.

Test Templates… Allows the creation and editing of test templates for use with equipment.

Assign Tests to an Equipment Item - New Schedule... Here you may create a new schedule of assigned tests to specific equipment items.

Assign Tests to an Equipment Item - Reschedule... Here you may re-schedule equipment item tests that have already been completed.

Assign Equipment Items to a Test - New Schedule... Here you may define which tests are to be used for specific items of equipment and create a new schedule of tests.

Assign Equipment Items to a Test - Reschedule... Here you may re-schedule tests that have already been completed.

Test Details… Allows the viewing and editing of a scheduled test.

Enter Results… Allows you to enter the results of a test.

Test Result History… Allows you to view the test history for items of equipment.

Traceability

With this menu you may trace where equipment has been used.

Unscheduled Events… Allows you to record unanticipated events that affect equipment status.

Equipment Usage… This item allows you to view where equipment has been used and who the equipment was assigned to. Here you may also book equipment on and off a job.

Settings

Equipment Types… Allows specified types of equipment to be created, edited and deleted. Used mainly for sorting purposes.

Manufacturers… Here you may create new records and maintain existing records of manufacturers of externally supplied goods.

Locations… Allows locations to be recorded, edited and deleted.

Sites… Allows sites to be recorded, edited and deleted.

Products… Allows you to create and edit product records of goods, either manufactured in-house, or externally supplied.

Suppliers… Here you may create new records and maintain existing records of suppliers/contacts of externally supplied goods and services.

User Defined Analysis - Equipment… Allows the creation of user-definable analysis categories and values for equipment.

User Defined Analysis - Manufacturers… Allows the creation of user-definable analysis categories and values for manufacturers.

User Defined Analysis - Suppliers… Allows the creation of user-definable analysis categories and values for suppliers.

Reports

Equipment Register… Provides a list of the equipment register at a point in time. Gives full details of equipment items including assignees and locations etc. but does not produce any schedule or history information.

Equipment Summary… Provides a brief summary of the equipment register at a given point in time.

Withdrawn Equipment History… This report lists all withdrawn equipment items of a particular type, at a specified site or location, supplied by a named manufacturer, within a given period etc.

Test Result History… Allows you to produce a report listing test results for any equipment within a given period.

Equipment Usage… This report lists all changes of equipment assignment and usage for any given period.

Test Schedules… This report gives a list of scheduled tests within a specified period.

Tests by Equipment Used… This report lists all equipment using a particular piece of test equipment.

Equipment Awaiting Calibration… Lists all equipment that needs testing because its status is Unknown or Not OK or because its scheduled test date has passed.

User Defined Reports… Shows queries and reports generated by Workbench ReportQuest (if installed).

Module

In this menu you may gain quick access to any other installed Workbench modules.

Audits You will only be able to use this menu item if you have the Audits module installed. If so, please refer to the Audits Help system for full details on its purpose and function.

Customer Care You will only be able to use this menu item if you have the Customer Care module installed. If so, please refer to the Customer Care Help system for full details on its purpose and function.

Document Control You will only be able to use this menu item if you have the Document Control module installed. If so, please refer to the Document Control Help system for full details on its purpose and function.

Nonconformities You will only be able to use this menu item if you have the Nonconformities module installed. If so, please refer to the Nonconformities Help system for full details on its purpose and function.

Personnel This module is installed as an integral part of all modules and facilitates all aspects of personnel administration on the system.

ReportQuest You will only be able to use this menu item if you have ReportQuest installed. If so, please refer to the ReportQuest Help system for full details on its purpose and function.

System Manager This module is installed as an integral part of all modules. It allows the system administrator to define and maintain all global system settings, manage individual user access to Workbench and to arrange user logins and passwords.

Test and Calibration You will only be able to use this menu item if you have the Test & Calibration module installed. If so, please refer to the Test and Calibration Help system for full details on its purpose and function.

Training You will only be able to use this menu item if you have the Training module installed. If so, please refer to the Training Help system for full details on its purpose and function.

Help

Contents Gives access to the Table of Contents for on-line Help.

Topic Search Gives an alphabetical index of all Help entries and allows you to type in and search for specific topics.

How to use Help Explains how to get the best out of your Help system.

About Workbench Gives information on the version of Workbench and the number / usage of licences.

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