Magi-Cut Express Plus

Guide

Revision 1.00

Copyright notice

This Manual and the Software referred to are licensed to the Company or Person identified by the Security licence and shown on the Start-up screen. Please make sure that you have read and understood the Software Licence Agreement provided before you install and use the software.

Contents

1. Working with Express Plus

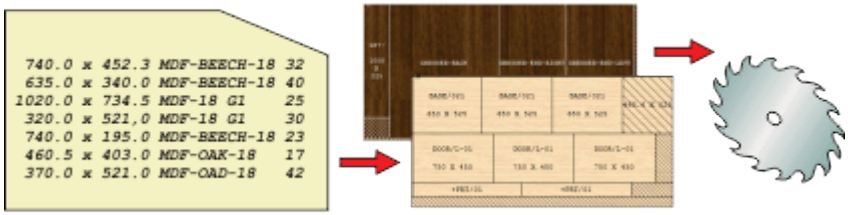
Welcome to Magi-Cut Express Plus

Splash screen

The Express program is a straightforward way of generating cutting patterns for a list of part sizes. It is designed for the smaller workshop using a sliding table saw or vertical saw and is focused on producing efficient cutting patterns from lists of part sizes and available materials (boards).

It is Windows software running on a single PC.

Express Plus at a glance



This is how to work with Express:-

- Create (or import) a part list
- Enter or adjust the part sizes, material and quantities required
- Automatically select the available board sizes from the Board library

 Optimise

- Review the results
- Print or Export results
- Use the Cutting instructions to set the saw

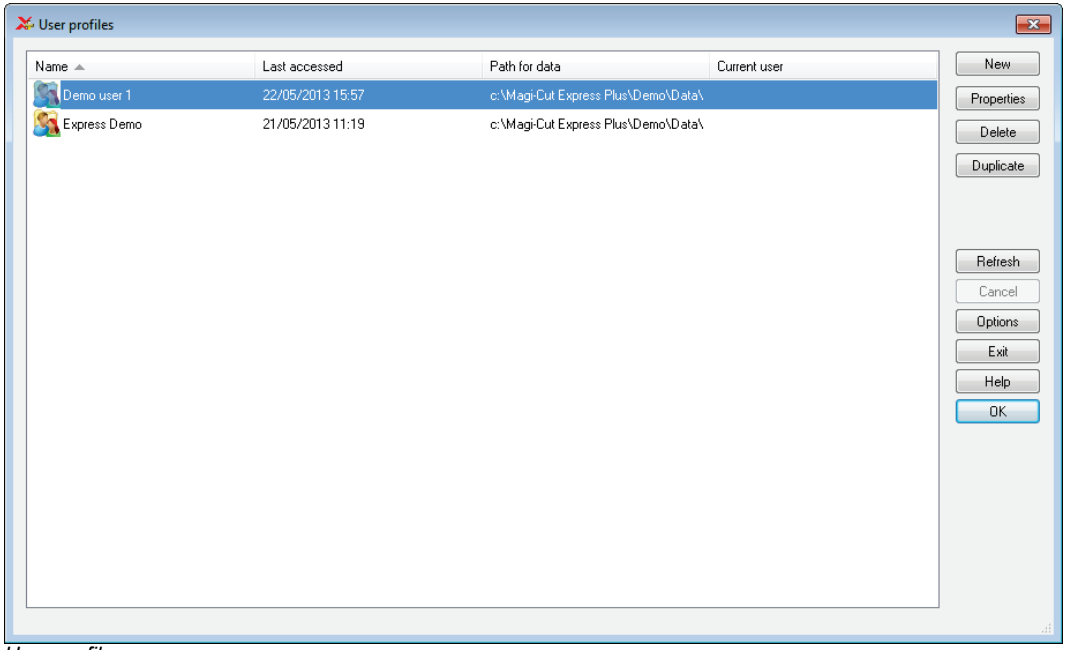
A Tour of Express Plus

Run the program

 To run the program click on the icon on the desktop

The first screen is a splash screen which appears for a few moments and the program moves to the Main screen.

USER PROFILE. Each user has a unique profile (account) where settings and data are stored. On start up the program displays a list of user profiles.



User profiles

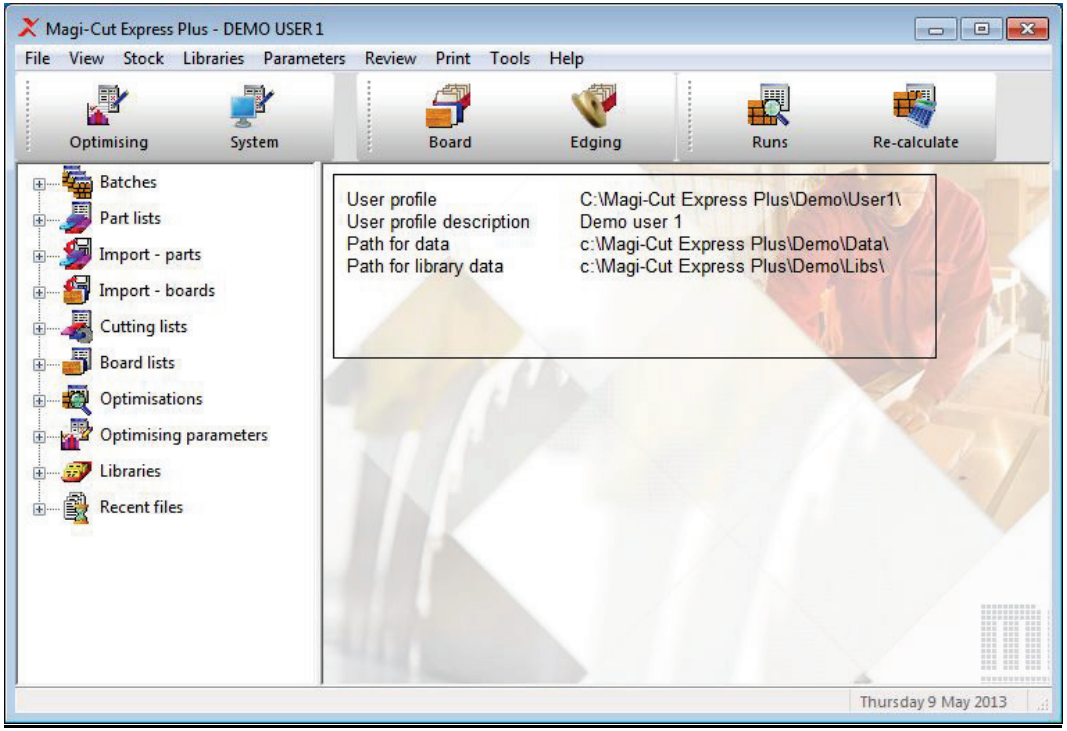
- Select a profile (e.g. Demo user 1)
- **OK** to confirm

On install the program includes a set of demo data with several user profiles. By default the program automatically moves to the last user profile used. The program moves to the main screen and displays the data for the profile.


Measurement modes - The software works in either millimetres, fractional inches, or decimal inches. The operation is the same in each case except that fractional inches are displayed and entered in the fractional format (44 x 61-1/4, 96 x 48-1/2).

Note - the demonstration data installed may differ from the examples shown in this guide

Main screen



Main screen

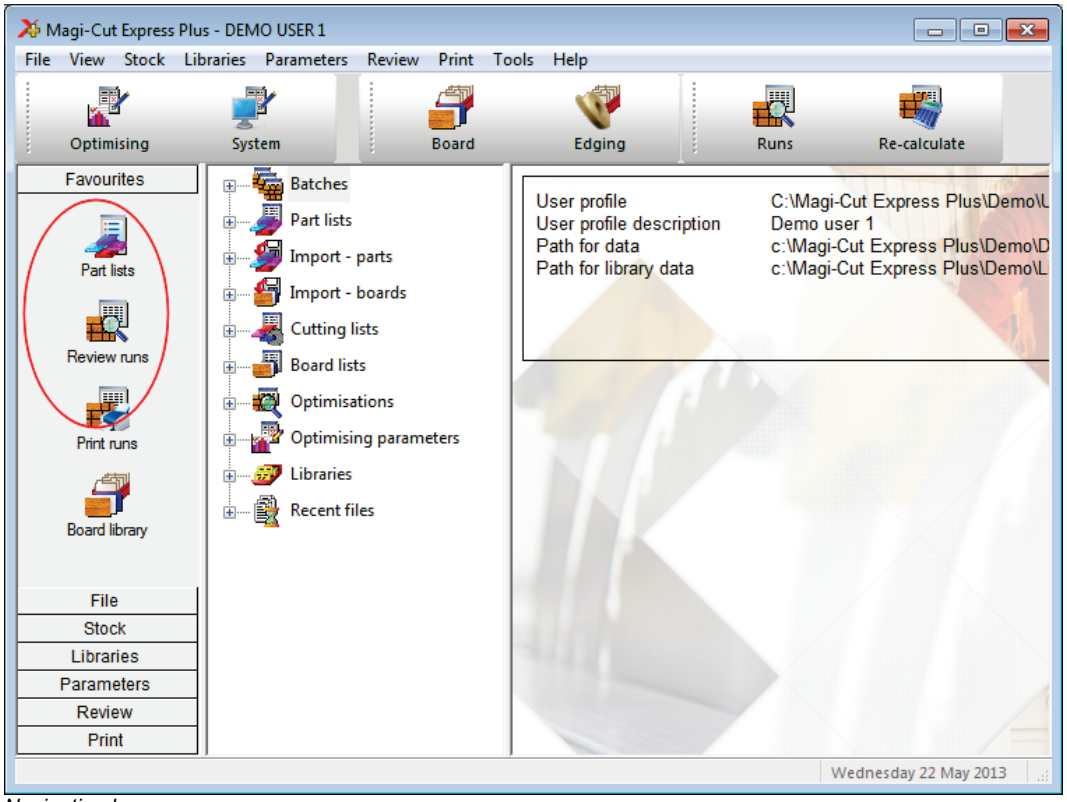
This is the command centre of the system. Access all the options from here

At the left is a tree showing the various options and existing data. Click on an item in the tree to see the files in each section.

There are also traditional menus and buttons to access all the options.

(Arrange the screen to suit your way of working with the *View* menu options).

NAVIGATION BAR. At the left (or right) of the screen is a toolbar with access to all the main program options. This bar floats at the left of the display and is available throughout on the desktop - giving quick access to any part of the program.



Navigation bar

If the quick navigation bar is not visible - place the mouse cursor over the docking bar.

Part lists

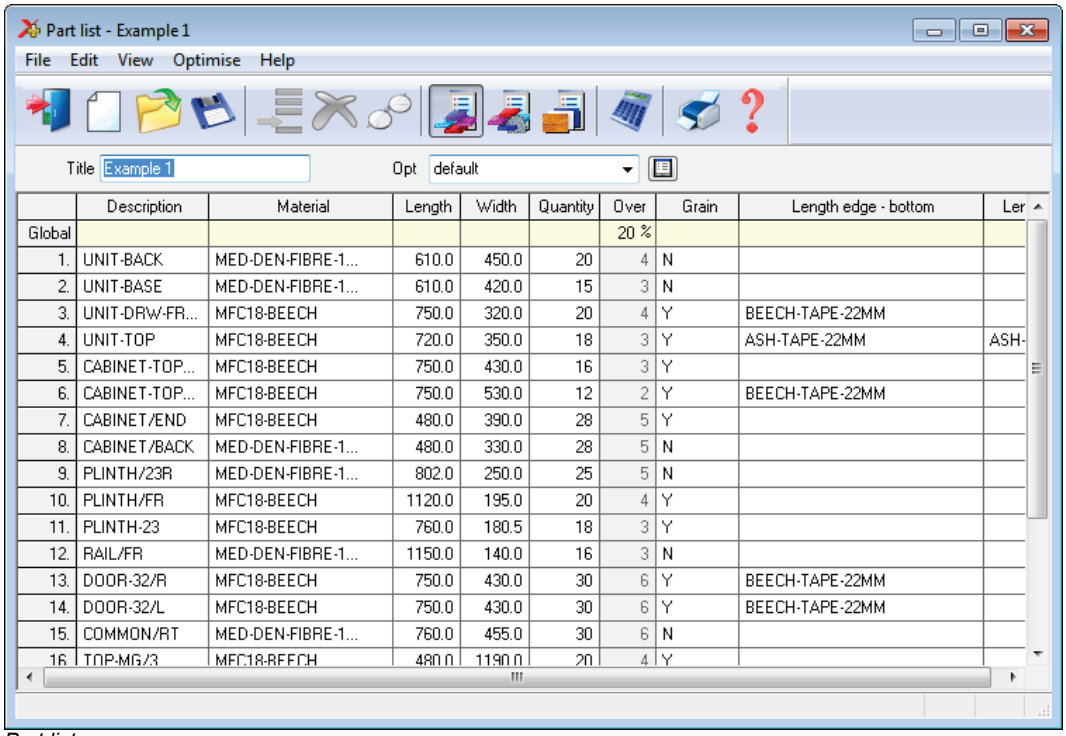
A part list is a list of all the part sizes and quantities required for cutting. This might be for a single order or for several different jobs.

(The demo data includes several examples of different sorts of part lists - these may be different from the example shown below).

Select a part list by opening the Part list branch of the file tree and double clicking on a part list.

(The program may prompt: *'Patterns exist - significant changes will delete patterns'* - this happens because in the demo data the part lists are already optimised - ignore this message as the next step is to optimise and re-create the patterns.

The part list contents are displayed.



	Description	Material	Length	Width	Quantity	Over	Grain	Length edge - bottom	Ler
Global						20 %			
1.	UNIT-BACK	MED-DEN-FIBRE-1...	610.0	450.0	20	4	N		
2.	UNIT-BASE	MED-DEN-FIBRE-1...	610.0	420.0	15	3	N		
3.	UNIT-DRW-FR...	MFC18-BEECH	750.0	320.0	20	4	Y	BEECH-TAPE-22MM	
4.	UNIT-TOP	MFC18-BEECH	720.0	350.0	18	3	Y	ASH-TAPE-22MM	ASH-
5.	CABINET-TOP...	MFC18-BEECH	750.0	430.0	16	3	Y		
6.	CABINET-TOP...	MFC18-BEECH	750.0	530.0	12	2	Y	BEECH-TAPE-22MM	
7.	CABINET/END	MFC18-BEECH	480.0	390.0	28	5	Y		
8.	CABINET/BACK	MED-DEN-FIBRE-1...	480.0	330.0	28	5	N		
9.	PLINTH/23R	MED-DEN-FIBRE-1...	802.0	250.0	25	5	N		
10.	PLINTH/FR	MFC18-BEECH	1120.0	195.0	20	4	Y		
11.	PLINTH-23	MFC18-BEECH	760.0	180.5	18	3	Y		
12.	RAIL/FR	MED-DEN-FIBRE-1...	1150.0	140.0	16	3	N		
13.	DOOR-32/R	MFC18-BEECH	750.0	430.0	30	6	Y	BEECH-TAPE-22MM	
14.	DOOR-32/L	MFC18-BEECH	750.0	430.0	30	6	Y	BEECH-TAPE-22MM	
15.	COMMON/RT	MED-DEN-FIBRE-1...	760.0	455.0	30	6	N		
16.	TOP-MG/3	MFC18-BEECH	480.0	1190.0	20	4	Y		

Part list

- Review and/or enter the required part list items. The basic information is:-

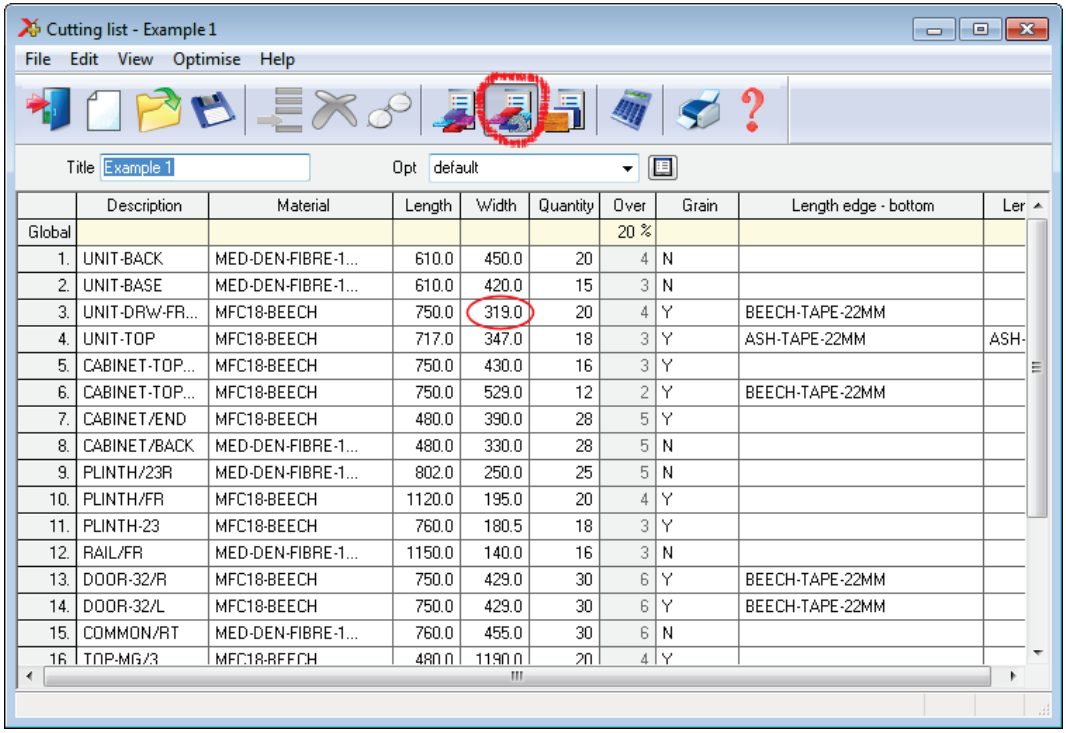
```
Description
Material code
Length
Width
Quantity
```

At the right of the part list screen there are several other columns - most of these are custom columns which can be used for all the extra data for parts, for example, edging, laminates, text for a part label …

MATERIAL CODE: This is important because it determines the material for that part. The program uses this to extract candidate boards from the board library and create a board list. The board list is simply the list of available board sizes and quantities for the job.

Cutting list

Once the part sizes and other details are entered the program creates a Cutting list.



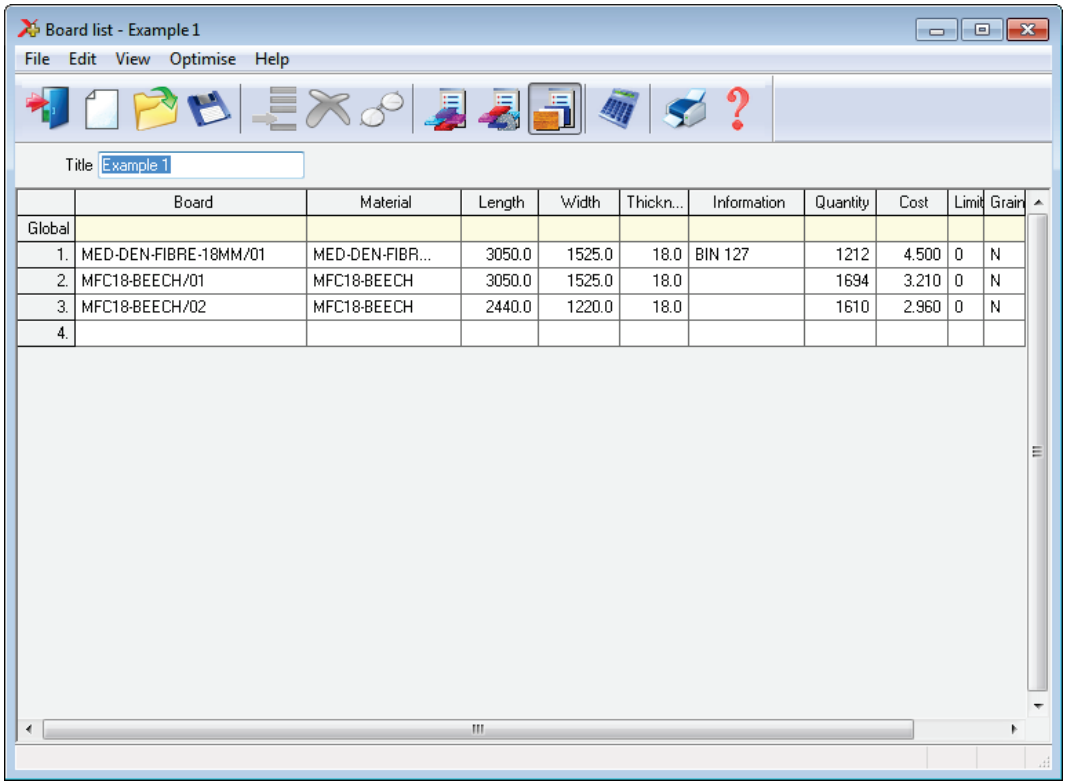
	Description	Material	Length	Width	Quantity	Over	Grain	Length edge - bottom	Ler
Global						20 %			
1.	UNIT-BACK	MED-DEN-FIBRE-1...	610.0	450.0	20	4	N		
2.	UNIT-BASE	MED-DEN-FIBRE-1...	610.0	420.0	15	3	N		
3.	UNIT-DRW-FR...	MFC18-BEECH	750.0	319.0	20	4	Y	BEECH-TAPE-22MM	
4.	UNIT-TOP	MFC18-BEECH	717.0	347.0	18	3	Y	ASH-TAPE-22MM	ASH-
5.	CABINET-TOP...	MFC18-BEECH	750.0	430.0	16	3	Y		
6.	CABINET-TOP...	MFC18-BEECH	750.0	529.0	12	2	Y	BEECH-TAPE-22MM	
7.	CABINET/END	MFC18-BEECH	480.0	390.0	28	5	Y		
8.	CABINET/BACK	MED-DEN-FIBRE-1...	480.0	330.0	28	5	N		
9.	PLINTH/23R	MED-DEN-FIBRE-1...	802.0	250.0	25	5	N		
10.	PLINTH/FR	MFC18-BEECH	1120.0	195.0	20	4	Y		
11.	PLINTH-23	MFC18-BEECH	760.0	180.5	18	3	Y		
12.	RAIL/FR	MED-DEN-FIBRE-1...	1150.0	140.0	16	3	N		
13.	DOOR-32/R	MFC18-BEECH	750.0	429.0	30	6	Y	BEECH-TAPE-22MM	
14.	DOOR-32/L	MFC18-BEECH	750.0	429.0	30	6	Y	BEECH-TAPE-22MM	
15.	COMMON/RT	MED-DEN-FIBRE-1...	760.0	455.0	30	6	N		
16.	TOP-MG/3	MFC18-BEECH	480.0	1190.0	20	4	Y		

This is a copy of the part list but where there is edging or other information fields the program automatically calculates the actual cutting sizes ready for the saw. For example, if there is edging tape on some edges the cutting sizes are going to be less that the part list size (finished size) to allow for the tape.

(Where there is no information to calculate the cutting list is the same as the part list and is created automatically on optimising and does not need to be checked).

Board list

 Click on the toolbar symbol to view the Board list



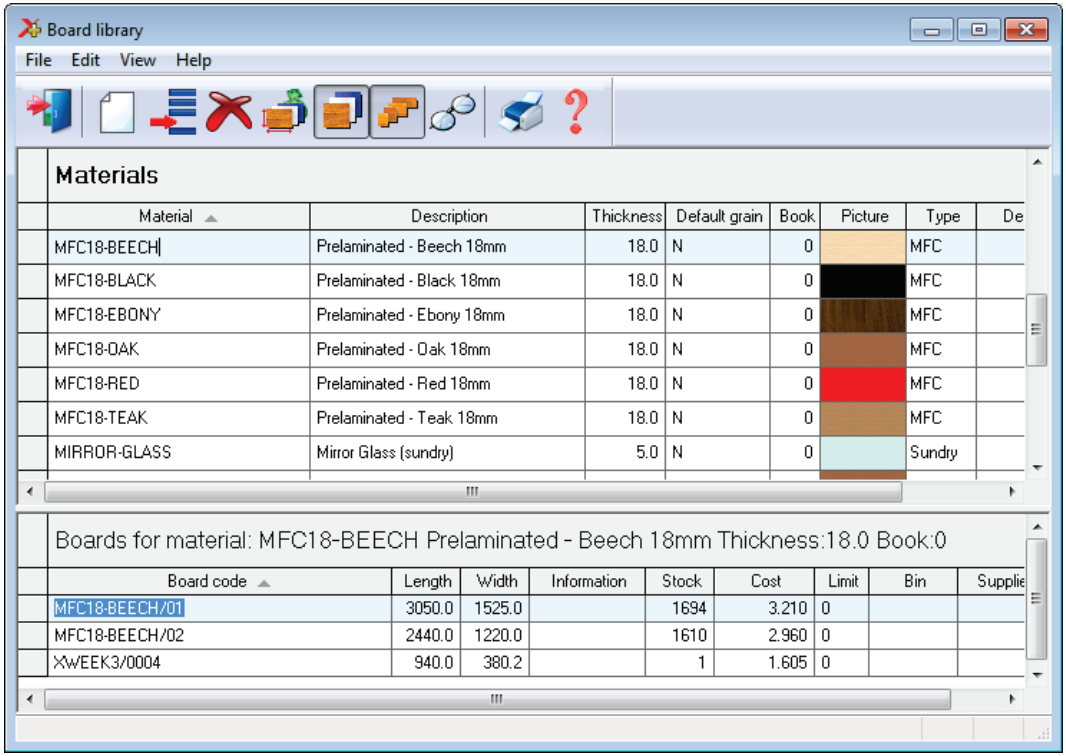
	Board	Material	Length	Width	Thickn...	Information	Quantity	Cost	Limit	Grain
Global										
1.	MED-DEN-FIBRE-18MM/01	MED-DEN-FIBR...	3050.0	1525.0	18.0	BIN 127	1212	4.500	0	N
2.	MFC18-BEECH/01	MFC18-BEECH	3050.0	1525.0	18.0		1694	3.210	0	N
3.	MFC18-BEECH/02	MFC18-BEECH	2440.0	1220.0	18.0		1610	2.960	0	N
4.										

Board list

The Board list is created by the program extracting from the Board library all board sizes (and offcuts if any) matching the material codes used in the Part list against each part.

Board library

The board library stores the details and quantities of all the sheet material (a library is provided in the demo data).



Board library

The board library can include information for each sheet size, for example, cost, storage…

Note - There are a wide range of materials from different suppliers so before using the program for real - an important task is to set up the board library for the materials typically available for the company.

Optimise

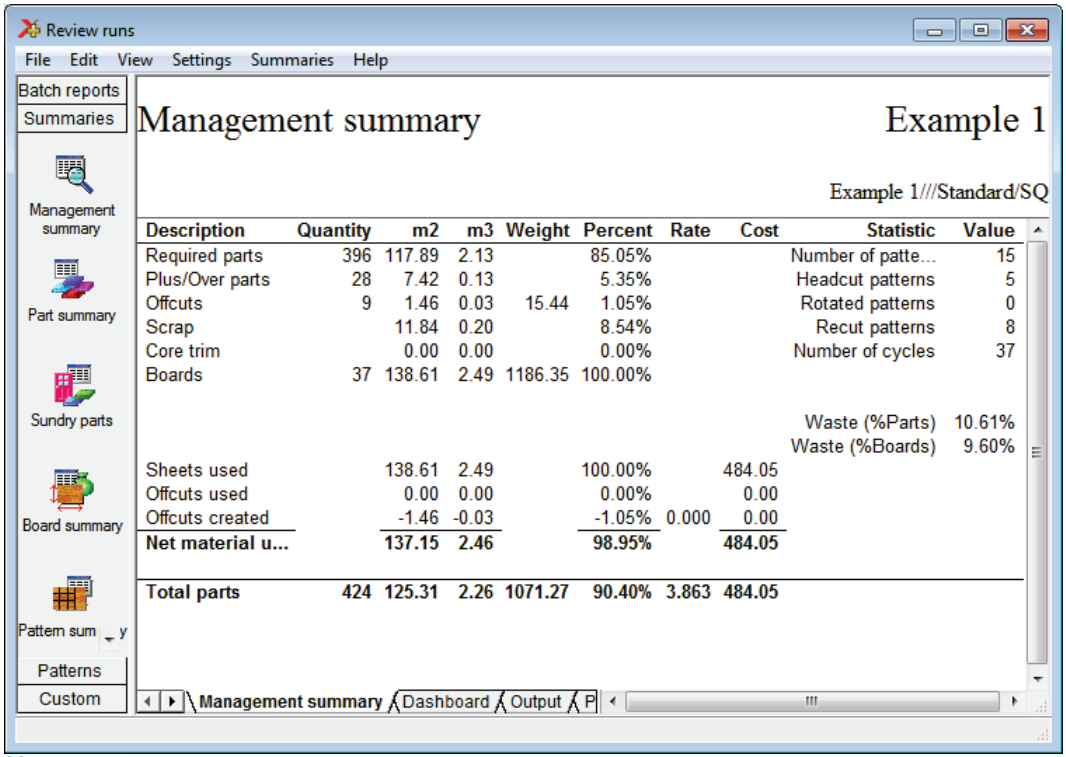
Once the Part list and Board list are created the job is ready to be optimised.

At the Part list screen (or at the Board list screen):-

 Select the optimise symbol

The program produces a set of cutting patterns and moves to the 'Review runs' section of the program. This shows all cutting patterns and a set of summary reports.

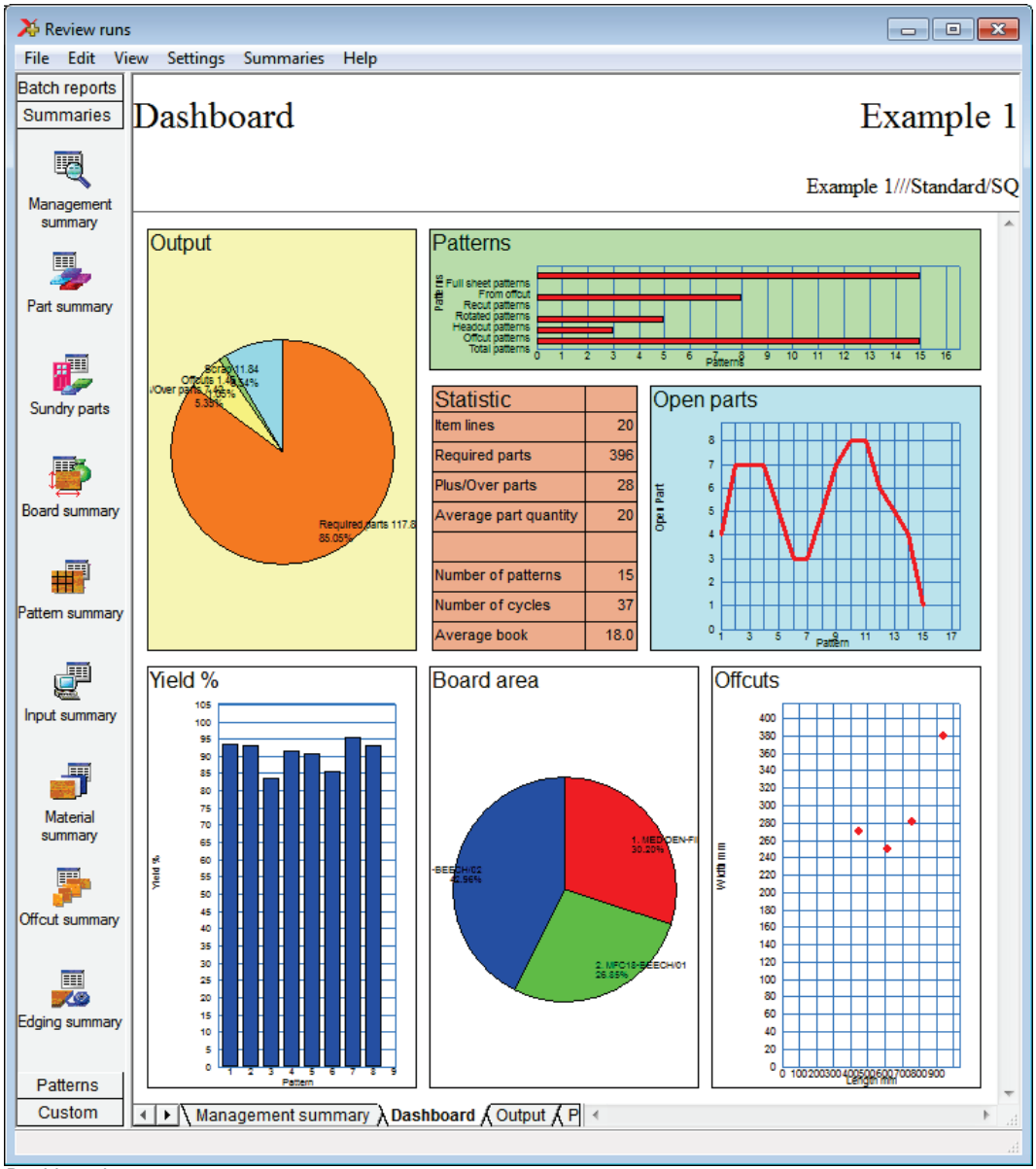
The first report shown is an overall summary of the job; the *Management Summary*.



Management summary

This is an overall summary of the job, for example. Total costs, Overall Waste percentage, Net material used… Use the Navigation buttons or 'Summaries' menu option to view other reports. At the foot of the report are a set of tabs with more information.

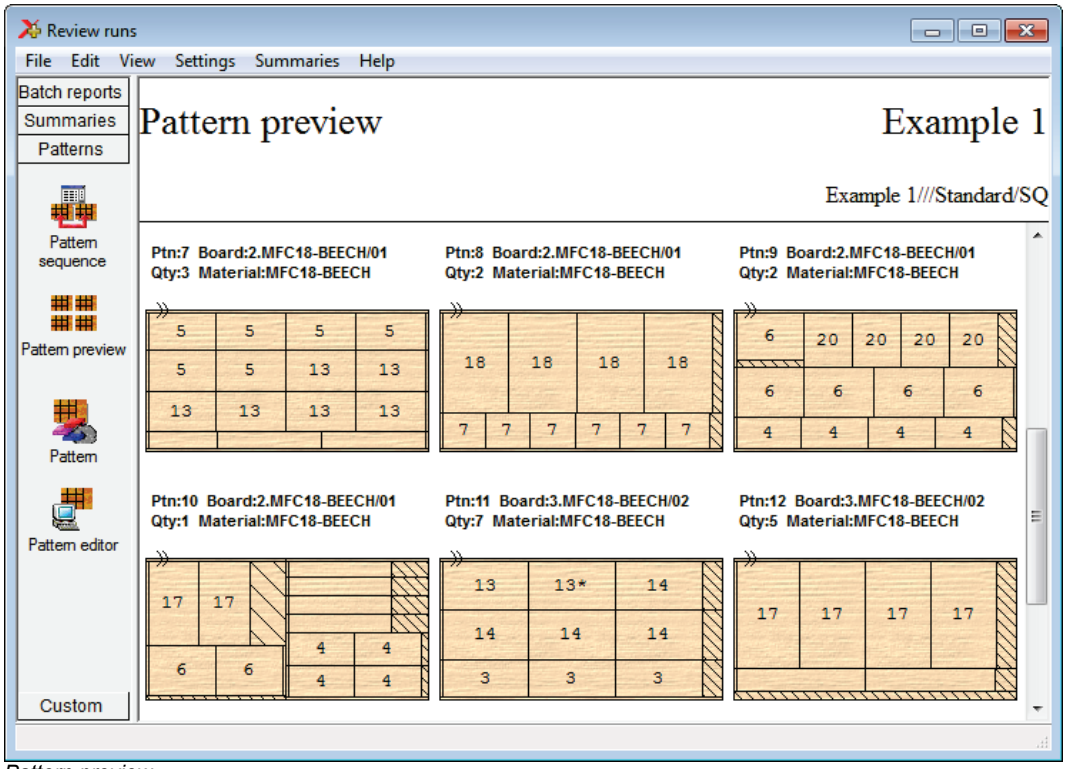
For example, the 'Dashboard' gives a graphical view of the management summary data.



Dashboard

The individual cutting patterns are viewed via the 'Pattern preview' option.

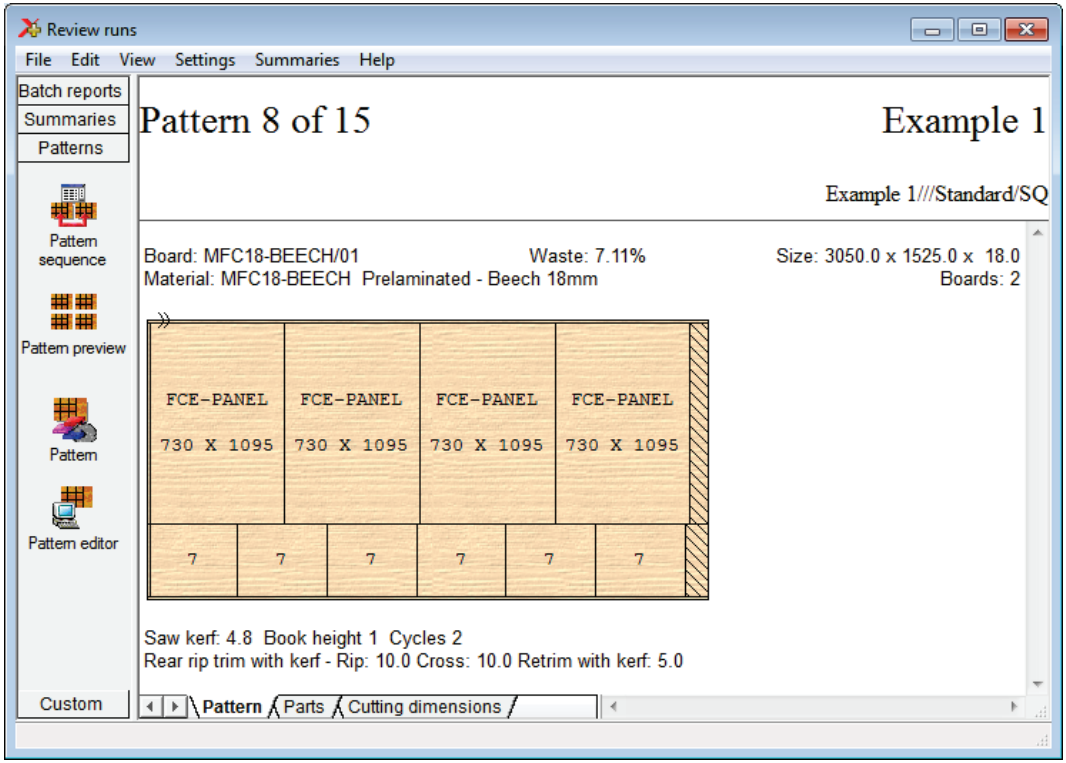
Pattern preview



Pattern preview

Use the navigation buttons or the Summaries menu to move between patterns and other summaries.

Double click on a thumbnail to view the pattern full screen.

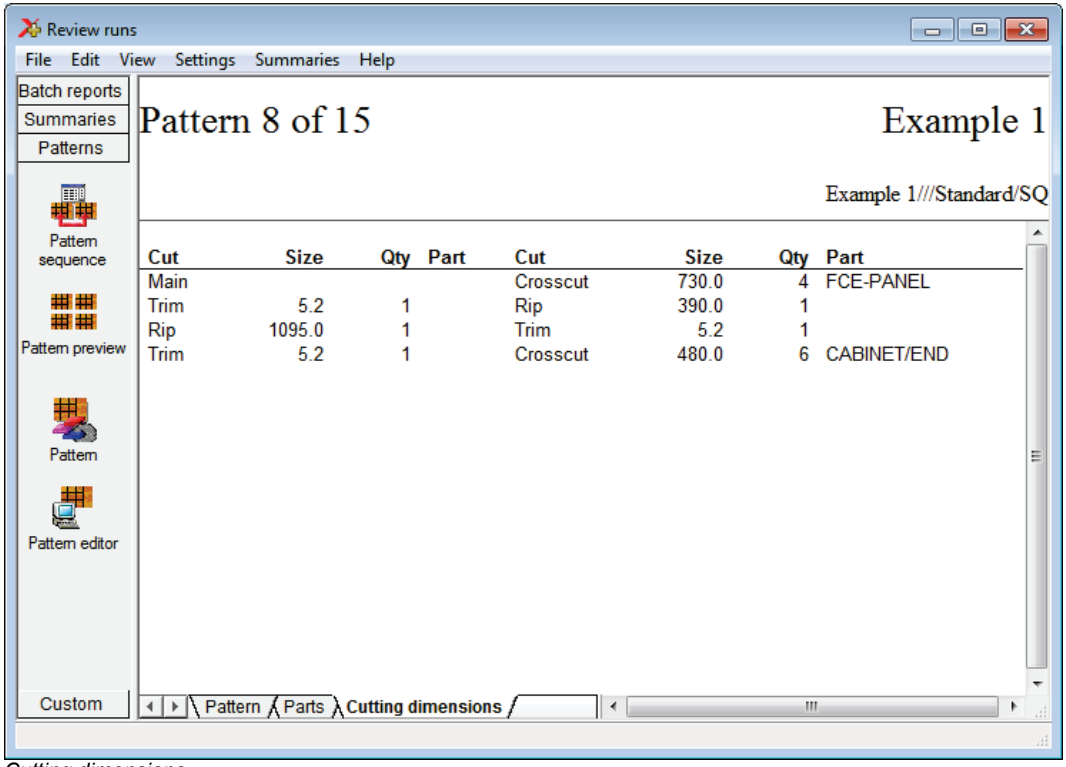


Pattern

The tabs at the foot of the report show more details, for example, a full list of the parts produced by the pattern.

The cuts, waste, offcuts and part information are shown for each pattern.

The cutting instructions can be used to set the saw; there are options to export the pattern data and/or the print the data.

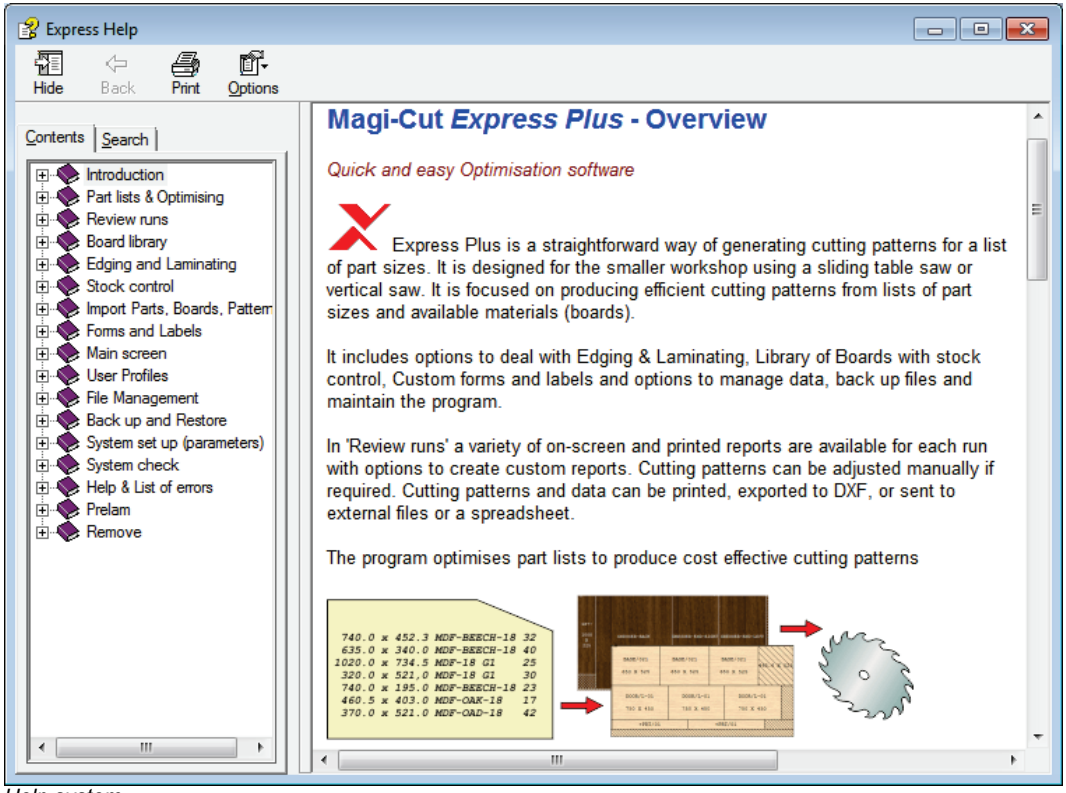


Cutting dimensions

Data from Summaries can be exported to external files (for example, a spread sheet) and patterns can be exported to a DXF format (graphics) file.

Help and support

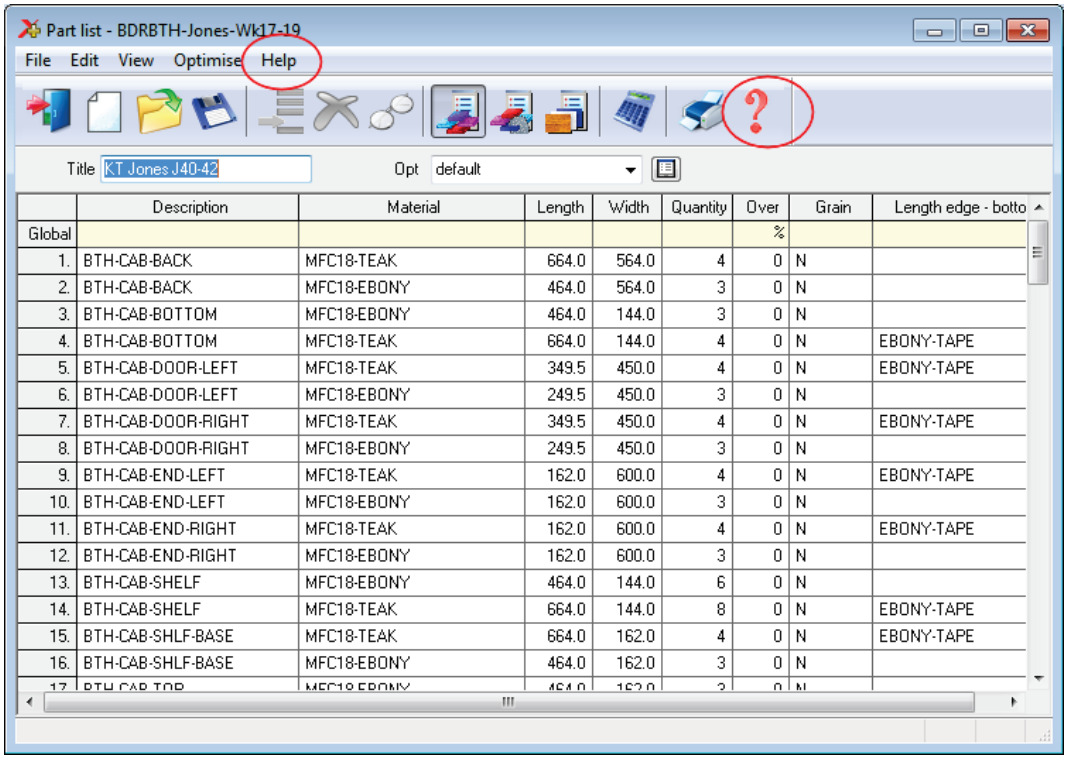
The program is fully supported by integrated, up to date, local help (no need to rely on a web link).



Help system

There is a help menu on most dialogs and screens.

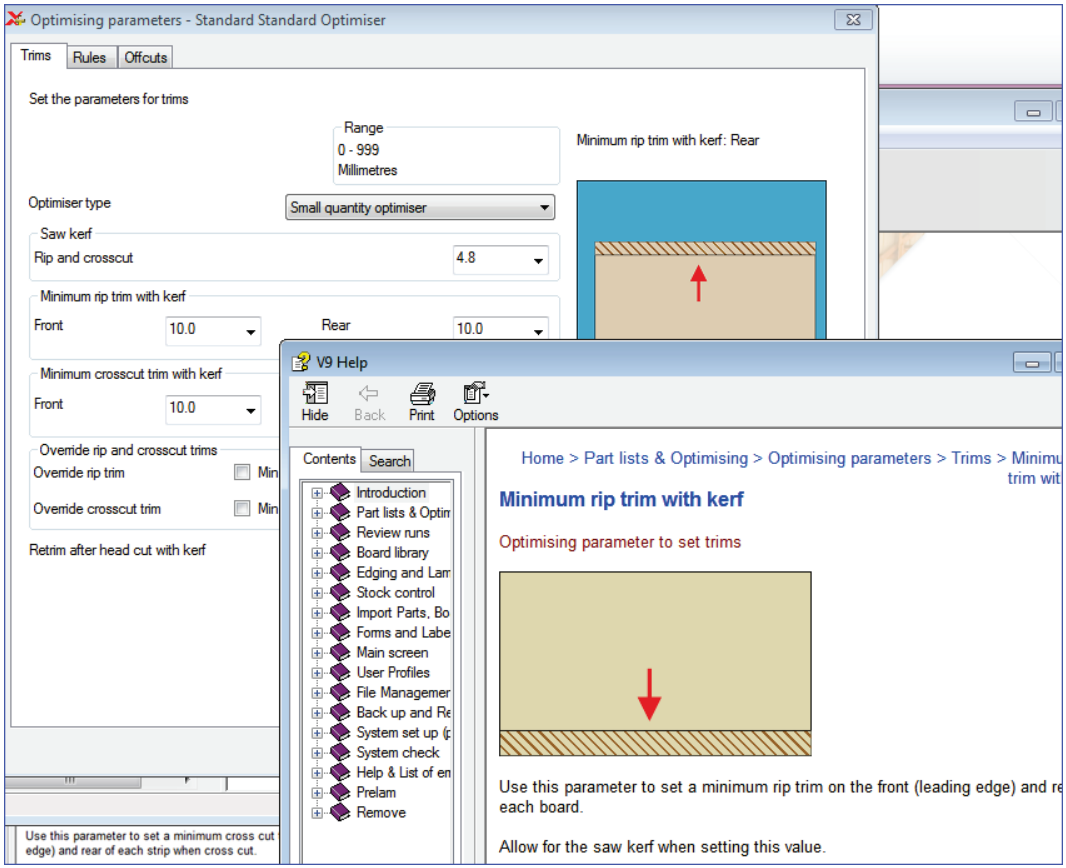
F1 is active for context sensitive help at most boxes, parameters and options.



	Description	Material	Length	Width	Quantity	Over	Grain	Length edge - botto
Global						%		
1.	BTH-CAB-BACK	MFC18-TEAK	664.0	564.0	4	0	N	
2.	BTH-CAB-BACK	MFC18-EBONY	464.0	564.0	3	0	N	
3.	BTH-CAB-BOTTOM	MFC18-EBONY	464.0	144.0	3	0	N	
4.	BTH-CAB-BOTTOM	MFC18-TEAK	664.0	144.0	4	0	N	EBONY-TAPE
5.	BTH-CAB-DOOR-LEFT	MFC18-TEAK	349.5	450.0	4	0	N	EBONY-TAPE
6.	BTH-CAB-DOOR-LEFT	MFC18-EBONY	249.5	450.0	3	0	N	
7.	BTH-CAB-DOOR-RIGHT	MFC18-TEAK	349.5	450.0	4	0	N	EBONY-TAPE
8.	BTH-CAB-DOOR-RIGHT	MFC18-EBONY	249.5	450.0	3	0	N	
9.	BTH-CAB-END-LEFT	MFC18-TEAK	162.0	600.0	4	0	N	EBONY-TAPE
10.	BTH-CAB-END-LEFT	MFC18-EBONY	162.0	600.0	3	0	N	
11.	BTH-CAB-END-RIGHT	MFC18-TEAK	162.0	600.0	4	0	N	EBONY-TAPE
12.	BTH-CAB-END-RIGHT	MFC18-EBONY	162.0	600.0	3	0	N	
13.	BTH-CAB-SHELF	MFC18-EBONY	464.0	144.0	6	0	N	
14.	BTH-CAB-SHELF	MFC18-TEAK	664.0	144.0	8	0	N	EBONY-TAPE
15.	BTH-CAB-SHLF-BASE	MFC18-TEAK	664.0	162.0	4	0	N	EBONY-TAPE
16.	BTH-CAB-SHLF-BASE	MFC18-EBONY	464.0	162.0	3	0	N	
17.	BTH-CAB-TOP	MFC18-EBONY	464.0	162.0	3	0	N	

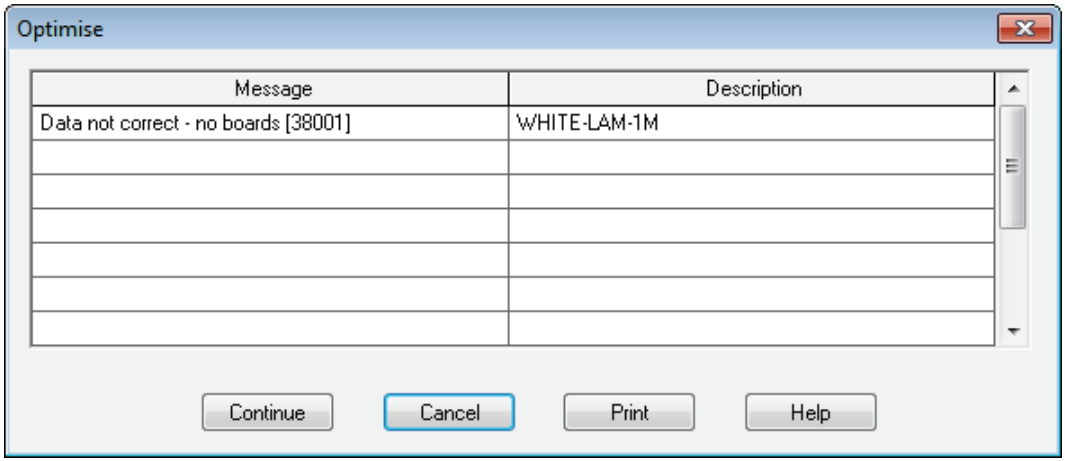
Help in context

Full help is available for all parameter settings.



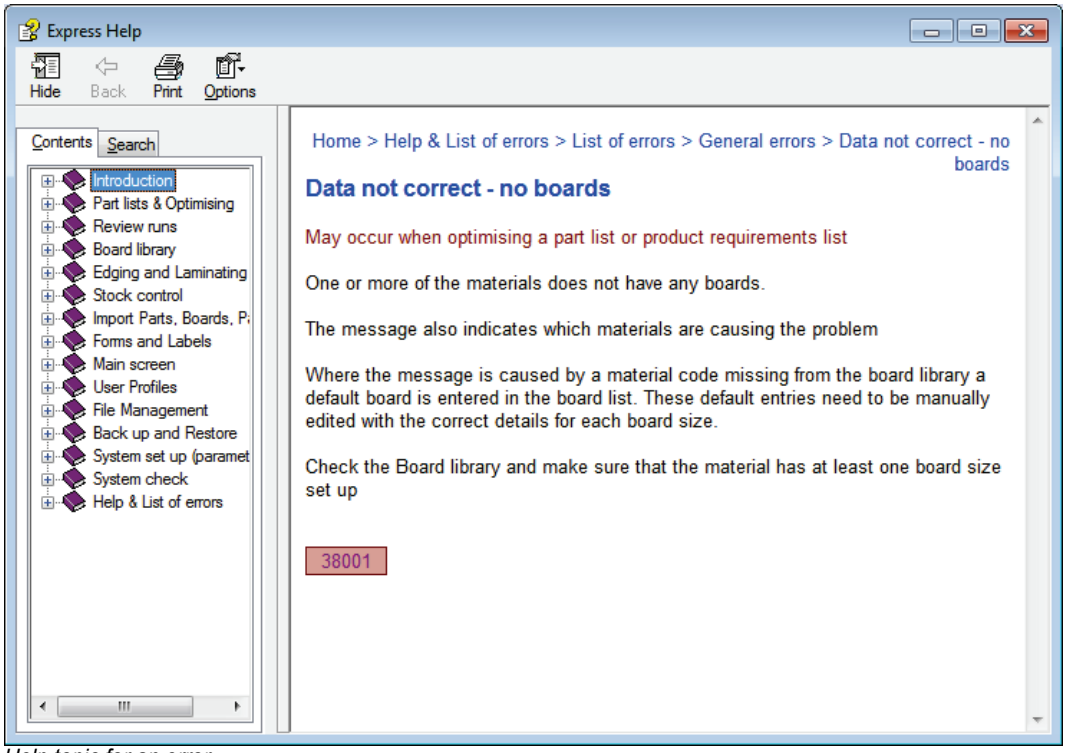
Help for parameters

Where an error is reported there is usually a link to more information in the help.



Error message

Click on the help button for more details:-



Help topic for an error

The number shown is the error number - this can be useful in identifying the problem where similar errors occur.

Web site

There are links at the main screen to the UK web site for downloads, updates, documentation, latest news …

2. Optimising

Optimising is the heart of the system.

The overall process is:-

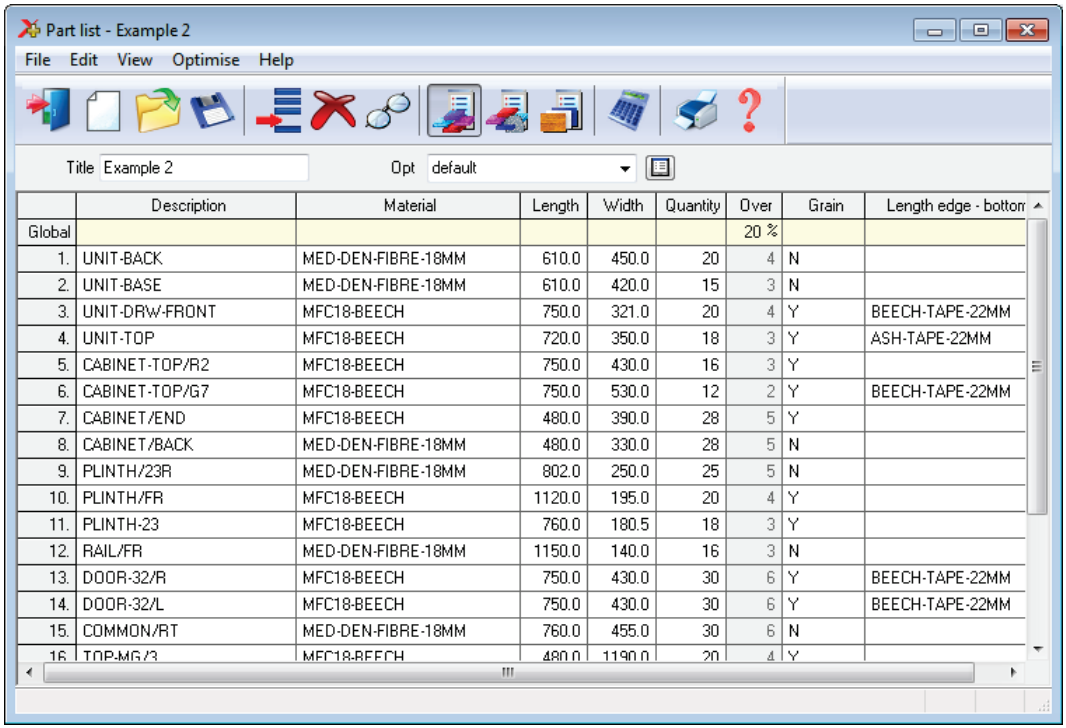
- Enter or Import part sizes
- Optimise
- Use cutting data at the saw

Part sizes

The starting point of optimisation is a list of part sizes. This can be produced in a variety of ways:-

- Enter sizes in the 'Part list' grid
- Import part sizes from external files or systems

The result is a list of Part sizes and requirements.



	Description	Material	Length	Width	Quantity	Over	Grain	Length edge - bottom
Global						20 %		
1.	UNIT-BACK	MED-DEN-FIBRE-18MM	610.0	450.0	20	4	N	
2.	UNIT-BASE	MED-DEN-FIBRE-18MM	610.0	420.0	15	3	N	
3.	UNIT-DRW-FRONT	MFC18-BEECH	750.0	321.0	20	4	Y	BEECH-TAPE-22MM
4.	UNIT-TOP	MFC18-BEECH	720.0	350.0	18	3	Y	ASH-TAPE-22MM
5.	CABINET-TOP/R2	MFC18-BEECH	750.0	430.0	16	3	Y	
6.	CABINET-TOP/G7	MFC18-BEECH	750.0	530.0	12	2	Y	BEECH-TAPE-22MM
7.	CABINET/END	MFC18-BEECH	480.0	390.0	28	5	Y	
8.	CABINET/BACK	MED-DEN-FIBRE-18MM	480.0	330.0	28	5	N	
9.	PLINTH/23R	MED-DEN-FIBRE-18MM	802.0	250.0	25	5	N	
10.	PLINTH/FR	MFC18-BEECH	1120.0	195.0	20	4	Y	
11.	PLINTH-23	MFC18-BEECH	760.0	180.5	18	3	Y	
12.	RAIL/FR	MED-DEN-FIBRE-18MM	1150.0	140.0	16	3	N	
13.	DOOR-32/R	MFC18-BEECH	750.0	430.0	30	6	Y	BEECH-TAPE-22MM
14.	DOOR-32/L	MFC18-BEECH	750.0	430.0	30	6	Y	BEECH-TAPE-22MM
15.	COMMON/RT	MED-DEN-FIBRE-18MM	760.0	455.0	30	6	N	
16.	TOP-MG/3	MFC18-BEECH	480.0	1190.0	20	4	Y	

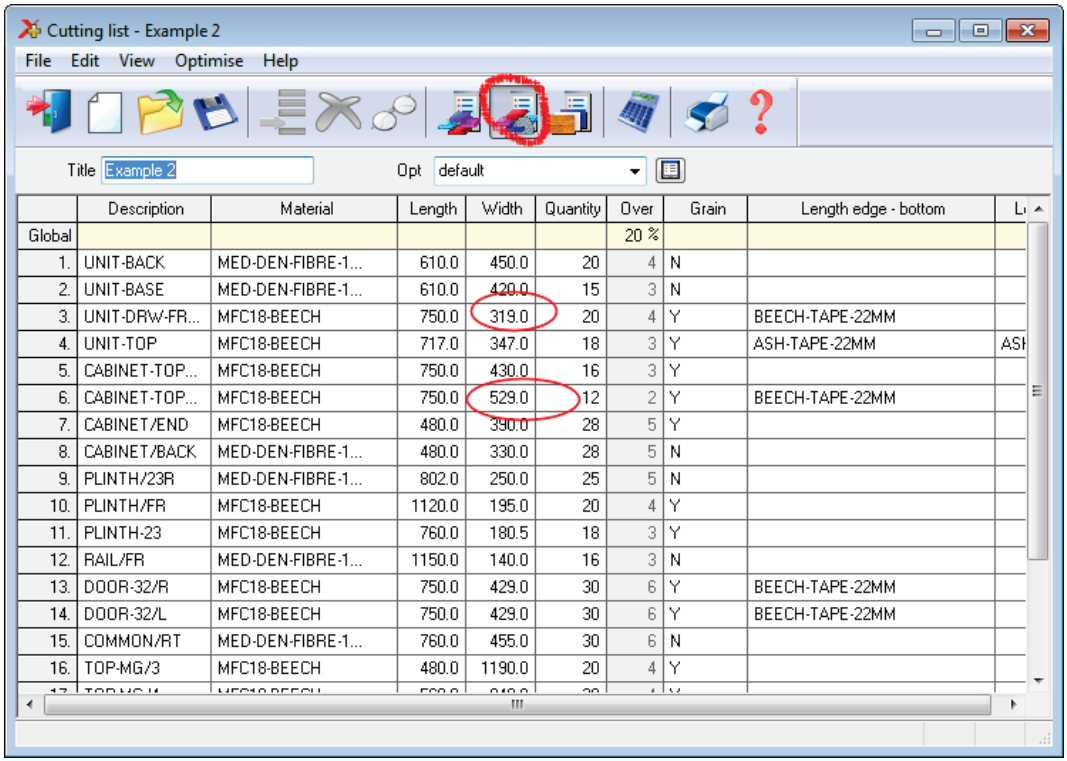
Part list

The part list editor can be used to add items or change sizes and quantities as required.

The part list includes many options for adjusting sizes, calculating edging and if necessary dividing lists if they are too large.

The part list can be customised with many pre-set and user defined fields.

Once the part sizes and other details are entered the program creates a Cutting list.



	Description	Material	Length	Width	Quantity	Over	Grain	Length edge - bottom	L
Global						20 %			
1.	UNIT-BACK	MED-DEN-FIBRE-1...	610.0	450.0	20	4	N		
2.	UNIT-BASE	MED-DEN-FIBRE-1...	610.0	420.0	15	3	N		
3.	UNIT-DRW-FR...	MFC18-BEECH	750.0	319.0	20	4	Y	BEECH-TAPE-22MM	
4.	UNIT-TOP	MFC18-BEECH	717.0	347.0	18	3	Y	ASH-TAPE-22MM	ASH
5.	CABINET-TOP...	MFC18-BEECH	750.0	430.0	16	3	Y		
6.	CABINET-TOP...	MFC18-BEECH	750.0	529.0	12	2	Y	BEECH-TAPE-22MM	
7.	CABINET/END	MFC18-BEECH	480.0	390.0	28	5	Y		
8.	CABINET/BACK	MED-DEN-FIBRE-1...	480.0	330.0	28	5	N		
9.	PLINTH/23R	MED-DEN-FIBRE-1...	802.0	250.0	25	5	N		
10.	PLINTH/FR	MFC18-BEECH	1120.0	195.0	20	4	Y		
11.	PLINTH-23	MFC18-BEECH	760.0	180.5	18	3	Y		
12.	RAIL/FR	MED-DEN-FIBRE-1...	1150.0	140.0	16	3	N		
13.	DOOR-32/R	MFC18-BEECH	750.0	429.0	30	6	Y	BEECH-TAPE-22MM	
14.	DOOR-32/L	MFC18-BEECH	750.0	429.0	30	6	Y	BEECH-TAPE-22MM	
15.	COMMON/RT	MED-DEN-FIBRE-1...	760.0	455.0	30	6	N		
16.	TOP-MG/3	MFC18-BEECH	480.0	1190.0	20	4	Y		

This is a copy of the part list but where there is edging or other information fields the program automatically calculates the actual cutting sizes ready for the saw. For example, if there is edging tape on some edges the cutting sizes are going to be less that the part list size (finished size) to allow for the tape.

(Where there is no information to calculate the cutting list is the same as the part list and is created automatically on optimising and does not need to be checked).

Optimising parameters are used to describe the type of cutting (trims, re-cuts, headcuts …). See the '*Parameters*' section for details. Typical parameters are:-

Saw kerf
Front Trims
Rear trims
…

The Front trim parameters, for example, allows the specification of the amount of material including kerf allowed at the front of the board for rips and cross cuts.

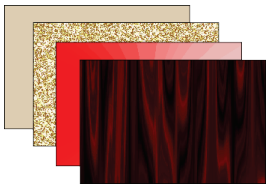
Front trim

Different parameters lists can be set up and used to produce the correct cutting requirements for any list. Typically users set up a handful of parameter lists with commonly used settings and add extra lists for one-off or special jobs.

In the above example the optimising parameter list is named 'default' from the Demo data.

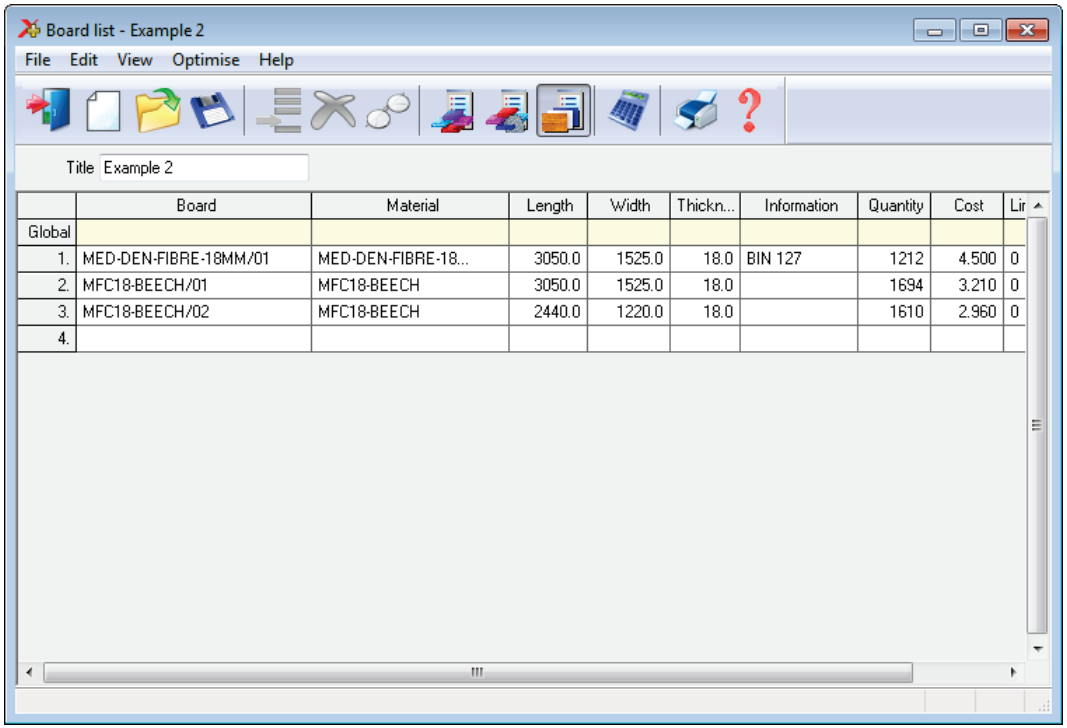
Materials

All materials are stored in the Board library. This is a database of all sheet material and includes quantities and costs.



Materials

The optimiser uses the Material code against each part in the part list, for example, MFC18-BEECH to extract the available boards (of that material) from the Board library.



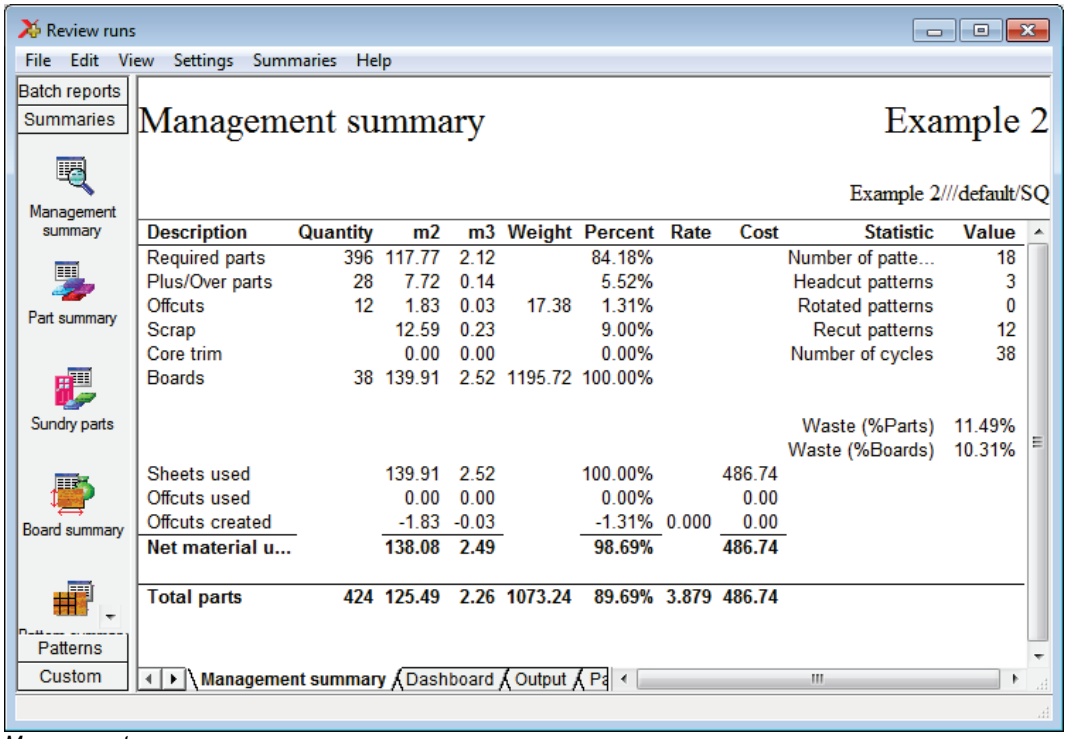
	Board	Material	Length	Width	Thickn...	Information	Quantity	Cost	Lir
Global									
1.	MED-DEN-FIBRE-18MM/01	MED-DEN-FIBRE-18...	3050.0	1525.0	18.0	BIN 127	1212	4.500	0
2.	MFC18-BEECH/01	MFC18-BEECH	3050.0	1525.0	18.0		1694	3.210	0
3.	MFC18-BEECH/02	MFC18-BEECH	2440.0	1220.0	18.0		1610	2.960	0
4.									

Board list

Optimising

Once the part list, parameter list and board list are set up the job can be optimised to produce the pattern layouts (balancing cutting times and waste) and a set of detailed reports on each job. The results are shown in the section of the program 'Review runs'.

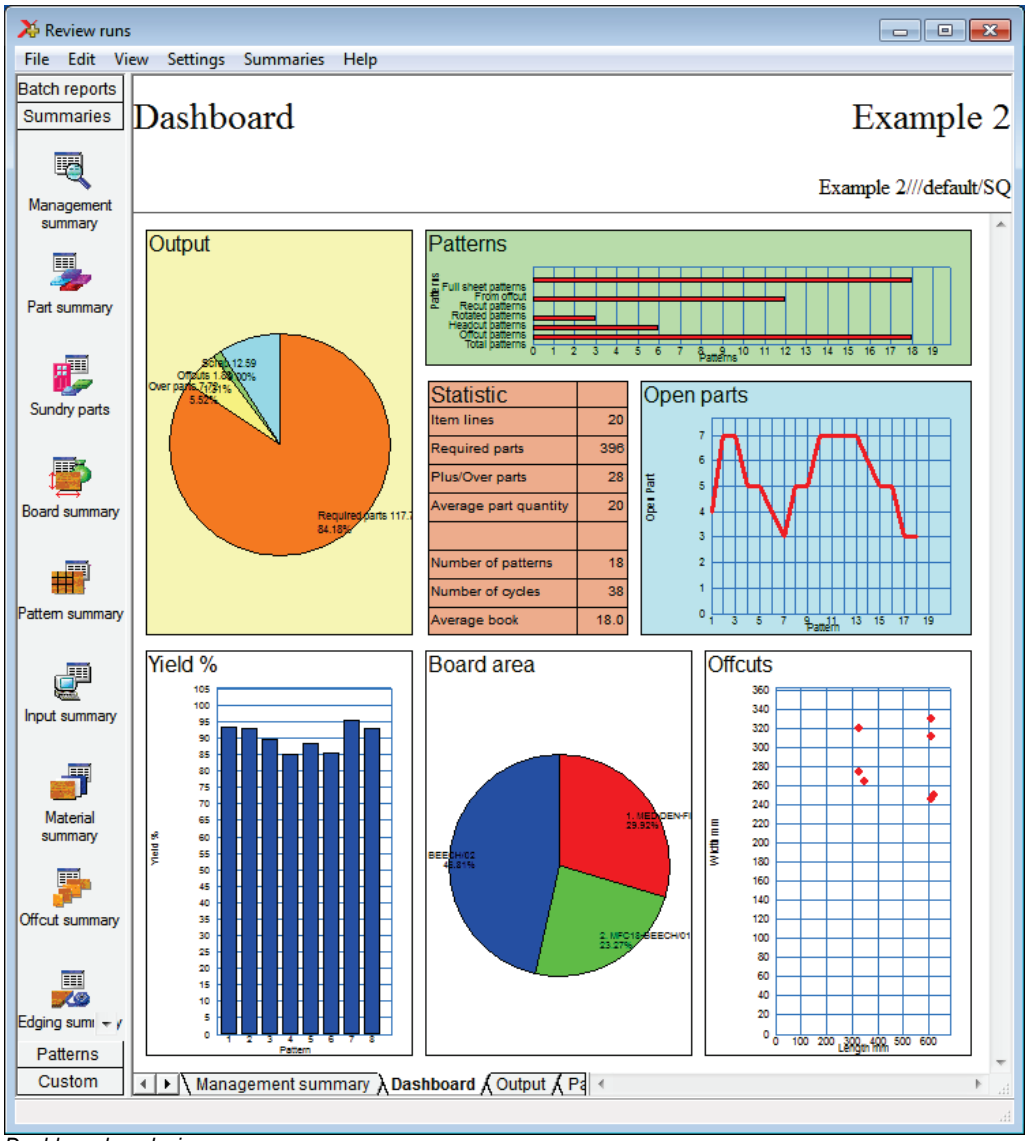
Runs are stored and can be easily recalled for review or adjustments.



Management summary

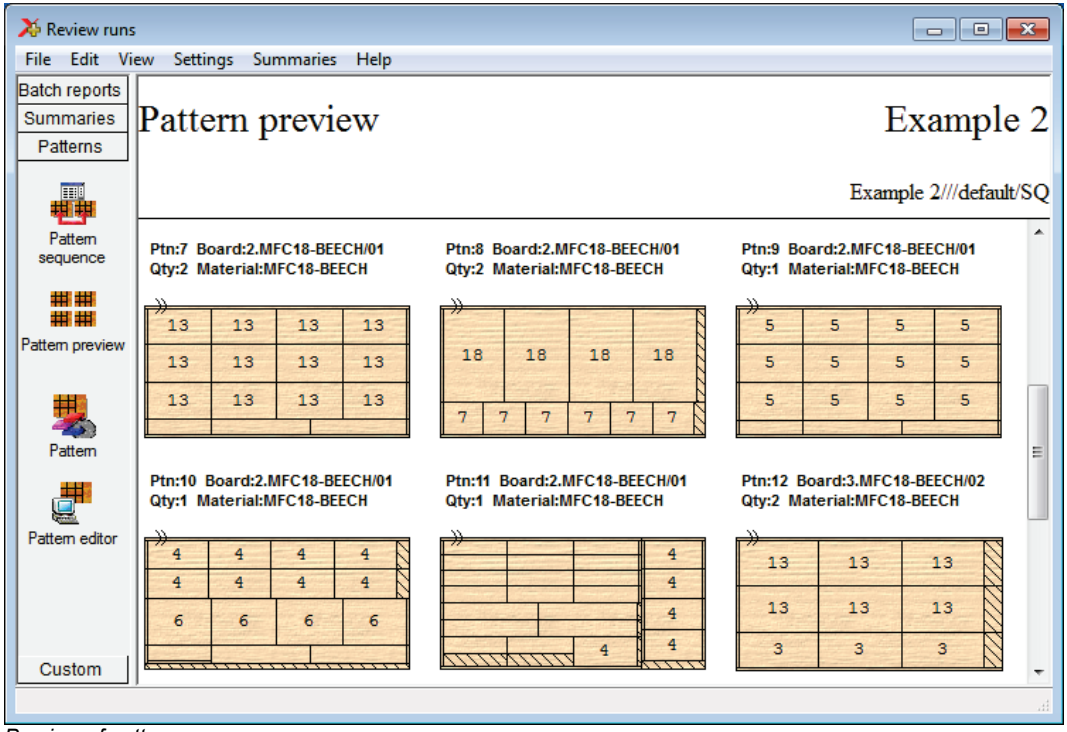
The management summary includes a Dashboard view showing a graphical view of some of the data.

This can be very valuable for larger runs where the reports consist of large numbers of patterns or parts.



Dashboard analysis

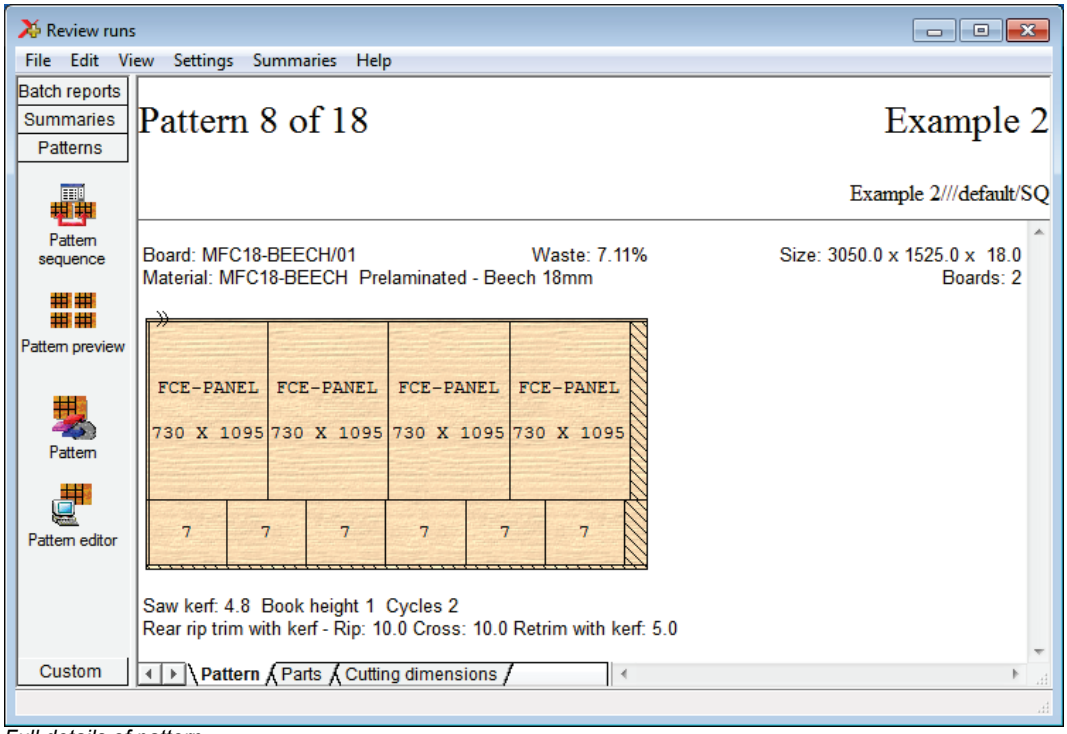
The cutting patterns are shown in a thumbnail overview.



Preview of patterns

Clicking on a thumbnail picture moves to the full screen of each pattern.

Extra details of each pattern are available on the tabs at the foot of each drawing.



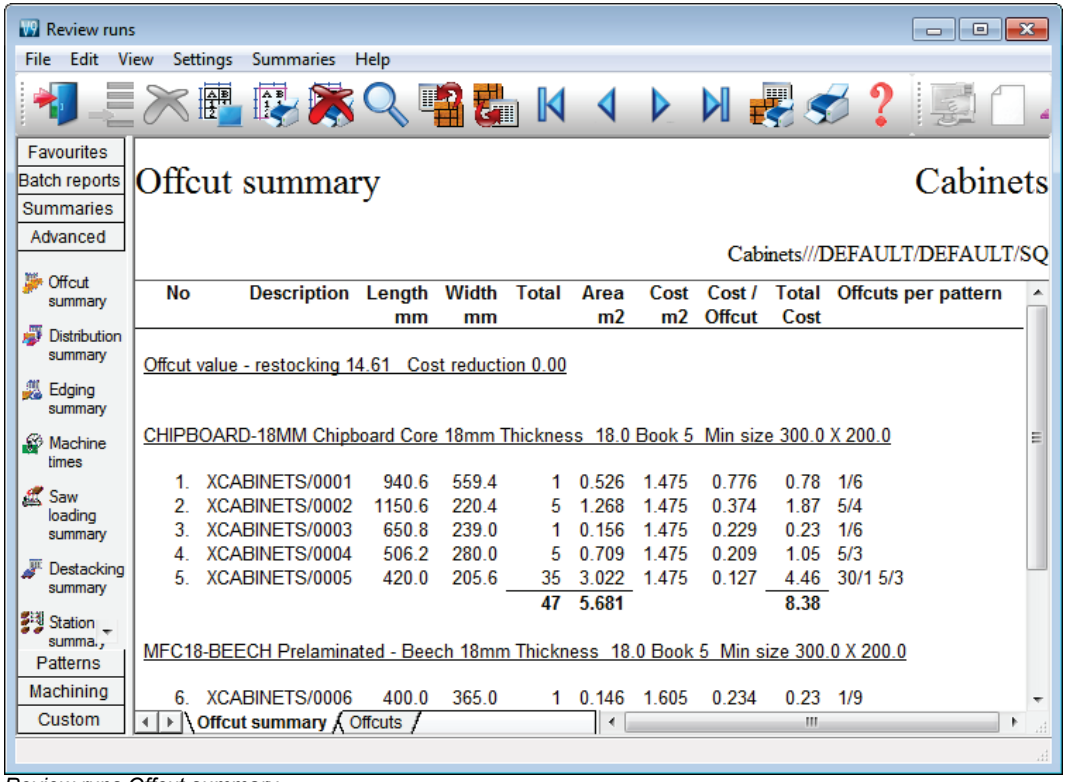
Full details of pattern

All reports can be fully customised and the Form & Design option is available for custom reports - fully integrated into the program.

There are a range of reports on the job, including, offcuts, costs, board usage.

Offcuts

Shows the offcuts produced in a run.

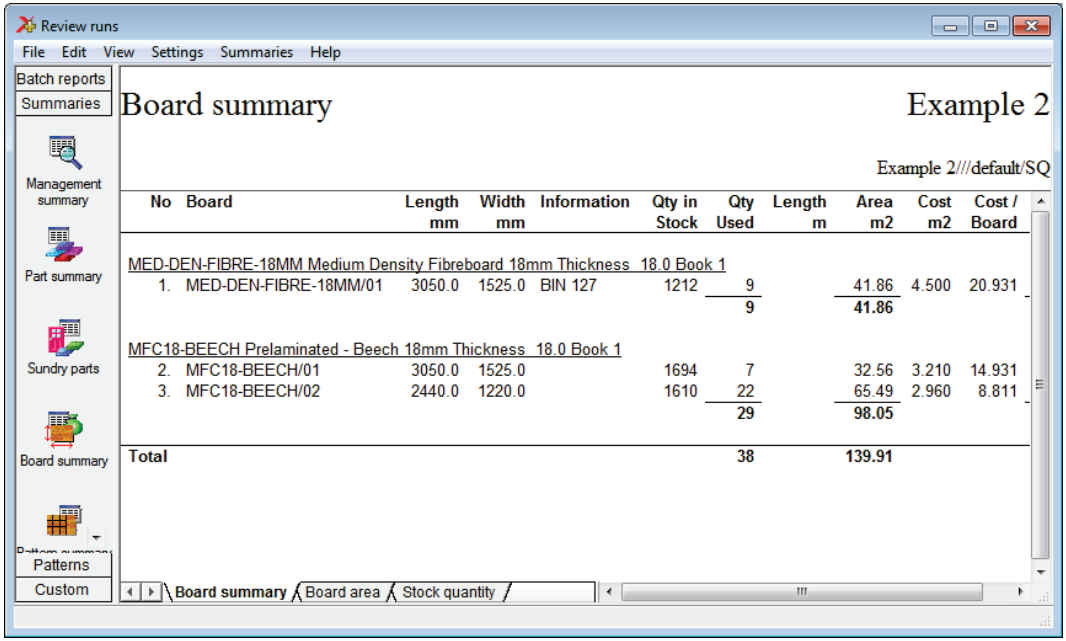


No	Description	Length mm	Width mm	Total	Area m2	Cost m2	Cost / Offcut	Total Cost	Offcuts per pattern
Offcut value - restocking 14.61 Cost reduction 0.00									
CHIPBOARD-18MM Chipboard Core 18mm Thickness 18.0 Book 5 Min size 300.0 X 200.0									
1.	XCABINETS/0001	940.6	559.4	1	0.526	1.475	0.776	0.78	1/6
2.	XCABINETS/0002	1150.6	220.4	5	1.268	1.475	0.374	1.87	5/4
3.	XCABINETS/0003	650.8	239.0	1	0.156	1.475	0.229	0.23	1/6
4.	XCABINETS/0004	506.2	280.0	5	0.709	1.475	0.209	1.05	5/3
5.	XCABINETS/0005	420.0	205.6	35	3.022	1.475	0.127	4.46	30/1 5/3
				47	**5.681**			**8.38**	
MFC18-BEECH Prelaminated - Beech 18mm Thickness 18.0 Book 5 Min size 300.0 X 200.0									
6.	XCABINETS/0006	400.0	365.0	1	0.146	1.605	0.234	0.23	1/9

Review runs Offcut summary

Boards

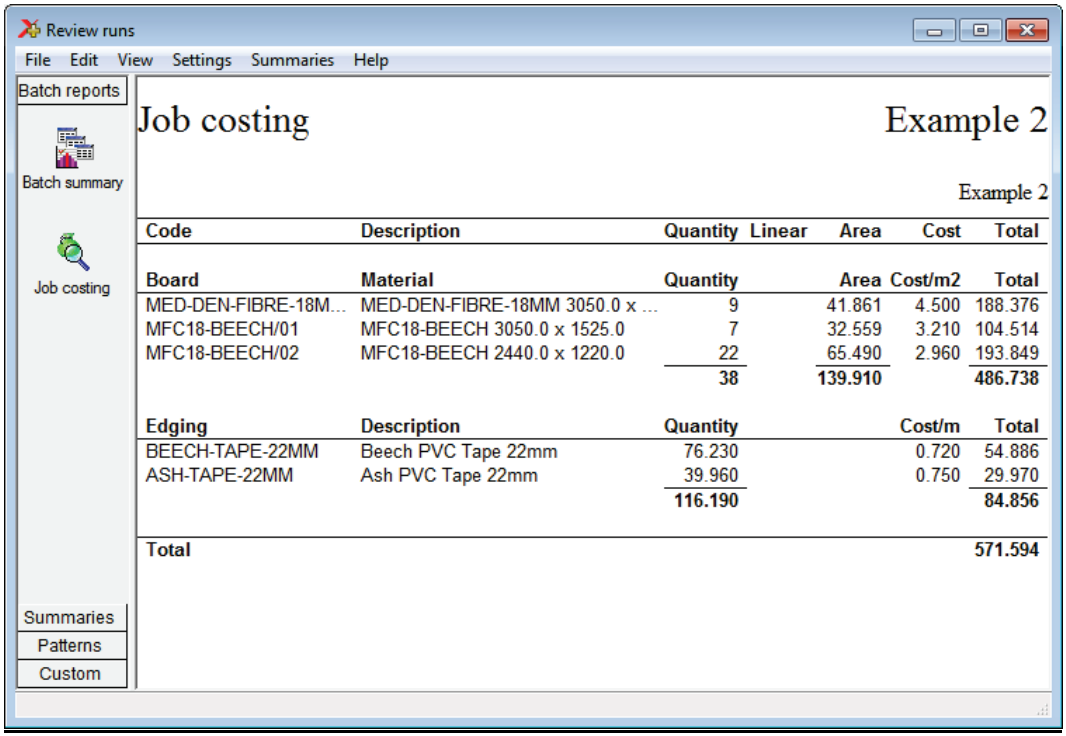
Shows the amount of each board size used in a run.



Review runs Board summary

Job costing

A summary of all the cost centres for a job.



Code	Description	Quantity	Linear	Area	Cost	Total

Board	Material	Quantity	Area	Cost/m2	Total
MED-DEN-FIBRE-18M...	MED-DEN-FIBRE-18MM 3050.0 x ...	9	41.861	4.500	188.376
MFC18-BEECH/01	MFC18-BEECH 3050.0 x 1525.0	7	32.559	3.210	104.514
MFC18-BEECH/02	MFC18-BEECH 2440.0 x 1220.0	22	65.490	2.960	193.849
		38	**139.910**		**486.738**

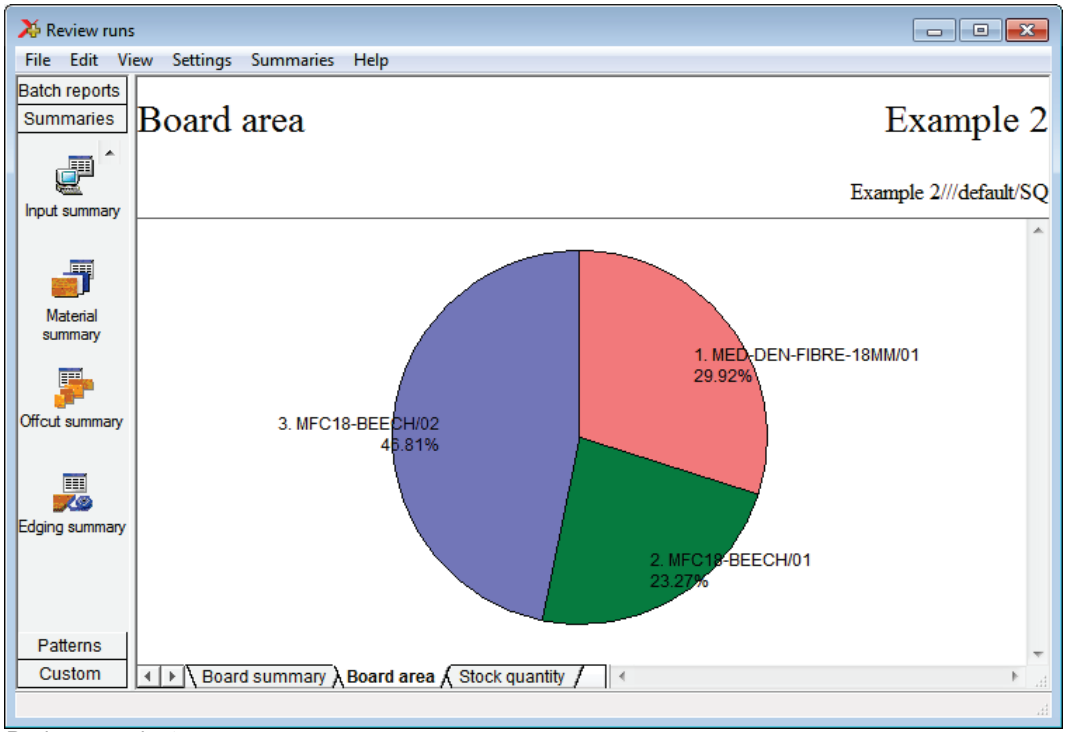
Edging	Description	Quantity	Cost/m	Total
BEECH-TAPE-22MM	Beech PVC Tape 22mm	76.230	0.720	54.886
ASH-TAPE-22MM	Ash PVC Tape 22mm	39.960	0.750	29.970
		116.190		**84.856**

Total	571.594

Review runs job costing

Charts and Analysis

Most reports include options to add a graphical view or chart of the report data. Up to 3 custom charts can be defined for each summary.

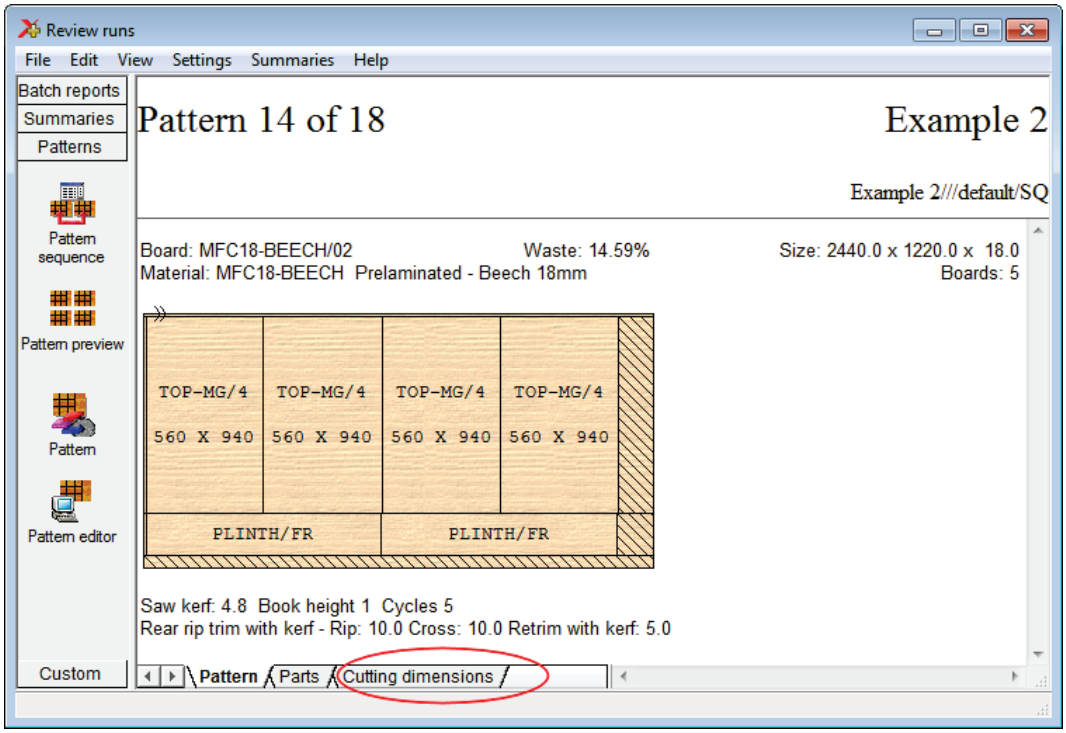


Review runs chart

The data to highlight in this way typically varies from company to company so there are full facilities for defining data to include and style of chart for each report in Review runs (*Settings - Chart settings*)

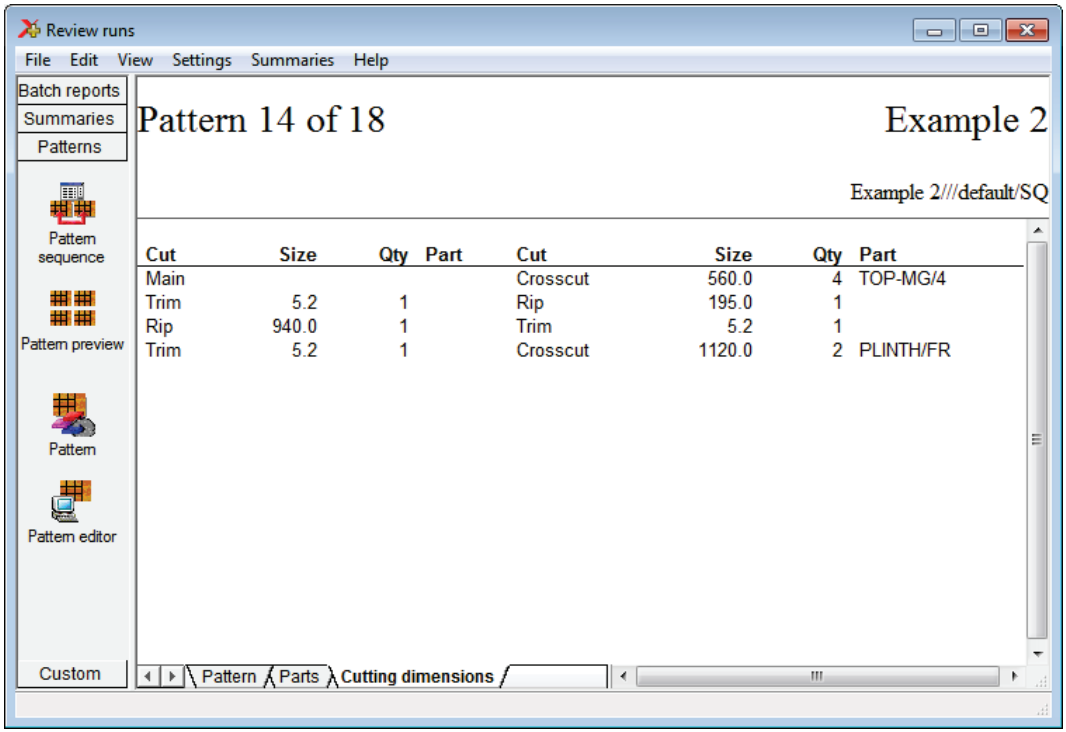
Cutting instructions

The cutting instructions for each pattern are shown via a tab at the foot of each pattern.



- Click on the tabs to move between views.

The cutting instructions show the details of each cut.



In 'Review runs' a variety of on-screen and printed reports are available for each run with options to create custom reports. Cutting patterns can be adjusted manually if required. Cutting patterns and data can be printed, exported to DXF, or sent to external files or a spread sheet.

Batches

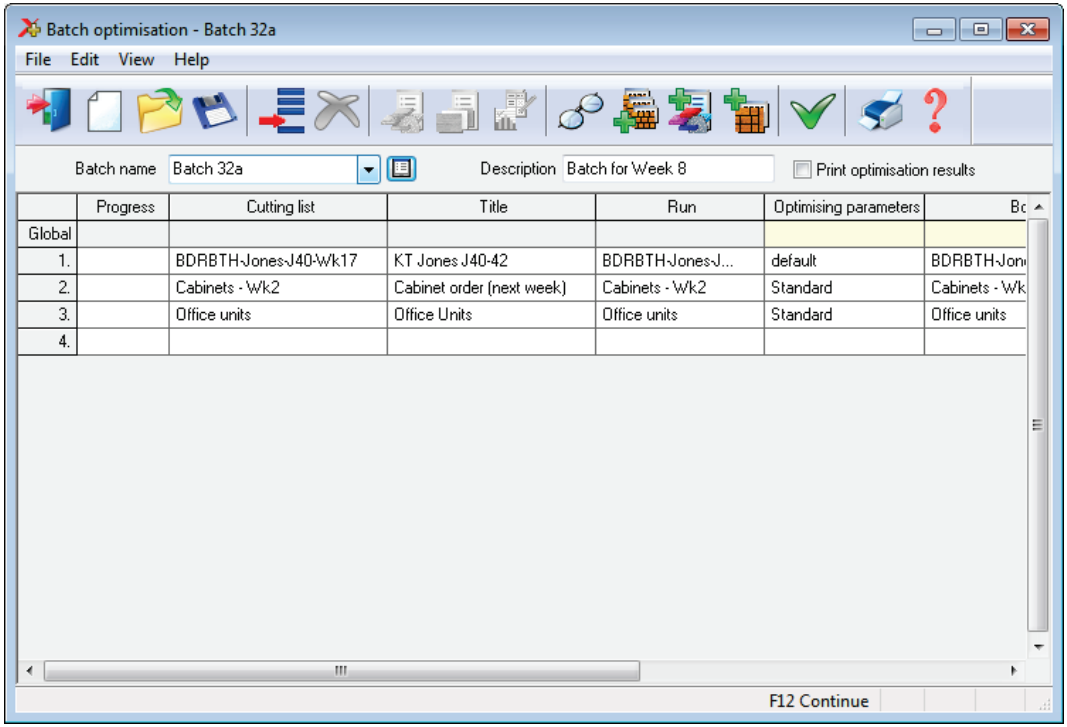
It is often useful to optimise more than one job at a time, for example, to process a set of smaller jobs or even to compare the same data optimised with several different settings in the parameter files. The following example illustrates this.

At the main screen:-

- Select: **Review runs - Batch optimisation**

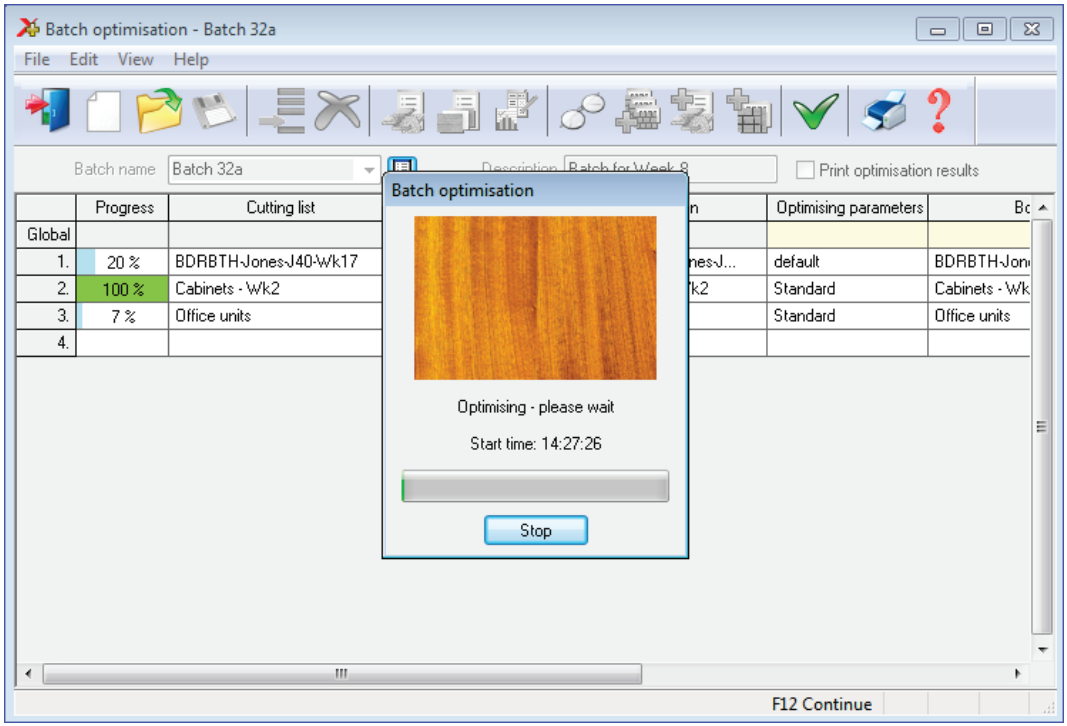
The program displays the batch screen. Enter the cutting lists to optimise. Parameters can be varied by choosing different parameter files in the 'Optimising parameter' and 'Saw parameter' columns as required.

Select the 'Continue' option



Multiple batch

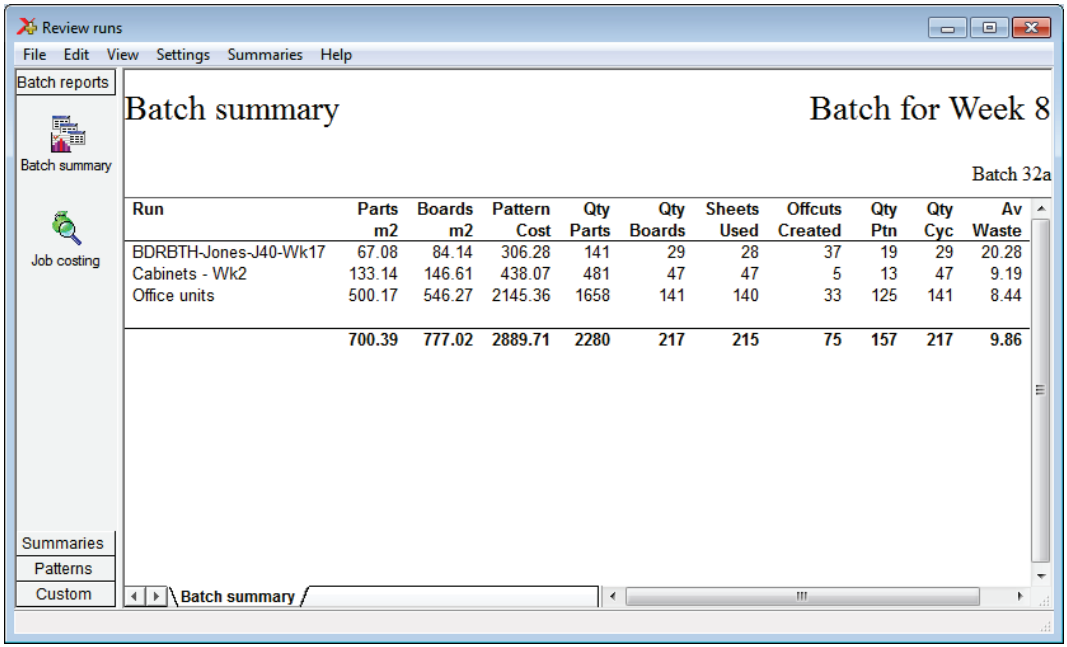
The progress of the optimising is shown in the column: *Optimising progress*



Optimising progress

When all runs are complete the program moves to the 'Batch summary' in Review runs.

This shows a one line summary for each job.

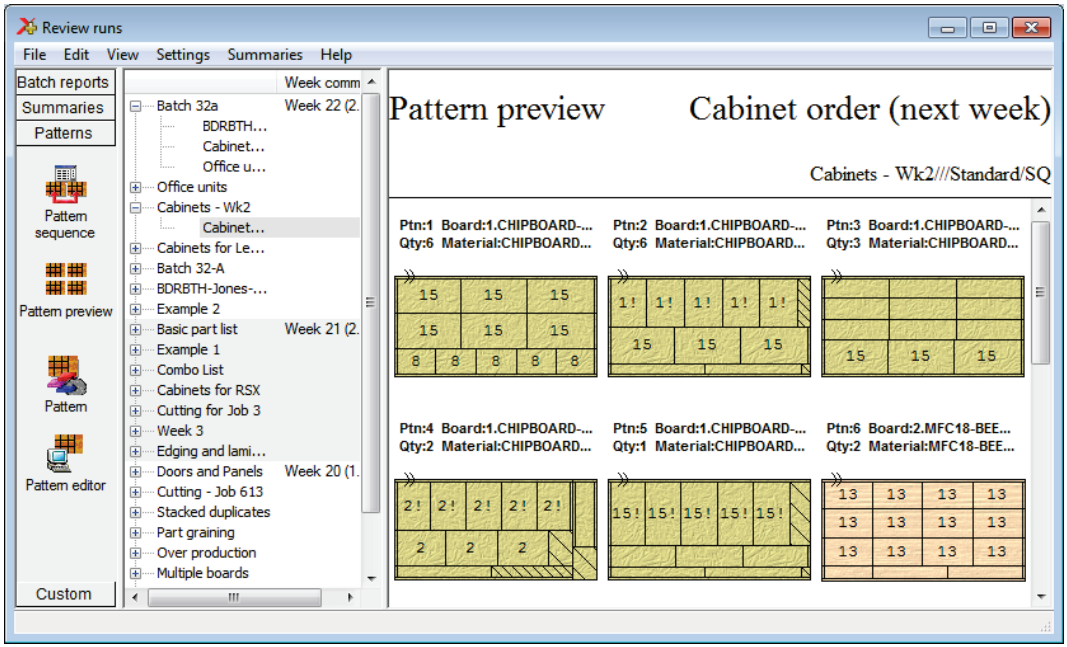


Run	Parts m2	Boards m2	Pattern Cost	Qty Parts	Qty Boards	Sheets Used	Offcuts Created	Qty Ptn	Qty Cyc	Av Waste
BDRBTH-Jones-J40-Wk17	67.08	84.14	306.28	141	29	28	37	19	29	20.28
Cabinets - Wk2	133.14	146.61	438.07	481	47	47	5	13	47	9.19
Office units	500.17	546.27	2145.36	1658	141	140	33	125	141	8.44
	700.39	**777.02**	**2889.71**	**2280**	**217**	**215**	**75**	**157**	**217**	**9.86**

Batch summary

In the following example the 'Runs' pane is switched on. This give a tree of all the batches and run in the User profile so it is easy to quickly move between runs - this can be useful when quickly comparing one result with another.

- Select a run and choose a summary to move to the details of each run.



Runs pane - Multiple batch

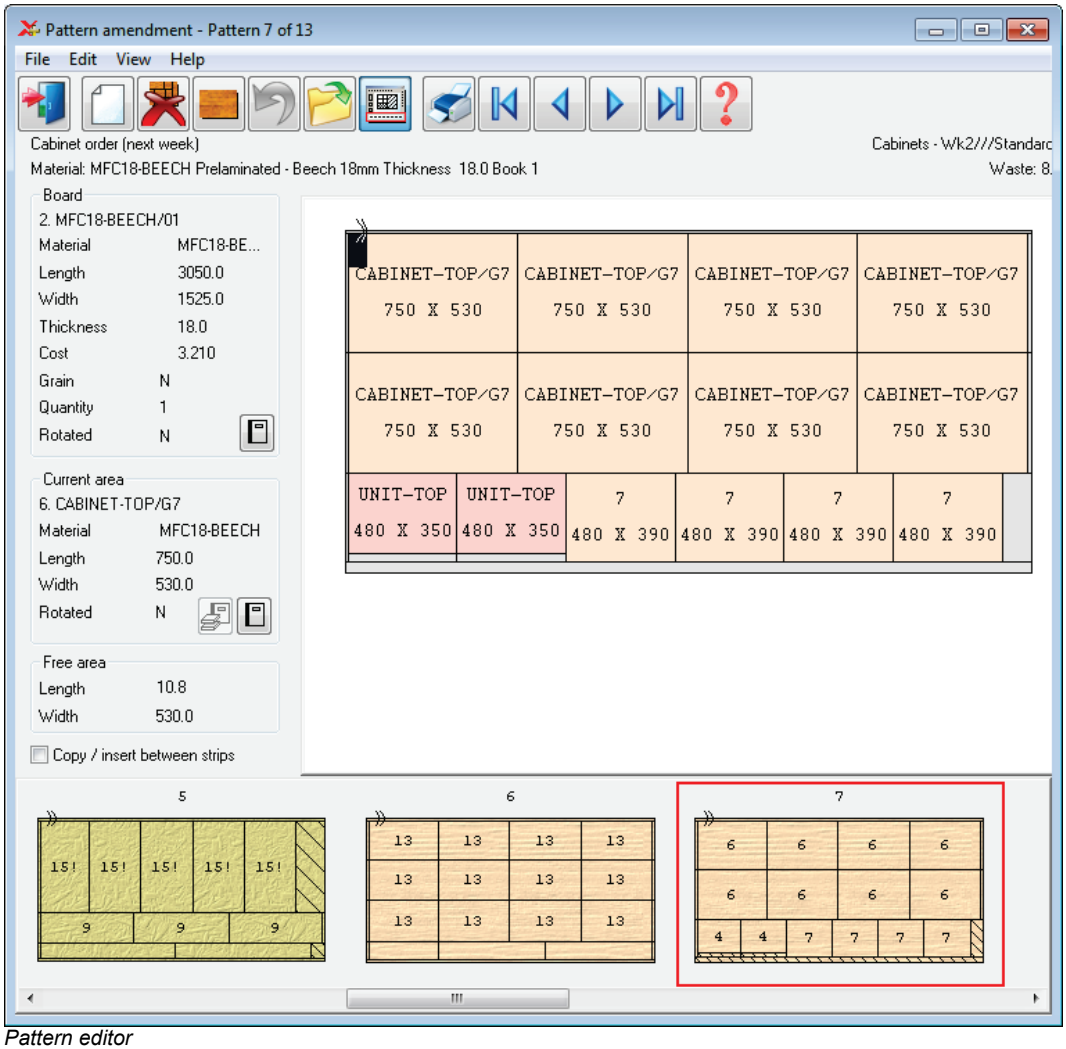
In the above example the 'Runs pane' is turned on - this makes it easy to switch between optimised batches and runs.

Pattern editor

In production there are sometimes last minute changes if materials are not available or an order changes. The optimiser includes a pattern editor . The editor allows changes to each pattern, for example:-

- change the order in which patterns are cut
- alter a cut quantity
- remove a headcut
- swap parts
- alter a part size
- use a different board

- Click on any pattern to move to the editor.

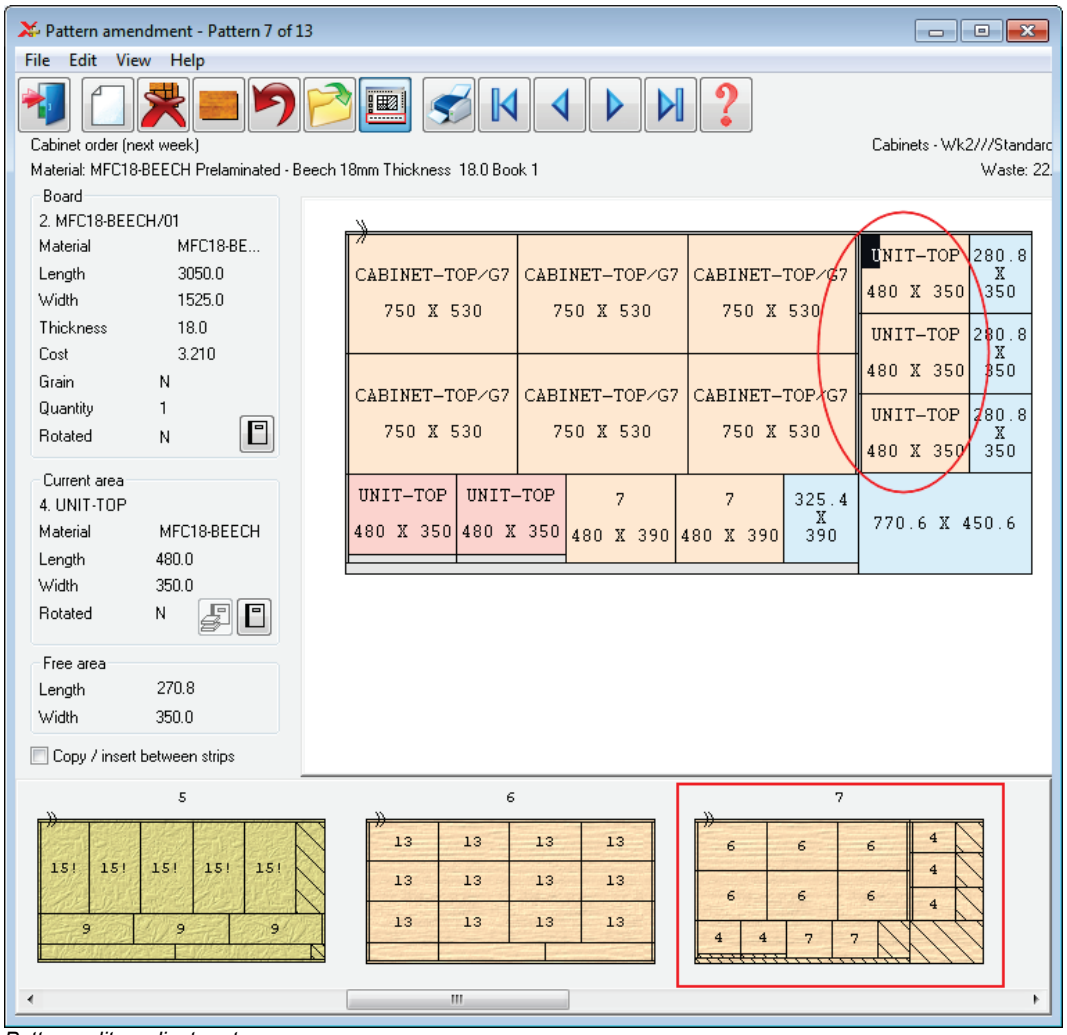


Pattern editor

The thumbnail at the foot of the editor allows patterns to be quickly selected and for parts to be moved between patterns.

Once the changes are complete the run is recalculated.

The parts in a pattern and/or the run quantities can be changed. In the following example a part was deleted and a head cut and run of 3 parts are placed in a different location.



Pattern editor adjust parts

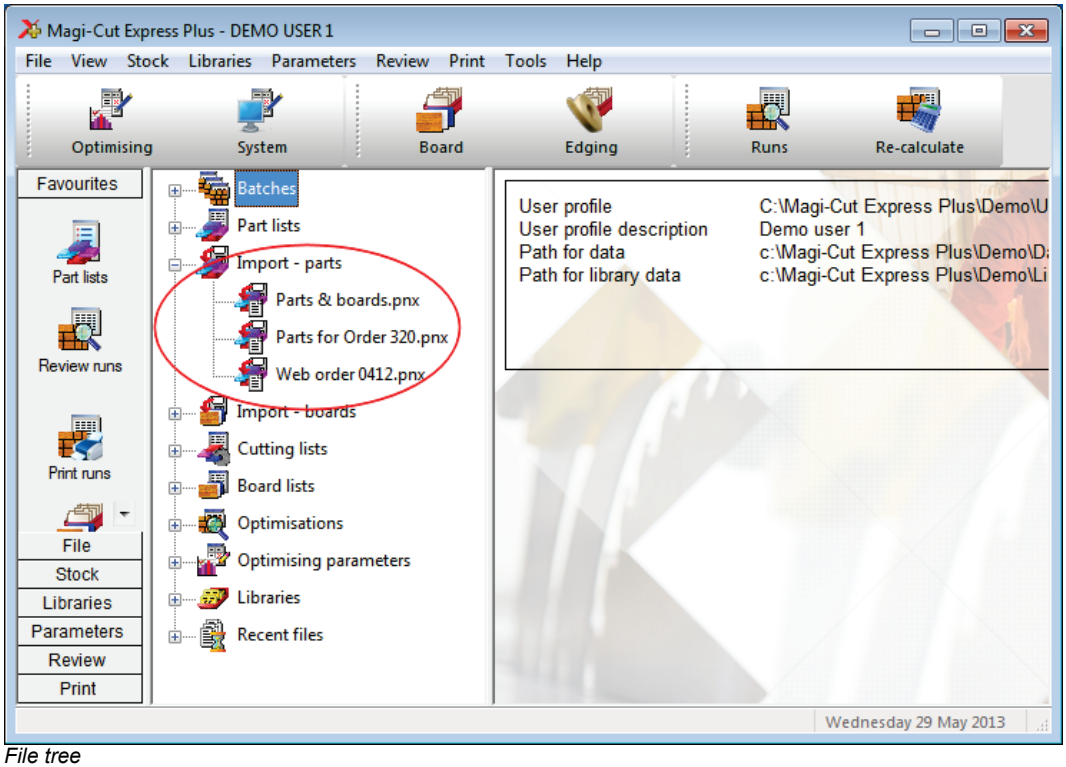
The editor is easy to use and acts in a similar way to a graphics program. At the right are various editing tools and at the left a set of panels for the board and part properties.

Import and export cutting data

These days, especially for larger orders, the part list may be generated in other systems. The optimiser includes a variety of options for importing and exporting data from the program.

To import a part list, at the Main screen:-

- Open the File tree
- Select the Import area



File tree

- Click on a part list to import

The format of the import files can be customised or set as one of the standard options.

Part list order - ASCII CSV (PNX)
Cabinet Vision format
Product Planner format
Code and quantity - ASCII CSV (PNX)
Batch - part list order (BTX & PNX)
Batch - Code and quantity (BTX & PNX)
User defined order - ASCII CSV
Batch - user defined order (BTX)
User defined order - Excel (XLS)
User defined order - Excel (XLSX)

There are a variety of options for importing and exporting from the program to work with other software.

Export reports

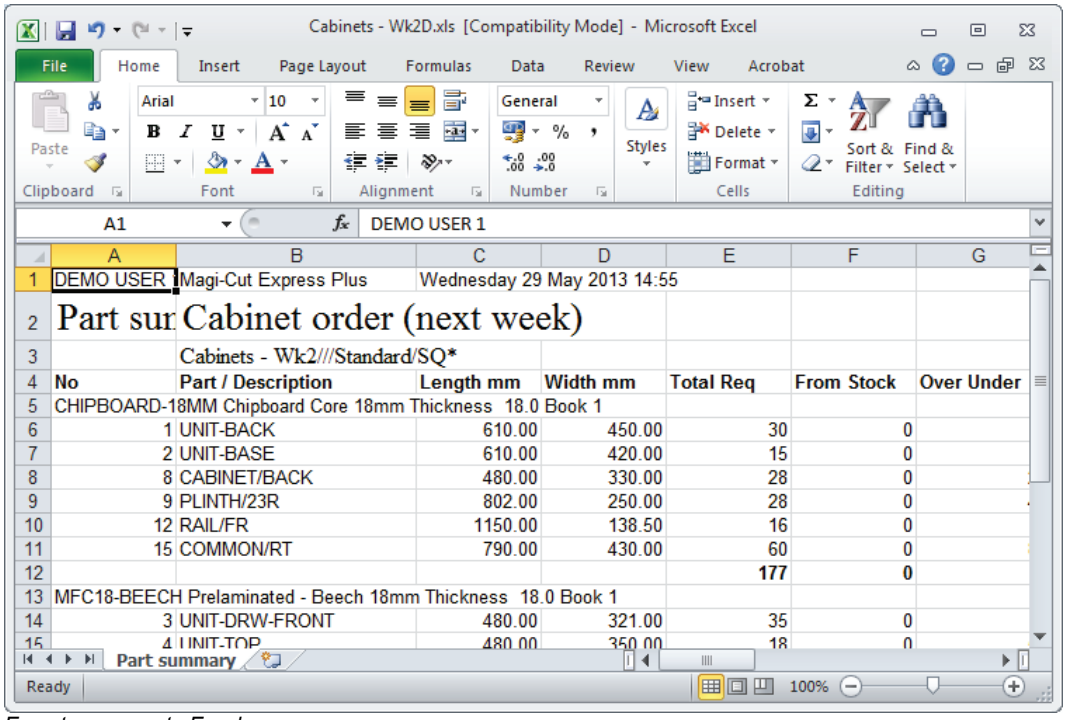
For larger runs it is often useful to export run data (summaries) to an external file so that the data can be used in an external system or in a spread sheet, for example, Excel. To do this:-

- Move to any summary
- Select: **File - Export**

Choose one of the export formats:-

ASCII
XLS
XLXS
Pattern

In the following example a Part list summary was exported to Excel.



Export summary to Excel

The 'Pattern' option is only available for pattern drawings.

To export a complete run, at the main screen:-

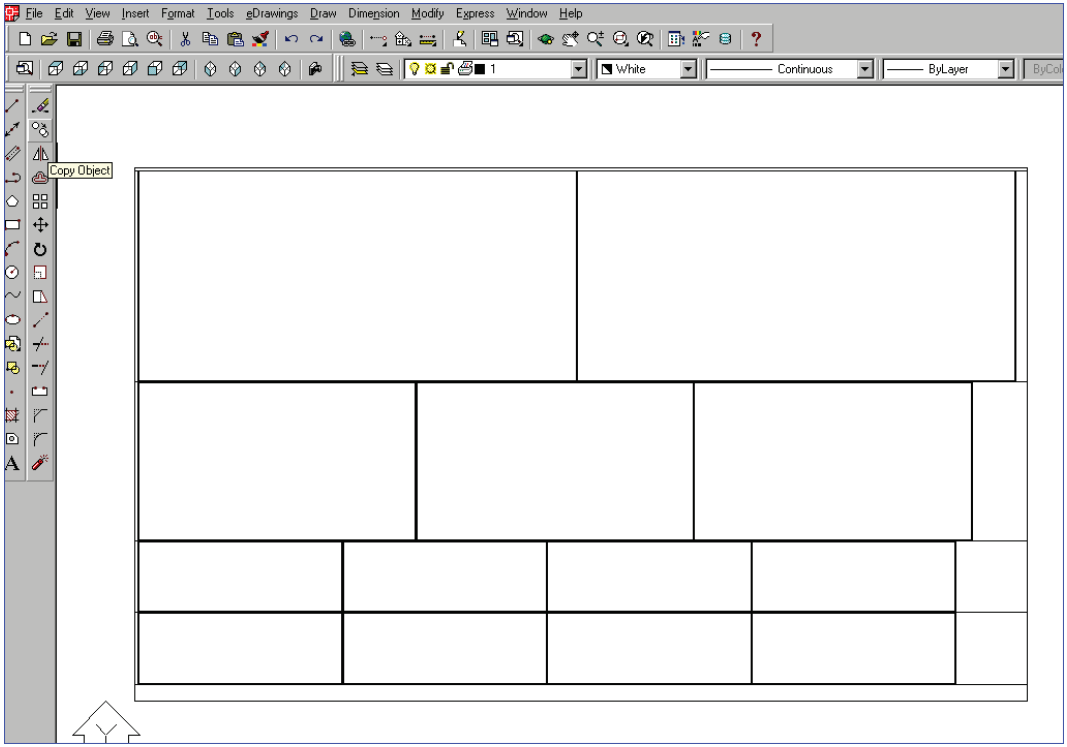
- Select: **File - Export runs**
- Choose the export format
- The program displays the current batch

Select the 'Continue' option

- Select the reports / patterns to export

DXF

Patterns can be exported to a DXF format and are then available to most CAD programs.



Using Information boxes

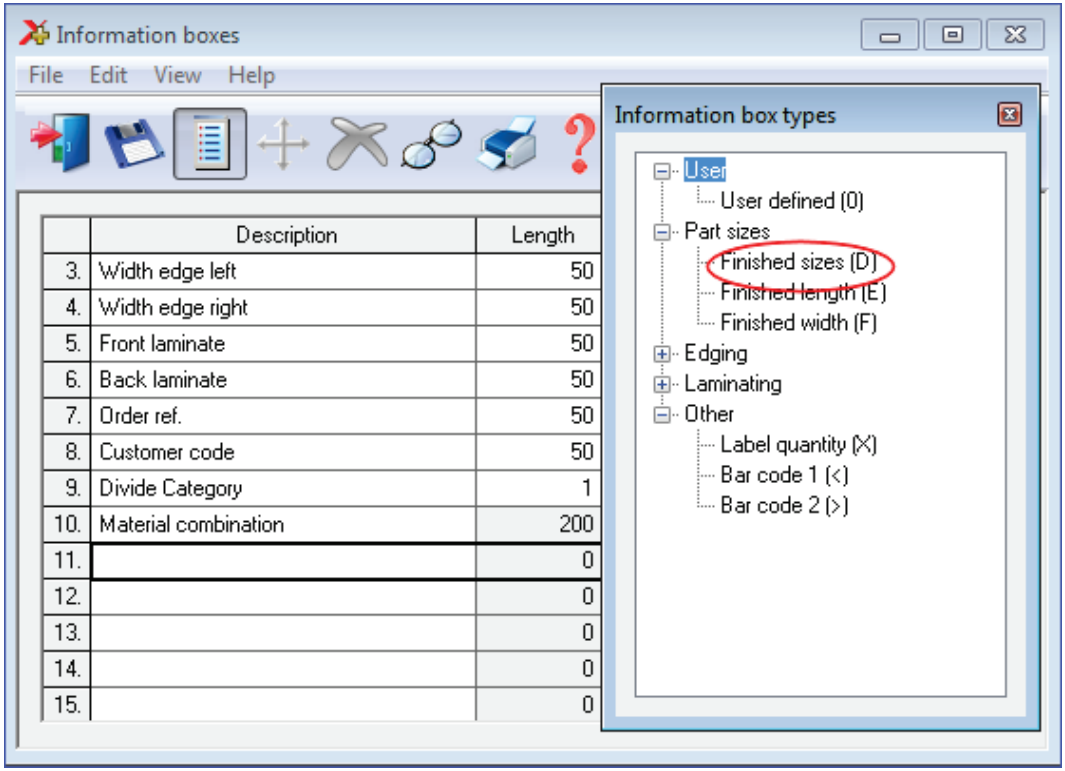
A unique feature of the program is the ability to add extra custom and/or pre-defined fields to the part list; called 'Information boxes'. These not only provide extra information for each part (for example for use on labels) but are also used to extend the capabilities of optimising to take account of many production constraints or requirements. For example:-

The 'Finished Sizes' information box calculates and reports the finished size for a part in a single file. This can be useful for including the data in a report or on a printed label, especially where edging is used and the finished size is different from the cutting size (which typically appear on reports and labels).

First set up the box if is it not already in use, at the main screen:-

- Select: **Parameters - Information boxes**
- Move to an empty row

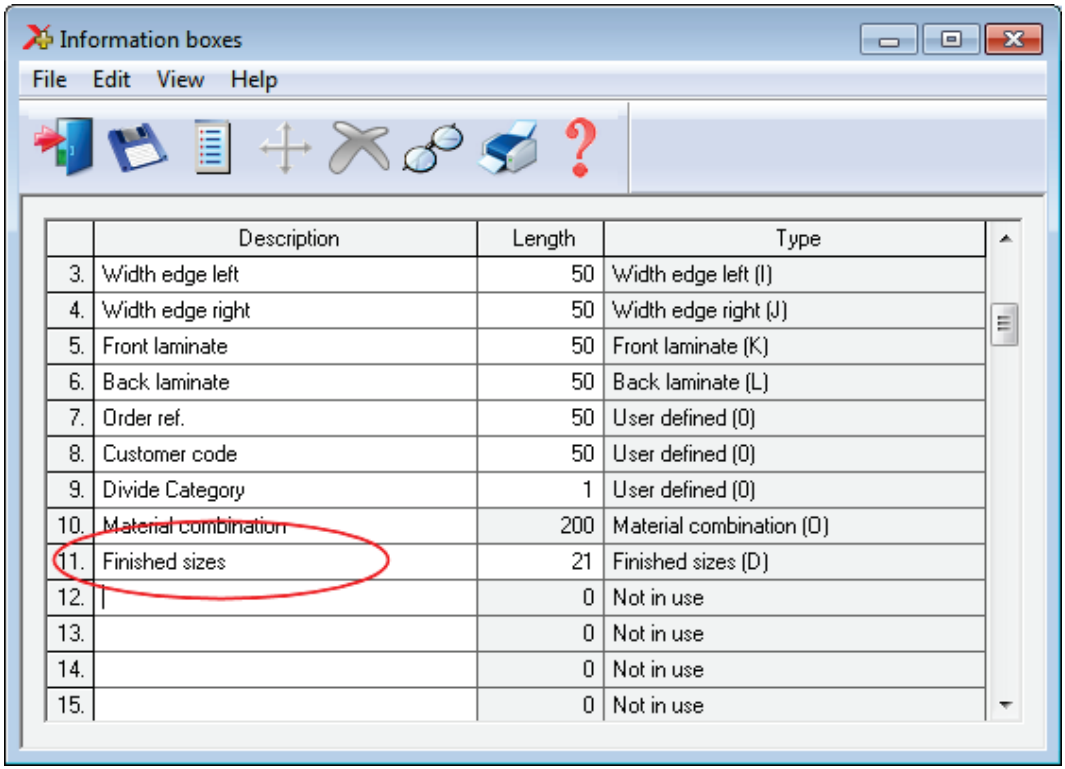
 Select the list of information boxes



	Description	Length
3.	Width edge left	50
4.	Width edge right	50
5.	Front laminate	50
6.	Back laminate	50
7.	Order ref.	50
8.	Customer code	50
9.	Divide Category	1
10.	Material combination	200
11.		0
12.		0
13.		0
14.		0
15.		0

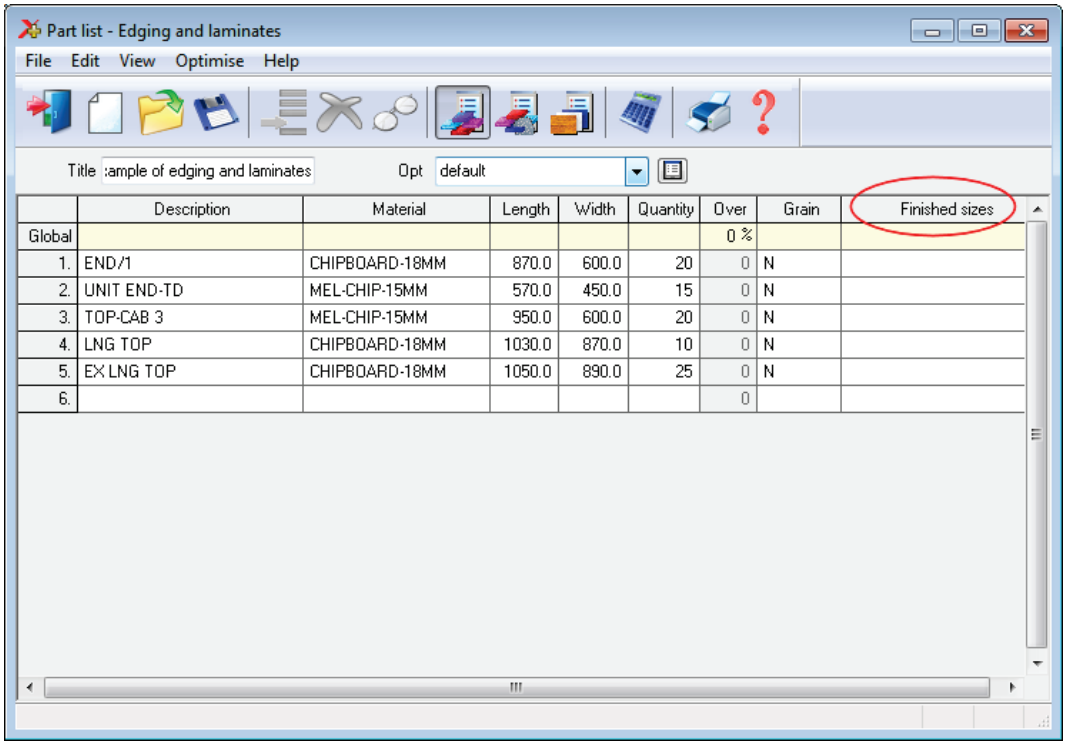
- Locate the required box and select it

The box is added to the list of information boxes.



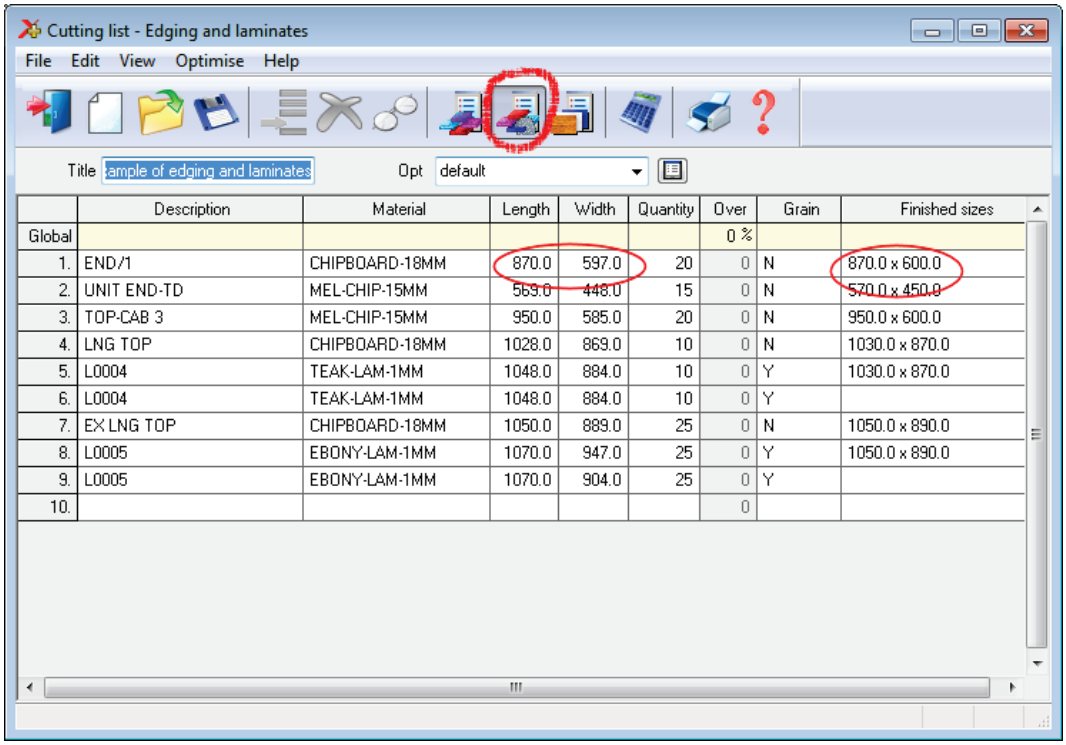
	Description	Length	Type
3.	Width edge left	50	Width edge left (I)
4.	Width edge right	50	Width edge right (J)
5.	Front laminate	50	Front laminate (K)
6.	Back laminate	50	Back laminate (L)
7.	Order ref.	50	User defined (0)
8.	Customer code	50	User defined (0)
9.	Divide Category	1	User defined (0)
10.	Material combination	200	Material combination (O)
11.	Finished sizes	21	Finished sizes (D)
12.		0	Not in use
13.		0	Not in use
14.		0	Not in use
15.		0	Not in use

The box is now available at the part list.



This box is often used when edging and laminating is involved for some of the parts since the cutting size is often different from the Finished size.

The information boxes and edging is calculated by moving to the 'Cutting list'.

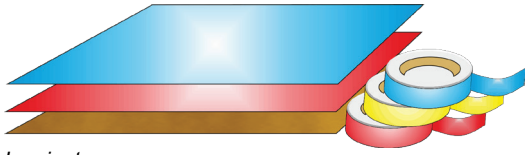


	Description	Material	Length	Width	Quantity	Over	Grain	Finished sizes
Global						0 %		
1.	END/1	CHIPBOARD-18MM	870.0	597.0	20	0	N	870.0 x 600.0
2.	UNIT END-TD	MEL-CHIP-15MM	563.0	448.0	15	0	N	570.0 x 450.0
3.	TOP-CAB 3	MEL-CHIP-15MM	950.0	585.0	20	0	N	950.0 x 600.0
4.	LNG TOP	CHIPBOARD-18MM	1028.0	869.0	10	0	N	1030.0 x 870.0
5.	L0004	TEAK-LAM-1MM	1048.0	884.0	10	0	Y	1030.0 x 870.0
6.	L0004	TEAK-LAM-1MM	1048.0	884.0	10	0	Y	
7.	EX LNG TOP	CHIPBOARD-18MM	1050.0	889.0	25	0	N	1050.0 x 890.0
8.	L0005	EBONY-LAM-1MM	1070.0	947.0	25	0	Y	1050.0 x 890.0
9.	L0005	EBONY-LAM-1MM	1070.0	904.0	25	0	Y	
10.						0		

The boxes for the Finished sizes are automatically entered in the cutting list - in this case it is clear the cutting size is different from the finished size. The finished size information box is now available for reports, labels, export in the same way as any other piece of data.

(Where edging and laminating is not used the part list and the cutting list are the same - so there is no need to worry about the cutting list - this generated automatically for each optimisation).

3. Edges & Laminating



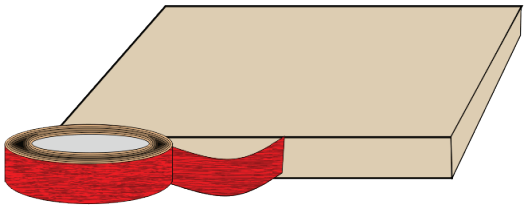
Laminates

This option provides a full set of options to deal with edged, trimmed and laminated parts. A wide variety of edging methods are covered:-

- **Tape**
- **Laminate strips**
- **Solid lipping**
- **Postform edging**
- **Bullnose edging**
- **Laminate front and back**
- **Core trimming (cutting back before edging)**
- **Edge before laminating**

Edging

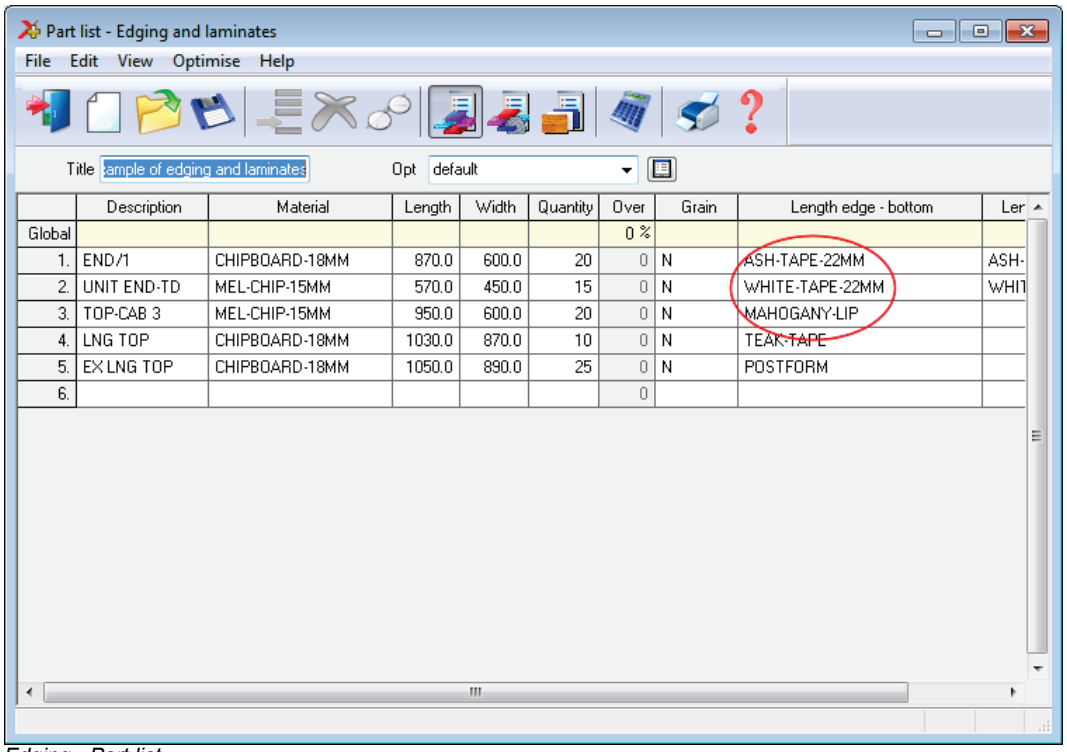
The edging requirement is set at the part list and can be set for each part. The program automatically calculates the correct cutting sizes.



Edging

Sizes are entered (or imported) via the Part list.

These are typically the finished sizes; where there is edging and laminating this finished size has to be adjusted to the cut size before being sent to the saw.



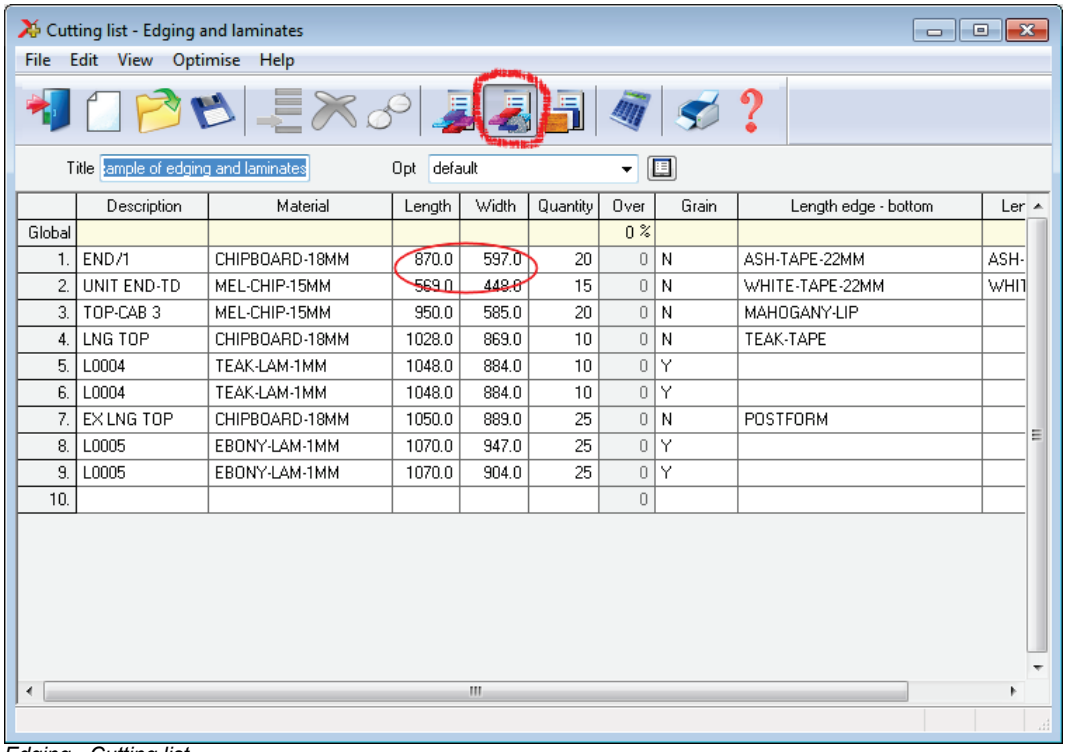
Edging - Part list

A set of extra fields (called Information boxes) extend the Part list to allow for the entry of the edging code for each edge of each part. For example, in the above example items such as drawers and doors have edging material on some of the edges.

To calculate the cutting sizes the program creates a 'Cutting list' this is similar to the 'Part list' but the sizes and other information is adjusted to take account of edging.

 Click on the cutting list symbol

The correct cutting sizes are produced automatically.



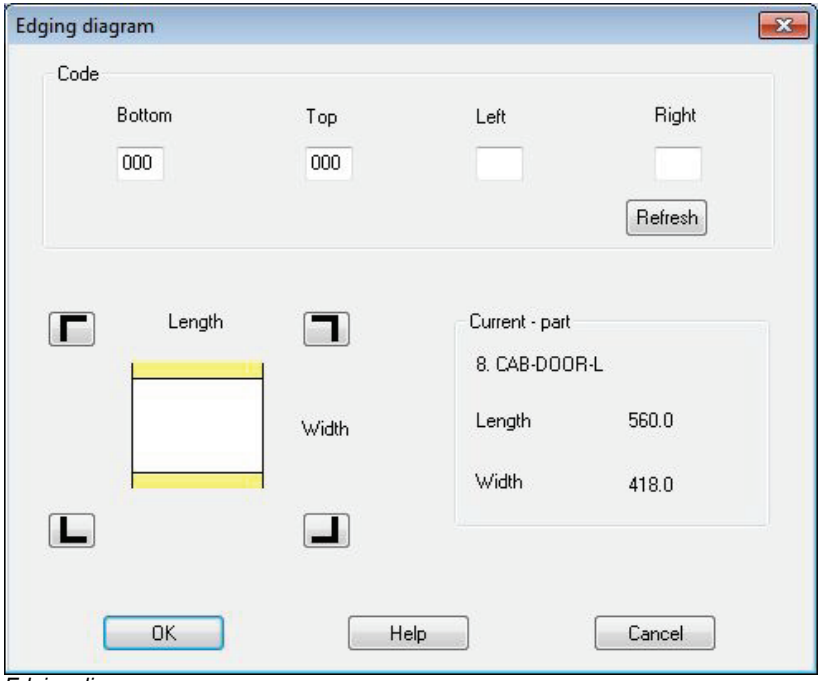
	Description	Material	Length	Width	Quantity	Over	Grain	Length edge - bottom	Ler
Global						0 %			
1.	END/1	CHIPBOARD-18MM	870.0	597.0	20	0	N	ASH-TAPE-22MM	ASH-
2.	UNIT END-TD	MEL-CHIP-15MM	569.0	448.0	15	0	N	WHITE-TAPE-22MM	WHI
3.	TOP-CAB 3	MEL-CHIP-15MM	950.0	585.0	20	0	N	MAHOGANY-LIP	
4.	LNG TOP	CHIPBOARD-18MM	1028.0	869.0	10	0	N	TEAK-TAPE	
5.	L0004	TEAK-LAM-1MM	1048.0	884.0	10	0	Y		
6.	L0004	TEAK-LAM-1MM	1048.0	884.0	10	0	Y		
7.	EX LNG TOP	CHIPBOARD-18MM	1050.0	889.0	25	0	N	POSTFORM	
8.	L0005	EBONY-LAM-1MM	1070.0	947.0	25	0	Y		
9.	L0005	EBONY-LAM-1MM	1070.0	904.0	25	0	Y		
10.						0			

Edging - Cutting list

For example, a finished width of 600.0 mm requires a cutting size of 597.0 mm if the part is edged by (1.5 mm) tape on each length edge.

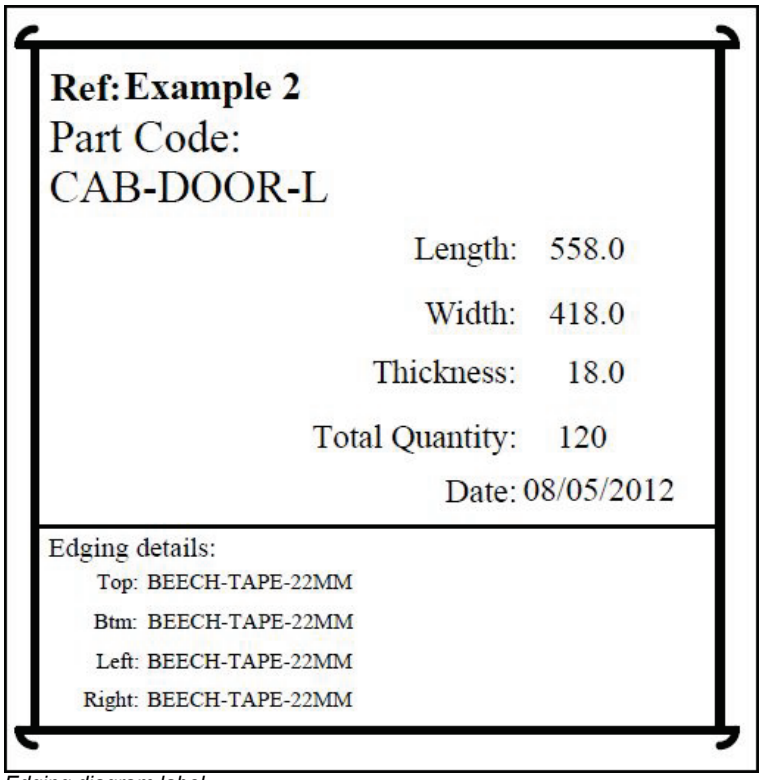
The part list can include a field for describing the Edge diagram.

This field can be used to set how adjoining edge pieces butt on to each other or whether they are mitred.



Edging diagram

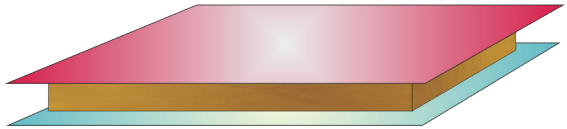
This can be used when printing labels for edging to show on the label (at the Edgebander) exactly how the edging is applied.



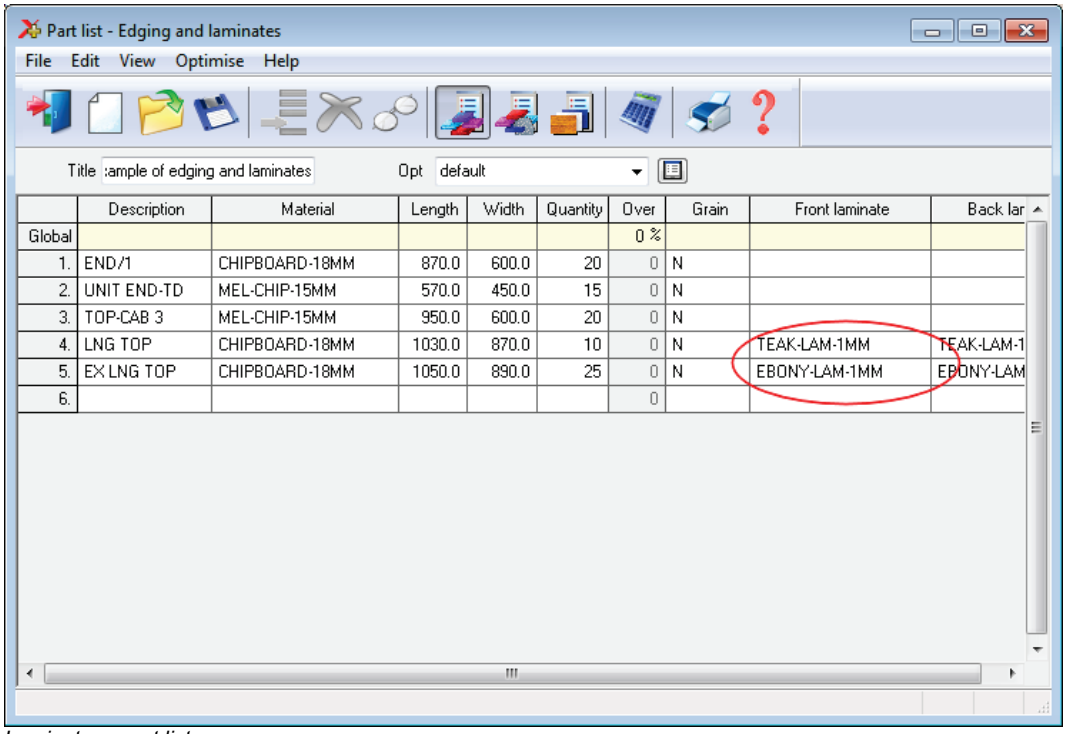
Edging diagram label

- The edging requirements can be printed on a label as a bar code and used for processing at the edgebander after cutting.

Laminating


Laminating

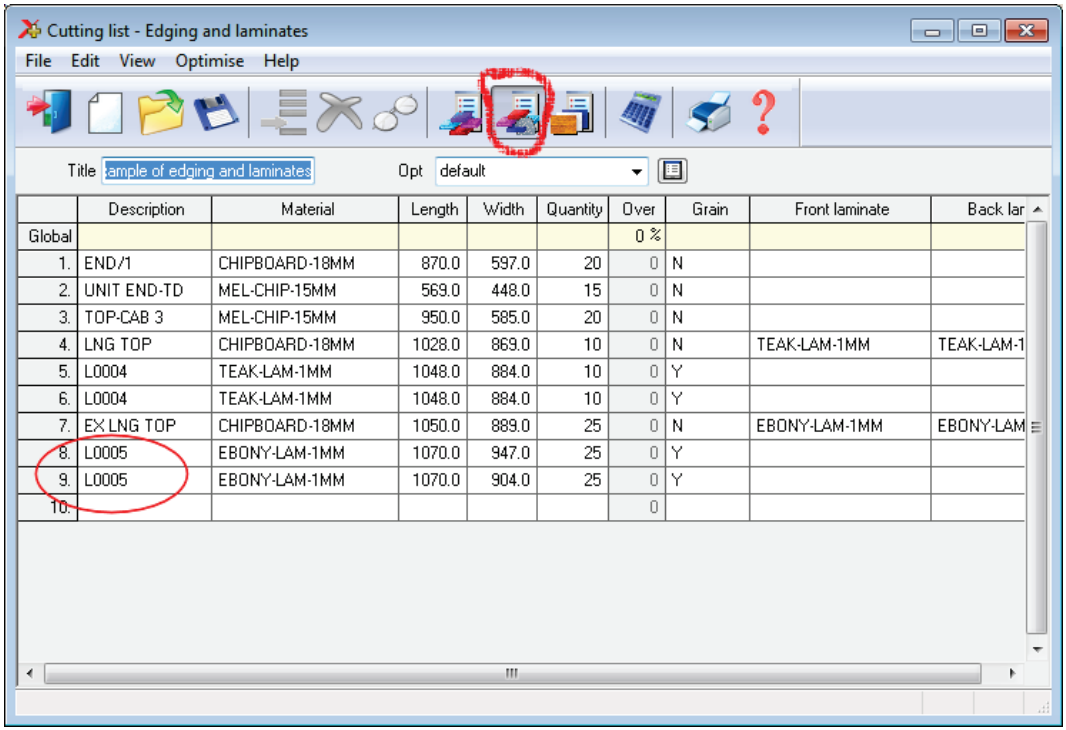
The part list can also include fields for laminating one or both sides of a part.



Laminates - part list

The program automatically adds extra items to the cutting list (cutting requirement) to allow for the laminate pieces required.

The laminate size is adjusted to allow for trimming as required.

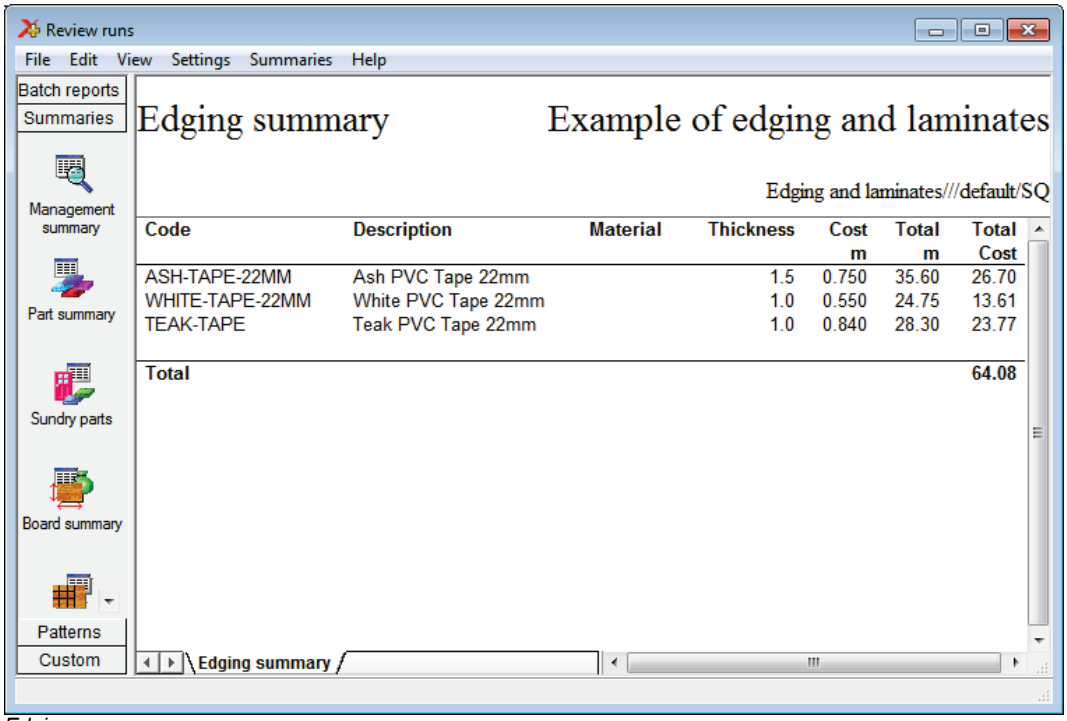


	Description	Material	Length	Width	Quantity	Over	Grain	Front laminate	Back lar
Global						0 %			
1.	END/1	CHIPBOARD-18MM	870.0	597.0	20	0	N		
2.	UNIT END-TD	MEL-CHIP-15MM	569.0	448.0	15	0	N		
3.	TOP-CAB 3	MEL-CHIP-15MM	950.0	585.0	20	0	N		
4.	LNG TOP	CHIPBOARD-18MM	1028.0	869.0	10	0	N	TEAK-LAM-1MM	TEAK-LAM-1
5.	L0004	TEAK-LAM-1MM	1048.0	884.0	10	0	Y		
6.	L0004	TEAK-LAM-1MM	1048.0	884.0	10	0	Y		
7.	EX LNG TOP	CHIPBOARD-18MM	1050.0	889.0	25	0	N	EBONY-LAM-1MM	EBONY-LAM
8.	L0005	EBONY-LAM-1MM	1070.0	947.0	25	0	Y		
9.	L0005	EBONY-LAM-1MM	1070.0	904.0	25	0	Y		
10.						0			

Laminates - cutting list

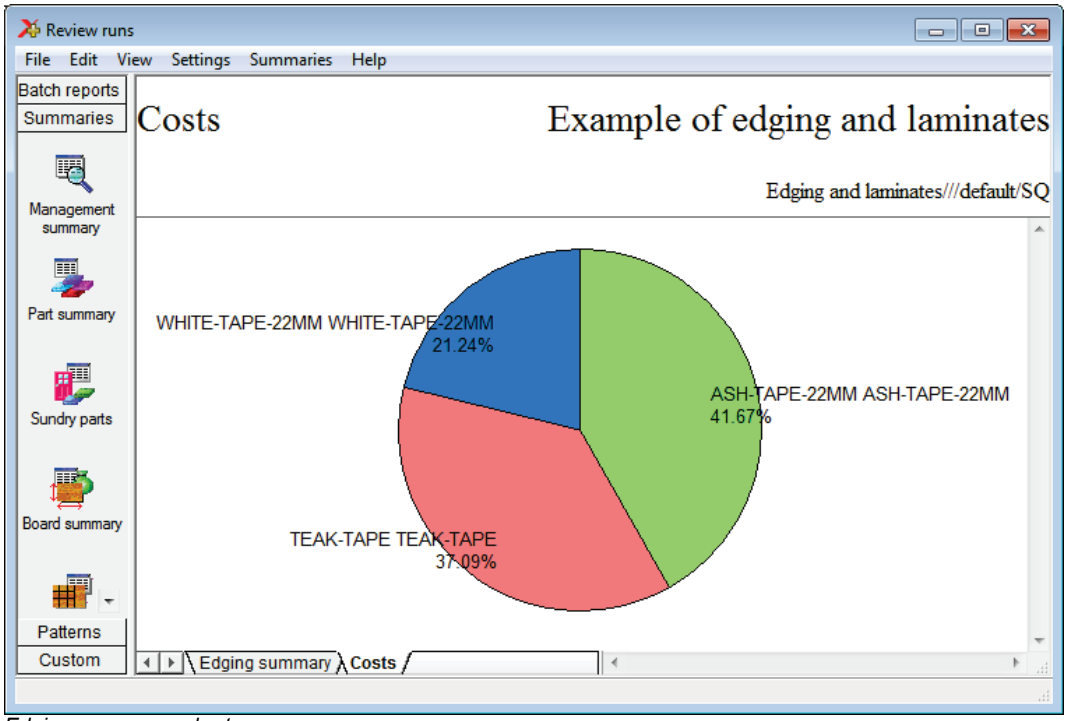
Edging summary and costs

The edging summary gives full details of the edging requirements including the costs.



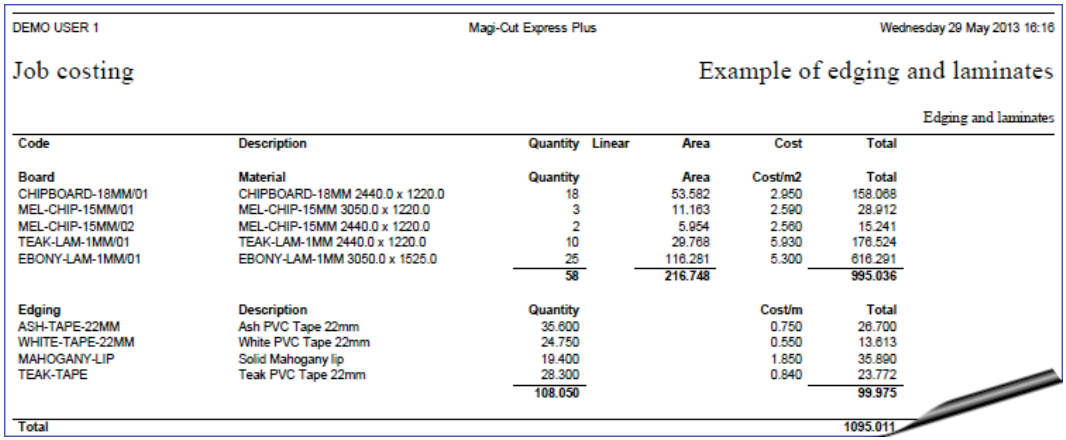
Edging summary

The Edging summary can include a custom graphic representation of the data.



Edging summary - chart

The printed job costing report includes the cost of edging material.



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Job costing — Example of edging and laminates

Edging and laminates

Code	Description	Quantity	Linear	Area	Cost	Total
Board	**Material**	**Quantity**		**Area**	**Cost/m2**	**Total**
CHIPBOARD-18MM/01	CHIPBOARD-18MM 2440.0 x 1220.0	18		53.582	2.950	158.068
MEL-CHIP-15MM/01	MEL-CHIP-15MM 3050.0 x 1220.0	3		11.163	2.590	28.912
MEL-CHIP-15MM/02	MEL-CHIP-15MM 2440.0 x 1220.0	2		5.954	2.560	15.241
TEAK-LAM-1MM/01	TEAK-LAM-1MM 2440.0 x 1220.0	10		29.768	5.930	176.524
EBONY-LAM-1MM/01	EBONY-LAM-1MM 3050.0 x 1525.0	25		116.281	5.300	616.291
		58		**216.748**		**995.036**
Edging	**Description**	**Quantity**			**Cost/m**	**Total**
ASH-TAPE-22MM	Ash PVC Tape 22mm	35.600			0.750	26.700
WHITE-TAPE-22MM	White PVC Tape 22mm	24.750			0.550	13.613
MAHOGANY-LIP	Solid Mahogany lip	19.400			1.850	35.890
TEAK-TAPE	Teak PVC Tape 22mm	28.300			0.840	23.772
		108.050				**99.975**
Total						**1095.011**

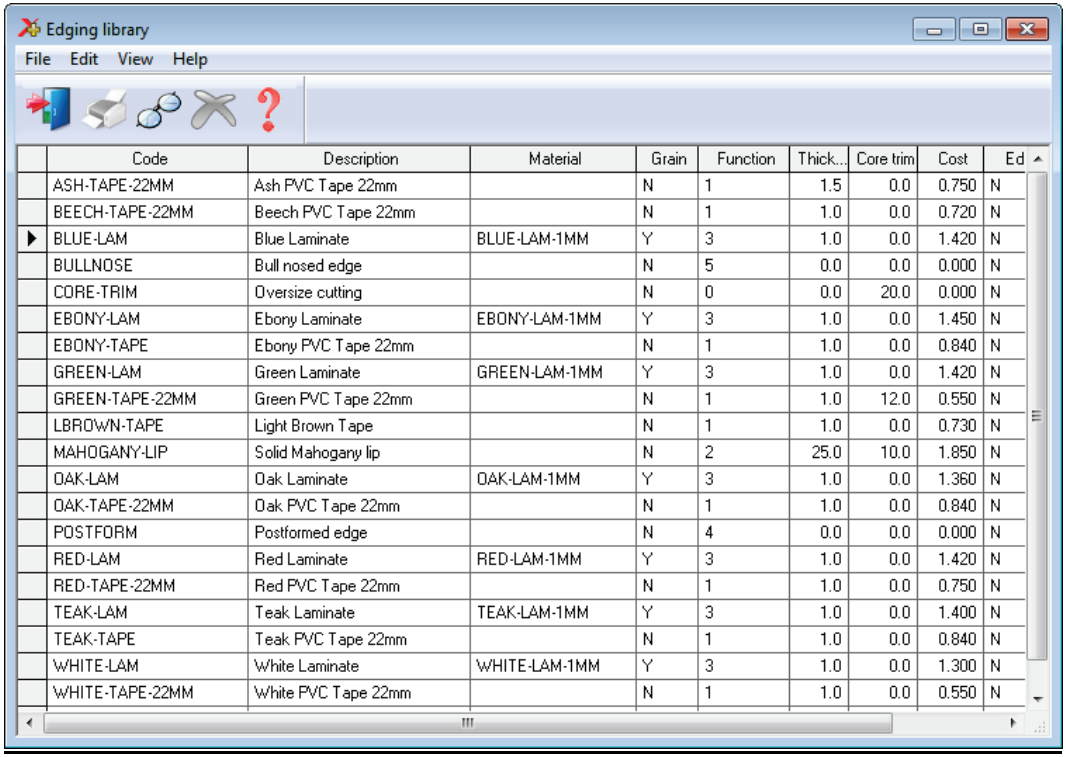
Edging - costing

The operational details and costs of each Edgebander are set up in the Edging parameters. These include options such as:-

- Overlap for edging
- Gap between parts
- Edgebander speed
- Double sided or not
...

Edging library

The details of the edging materials and operations are set up in the Edging library. This can be customised to match many different edging methods, for example, whether edging is applied before laminating, whether a core trim is taken, the type of edging …



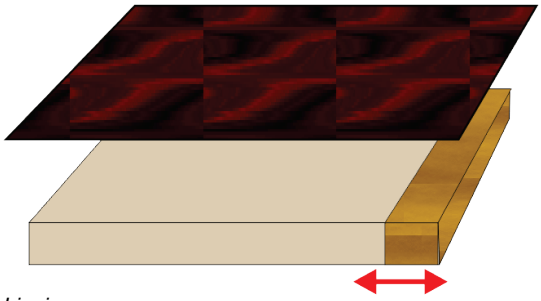
Code	Description	Material	Grain	Function	Thick...	Core trim	Cost	Ed
ASH-TAPE-22MM	Ash PVC Tape 22mm		N	1	1.5	0.0	0.750	N
BEECH-TAPE-22MM	Beech PVC Tape 22mm		N	1	1.0	0.0	0.720	N
BLUE-LAM	Blue Laminate	BLUE-LAM-1MM	Y	3	1.0	0.0	1.420	N
BULLNOSE	Bull nosed edge		N	5	0.0	0.0	0.000	N
CORE-TRIM	Oversize cutting		N	0	0.0	20.0	0.000	N
EBONY-LAM	Ebony Laminate	EBONY-LAM-1MM	Y	3	1.0	0.0	1.450	N
EBONY-TAPE	Ebony PVC Tape 22mm		N	1	1.0	0.0	0.840	N
GREEN-LAM	Green Laminate	GREEN-LAM-1MM	Y	3	1.0	0.0	1.420	N
GREEN-TAPE-22MM	Green PVC Tape 22mm		N	1	1.0	12.0	0.550	N
LBROWN-TAPE	Light Brown Tape		N	1	1.0	0.0	0.730	N
MAHOGANY-LIP	Solid Mahogany lip		N	2	25.0	10.0	1.850	N
OAK-LAM	Oak Laminate	OAK-LAM-1MM	Y	3	1.0	0.0	1.360	N
OAK-TAPE-22MM	Oak PVC Tape 22mm		N	1	1.0	0.0	0.840	N
POSTFORM	Postformed edge		N	4	0.0	0.0	0.000	N
RED-LAM	Red Laminate	RED-LAM-1MM	Y	3	1.0	0.0	1.420	N
RED-TAPE-22MM	Red PVC Tape 22mm		N	1	1.0	0.0	0.750	N
TEAK-LAM	Teak Laminate	TEAK-LAM-1MM	Y	3	1.0	0.0	1.400	N
TEAK-TAPE	Teak PVC Tape 22mm		N	1	1.0	0.0	0.840	N
WHITE-LAM	White Laminate	WHITE-LAM-1MM	Y	3	1.0	0.0	1.300	N
WHITE-TAPE-22MM	White PVC Tape 22mm		N	1	1.0	0.0	0.550	N

Edging library

For example, where a core trim is specified, this indicates that the core material is trimmed first before edging is applied. This is quite common, for instance with doors, where solid wood edges are often applied before laminating.

- Where there are a large number of different laminates for example with laminate colours the Board library can be used instead of the edging library for describing the laminates - this is often more convenient for sheet laminates.

The core trim, for example, allows for the removal of core material ready for solid wood lipping.

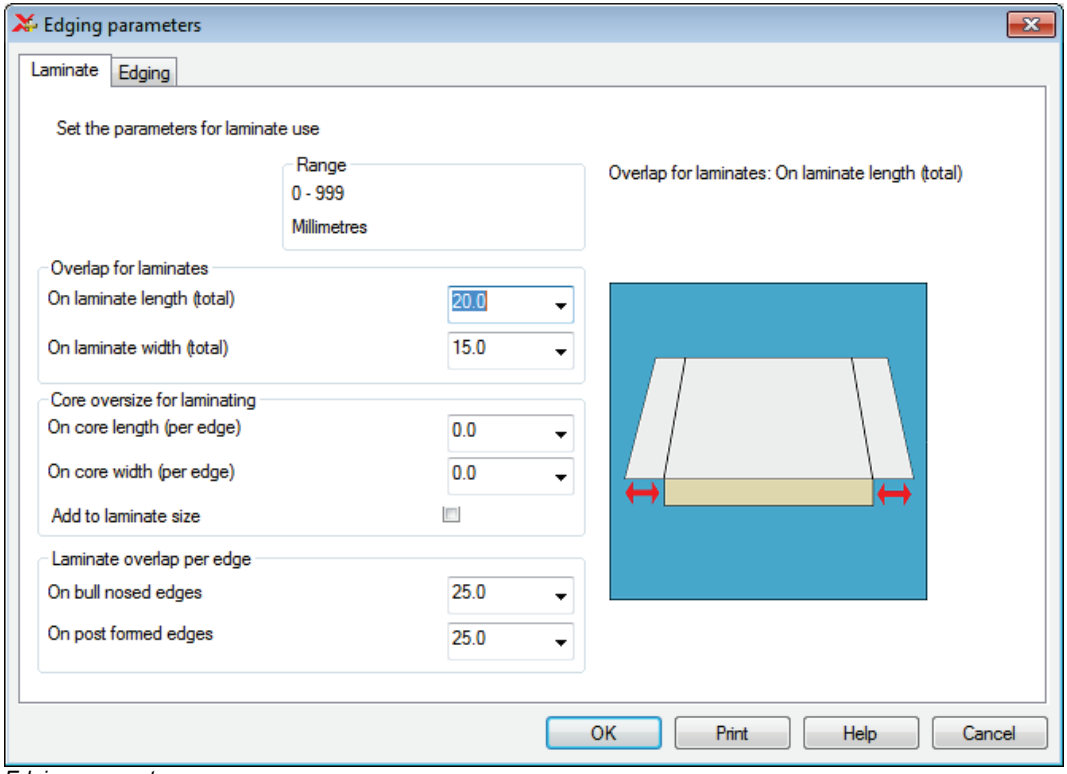


Lipping

The laminate size is automatically adjusted to take account of the lipping.

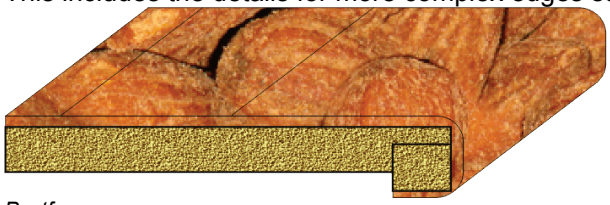
Edging parameters

The tolerances and settings for applying edging and laminates are set via the Edging parameters (*Main screen - Parameters - Edging*).



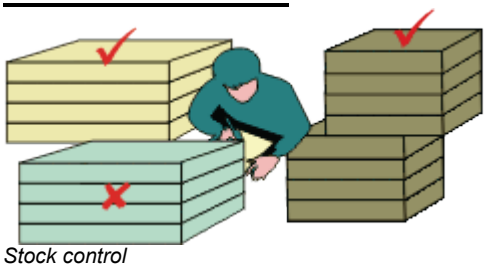
Edging parameters

This includes the details for more complex edges such as Post form and bullnose edges.



Postform

4. Stock Control



Stock control

The stock control options allow the offcuts generated in each run to be returned to the Board library so they are available for later optimisations.

There are also options to update the board stock from an external file and to adjust board costs.

The simplest operation is to control the physical stock in the Board library.

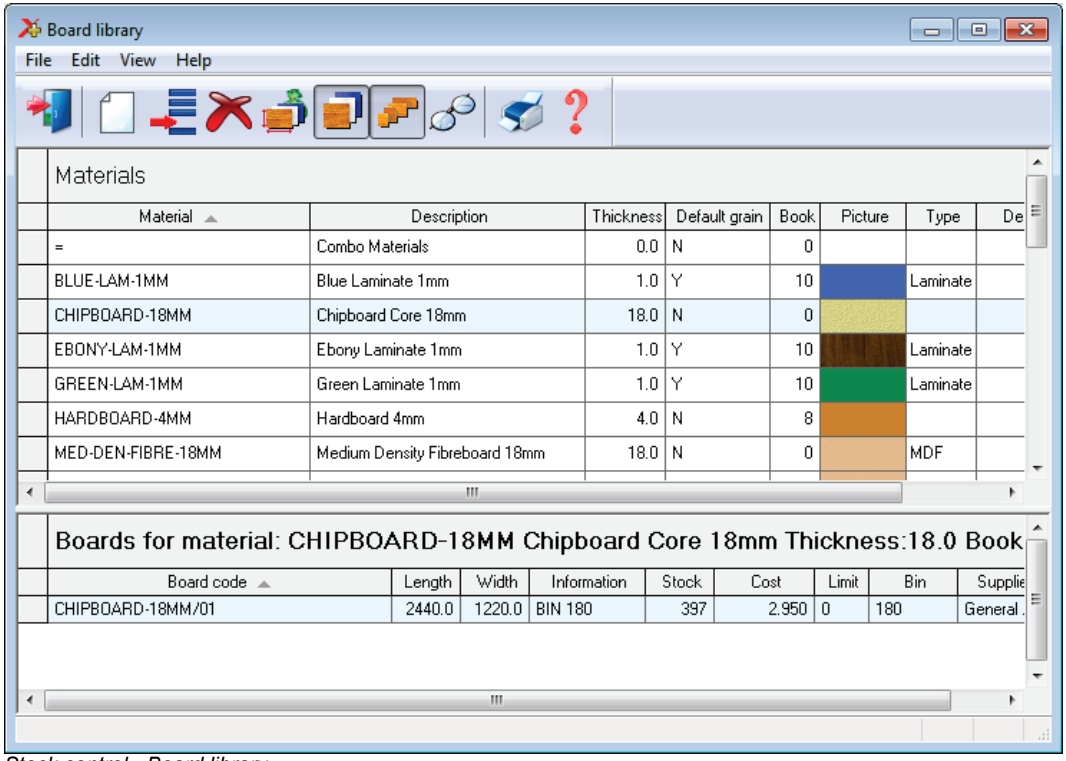
- *Optimise run (or batch of runs)*
- *Issue stock for runs*

The sheets required/used for cutting are removed from the library and any offcuts generated by the run are entered as new items in the library.

Make sure there is a system in place for the use of 'Issue stock for runs' because it needs to be carefully co-ordinated with the cutting of a job to ensure an accurate flow of stock.

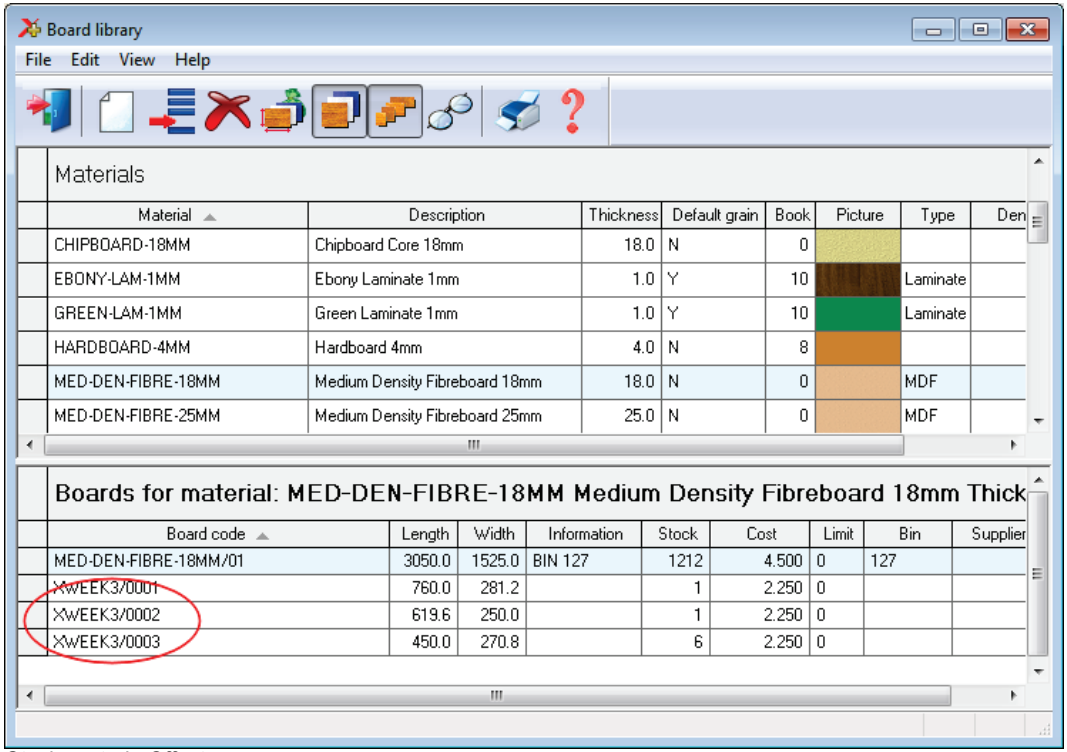
Board library

The board inventory is shown in the Board library.



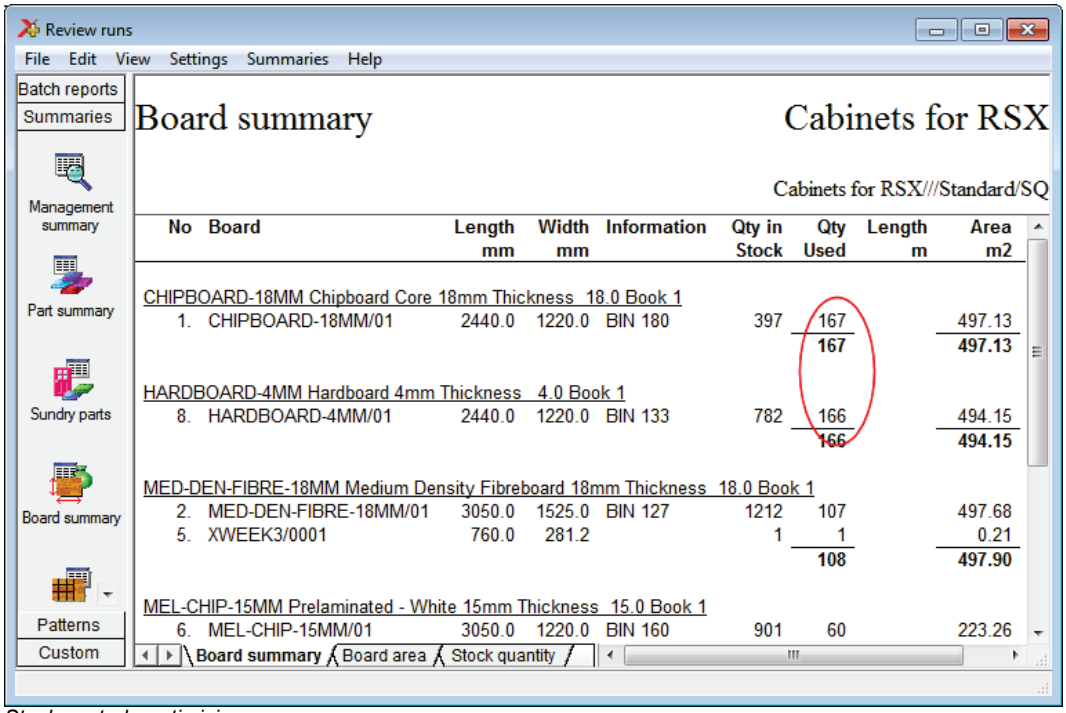
Stock control - Board library

This includes offcuts generated from earlier jobs (labelled with **X …)**



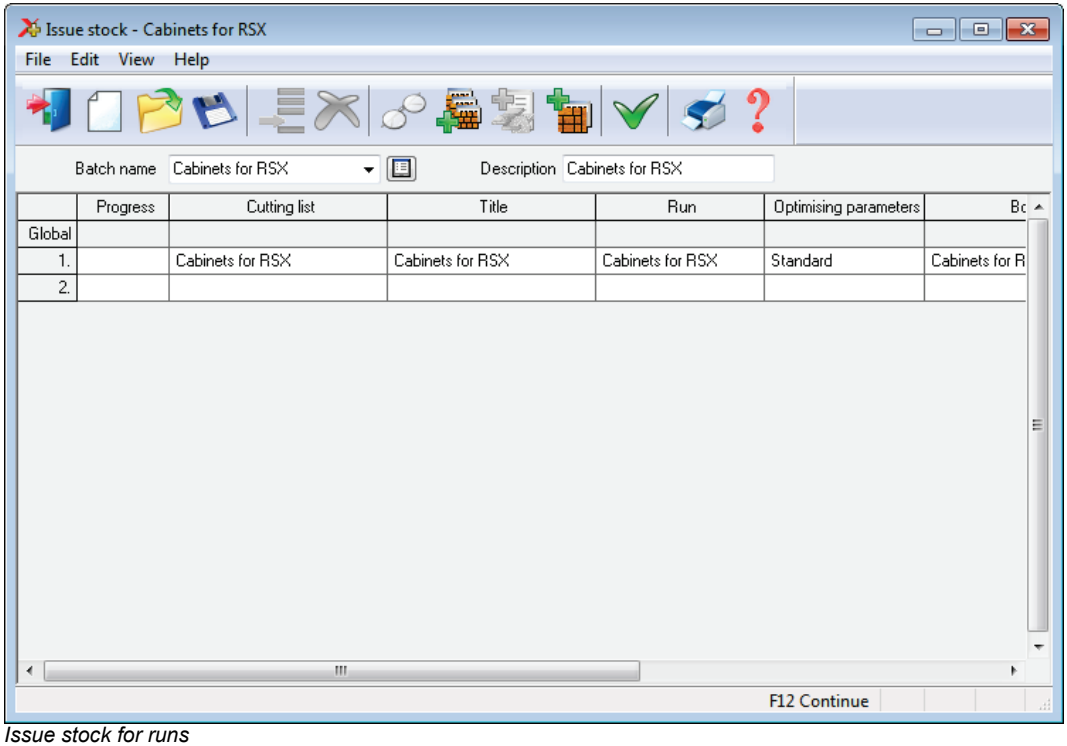
Stock control - Offcuts

The quantity of boards required for any job is calculated by the optimization.



Stock control - optimising

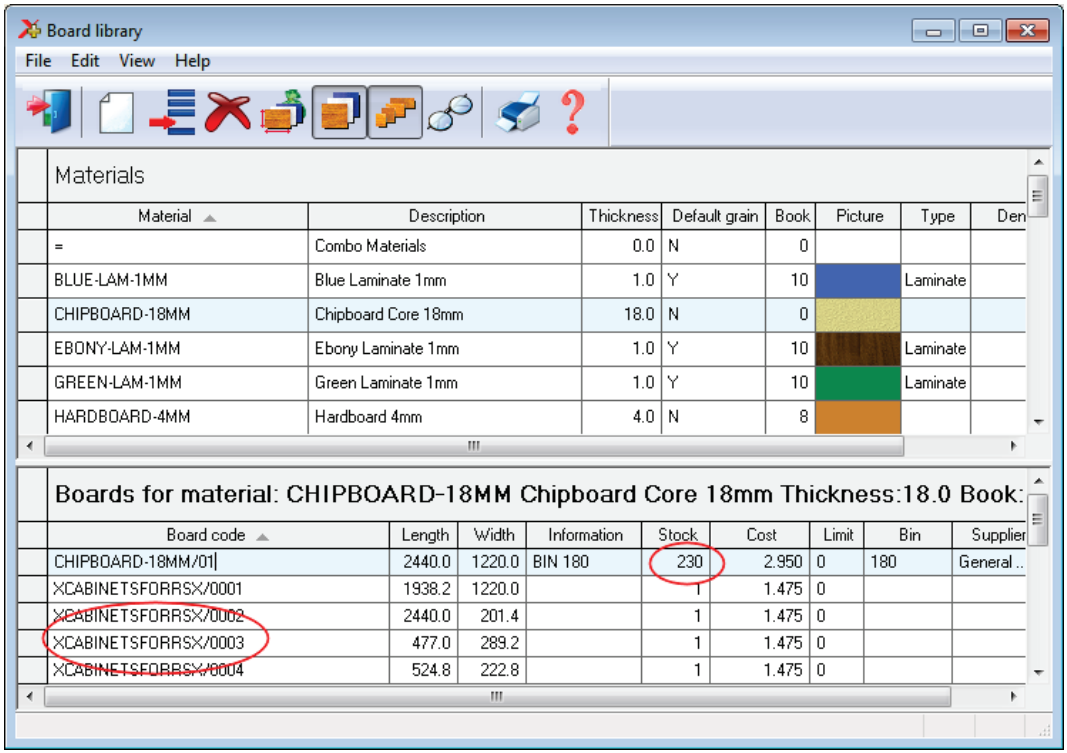
Once the run is committed for cutting (data sent to saw) the stock can be updated by the 'Issue stock for runs' options.



Issue stock for runs

The Board library is updated.

The board quantities are reduced and any offcuts are added back to the library.



Board library update

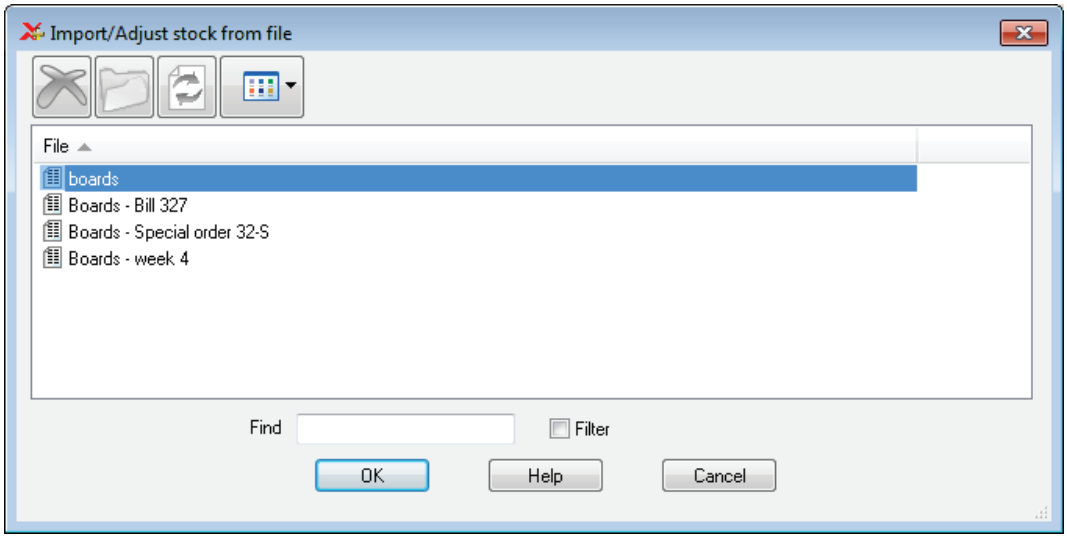
The program carefully controls the operation of part lists and optimising - once a run has been used for a stock issue it cannot be manually changed or re-optimised

Adjust Stock from file

The stock quantities can also be adjusted from an external file. This is useful, for example, where there is record of material orders on another system.

At the main screen:-

- Select: **Stock - Import/Adjust stock from file**



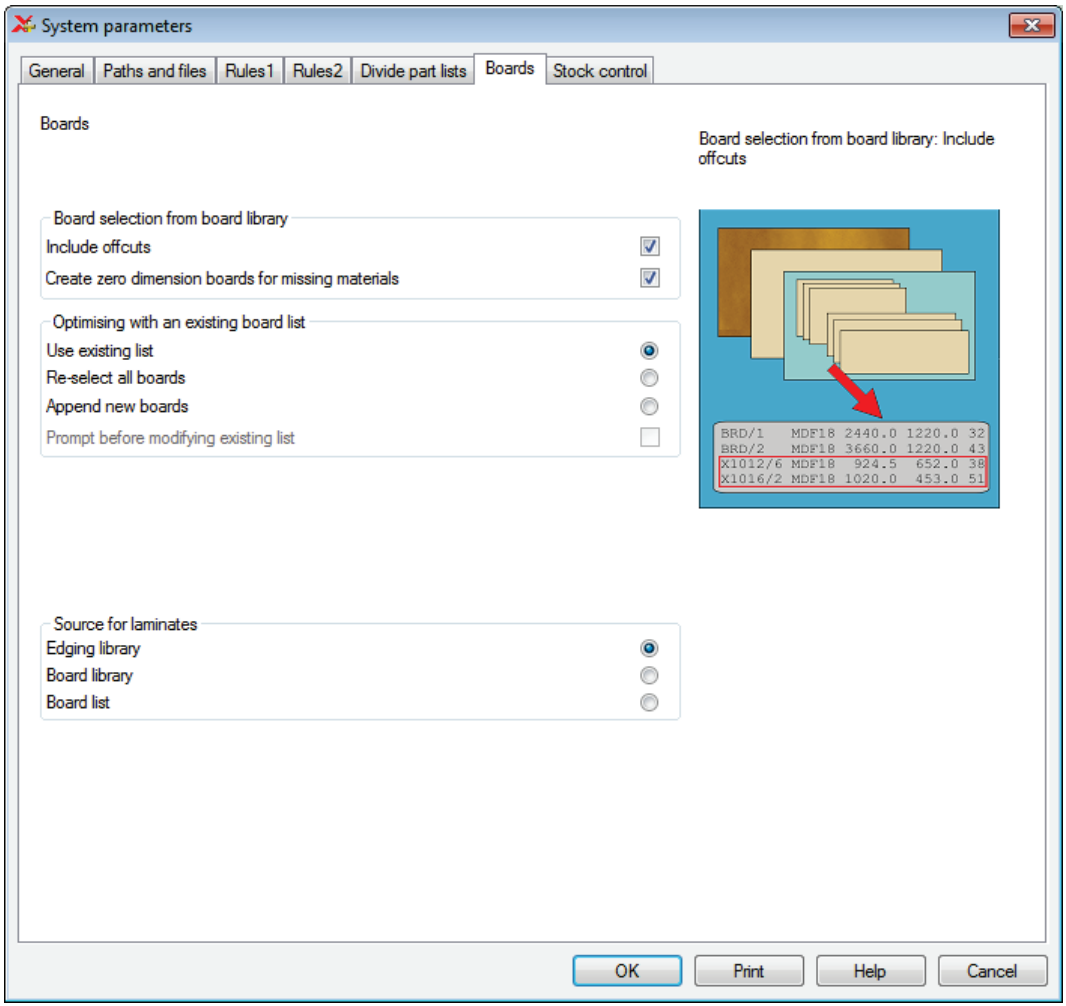
- Select a file to import

The program prompts for how the update is to occur.

- Add New stock
- Update existing stock

This gives some control over how the import is achieved.

The format for import and the way that import operates are set in the System parameters on the 'Boards' tab.



Note - this import is different from the 'Import boards' option on the File menu or File tree at the main screen; these options import to the Board list rather than the board library.

5. Board library

 The Board library is a record of the Materials in use. The program uses it to select the correct board sizes when a list of parts is optimised. Setting up the board library with the materials and board sizes is essential for optimising.

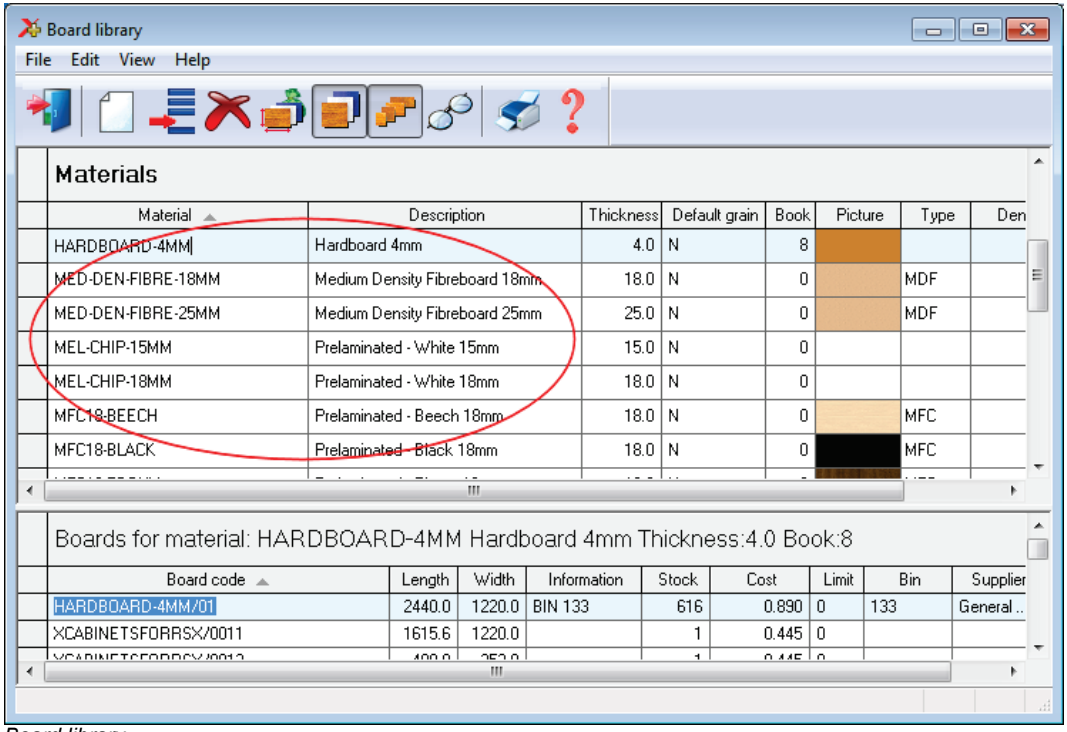
This can be quite an extensive task but there are options for importing boards from other systems with the Stock control options. Once the library is set up there is then only regular maintenance to allow for new suppliers, materials and price changes.

At the main screen:-

- Select: **Libraries - Board library**

The top section of the screen is a list of MATERIALS.

The materials can be, for example, core material such as chipboard or MDF or various laminates.



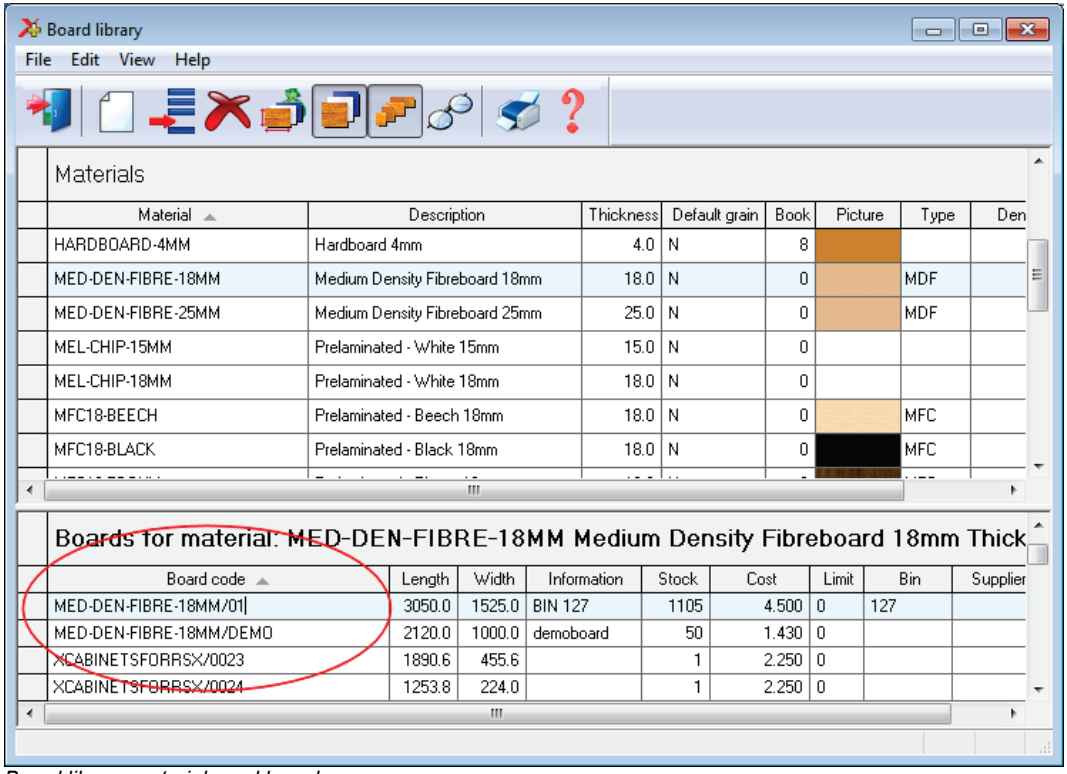
Board library

Material code - each material has a unique material code. This is important because the program uses this code to identify the material for each part and find the correct material in the material library.

For each material enter the data for each column: Material code, Description, Thickness, Grain (whether the material has a grain or not), Book (the maximum book height in terms of the number of boards) and Parameters.

Picture - each material can include a picture of the material - this can be a bit map or a colour and can be used to help identify the material.

For each material there may be several different board sizes and different quantities of each size available. These are shown, for the current material, in the lower pane.



Board library materials and boards

Board details **-** to add a new board fill in the values for each column: Board code, length, width, information (this can be any descriptive data about the board) and the cost per square area of the board, for example, £2.54 per square metre. A realistic cost is important as this is used when the cutting patterns are generated to help decide which are the most effective patterns.

Quantities - the number of boards available for each size.

Limit **-** This setting (0-9) determines how the boards are used.

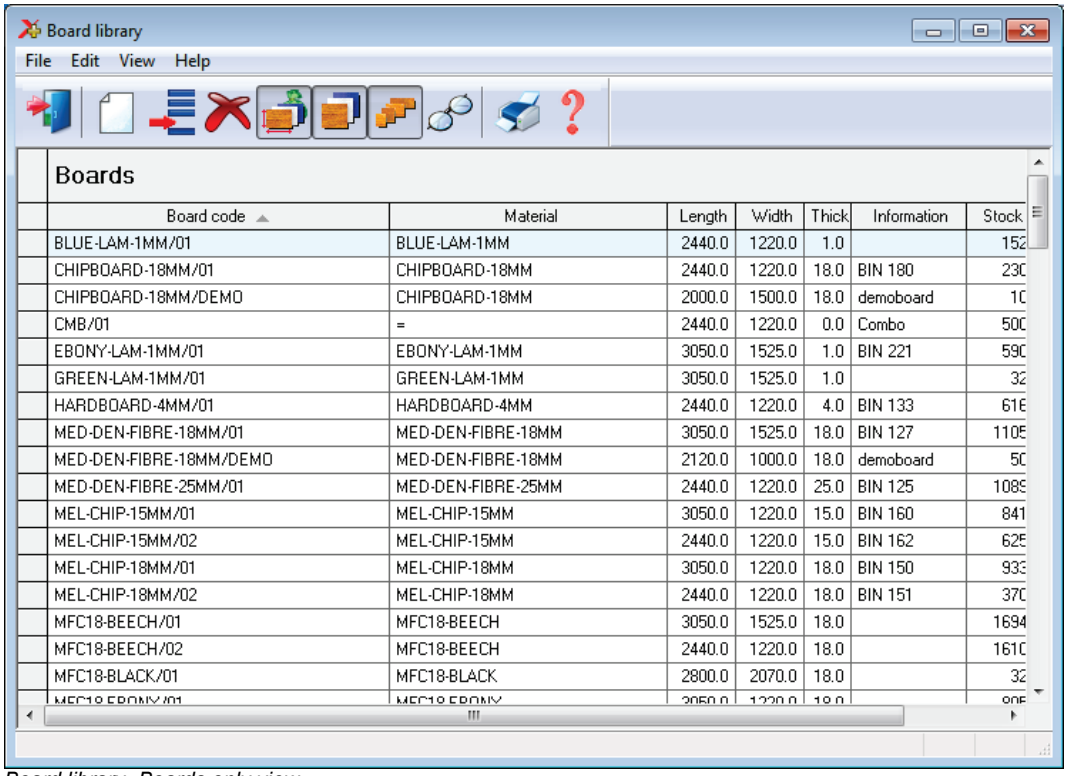
For example, a setting of 8 allows the software to ignore the physical quantity in stock when generating cutting patterns - useful for estimating stock requirements when stocks are low.

Board library views

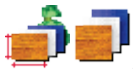
There are several different views of the library data. 'Boards only' shows the list of board sizes and there is a choice of listing offcuts or stock boards.

Boards only

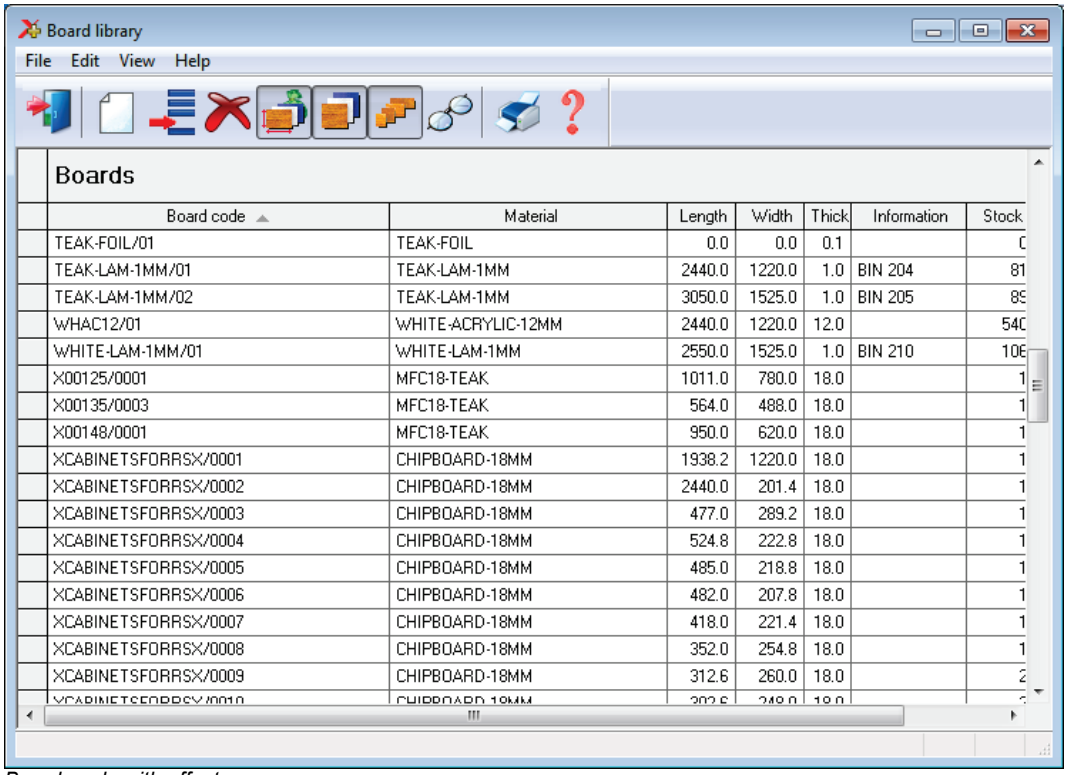
The library includes an alternative layout 'Boards only' which shows all the boards in a single list. This can be convenient when adding or searching for specific board sizes.



Board library- Boards only view



Boards only with Offcuts

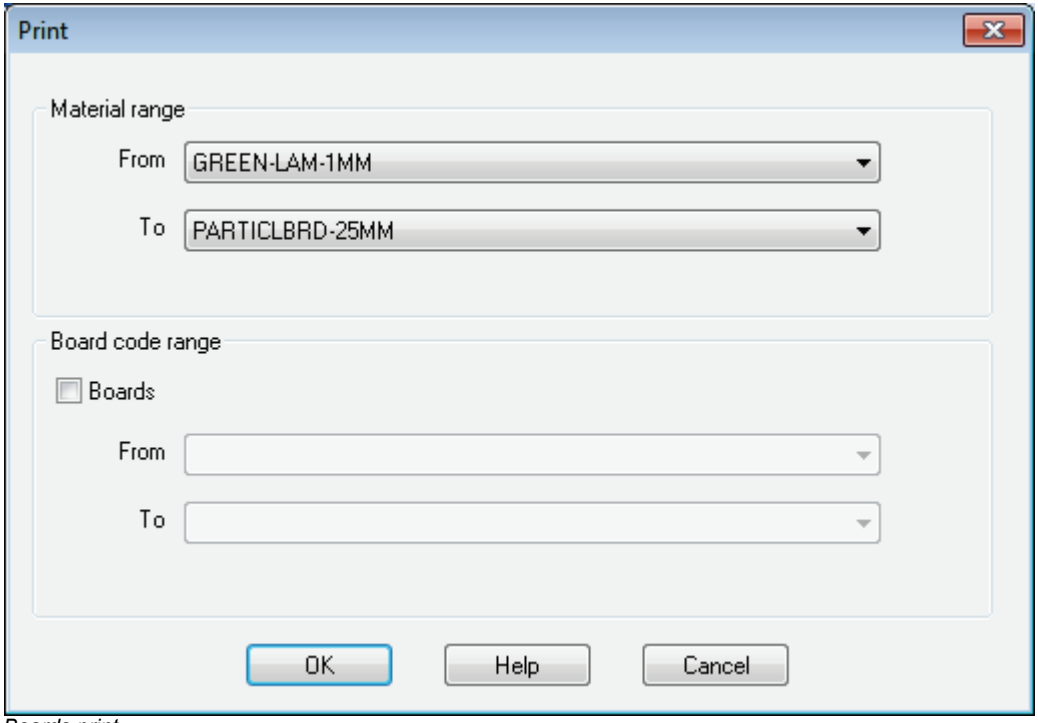


Boards only with offcuts

Board library - Print and Export

 There are a range of options to print the Board data

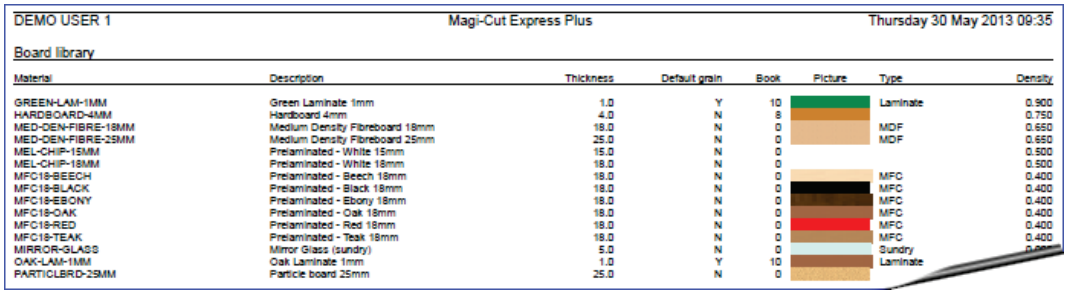
The program prompts for the range of items to print.



Boards print

The print out is based on the current view - adjust the columns on screen to alter the print.

Columns can be hidden via the View menu which controls the on-screen display.



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Board library

Material	Description	Thickness	Default grain	Book	Picture	Type	Density
GREEN-LAM-1MM	Green Laminate 1mm	1.0	Y	10		Laminate	0.900
HARDBOARD-4MM	Hardboard 4mm	4.0	N	8			0.750
MED-DEN-FIBRE-18MM	Medium Density Fibreboard 18mm	18.0	N	0		MDF	0.650
MED-DEN-FIBRE-25MM	Medium Density Fibreboard 25mm	25.0	N	0		MDF	0.650
MEL-CHIP-15MM	Prelaminated - White 15mm	15.0	N	0			0.500
MEL-CHIP-18MM	Prelaminated - White 18mm	18.0	N	0			0.500
MFC18-BEECH	Prelaminated - Beech 18mm	18.0	N	0		MFC	0.400
MFC18-BLACK	Prelaminated - Black 18mm	18.0	N	0		MFC	0.400
MFC18-EBONY	Prelaminated - Ebony 18mm	18.0	N	0		MFC	0.400
MFC18-OAK	Prelaminated - Oak 18mm	18.0	N	0		MFC	0.400
MFC18-RED	Prelaminated - Red 18mm	18.0	N	0		MFC	0.400
MFC18-TEAK	Prelaminated - Teak 18mm	18.0	N	0		MFC	0.400
MIRROR-GLASS	Mirror Glass (sundry)	5.0	N	0		Sundry	0.000
OAK-LAM-1MM	Oak Laminate 1mm	1.0	Y	10		Laminate	
PARTICLBRD-25MM	Particle board 25mm	25.0	N	0			

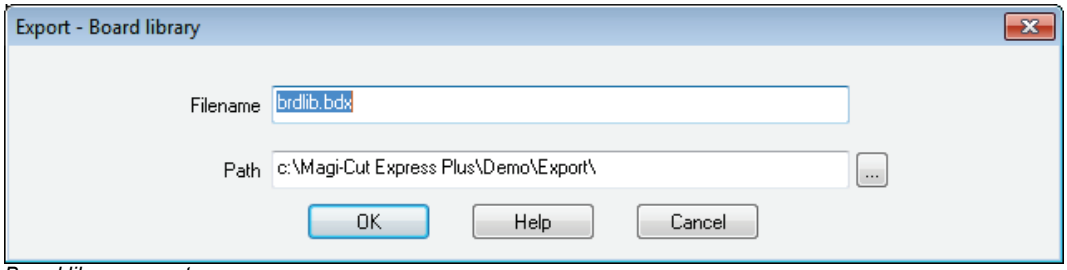
Board library print

Use **File - Print setup** - to select and set up the printer before printing.

Board data can also be exported to an external file.

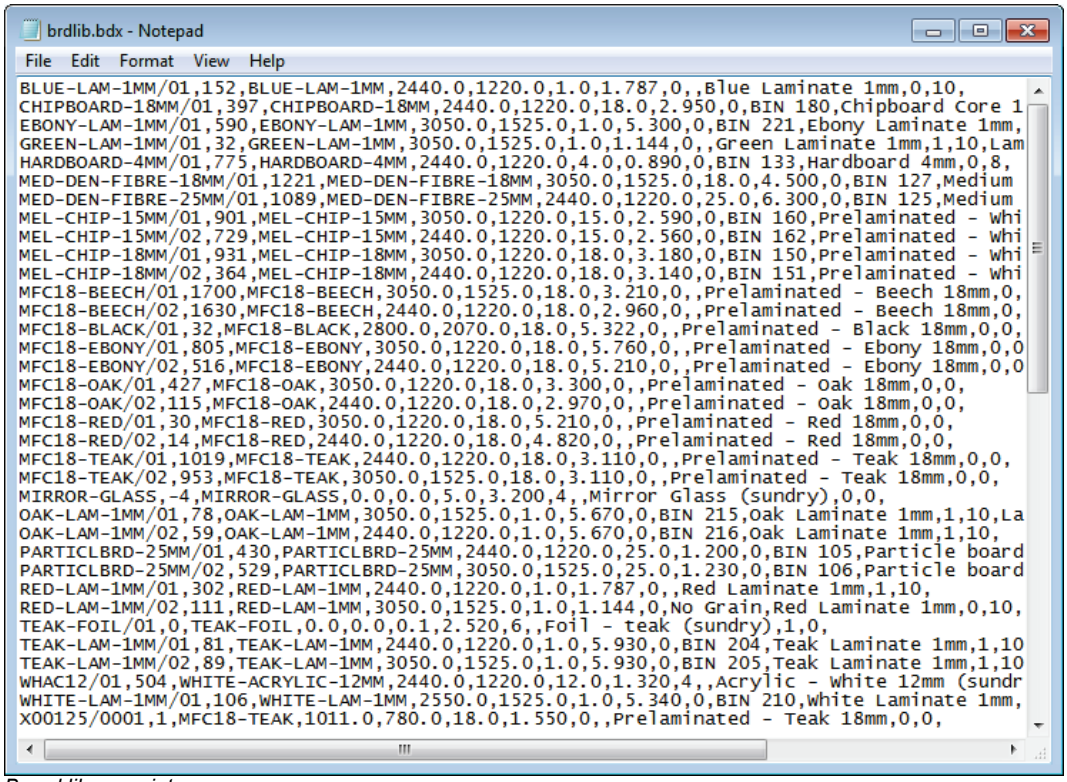
Export Board library

The board library contents can be exported to an ASCII file.



Board library export

The file is placed in the path for export data by default.

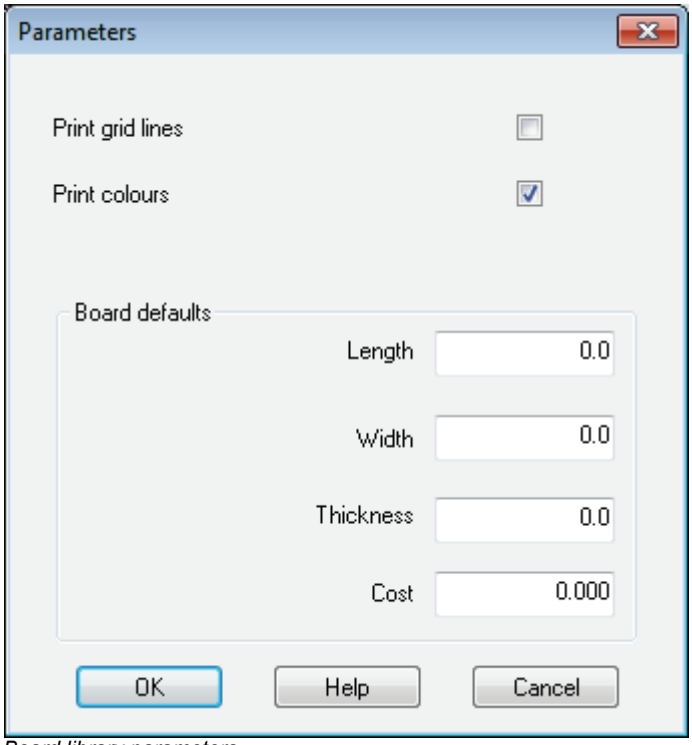


Board library print

There is one line for each board (the material records are not exported). The format is 'bdx' which is an ASCII file with the records in a defined order (details of the BDX format are in the online help).

Board library parameters

The parameters are used to set up the board library view and to set up default values for entering board - this can help to speed up data entry.



Board library parameters

6. More about Parameters and settings

Parameters are used for setting up the system. For example, to set up the types of pattern allowed - using optimising parameters; this ensures the patterns produced are suitable for the saw and optimised for it.

In a similar way parameters are used to set up, Edgebanders, Costing, and many other features.

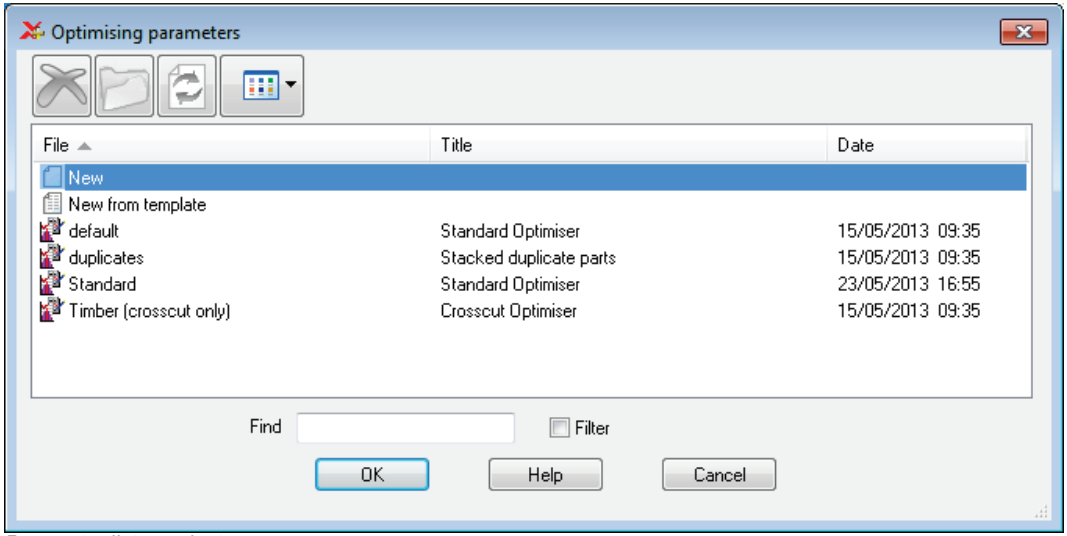
Most users should look at the system and optimising parameters carefully and then deal with the other lists as they are needed.

Parameter lists at the Main screen

- Optimising parameters
- System parameters
- Part list import parameters
- Board list import parameters
- Edging parameters
- Information boxes

How Parameters lists work

For some parameter lists, for example, Optimising, there are typically several different lists each stored in a separate file. In this case the program offers a choice of list:-



Parameter lists - select

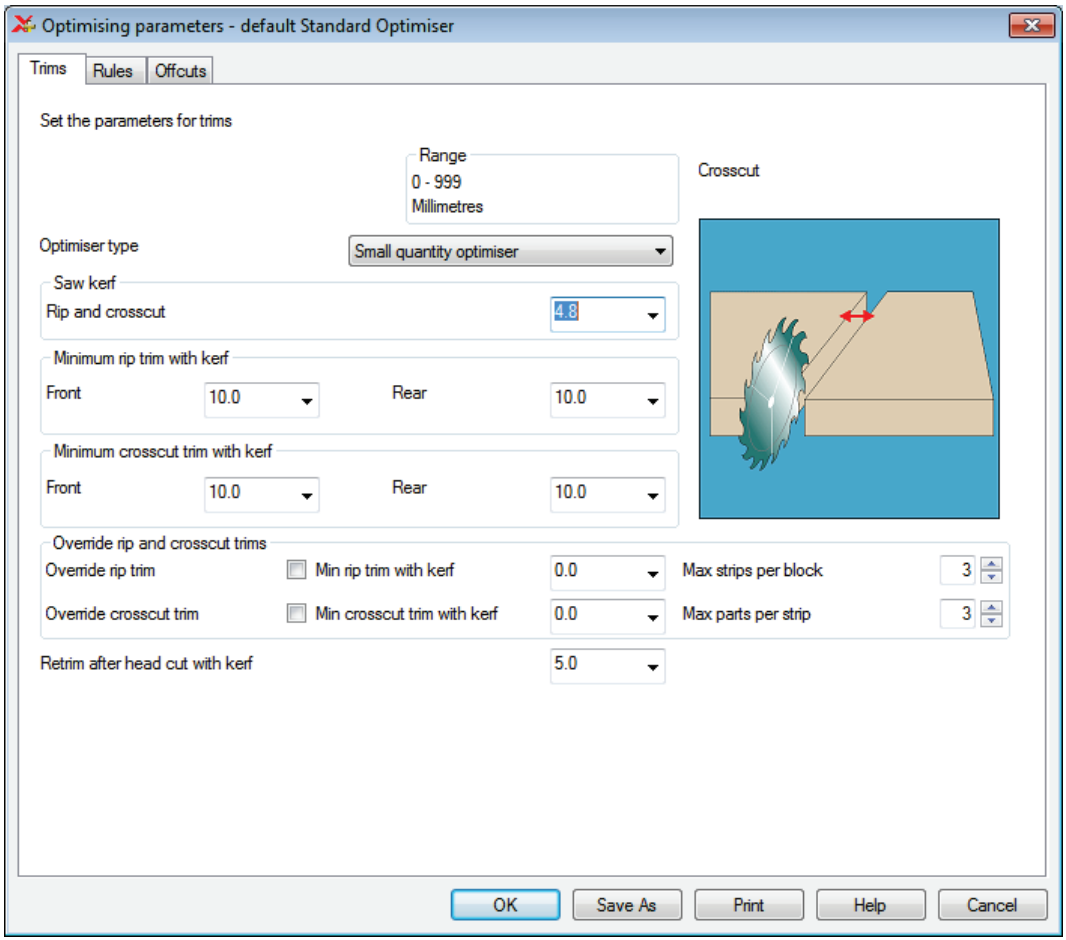
- Select the list required or use New to create a new list of parameters.

 Use the Views option to change the view; the options are: 'Details', 'List', 'Small icons', 'Large icons'.

- Use 'New' to create a new list

Note - the 'New from template' option is not used

On selecting a file the program moves to the parameter screen (in this example, Optimising parameters).



Optimising parameters

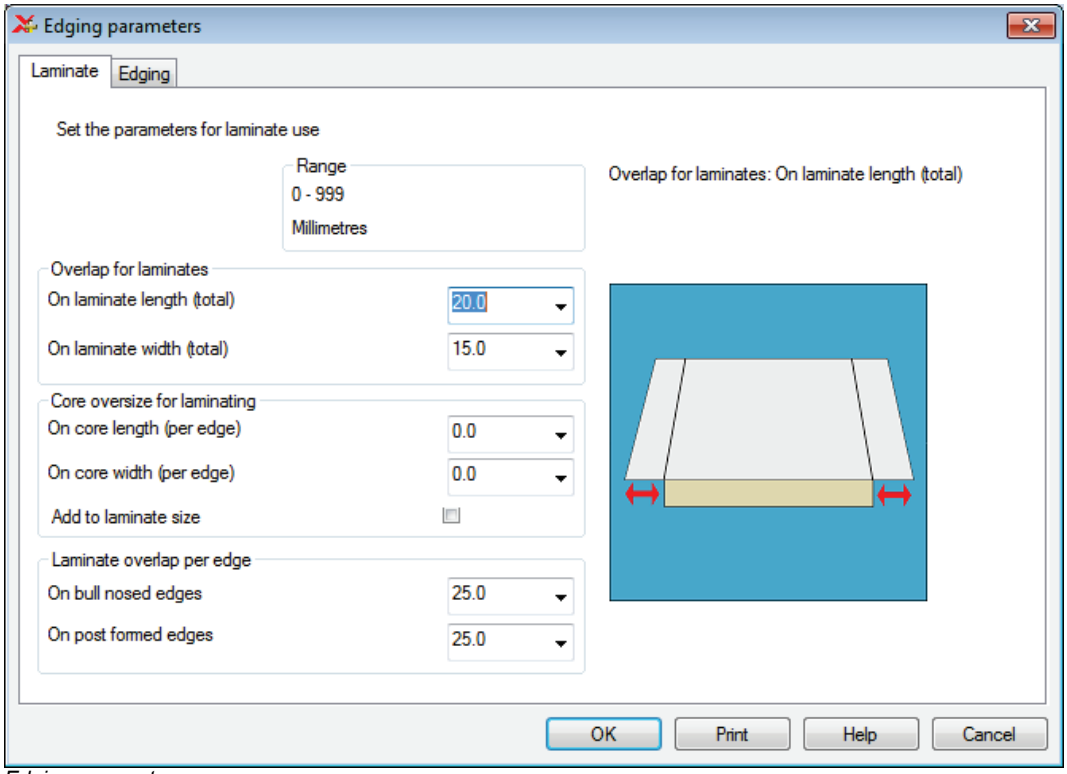
Click on an option or type in a value as necessary.

Many parameters show a diagram which gives a reminder of what the setting is for and how it operates.

- Click on HELP for full details of each parameter.

For some parameter lists such as *Edging parameters* there is only one set for the program. In this case the program moves directly to the parameter screen.

Where the parameter screen shows a set of tabs at the top right - this means there are several pages of parameters. Click on the tabs to see the other pages.

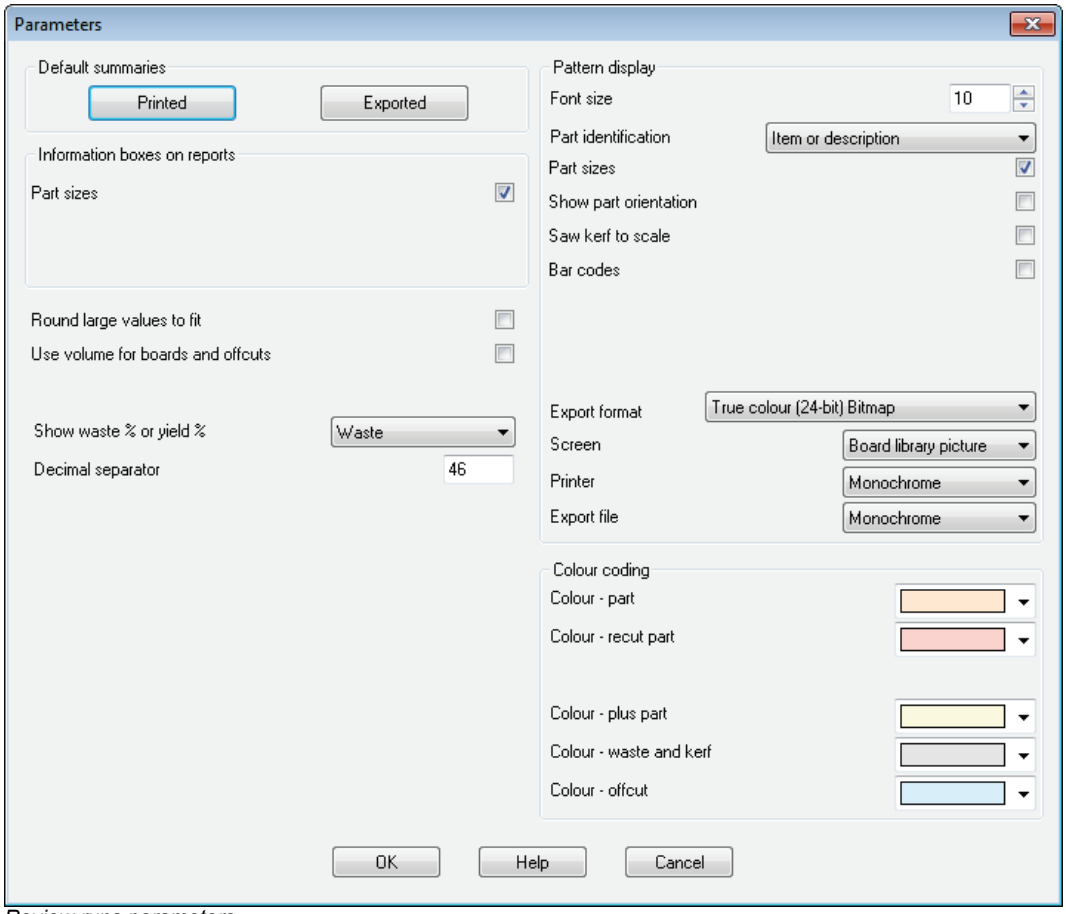


Edging parameters

Parameters controlling the look and style of screens and reports

There are also sets of parameters that deal with the look and style of the reports and screens and how data is exported. These parameters are usually located in the same section of the program where they are used so it is easy to change the parameter and see the effect. The most commonly used are: Part list parameters and Review runs parameters (including export).

For example, Review runs parameters (*Main screen - Review runs - File - Parameters*)

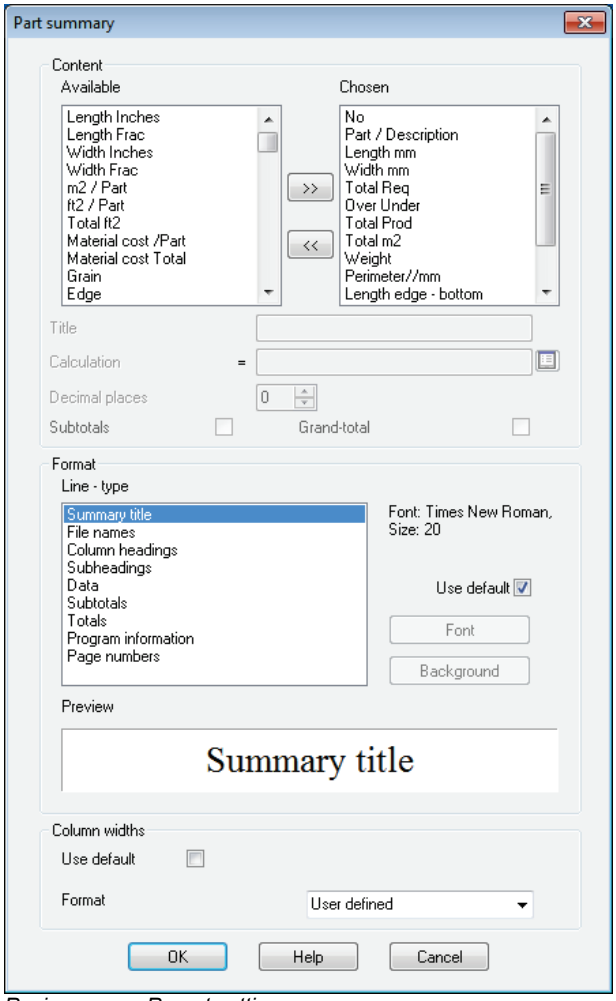


Review runs parameters

Select the options required. Some buttons lead to a further dialog with more settings. There can be quite a wide variety of parameters on the screen because there are many different features in Reports that can be controlled.

Parameters for each report

There are parameters to control the layout and content of each report in Review runs. Move to a report and select: *Settings - Report settings*



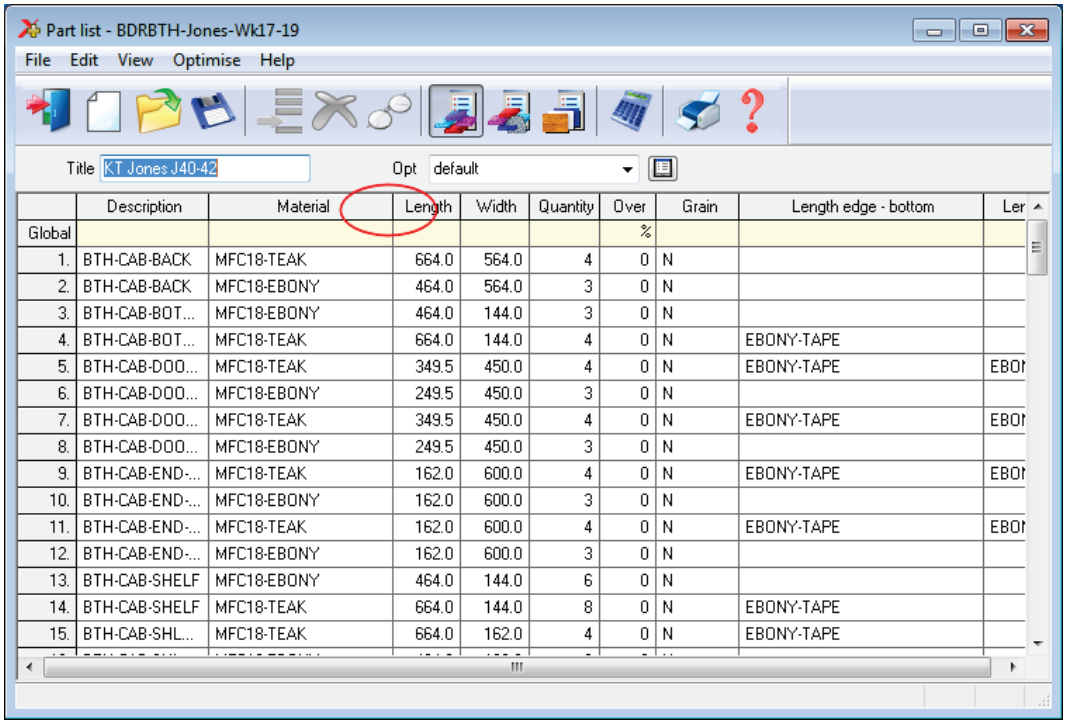
Review runs - Report settings

This type of dialog is quite often used (in Review runs and Form design) where you are selecting a few fields from a list of available fields. The Available fields are shown on the

left and the ones chosen on the right. In this example the chosen fields are for the Management summary in Review runs.

Changing screen and column sizes

Use the mouse on screens and grids to change the screen and column size - the settings are saved between sessions.



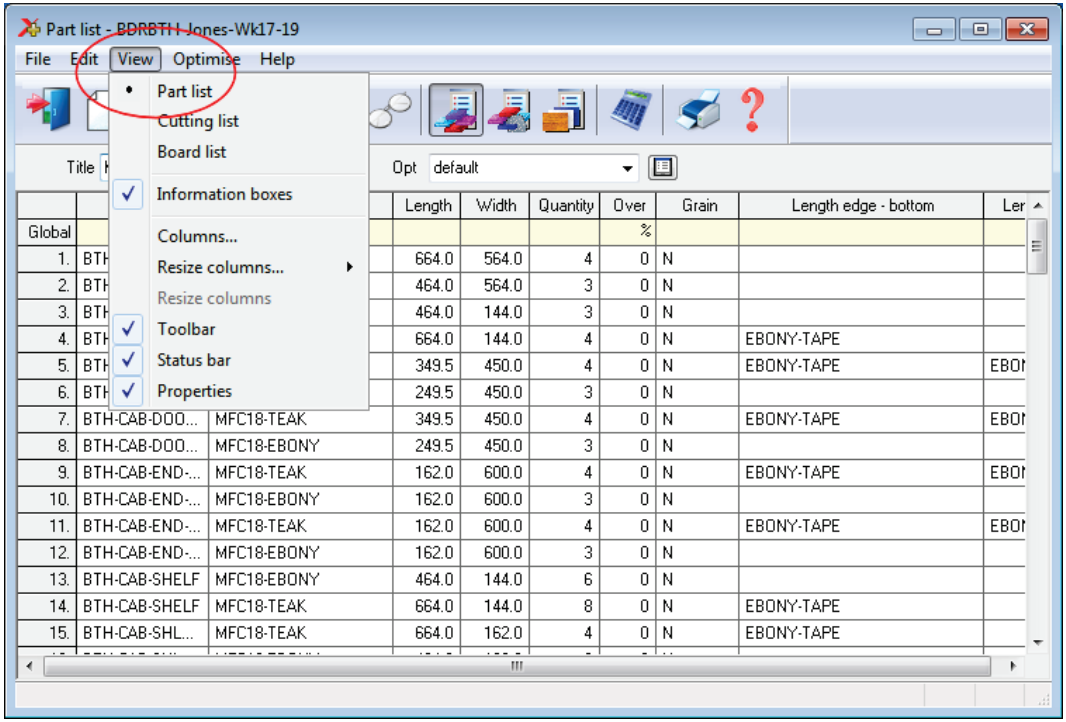
	Description	Material	Length	Width	Quantity	Over	Grain	Length edge - bottom	Ler
Global						%			
1.	BTH-CAB-BACK	MFC18-TEAK	664.0	564.0	4	0	N		
2.	BTH-CAB-BACK	MFC18-EBONY	464.0	564.0	3	0	N		
3.	BTH-CAB-BOT...	MFC18-EBONY	464.0	144.0	3	0	N		
4.	BTH-CAB-BOT...	MFC18-TEAK	664.0	144.0	4	0	N	EBONY-TAPE	
5.	BTH-CAB-DOO...	MFC18-TEAK	349.5	450.0	4	0	N	EBONY-TAPE	EBO
6.	BTH-CAB-DOO...	MFC18-EBONY	249.5	450.0	3	0	N		
7.	BTH-CAB-DOO...	MFC18-TEAK	349.5	450.0	4	0	N	EBONY-TAPE	EBO
8.	BTH-CAB-DOO...	MFC18-EBONY	249.5	450.0	3	0	N		
9.	BTH-CAB-END-...	MFC18-TEAK	162.0	600.0	4	0	N	EBONY-TAPE	EBO
10.	BTH-CAB-END-...	MFC18-EBONY	162.0	600.0	3	0	N		
11.	BTH-CAB-END-...	MFC18-TEAK	162.0	600.0	4	0	N	EBONY-TAPE	EBO
12.	BTH-CAB-END-...	MFC18-EBONY	162.0	600.0	3	0	N		
13.	BTH-CAB-SHELF	MFC18-EBONY	464.0	144.0	6	0	N		
14.	BTH-CAB-SHELF	MFC18-TEAK	664.0	144.0	8	0	N	EBONY-TAPE	
15.	BTH-CAB-SHL...	MFC18-TEAK	664.0	162.0	4	0	N	EBONY-TAPE	

Review runs - Report settings

Move the mouse to a window edge or column edge and use the grab handles (holding down the left mouse button) to drag column, row or windows.

Note - some screens have a fixed size or fixed minimum size and cannot be changed

On most data screens, for example, the Part list, Review runs summaries, Board list, Board there is also a 'View menu' with various options for changing the screen display and operation.



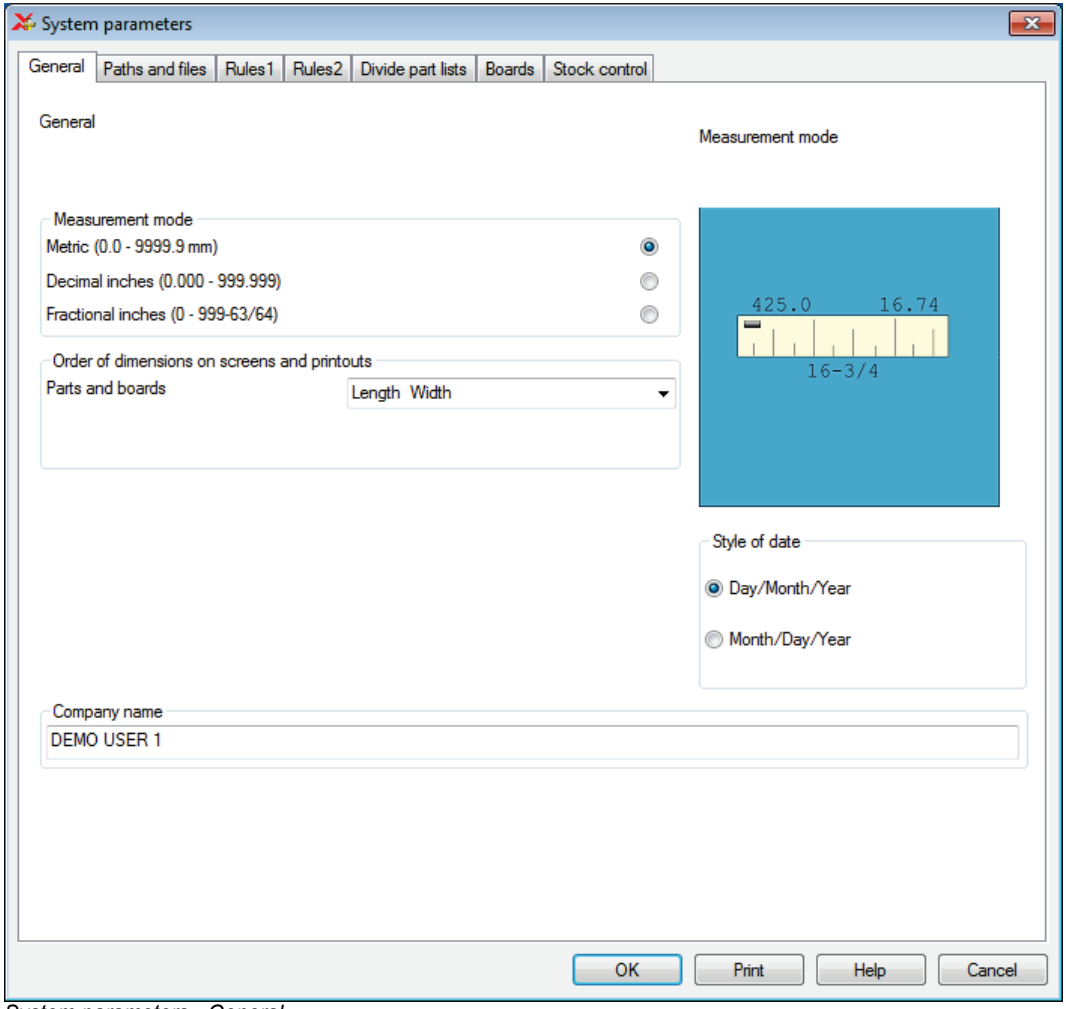
View menu

The size of the screen and the size of the columns can be changed using the mouse.

Settings menus - Many screens also have a *Settings menu* which can be used to set what is shown on the screen and how it operates..

System parameters

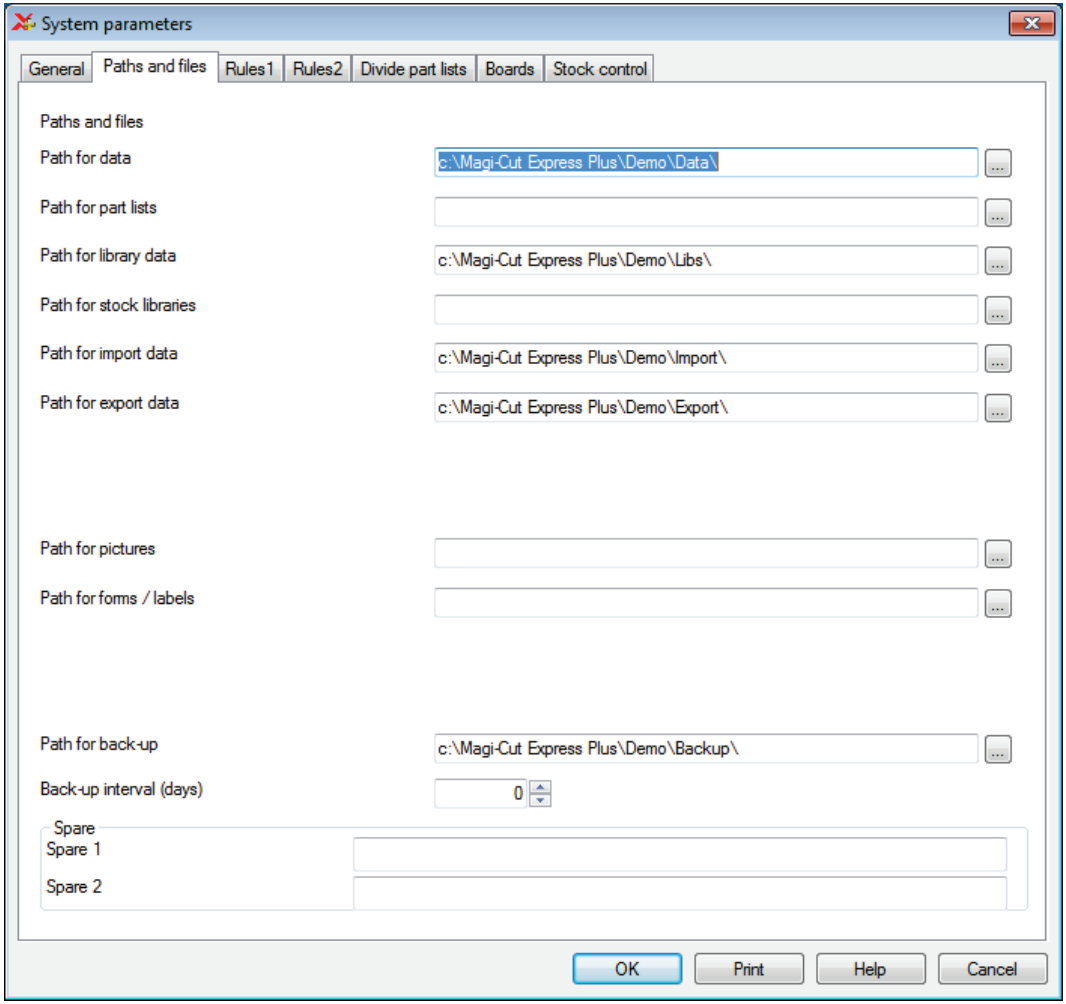
The system parameters are important - these mostly control the overall operation of the program, for example, the measurement mode to use, the language to use, how files are named, the paths for storing data …



System parameters - General

There are several pages of parameters each for different aspects of the program.

The second tab covers the paths for storing data.



System parameters - Paths and files

Click on a tab to move to that section and check and adjust the parameters.

Once set the system parameters should rarely need to be changed again. The installed program is set up with reasonable defaults - and these are fine for running the program

initially - but check the parameters carefully to make sure the program is set up to match your preferences and way of working.

Demo data - the system is provided with several sets of parameter data (and your supplier may have added some others) - these can be used as the base for your setup.

7. Managing data, Import data, Export results

There are several utilities built into the software to help with organising data, data backup, and interfacing with external files, databases, and systems.

- Manage data and files
- Back up user profiles and data
- Importing and exporting data

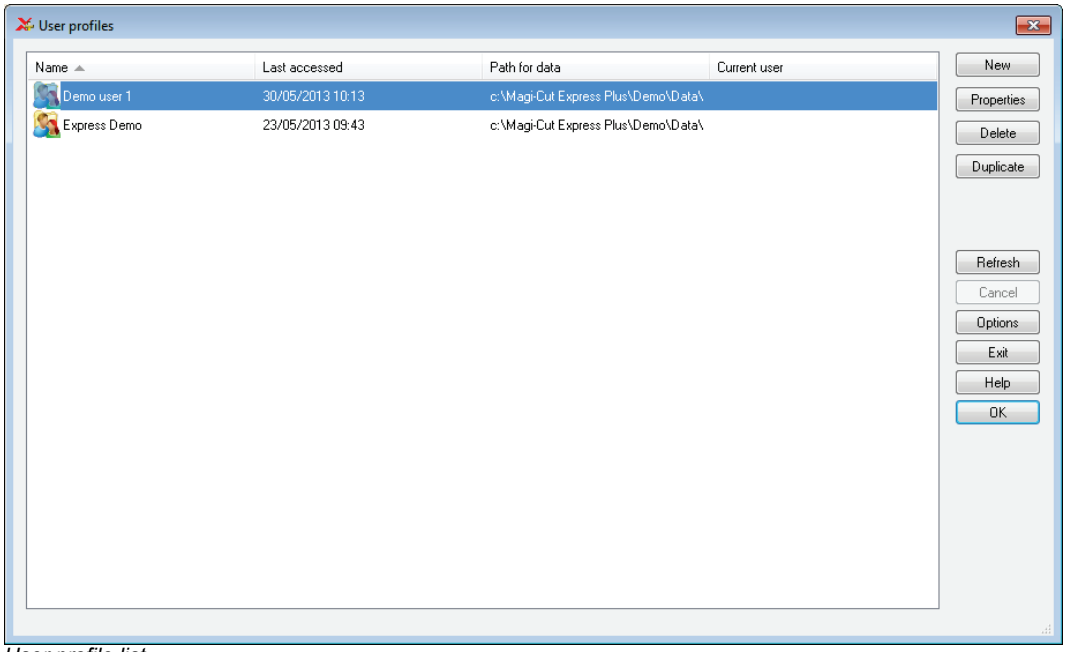
User Profiles

The data is organised around 'User profiles'. Each user has their own 'profile' which stores the various settings they use and is controlled by a password.

On entering the program the program moves to the last profile used or prompts with the list of user profiles available.

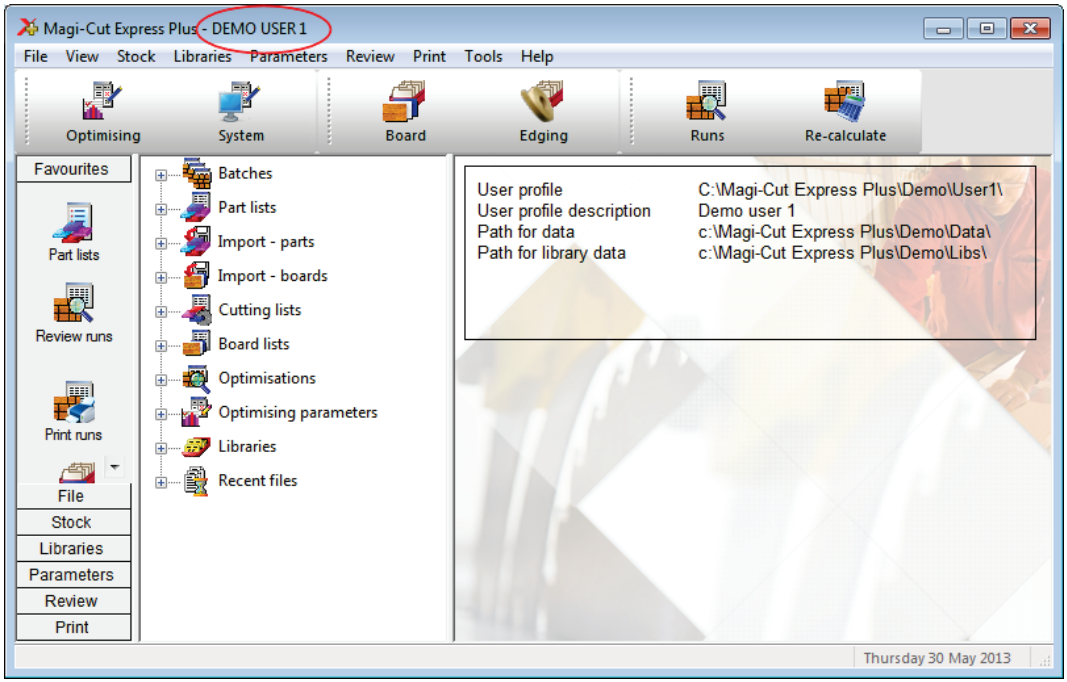
To see all the User profiles, at the Main screen

- Select: **File - User profiles**



User profile list

- Click on a profile to move to it



User profile - main screen

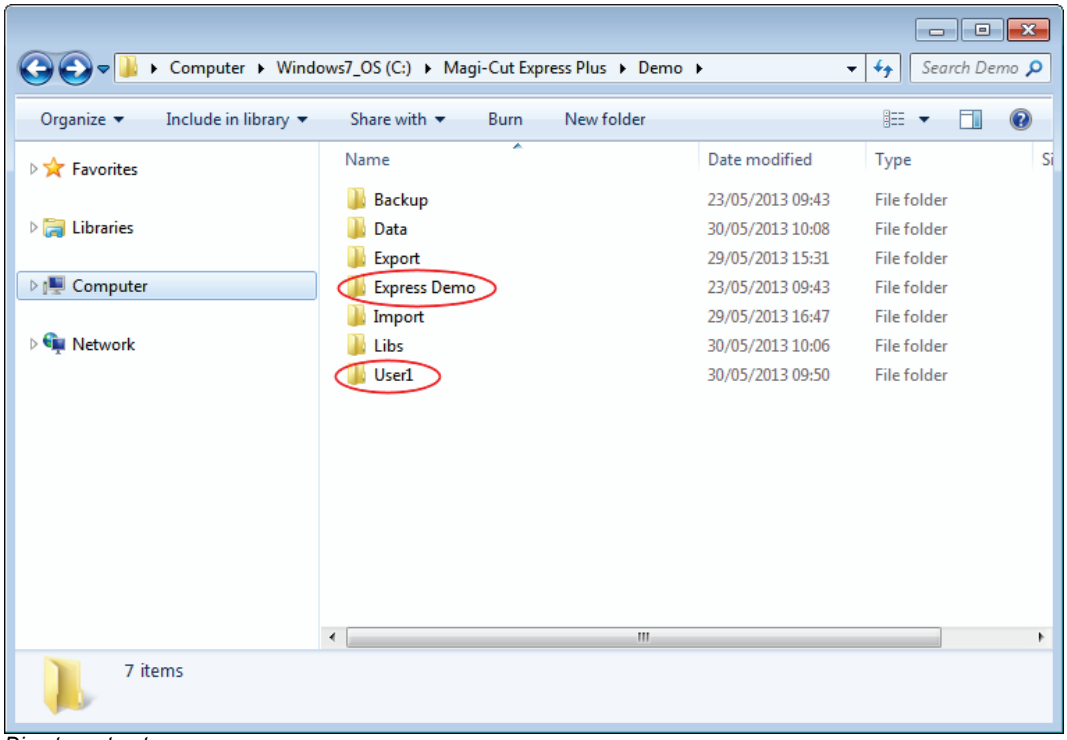
In this example the profile is 'Demo user 1'.

This profile contains all the screen and other default settings, system parameter settings, part lists and optimisations for this user.

This data is spread over a directory structure set by the System parameter: *Paths and files*

Typically any common data between users, such as, Board library, import data, or export data is shared between profiles - so all users access the same common data.

On the computer the data structure often looks similar to the following.



Directory structure

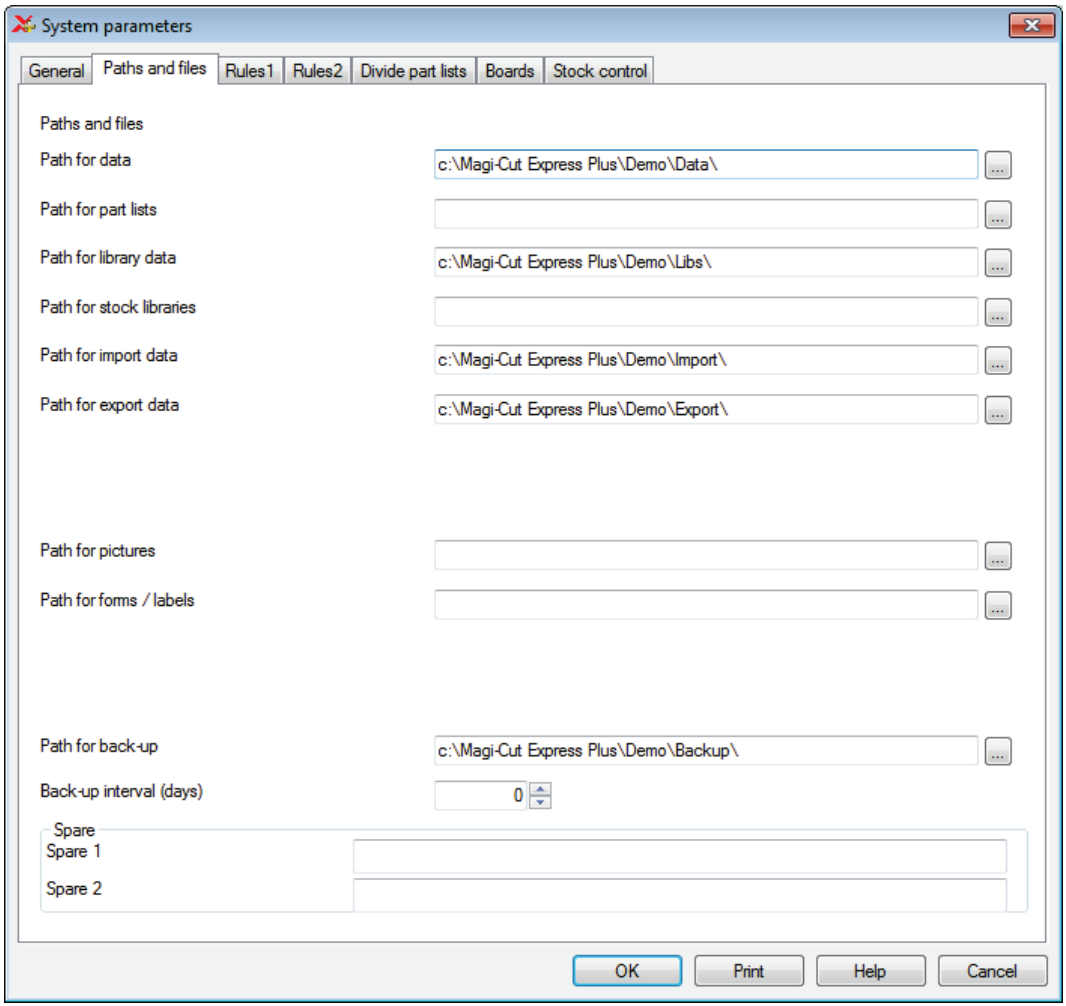
In the above structure 'Magi-Cut Express Plus' is the directory where the Program is installed. 'Demo' is the main data directory. Within the main data directory the User profiles are:-

'User1'
'Express Demo"

The common data, for example the board library, is located in the 'Libs' directory.

Most of the shared data, part lists… is stored in the 'Data' directory.

The system parameter tab: *Paths and files* for 'Demo User 1' shows how this profile is mapped on to the data structure.



System parameter: Paths and files

In this case the 'Path for library data' points to the 'Libs' directory so the common data is shared.

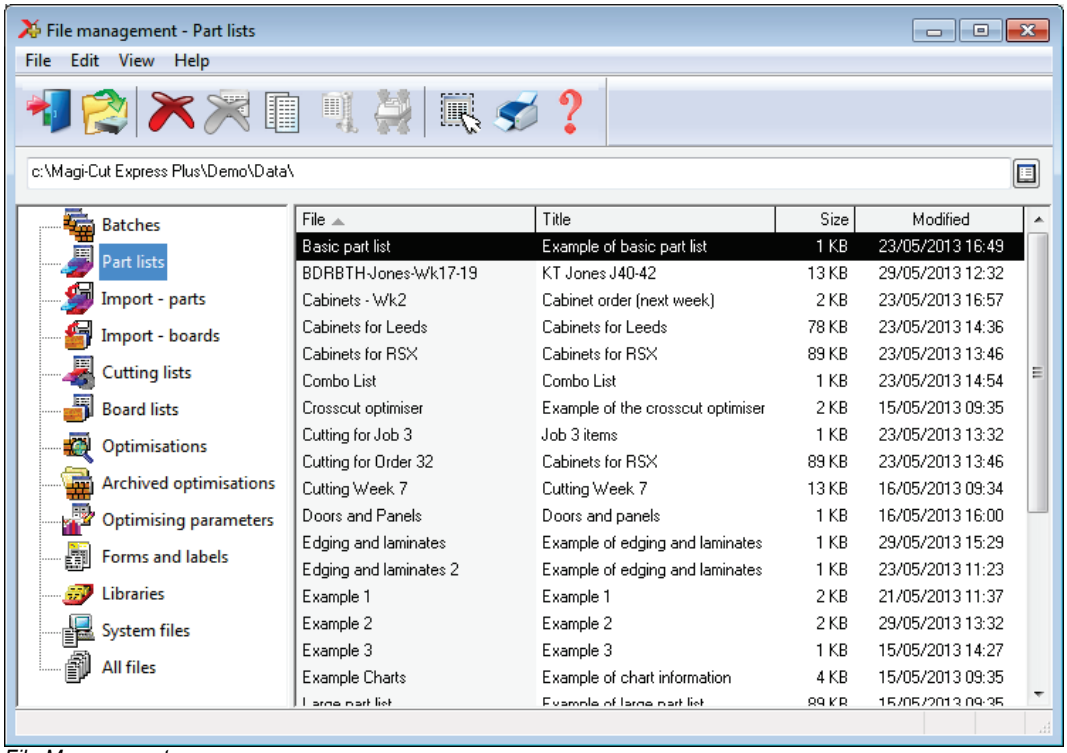
The 'Path for Data' points to the 'Data' directory - and the part lists and runs etc. are also shared between the users and stored in one place. This allows any user to log on and access any of the part lists for example.

Another very common arrangement is for users to each have their own 'Data' directory so that part lists etc. are reserved for them.

File Management

It is not necessary to use Windows to manage the data and file structure. The program provides a full range of tools for managing files. At the main screen:-

- Select: **File - File management**



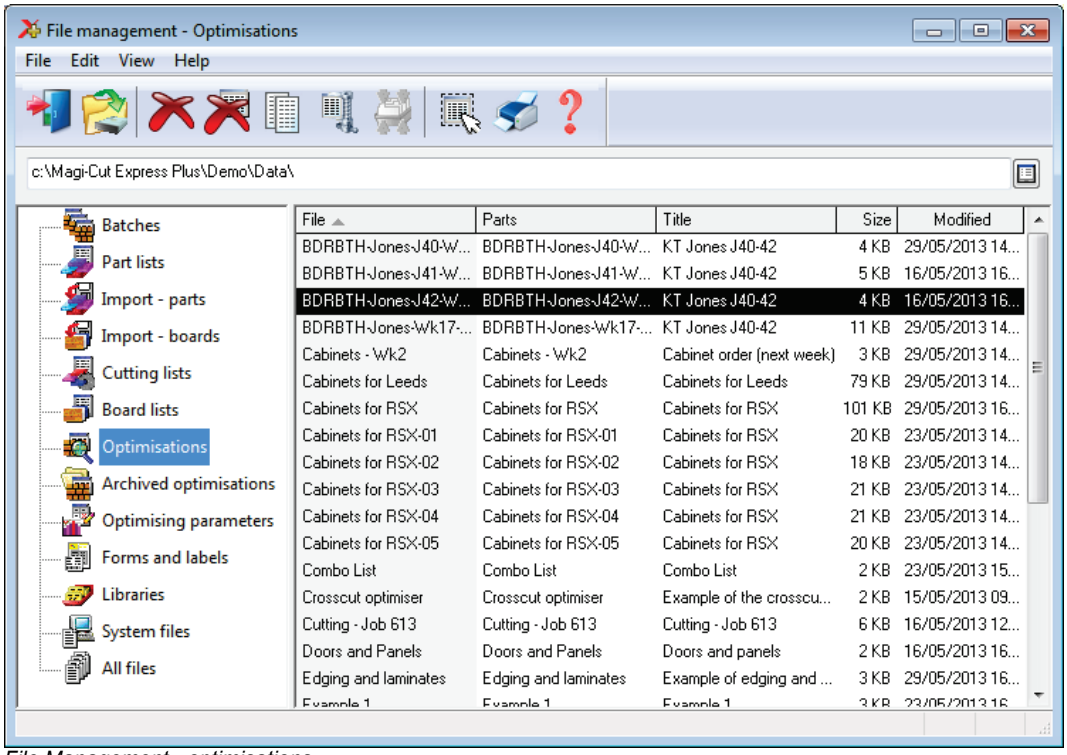
File Management

The pane as the left shows the various file type used by the program, for example, part lists, optimisations (runs), Optimising parameters…

- Select a category from the left pane

The list of files (for example, part lists) is shown at the right. The contents of the current file are shown towards the foot of the screen.

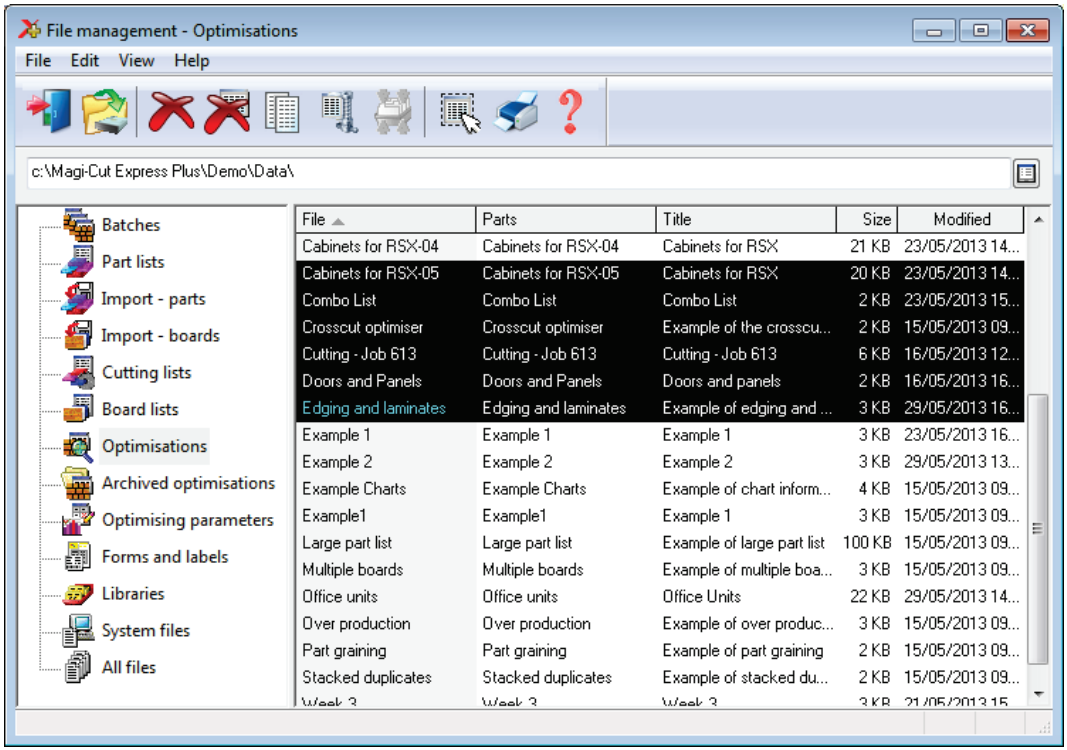
The following screen shows a list of optimisations (Runs).



File Management - optimisations

Note in this case the file contents are not shown - as the run file is not a simple ASCII file also a run e.g. 'Basic part list' is actually a collection of, typically, several different files.

- Use the mouse or navigation buttons to select a file or files.



File management - select files

- Use the tools to delete or copy files as required.

 - delete files

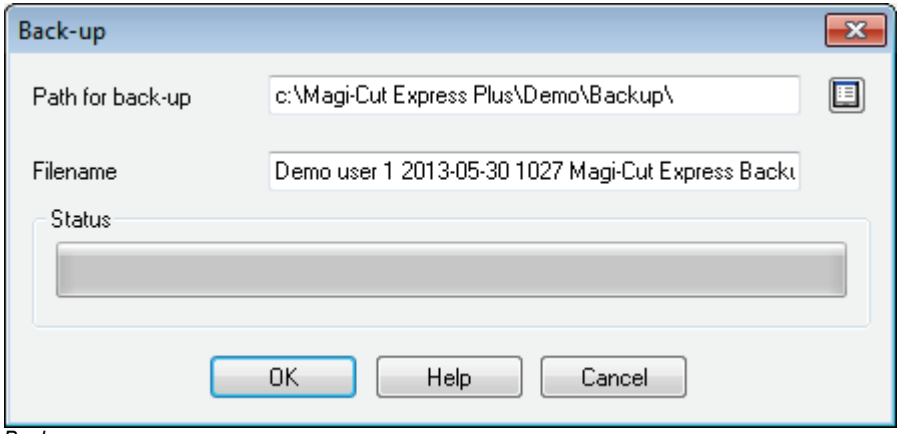
 - copy files

Windows Explorer - it is also possible to use the regular Windows Explorer options to manage data but File Management presents the data by type and keeps track of any related or temporary files, for example, extra files produced when optimising (runs).

Back up

The File management screen also includes a link to the back-up options.


Back-up user profile



Back up

The Back-up process makes a copy of the User profile and stores it in a single BKP file. It is a good policy to always take a back up of the user profile before making any substantive changes with File Management.

The backup includes the user profile and the Path for data and the Path for library data - so most of the user data is copied. There are some exceptions, for example, the path for import and export data so check the details in the Online help before using Back up extensively so that it is clear what is safe and what is not.

Note - The Back up option is also available at the main screen.

If possible also make sure that the program and data directories are covered by a regular system back up using the Companies own procedures.

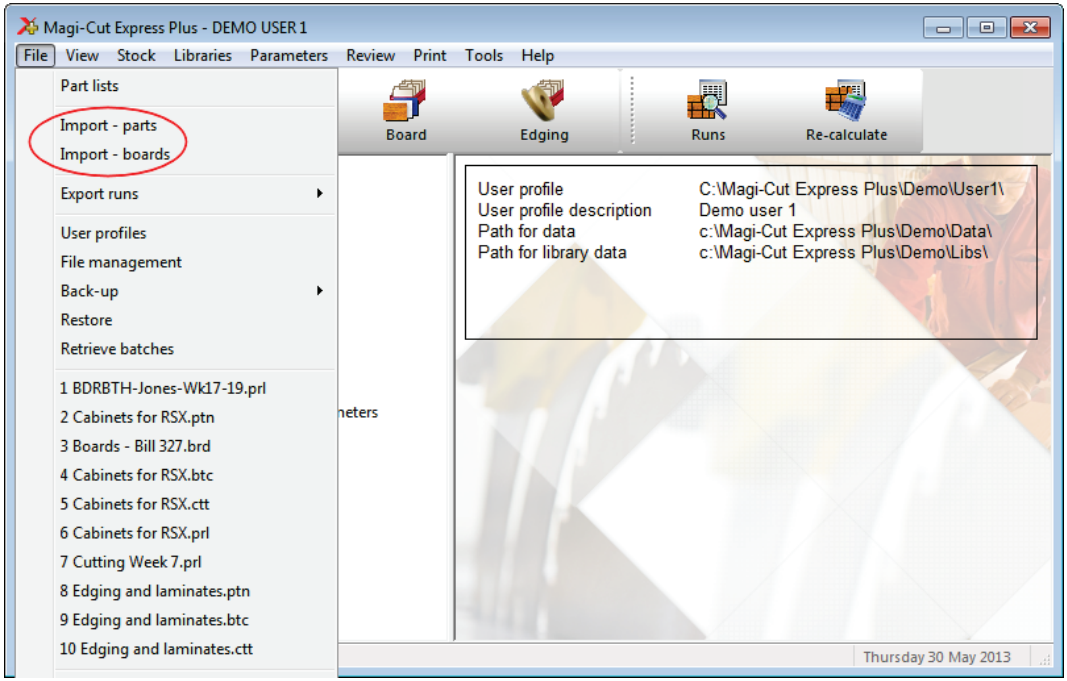
Import and Export

These days it is more common for programs to interact with other files and systems. For example, part lists may be created by a separate Sales order system, Boards may need

to be imported and exported from a stock control database, and management data for optimised runs may need to exported to other reporting systems or spread sheets.

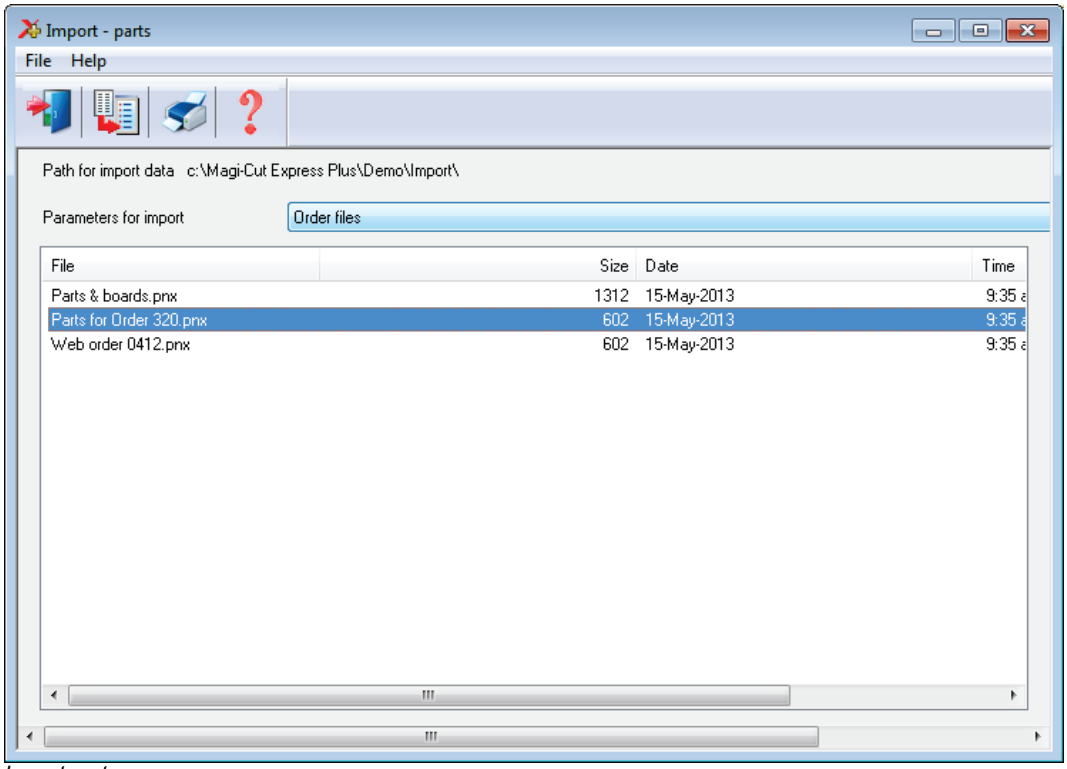
Import parts, boards

Part lists and board lists can be quickly imported. At the main screen these are options on the File menu.



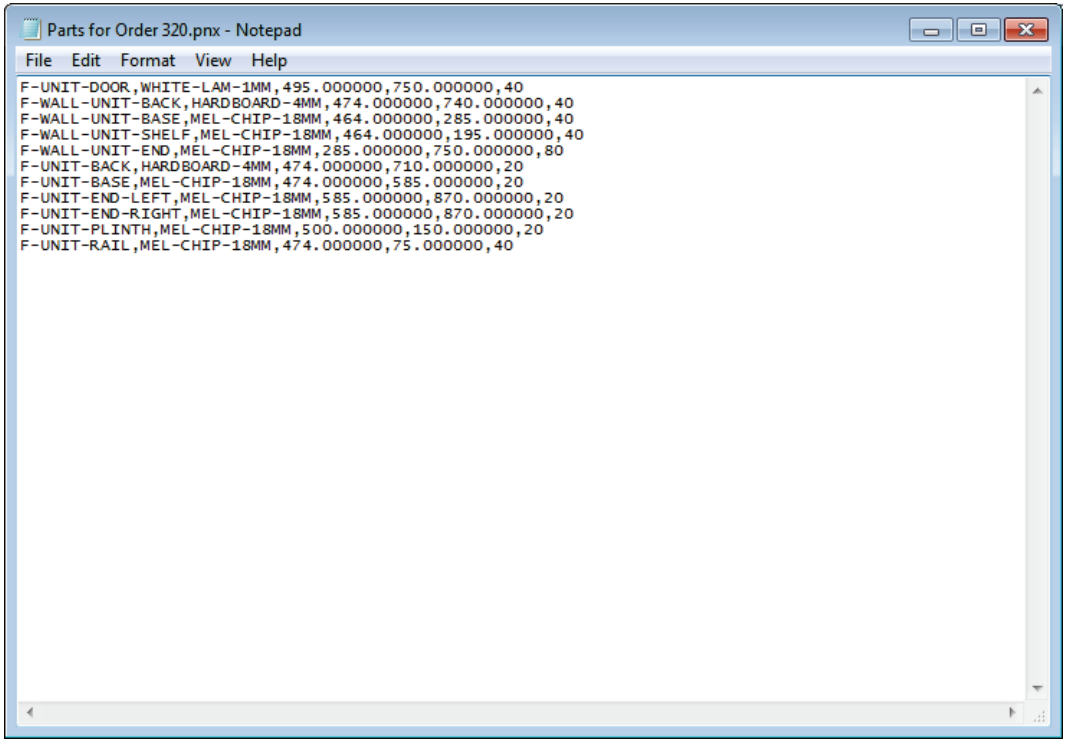
Import parts, boards

The program moves to the Import screen.



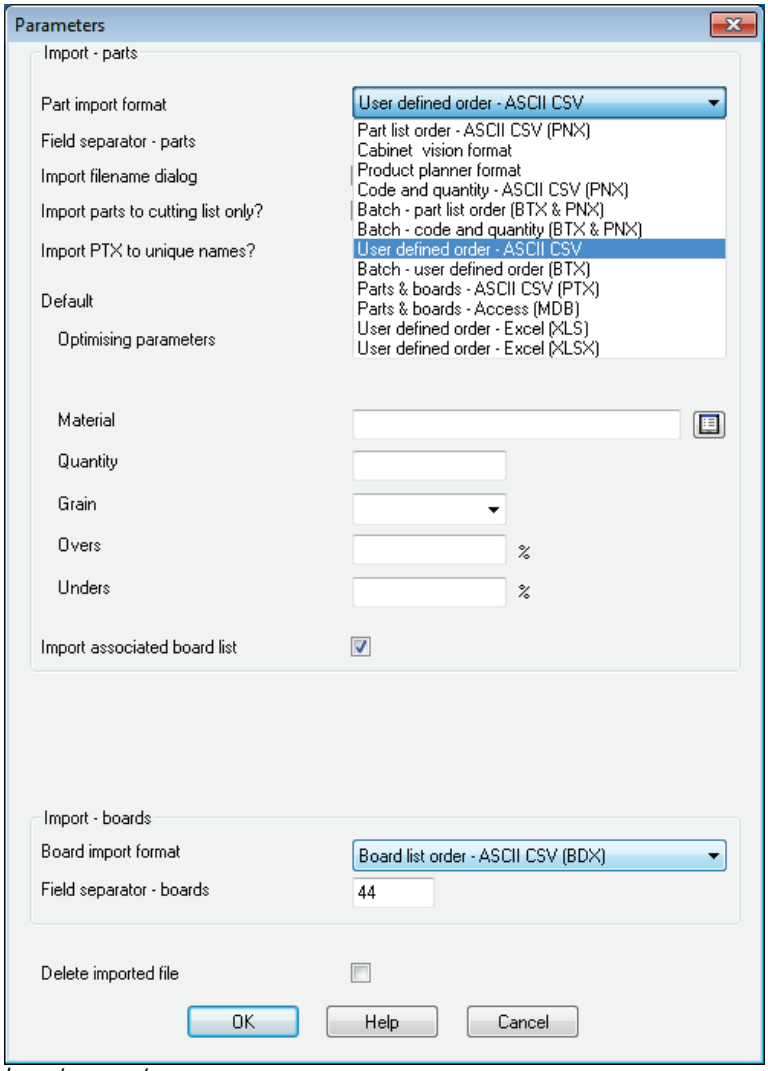
Import parts

Select a file to import. In this example the import format is the program's format of PNX; an ASCII file with the fields in a fixed order.



Import file format

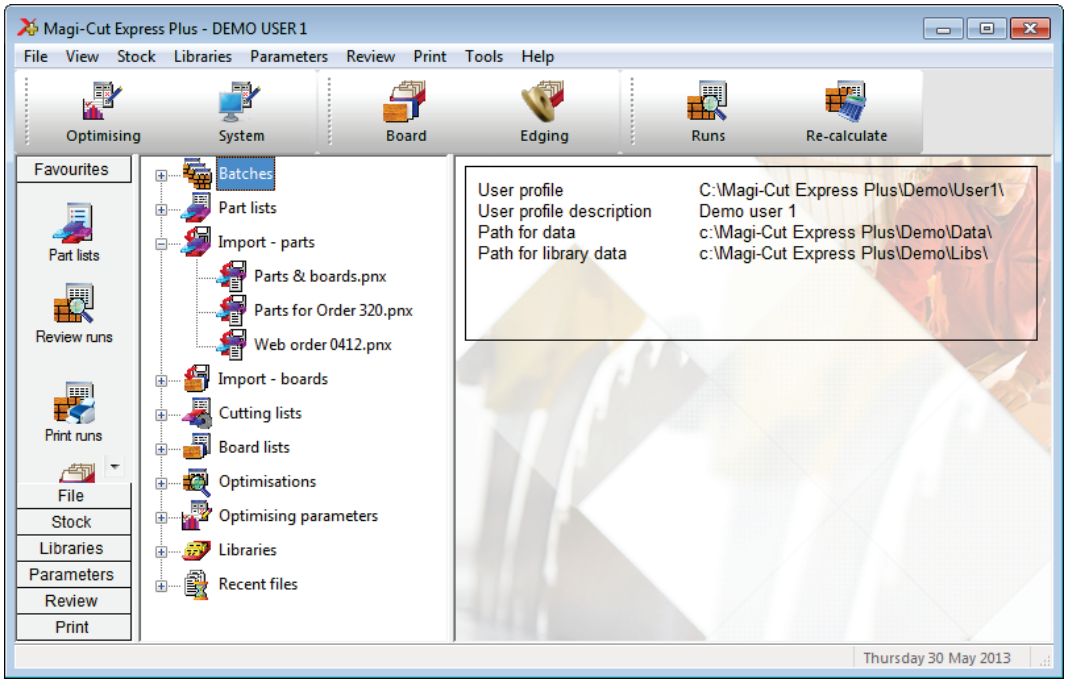
Use the Import parameters to choose a different format. **File - Parameters**



Import parameters

It is also possible to use a custom format (user defined format) - this can be useful where there is limited control on the format of the external file. The *'Part list import parameters'* are used to customise import format. Similar parameters are available for Boards.

Files can also be imported from the File Tree. This is a quicker option once the format has been chosen because the file can be imported and there is no need to go via the Import dialog.



Import from file tree

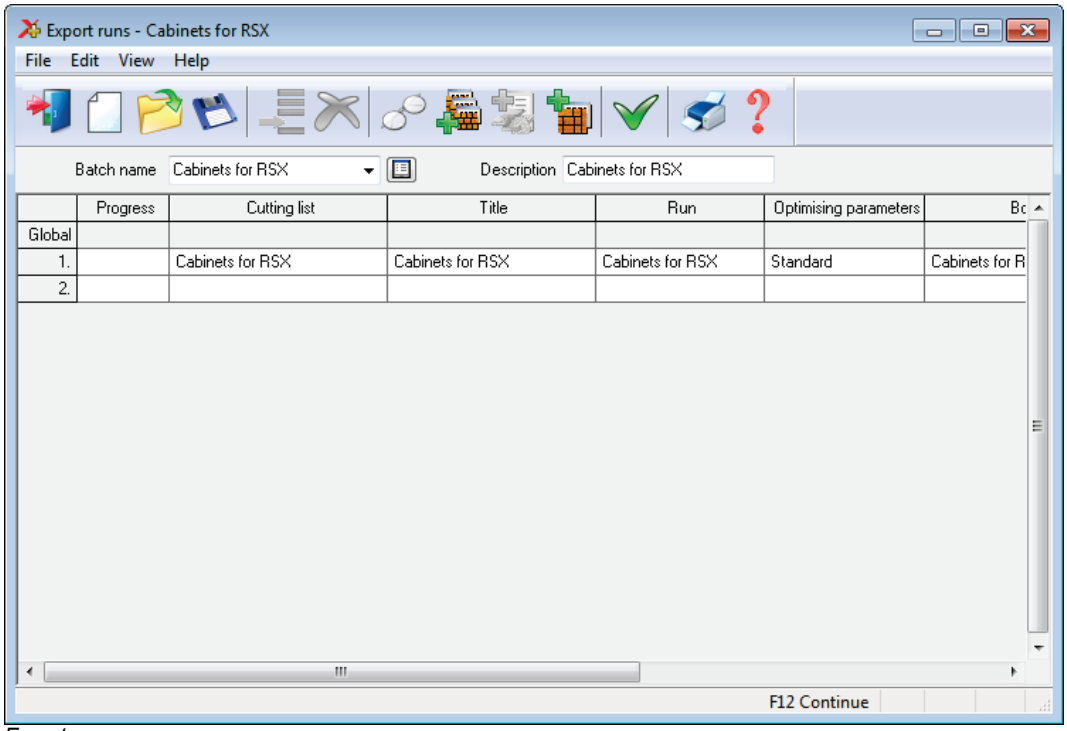
Export

The main use for export is to export results (optimisations) to an external file or system. Individual reports (for example, Pattern summary) can be exported at the screen view or a complete set of results can be exported.

At the main screen:-

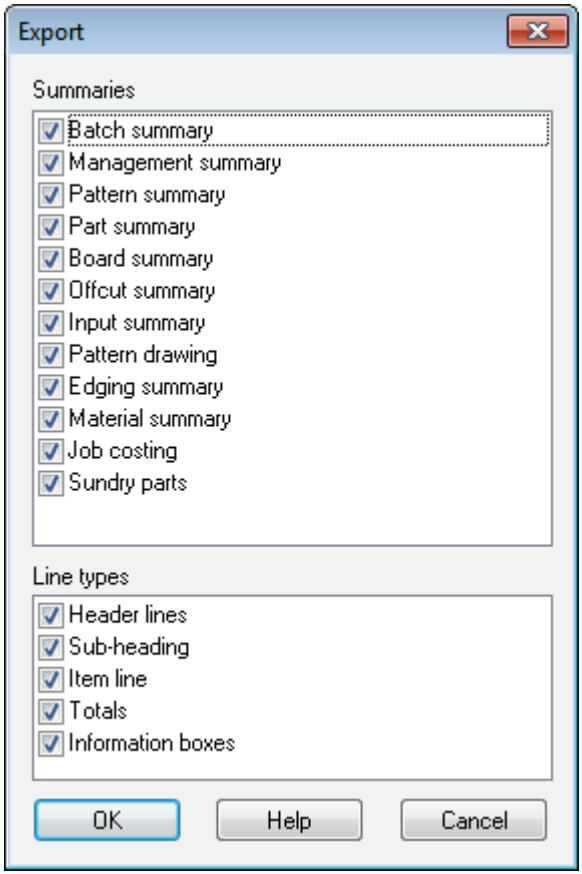
- Select: **File- Export runs**
- Choose the export format (ASCII, MDB, XLS, XLSX, DXF)

(XLS and XLSX are Excel formats).



Export runs

The program prompts for the summaries to export and also the type of data to include.

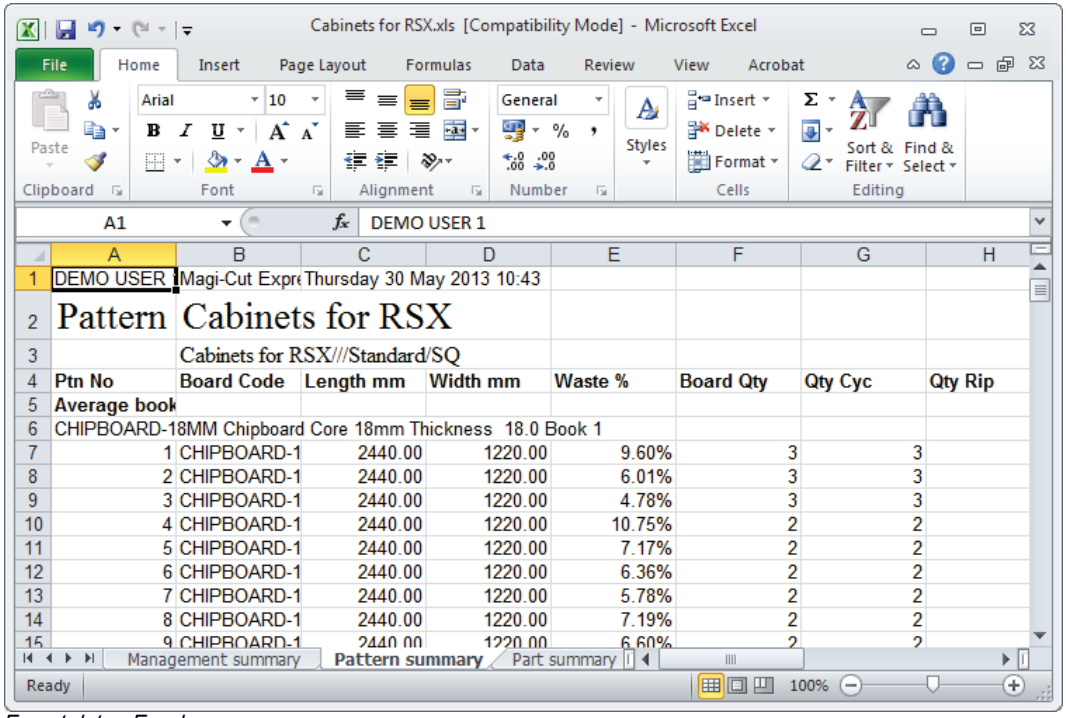


Summaries to Export

In some cases items such as the headings, sub headings and Totals are not required - these can be easily excluded.

The data is sent to the *Path for Export data*

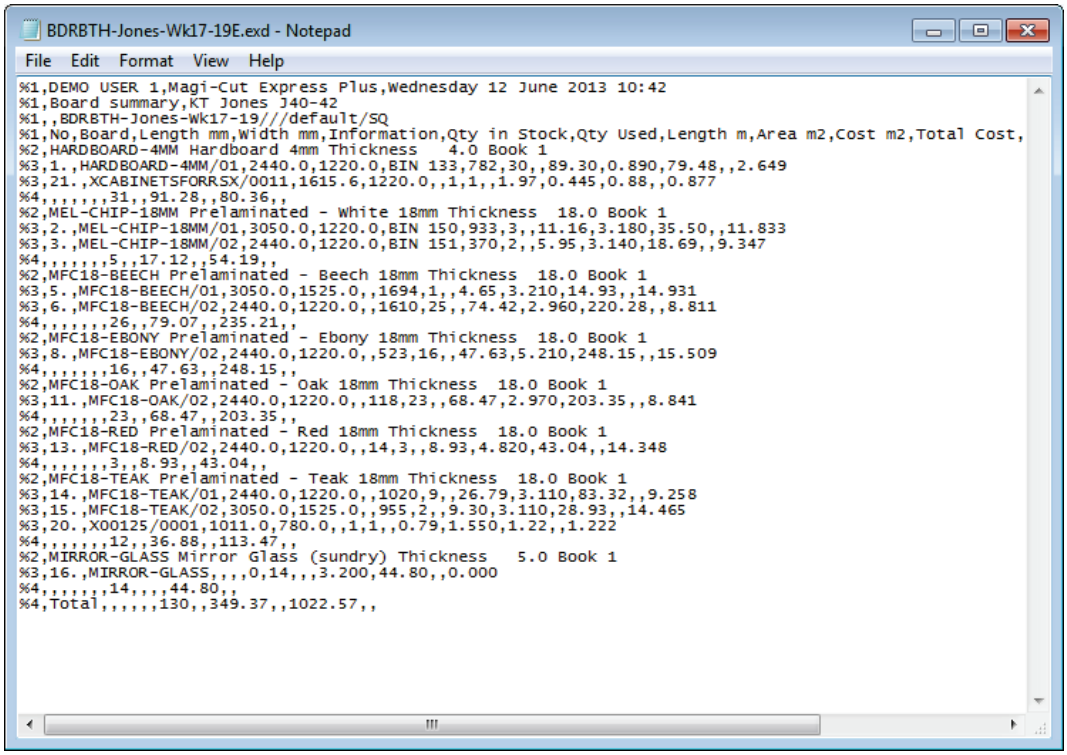
In the case of Excel, for example, the reports are sent to a single file with each summary on a separate spread sheet tab.



Export data - Excel

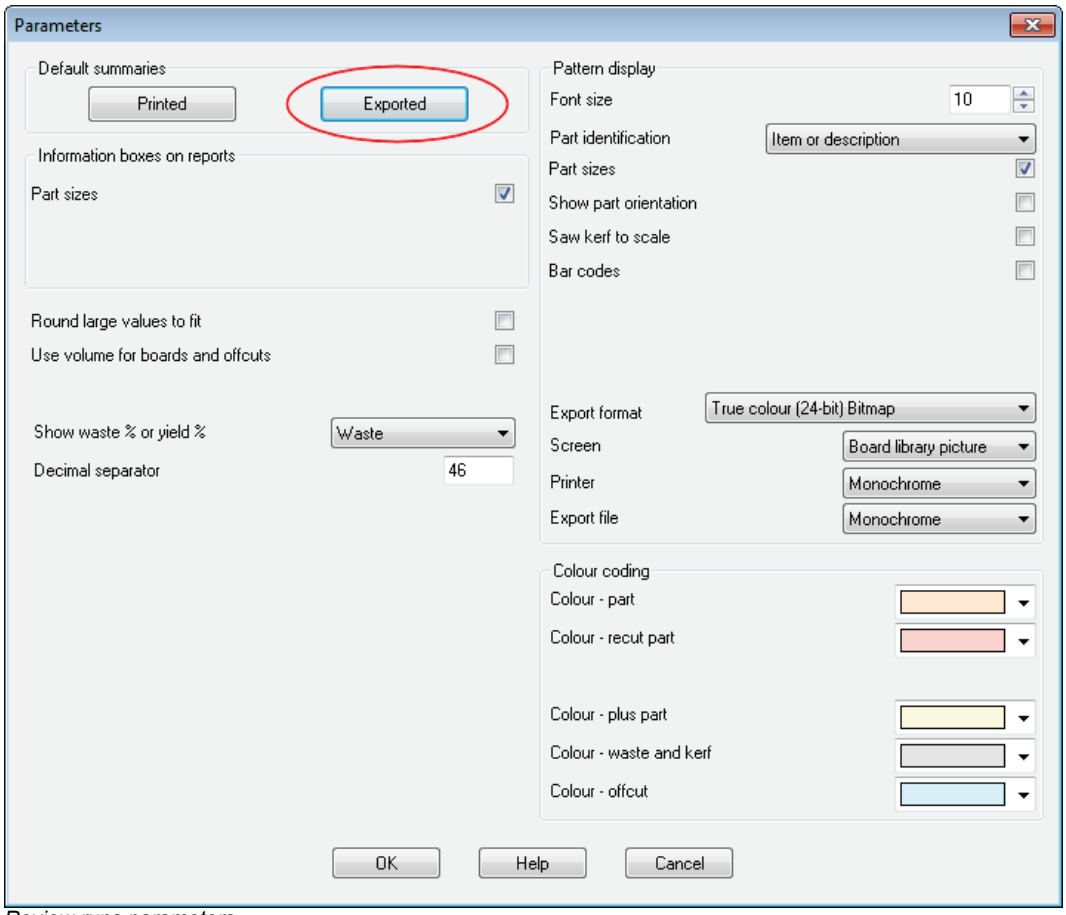
For Export to an ASCII file each report is sent to a separate ASCII file with the data types identified by a token at the start of each line.

Here is an example of the board summary data.



The export choices can be set at the Review runs parameters dialog.

At any Review runs screen:-The data to export for each report can be customised for each report.

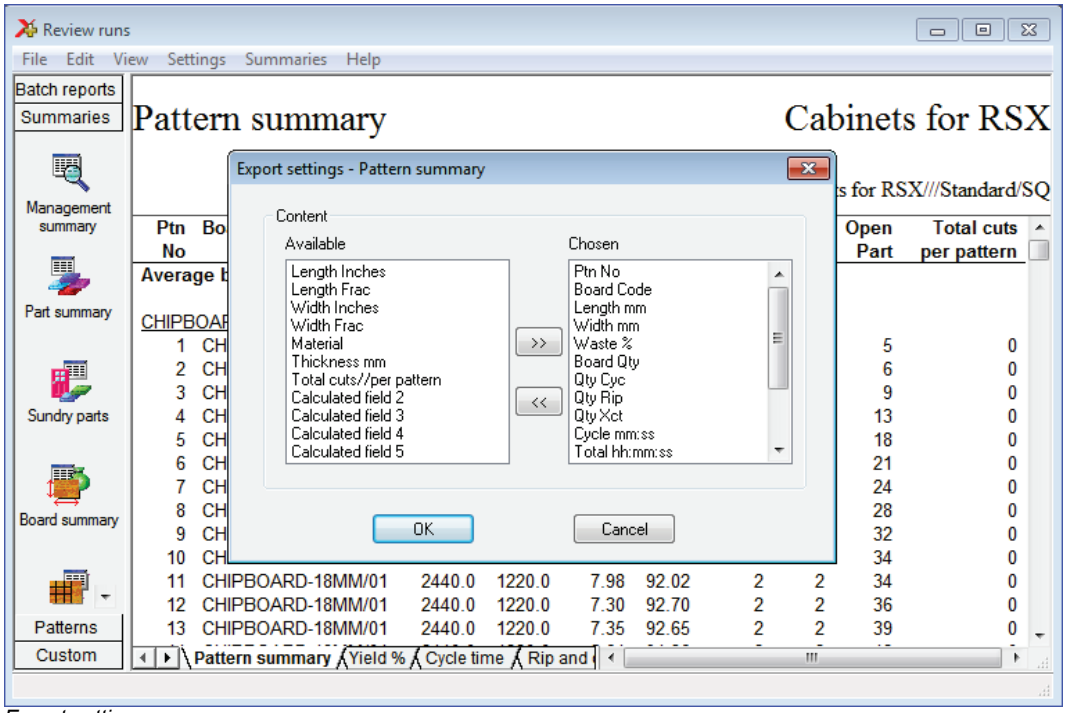


Review runs parameters

The data to export can also be customised at the Review Runs screens:-

- Locate the report
- Select: **Settings - Export settings**

This shows the Export settings dialog.

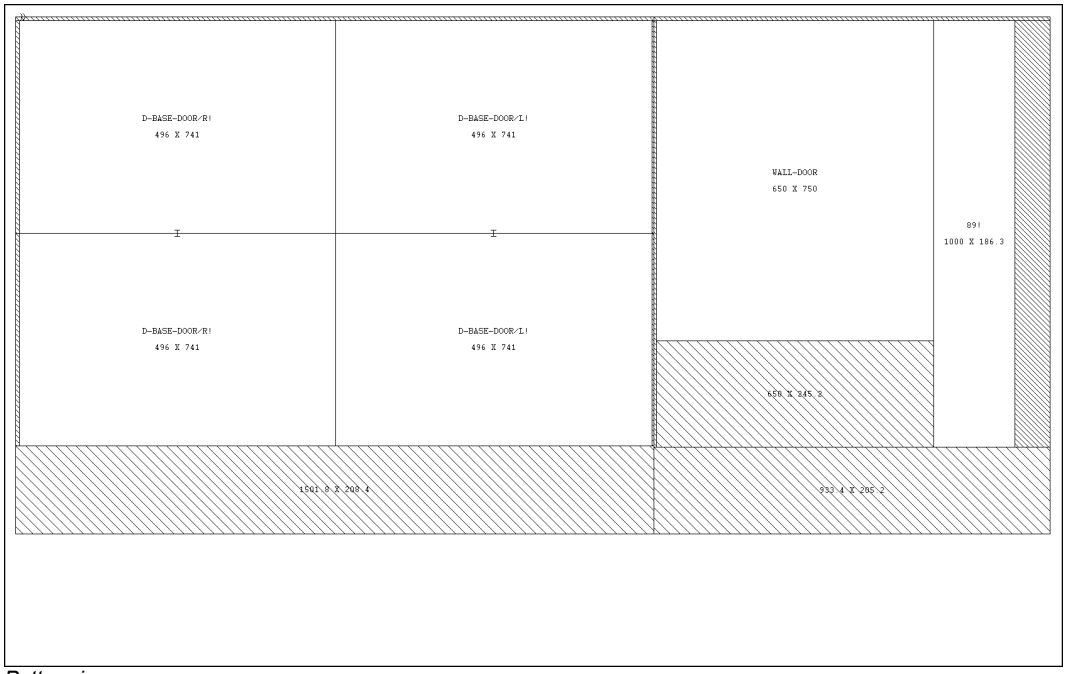


Export settings

The above example shows fields for the Part summary.

Pattern images - at any on-screen pattern there is an option to export the pattern image. The formats available are:-

```
Windows Bitmap (.bmp)
Windows Metafile (.wmf)
Windows Enhanced Metafile (.emf)
```



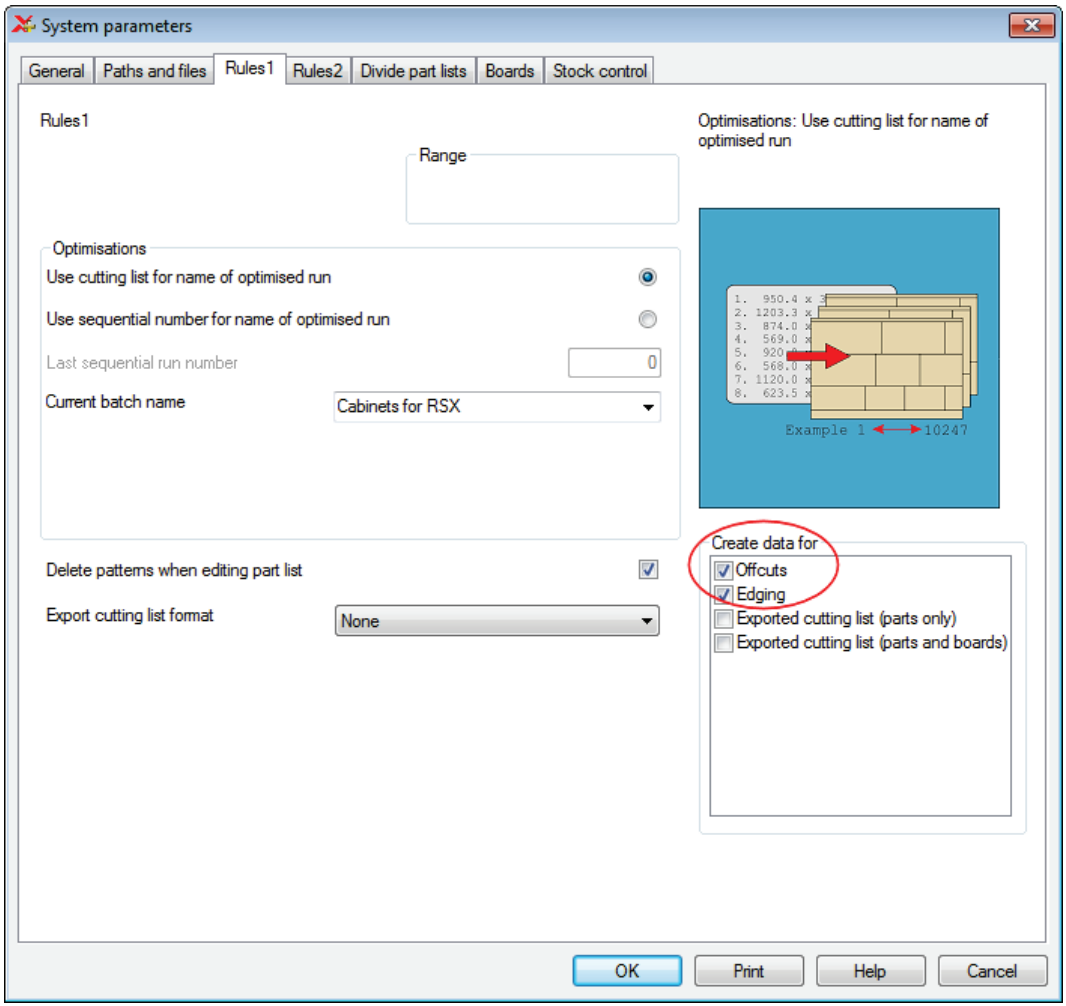
Pattern images

There are also options to export non run based reports:-

Board library data

It is sometimes useful to export the cutting list (for example where it is changed for edging and laminating and the sizes are used elsewhere in production).

This export is included in the optimisation provided that the option is chosen in system parameters.



Create data for

The program creates files in the PNX and BDX (for board sizes) formats.

7. Labels and Forms

Use the Design options to create templates for labels and forms. Labels are typically for printing labels in the office for parts or runs.

Forms are typically for adding brand new custom forms to Review runs or providing a full set of order or stock documentations; Invoices, despatch notes, worksheets …

At the main screen:-

- Select: **Tools - Form design**

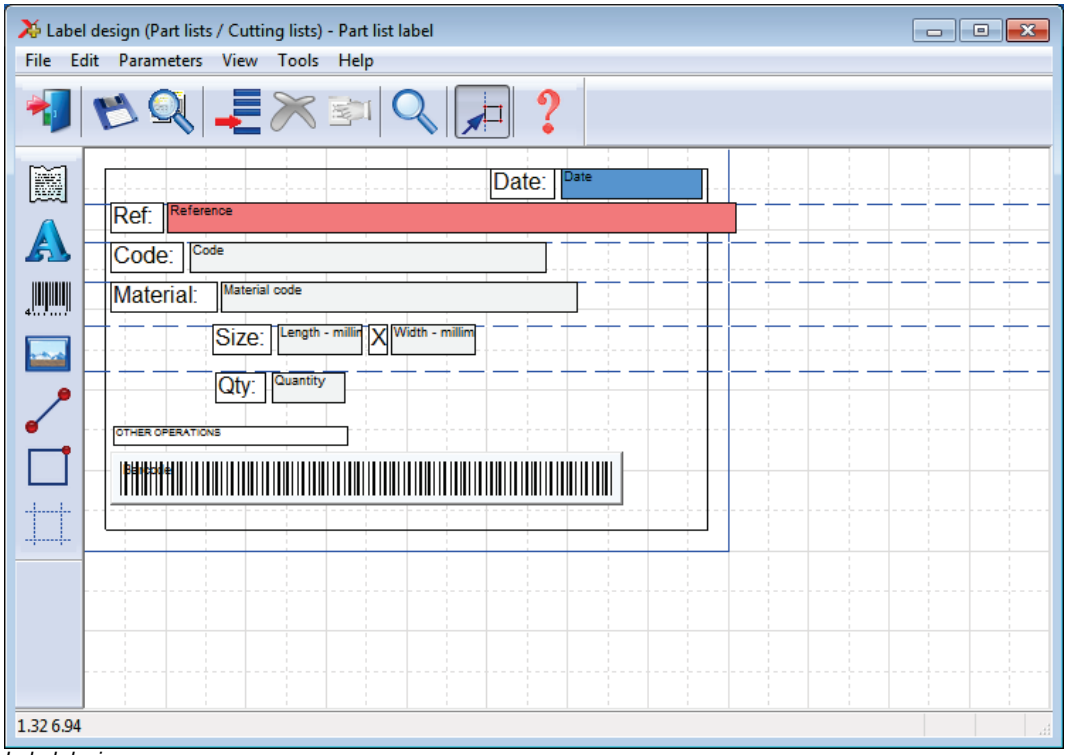
or

- Select: **Tools - Label design**

- Select the type of form or label required:-

Part lists / Cutting lists
Patterns
Runs (for Forms only)

The following example shows a design for a label at the Design screen.



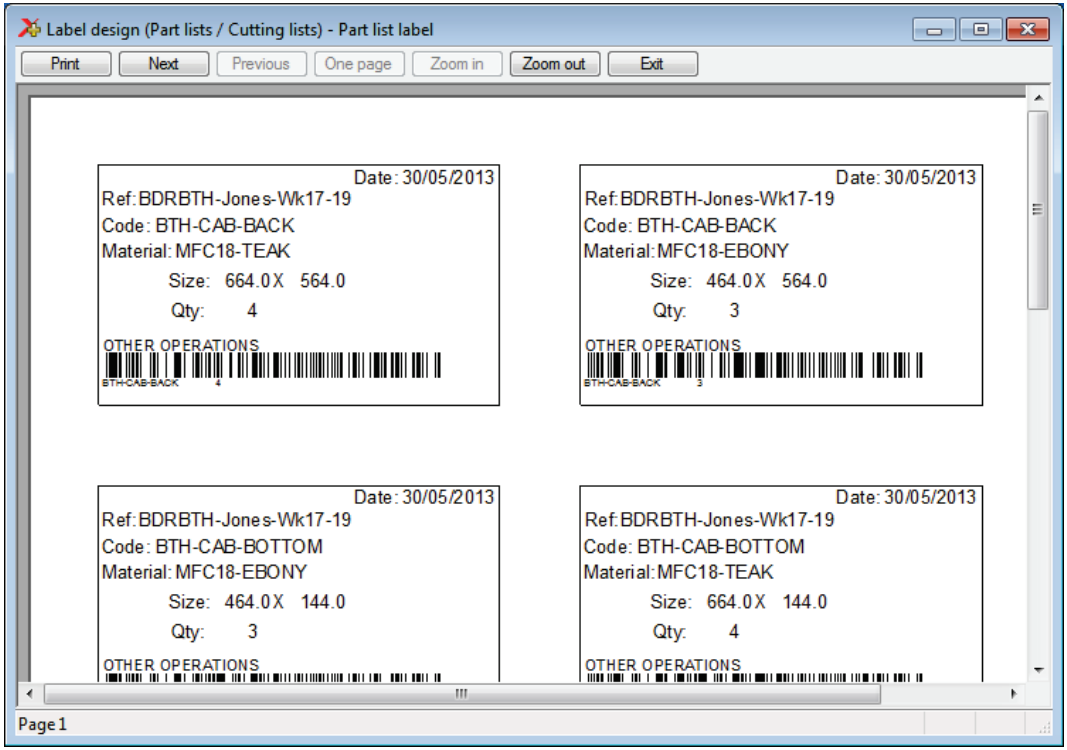
Label design

To design a form or label create a template that describes the items of information (objects) on the label or form; where they are placed and special effects such as pictures or colour. Once the template is saved it can be used by the program for printing that style of label or form.

Many users typically only need one or two templates for all their part labels but may need several templates for forms such as invoices, despatch notes, waybills and so on.

Standard templates **-** There are several standard templates supplied with the software which you can use as a starting point for your templates. Use the SAVE AS option to take a copy of the standard form and always make changes to the copy.

Data Preview - use this at the design screen to see what the label looks like.



Preview of printed labels

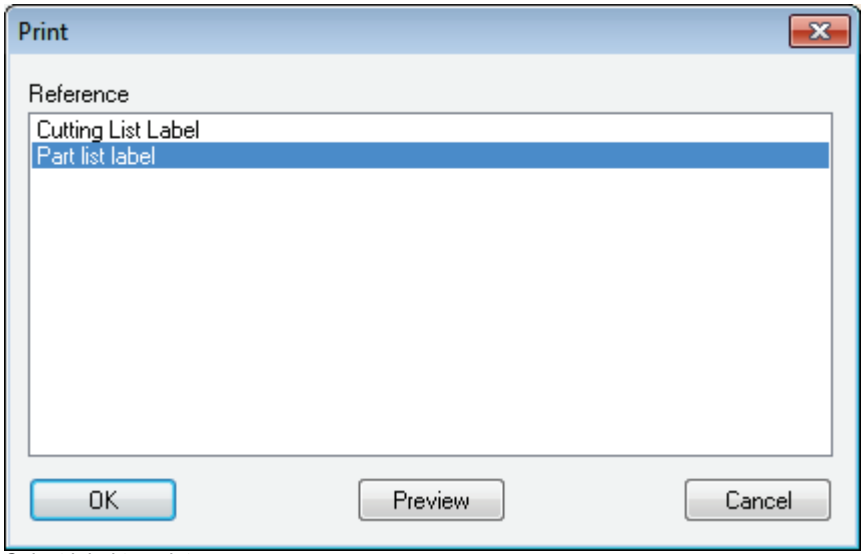
When creating a NEW design use the OBJECT TOOLBAR (at the left) to place label design elements on the label. The main elements are:-

- Text boxes - fixed text to describe the data
- Data boxes - for the variable data (e.g. part codes)
- Lines - to draw lines on the label
- Picture boxes - for part drawings or logos
- Barcode boxes - for bar codes (e.g. bar code for part code and quantity)

Use the properties box to change any features, for example, to fine tune the position of the item.

Print - to print a label for part lists or cutting patterns etc.

- Select Print at the main screen
- Select 'Labels' or 'Forms'
- Select the type of data to print (e.g. Part lists, Patterns)

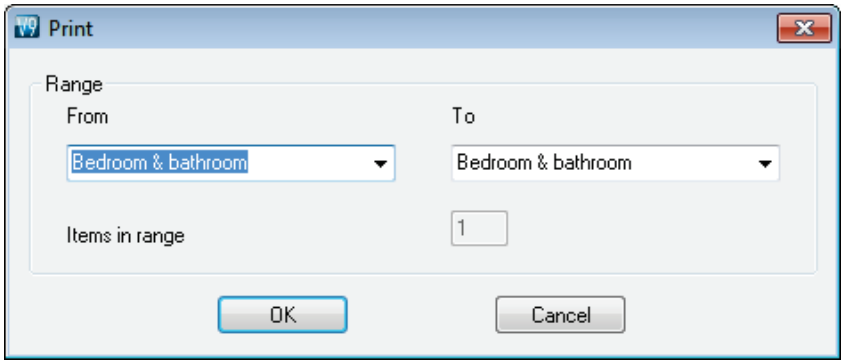


Select label template

- Select the required template

Select **OK** to print

The program prompts for the data to print.



Select data for label printing

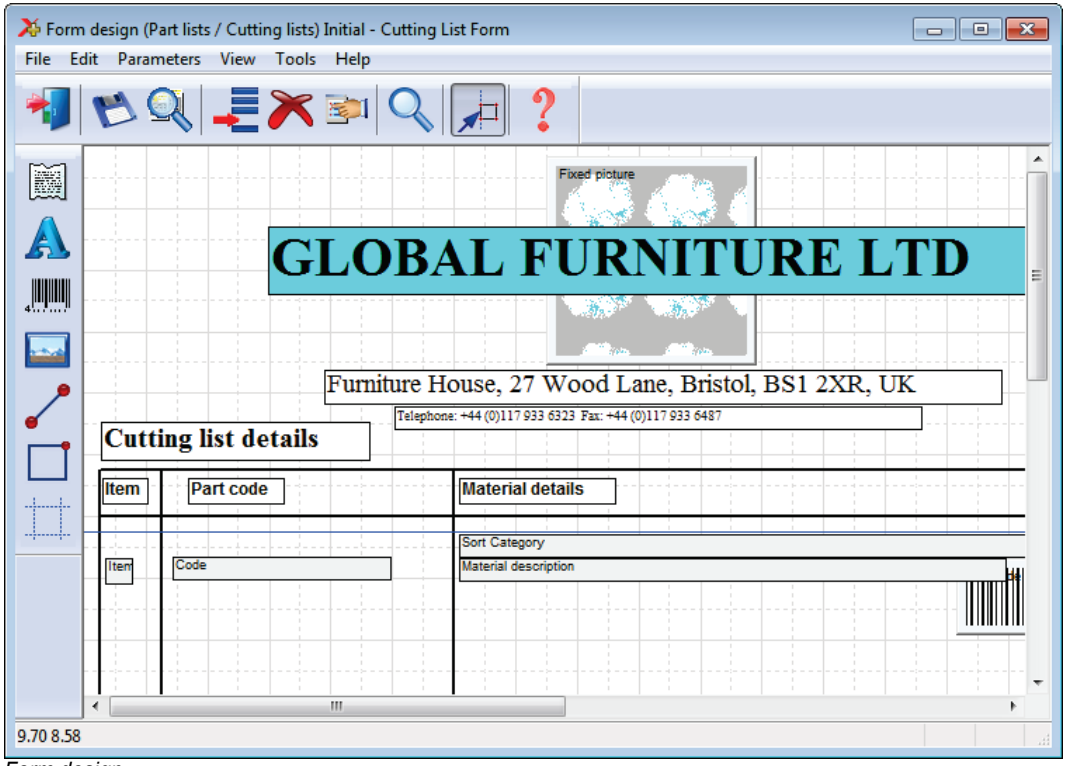
- Check the data and select OK to print labels.

The labels can be set up to print in a wide variety of layouts; continuous, 2 per page …

Printed labels

Forms

Design a form in the same way as a label - the main differences are that a form (like an invoice) usually contains a section with a list of varying data items and uses page numbers, headings, and continuation pages etc.



Form design

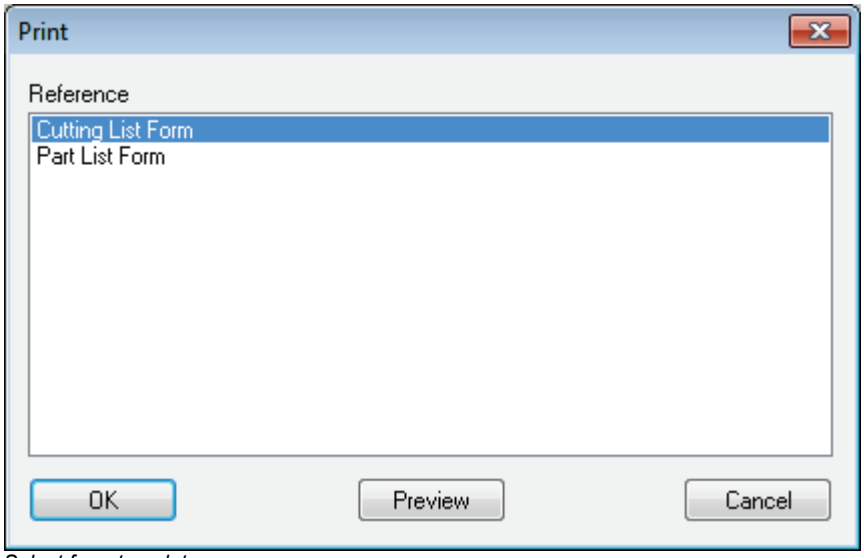
Use the object tool bar for the common items.

Print a form

- Select (at the main screen) **Print**
- Select **Form**

Choose the type of form to print (Part lists, Cutting patterns, Runs).

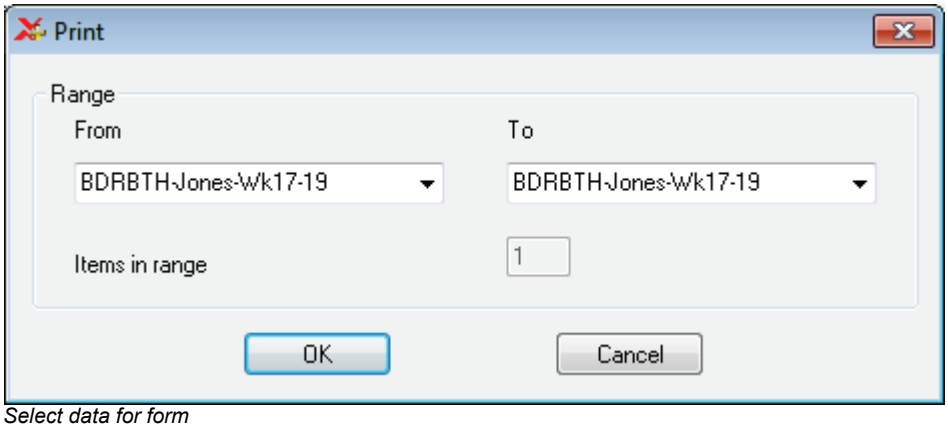
The program prompts for the template to use:-



Select form template

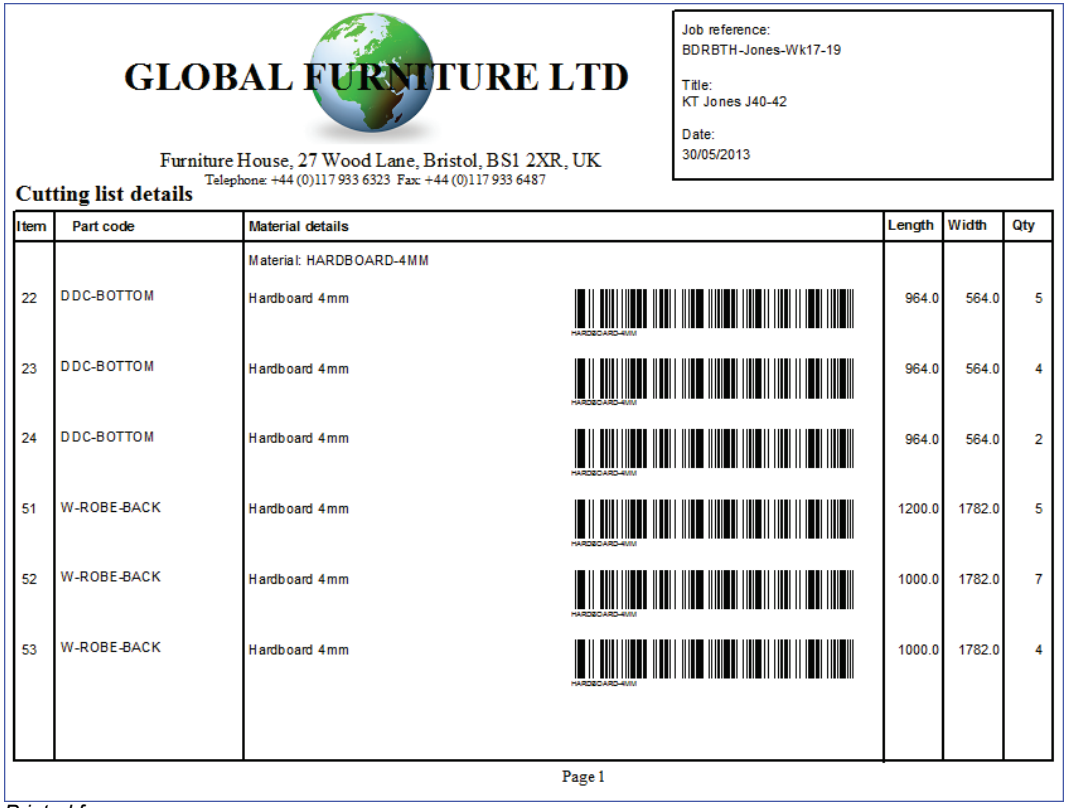
- Select a template
- Select Preview to check the layout.

The program then prompts for the data to print:-



Select data for form

For a run or cutting patterns the program prompts with the current batch screen, select **OK** to continue. Select PRINT to print the data from the preview.



GLOBAL FURNITURE LTD

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Telephone: +44 (0)117 933 6323 Fax: +44 (0)117 933 6487

Job reference:
BDRBTH-Jones-Wk17-19

Title:
KT Jones J40-42

Date:
30/05/2013

Cutting list details

Item	Part code	Material details	Length	Width	Qty
		Material: HARDBOARD-4MM			
22	DDC-BOTTOM	Hardboard 4mm	964.0	564.0	5
23	DDC-BOTTOM	Hardboard 4mm	964.0	564.0	4
24	DDC-BOTTOM	Hardboard 4mm	964.0	564.0	2
51	W-ROBE-BACK	Hardboard 4mm	1200.0	1782.0	5
52	W-ROBE-BACK	Hardboard 4mm	1000.0	1782.0	7
53	W-ROBE-BACK	Hardboard 4mm	1000.0	1782.0	4

Page 1

Printed form

Form and label parameters **-** Use these to set the page size, margins and other general features or each label and form template.

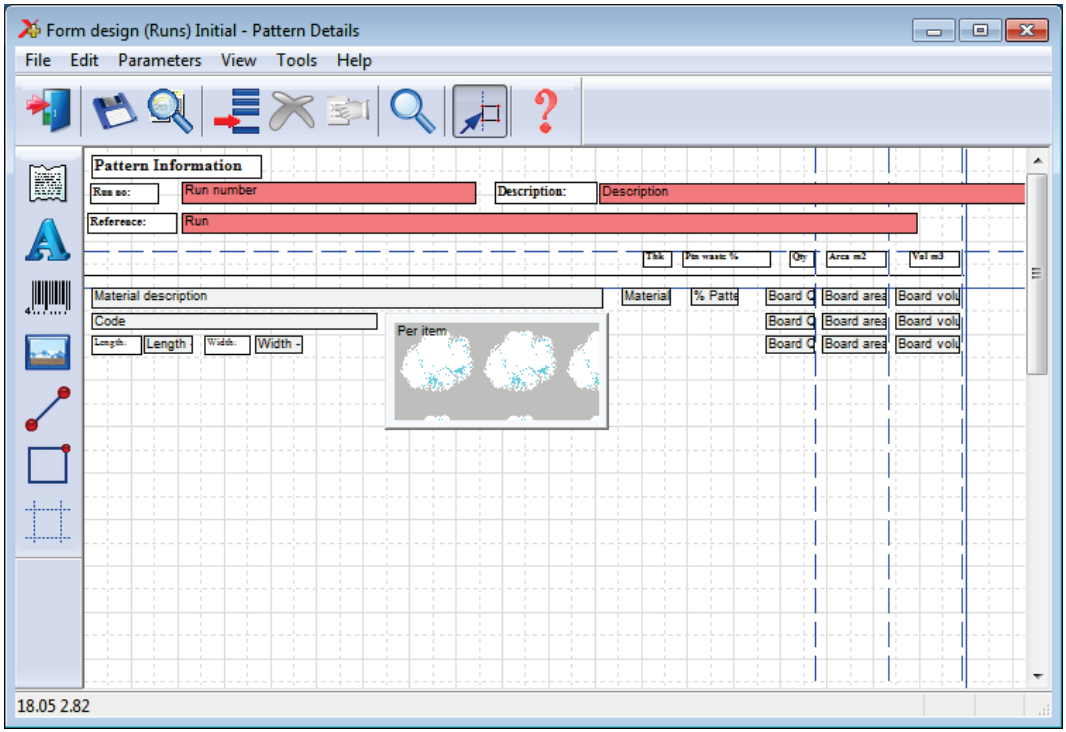
With labels set the frequency with which labels are produced, per part, per part type, per stack etc.

Custom Reports / Summaries

Form design can also be used to create fully customised reports for runs (optimising results). This can be useful for tailoring documents to suit the production process.

Emphasising important data, removing details, matching the order of data to the company standard …

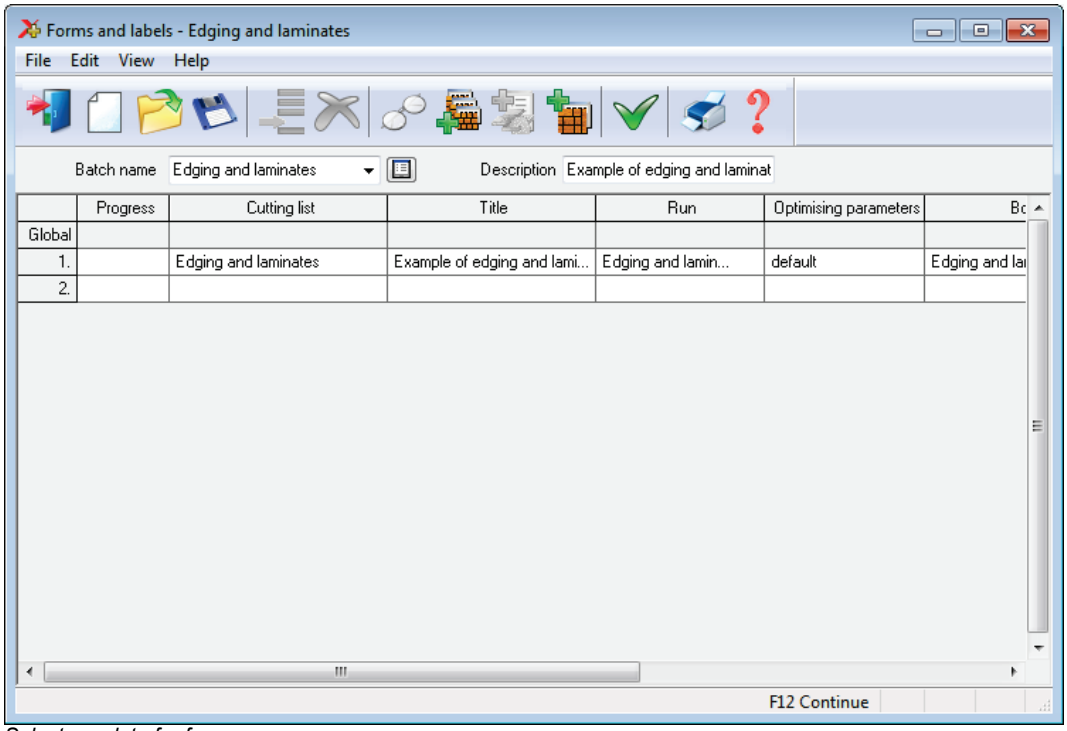
Here is part of a design for a custom report for a pattern summary.



Custom report design

The layout and information on the report can be fully customised. The above design produces the following style of report or summary.

In this case the program prompts for the run to use for the data.



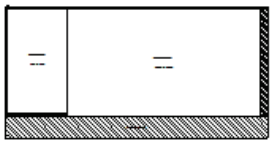
Select run data for form

The report is printed in the usual way.

Pattern Information

Run no: BDRBTH-Jones-Wk17-19 **Description:** KT Jones J40-42

Reference: BDRBTH-Jones-Wk.../BDRBTH-Jones-Wk.../default/default/5

	Thk	Ptn waste %	Qty	Area m2	Vol m3
Material description: Hardboard 4mm Board code: HARDBOARD-4MM/01 Length: 2440.0 Width: 1220.0 	4.0	40.14	7	20.84	0.08
Material description: Hardboard 4mm Board code: HARDBOARD-4MM/01 Length: 2440.0 Width: 1220.0 	4.0	40.14	4	11.91	0.05
Material description: Hardboard 4mm Board code: HARDBOARD-4MM/01 Length: 2440.0 Width: 1220.0 	4.0	40.14	3	8.93	0.04
Material description: Hardboard 4mm Board code: HARDBOARD-4MM/01 Length: 2440.0 Width: 1220.0 	4.0	21.87	1	2.98	0.01

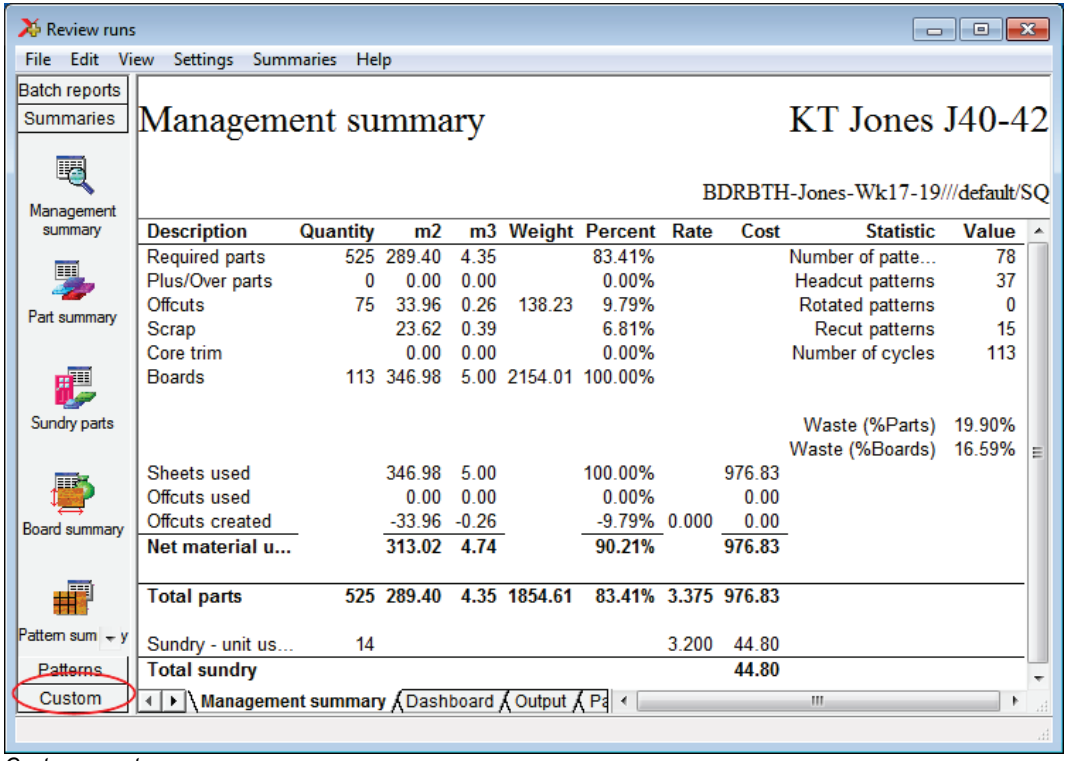
Printed report

Custom reports in Review runs

For run based custom reports it is often more convenient to integrate the reports in Review runs so that they appear on the Report bar - like any other report. To do this use the option at the main screen.

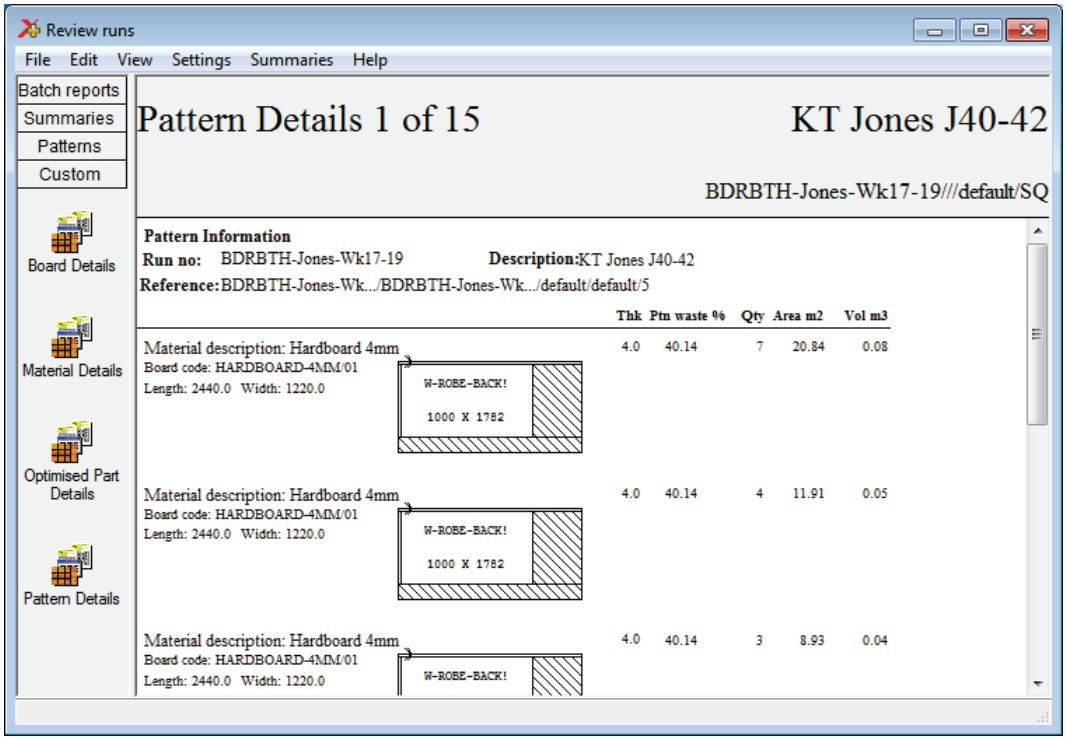
Select: **Tools - Form design - Runs**

Any reports created via this option are automatically added to the report bar under the 'Custom' tab.



Custom report

The custom reports are listed in the shortcut bar.



These reports can also be accessed from the main screen as forms (*Print - Forms - Runs*).