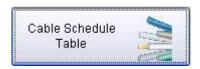
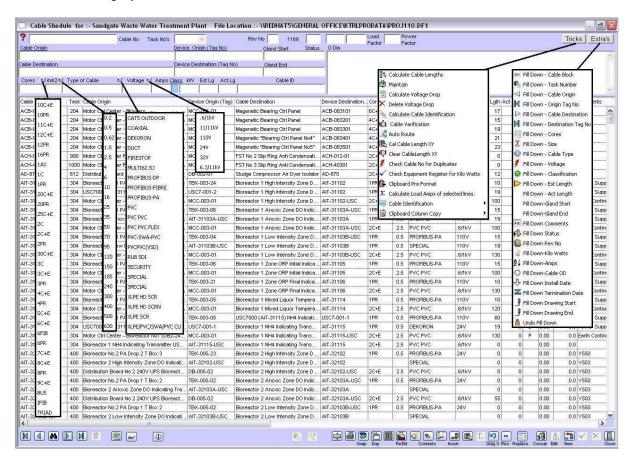
# **Category 1**

# 1.1 Cable Schedule Table



The Cable Schedule Table is all objects that have been given a tag number and require electrical linking by the means of Power Control communications and Data cables.



The Cable Schedule shows all the current cables. To include all cables including redundant cables right click on the 'Rebuild' button.

It is important that you have established a complete Equipment List prior to preparing a Cable Schedule. You can compile your Equipment List in the Equipment Manager Module.

#### 1.1.1 Functions



To enter a new cable, click "New". The Cost Centre can be entered by using the down arrow to select appropriate Cost Centre. Revision Numbers can be added. The status will automatically be generated to C which means the cable schedule is current. If this is not the case, you will need to insert the current status C = Current, D = Delete, N = New and R = Redundant.

Insert 'Cable Origin' – insert first letter and right click to select.



# **Alter Existing Record**

Modifications and additions can be made to the cable schedule. To change existing information, click "Edit", then "Tab" to the field required. Click "OK", and the changed details will be recorded.



### Concatenates

Concatenates on the end of the field or right click to add to the front of the field.



### Replace

This function replaces the existing word(s) in the cable "Origin", "Device Origin", "Destination" or "Device Destination".



### Reverse

Reverses the Origin of the cable to the Destination and the Destination to the Origin without using the edit function.



# Diag X

Inserts new line and places the 'Cable Destination' into the 'Cable Origin' field eliminating data entry.



### **Termination Schedule**

Generates termination schedule.



### Calculate

Select and highlight lines to provide totals of Estimated Lengths and Cables.



### Insert

To insert a new cable record where required and will not place at end of cable schedule.



### Clear

This clears the contents of the line, not the line number or in other words it removes any information contained in the fields except the line number itself.



### Copy

Copies contents to line below.



### **Delete Selected Lines**

Deletes selected lines from list. This does not delete the information; but allows you to work with a smaller list.



# Rebuild

Rebuilds list complete current cable list defined by C = Current. A right click builds a cable schedule with all cables including C = Current and C =



### **Deselect Lines**

Deselects all highlighted lines.



# **Duplicates**

Duplicates the selected line and extends the cable ID number by 1.



### **Swap**

Swaps two (2) selected lines around. Use by holding down 'Ctrl' Key and click with the mouse, to select the lines.



### **Print**

Prints the selected lines. To print onto Excel Spreadsheet, highlight the required lines and right click on the Print button.



### Clear

Clears the entire cable schedule list.



### **Node Window**

Opens node window.



### **Node Window**

Opens node window type 2.



### Search

Searches for the cables that are in the nominated cost center.



### Search

A normal click prompts for a Tag Number and does a search on the following: - Device Origin, Device Destination, Origin and Destination ....A right mouse click stops the redraw and does not clear the list.



# **Prints**

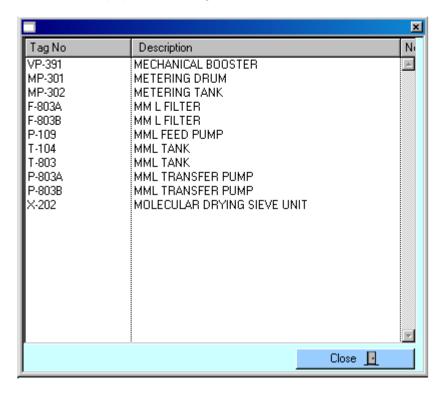
Prints selected lines into a excel spread sheet, with extra information

### Ctrl [ ]

By using the Control Key and the square brackets you can expand and contract the text in any screen ie 'Cable Schedule Table' – use Control Key + ] . The text will expand.

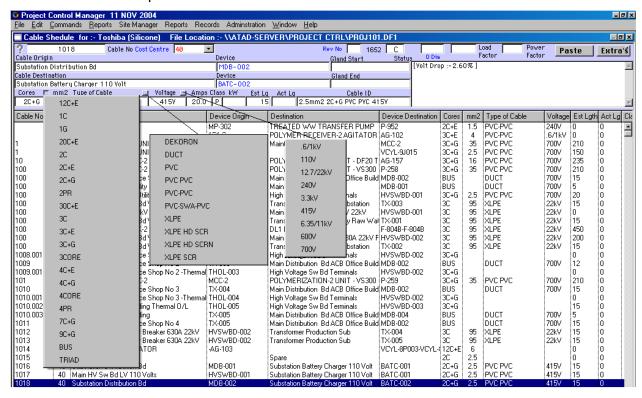
# 1.1.1 Cable Origin & Destination

Once you have entered information into the 'Equipment Manager' you are able to access the information by a right click in the 'Cable Origin and Cable Destination' fields. Refer to Module 4 – Equipment Manager.



# 1.1.2 Cable Schedule Window

To select 'Cores, Type of Cable and Voltage' you can use the facility which has been included in this screen by clicking on the small box to the right hand side of the field, as indicated in the example below.

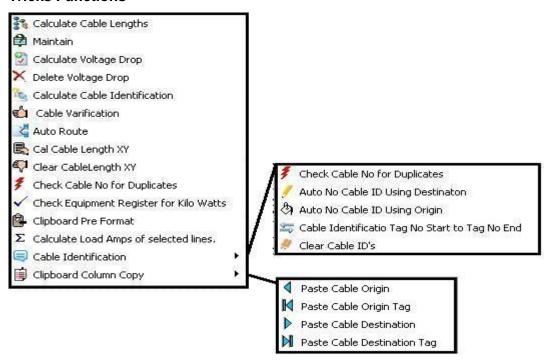


### 1.1.3 Tricks



The 'Tricks' button performs many functions. Simply click on the paste button located on the top right hand side of the screen to have the following functions highlighted on the screen.

### **Tricks Functions**





# **Calculate Cable Lengths**

Highlight the lines you want to calculate and click on the 'Calculate Cable Lengths' a dialogue box will appear asking you to 'Insert % factor you want to add to the cable'. Insert the required percentage and click 'OK' button



### Maintain

The 'Maintain' function eliminates – Trailing Spaces. Should data need to be imported into the 'Cable Schedule' it is important that you use the Maintain function to eliminate spaces that are not required. This will ensure that no spaces are remaining at the beginning or end of alpha or numerical information. Should spaces still be present it will impede the search and find functions.



# **Calculate Voltage Drop**

To calculate a Voltage Drop ensure that you have figures in the Estimated Length, Amps and Voltage fields. Highlight the lines that you need to calculate the 'Voltage Drop' and click on 'Calculate Voltage Drop'. The system will calculate the voltage drop and insert the figure into the 'Comments Section' on the 'Cable Schedule', it is highlighted by square brackets []. A Voltage Drop that is more than 5% in difference is unacceptable and should be checked.



# **Delete Voltage Drop**

Should cables circumstances change ie the length size then the 'Voltage Drop' will need to be recalculated. First delete the current 'Voltage Drop' by highlighting the lines and then by clicking on the 'Delete Voltage Drop'. The system will look for the square brackets [] and will remove the current calculation. Once this function has been performed, recalculate the 'Voltage Drop' by the method explained above in 'Calculate Voltage Drop'.



### Calculate Cable Identification



### **Cable Verification**



### **Auto Route**

As the automatic routing function becomes available it will route the cable through the nodes.



# **Check Cable Number for Duplicates**

When the 'Cable Schedule' is complete you will need to perform the 'Check Cable Number for Duplicates' function to ensure that cables have not been labelled the same. The system will automatically check the 'Cable Schedule' by sorting cable numbers in the table and testing adjacent records next to each other. Should a duplicate be found the system will alert you and will highlight the lines duplicated lines allowing you to edit the Cable Number.



# **Check Equipment Register for Kilo Watts**

If the 'Kilo Watts' have been changed to any cable in the 'Equipment Manager Module' the system will automatically check for changes and update the 'Cable Schedule' accordingly. Therefore, will save time by not having to go between the Modules checking for these changes manually.



# **Clipboard Pre Format**



### **Cable ID Auto Format Prefix**

The system will automatically copy the 'Device Destination' Tag Number and will paste it into the 'Cable Number' column.



### Cable ID Series

If you need to identify your cables by a series of alpha and numerical prefixes, this can be performed quite quickly by using the 'Cable ID Series' function. Enter the first number in the series ie: PW-001. Highlight the range of cables to be identified by the same prefix and use the key strokes 'Ctrl + C' this will then prefix all the cables with the same prefix of PW-001. Highlight the same range of cables again and now click on the 'Cable ID Series' and the numbers will automatically be numbered from PW-001, PW-002, PW-003, and so on.



**Cable ID Prefixes** 



**Extra Tips** 

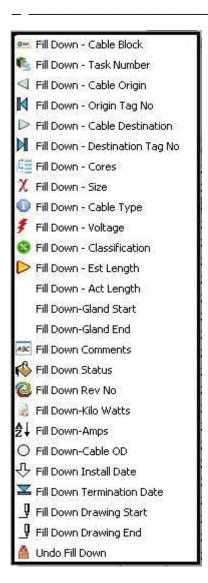
### 1.1.4 EXTRA'S

# Extra's

The Extra's button performs Fill Down functions. Simply click on the small button located on the top right hand side of the 'Extra's' button to have the following functions highlighted on the screen.

# 'Fill Down' Functions

To save excessive data entry time, the following 'Fill Down' functions have been included to ensure a faster more effective production of the 'Cable Schedule'. Simply highlight the lines required and click on the appropriate 'Fill Down' function and the information will be copied into all lines highlighted.



### Cable Block

If all of the Bi-Polar coordinates are entered for the location of all equipment, this function will calculate the 'estimated length'.

### 1.1.6 Additional Functions

To use these functions simply right click in the 'Cable Schedule' window.





### **Trace Back**

This takes you to the first record in the list.



### Trace Forward

This takes you to the last record in the list.



**Find on Word** 



**Open Object Manager Start** 



**Open Object Manager Destination** 



Single Cable Record



# **Generate Cable Tags**

'Cable Numbers' can be generated by the system. Kontrol Pro can automatically generate an Excel document with the 'Cable Numbers'. Highlight the cables in the 'Cable Schedule' window. Click on 'Generate Cable Tags' and the spreadsheet will be generated. This feature assists so that ordering can be controlled by selecting and generating a file called ????? with the date that the document was generated.



# **Generate Wire Numbers**

'Cable Numbers' can be generated by the system. Kontrol Pro can automatically generate an Excel document with the 'Cable Numbers'. Highlight the cables in the 'Cable Schedule' window. Click on 'Generate Cable Tags' and the spreadsheet will be generated. This feature assists so that ordering can be controlled by selecting and generating a file called ????? with the date that the document was generated.