V9 Modular - Introduction



V9 is a brand new full release of our long established Optimising and production software for the furniture, woodworking and other sheet processing industries.

For this version we have focussed on adding features and value to the everyday operation of the software which will be of benefit to most users. This includes, faster optimisation with multi-core processors, innovative and improved navigation between sections, an integrated dashboard for exploring results and summaries, custom charts for most reports and a wider range of import and export options.

New features for V9.0

<u> Optimising</u>

- Faster optimisation with multi-core and multiple processors
- Lite & Standard Optimisers additional algorithm for improved yield
- Optimising parameter option to consider or exclude offcut boards
- Batch screen Optimisation progress indicators
- Crosscut Optimiser supports optimising parameter 'matching parts in strip'
- Nesting board orientation set minimum and maximum size of board for nesting table

<u>Mavigation</u>

- Updated toolbars and icons throughout
- Standardised file and item selection dialogs
- Navigation bar quicker access between applications
- Batch screen direct access to edit cutting list, board list and parameters

W <u>Review runs and reports</u>

- Review runs integrated dashboard and custom charts for most reports
- Review run reports extra columns for user-defined calculated values
- Review runs direct access to edit cutting list, board list and parameters
- Review runs file tree option to filter or group runs e.g. by date
- Review runs reports and export option to specify decimal separator
- Review runs extra column for weight in most reports

W Board library and Stock

- Board library 50 character stock codes
- Board library option to view full sheets or offcuts only
- Stock option to update from Bargstedt SQL database and create board list just before optimising
- Stock valuation report option to include full sheets or offcuts only
- Stock offcuts option for unique sequential id for each offcut created
- Stock control record offcut history
- Board library field for Material density

M Import / Export

- Direct import & export of spread sheets in XLS/XLSX formats
- Picture files (JPG) can be attached to product and part library
- Integrated PDF 'print to file' option

<u>V9</u> <u>Security and data organisation</u>

- Improved network operation with user profiles & passwords
- Improved and simplified options for the set up of shared data

<u>V9</u> <u>Custom options and System details</u>

- Labels for single parts and individual patterns
- Part list parameters set defaults for material, overs, unders and grain
- V9 Minimum specification

<u>Overview of V9 modules</u>



Faster optimisation with multi-core and multiple processors

Version 9 includes changes to reduce the optimisation time on multi-core or multiple processor systems. When optimising batches of more than one run or single runs with multiple materials or single runs with one Material using the 'Automatic selection' optimiser multiple processors are used to optimise runs/materials simultaneously.

Note - any reduction in optimising time is dependent on the relative sizes of the optimisations and the number of processors available.

For example, in a multiple run batch containing one run which takes more time to optimise than all other runs in the batch combined, the overall optimising time is determined by the length of time taken to optimise the single large run. If all the runs in the batch take a similar length of time to optimise, the overall optimisation time for the batch is noticeably reduced.

Batch 1 - 4 runs, 4 processors Run 1 - 25s Run 2 - 90s Run 3 - 10s Run 4 - 15s

V8.2 total batch optimising time \approx 140s V9 total batch optimising time \approx 90s

Batch 2 - 4 runs, 4 processors Run 1 - 25s Run 2 - 25s Run 3 - 25s Run 4 - 25s

V8.2 total batch optimising time \approx 100s V9 total batch optimising time \approx 25s

Lite & Standard Optimisers - additional algorithm for improved yield

An additional algorithm is added to these optimisers to improve the yield for some types of runs. LO and SO optimisers typically deal with smaller numbers of parts required in small quantities.



Note - any improvements and the extent of the improvement depend on each run and the parameter settings...

Note - For all optimisers the optimising yield is improved when costs of all boards are set to zero.

Optimising parameter - option to consider or exclude offcut boards

Version 9 includes a new parameter to allow users to specify whether offcut boards (offcuts from previous optimisations) are considered when generating patterns.

This facility is set via the parameter 'Consider offcuts' which is located on the offcuts page of the optimising parameters.

📱 Optimising parameters - default Standard Optimise	r			×
Trims Limits Rules Recuts Offcuts Advanced				
Set the parameters for offici te				
Set the parameters for oncuts				
Ran	ge			
Minimum offcut dimensions and area			1	
Length 300 Width 200	Area - m2	0.00		
Maximum offcut dimension (material flow direction)				
Head cut 9999 Rip 9999	Crosscut	9999		
Offcut allowance				
For minimum size offcut				
	30 %			
For maximum size offcut		Consid	ler offici te	
	100 %	Lise of		
		Offect	e from recute	
Sort offcut patterns Board list sequence		Always	s preserve offcut orientation	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	ОК	Save As F	Print Help	Cancel

If this parameter is checked any offcuts in the board list may be used to generate patterns, whereas if it is not checked these offcuts are not used.

Note - If the parameter is not checked the associated 'Use offcuts first' parameter is disabled.

Batch screen - Optimising progress indicators

Optimising progress

V9 includes a new 'Optimising progress' field on the batch screen to indicate the progress of the optimisation for each run in the batch.

🐨 Bato	W Batch optimisation - Wall units										
File E	File Edit View Help										
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E	Batch name Wall units Description od req 02-Room / floor number Print optimisation results										
	Tm	Optimising progress	Cu	Batch optimisation	Run	Optimising parameters	S 🔺				
Global								1			
1.		100 %	Wall units-0	ALL COMPANY	Wall units-01 default Wall units-02 default	default	defa	L			
2.		100 %	Wall units-0			default	defa	l			
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4.		2%	Large part li		Large part list	DEFAULT	DEF	I			
5.		42 %	Kitchen & b		Kitchen & bedro	DEFAULT	DEF	l			
6.		53 %	Over produc	lin.	Over production	default	defa	l			
7.				Optimising - please wait				Ľ			
				Check Marco 11:22:40			E				
				Start time: 11:33:48				L			
								l			
				Stop							

When a run is being optimised this field contains a coloured progress bar and a percentage figure.

Different colours are used to indicate the status of the optimisation:-

Light blue - the run is being optimised

Yellow - the run is being optimised and an initial solution has been found

Green - the optimisation has finished and a solution was found

Red - the optimisation has finished and no solution was found

The 'Please wait' dialog displayed for optimising also contains a progress bar. This progress bar displays the overall progress of the optimisation of the batch of runs - when the optimisation of a run with a large number of parts is finished a larger proportion of the progress bar is completed.

Note - When using multiple processors to optimise data the information text displayed in the wait dialog reads "Optimising - please wait" - because multiple optimisations can occur simultaneously it is not possible to display the single name of the optimiser in use.

Cancelling optimisations

The 'Please wait' dialog displayed for optimising contains a 'Stop' button and displays the start time of the optimisation. When the 'Stop' button is pressed the optimisation is paused and the user is prompted for an appropriate course of action.

Batch optimisation - Wall units									
File Edit View Help									
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2. Batch optimisation		default	defa						
3. 1		default	defa						
4. Optimisation stopped - Large part list. Do you	u want to continue	DEFAULT	DEF						
5. 4 optimising other runs in the batch		DEFAULT	DEF						
6. 1		default	defa						
7. Yes No	Cancel		E						
Stop									

When optimising a single run, if an initial solution has been found the user is asked "Do you want to keep the solution found"? If the user chooses 'Yes', the optimisation is stopped and the initial solution found is displayed. If the user chooses 'No' the optimisation is cancelled and the user returns to the main screen. If the user chooses 'Cancel' the optimisation continues.

When optimising a single run if no initial solution has been found the user is asked "Do you want to cancel the optimisation"? If the user chooses 'Yes', the optimisation is cancelled and the user returns to the main screen. If the user chooses 'No' the optimisation continues.

When optimising a multiple run batch the user is asked " Do you want to continue optimising other runs in the batch"? If the user chooses 'Yes', the optimisation of the current run is cancelled and the optimisation proceeds to the next run in the batch. If the user chooses 'No' the batch optimisation is cancelled and the user returns to the main screen. If the user chooses 'Cancel' the optimisation continues.

If multiple cores (processors) are available and are being used to optimise multiple runs simultaneously only one run is cancelled by this process. Of the set of runs currently being optimised the run nearest the start of the batch is cancelled and the optimisation of the other runs continues.

When the optimisation of a run is cancelled the optimising progress field on the batch screen includes the text "Cancelled". If a cancelled run is displayed in review runs the file information field in the report header has an exclamation mark appended.

Review runs										×
File Edit View Set	tings Summaries H	elp								
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K Management summary						Large	part li	st///DEFAULT/DEF	AULT/S	0!
🖷 Pattern summary	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	value	
## Datters and inter	Required parts	0	0.00	0.00	100.00%			Number of patterns	0	
Hattern preview	Plus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	0	
🗏 Pattern	Offcuts	0	0.00	0.00	0.00%			Rotated patterns	0	
	Scrap		0.00	0.00	0.00%			Recut patterns	0	
	Core trim		0.00	0.00	0.00%			Number of cycles	0	
	Boards	0	0.00	0.00	100.00%			Cutting length	0.0	
								Throughput (M3/Hr)	0.0	
								Waste (%Parts)	0.00%	Ξ
								Waste (%Boards)	0.00%	
	Sheets used		0.00	0.00	0.00%		0.00			
Database and	Offcuts used		0.00	0.00	0.00%		0.00			
Batch reports	Offcuts created		0.00	0.00	0.00%	0.000	0.00			
Summaries	Net material used	I	0.00	0.00	0.00%		0.00			
Advanced	Cutting time	0:00Hr				50.000	0.00			
Patterns	Total parts	0	0.00	0.00	100.00%		0.00			
Machining										+
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Also there may be no results and no patterns depending on the point at which the run was stopped.

Crosscut Optimiser - supports optimising parameter 'matching parts in strip'

Version 9 allows the use of the Optimising parameter: 'Boxes for matching parts in strip' with the crosscut optimiser (Optimiser type: 'Crosscut only (timber)').

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File Edit View Set	ttings Summaries Help
*	🖷 😳 🔆 🔍 📲 🏭 🛛 🔹 🕨 🛃 🥪 💈 📜
Favourites	
Batch reports	Pattern preview Example of basic part list
Summaries	
Advanced	WHITE I AM 1MM Det reg///default/Aefault/XC
Patterns	
Pattern sequence	Ptn:1 Board:1.WHITE-LAM-1MM/ Ptn:2 Board:1.WHITE-LAM-1MM/ Ptn:3 Board:1.WHITE-LAM-1MM/ Qty:9 Material:WHITE-LAM-1MM Qty:8 Material:WHITE-LAM-1MM Qty:7 Material:WHITE-LAM-1MM
Rattem	1 1 4 2 3 6 6 1 4 5 5
ditor	Ptn:4 Board:1.WHITE-LAM-1MM/ Ptn:5 Board:1.WHITE-LAM-1MM/ Ptn:6 Board:1.WHITE-LAM-1MM/ Qty:4 Material:WHITE-LAM-1MM Qty:3 Material:WHITE-LAM-1MM Qty:1 Material:WHITE-LAM-1MM
	2 2 6 2 4 4 4 3 3 5
	Ptn:7 Board:1.WHITE-LAM-1MM/ Qty:1 Material:WHITE-LAM-1MM
Machining	3 2245.244
Custom	
	h.

This parameter allows for the production of patterns containing strips where all the parts in a strip have the same information box content. This allows (via the information boxes) for greater control over which parts appear in which patterns; production and other factors can be taken into account.

(In previous versions the crosscut optimiser did not use this parameter).

Nesting - board orientation - set minimum and maximum size of board for nesting table

Version 9 includes a new set of nesting parameters to define the size of the nesting table. These parameters are used to determine the valid orientation(s) of boards for nesting runs.



The 'Board dimensions' parameters can be found on the 'Nesting 1' page of the nesting parameters. Users can configure the minimum and maximum length and width of boards that can be machined on

the nesting table. Board dimensions must be greater than or equal to the minimum length/width parameters and less than or equal to the maximum length/width parameters.

```
Board orientation = lengthways
Board length = 3660
Board width = 1830
Maximum length = 2000
Maximum width = 4000
```

The board does not fit the nesting table in a lengthways orientation so it cannot be used.

In this case the error: 'Data not correct - board length and orientation [37101]' is shown. This error is also shown if the board length is less than the minimum length. If the board width is greater than the maximum length or less than the minimum length the error: 'Data not correct - board width and orientation [37098]' is shown.

When the board orientation is set to 'Either way; the size of nesting table parameters force the correct orientation of the board.

```
Board orientation = either way
Board length = 3660
Board width = 1830
Maximum length = 4000
Maximum width = 2000
```

The board cannot be rotated because the rotated width of the board (3660) exceeds the maximum width (2000).

If neither orientation of the board is valid the errors: Data not correct - board too large [37012]' or 'Data not correct - board too small [37013]' are displayed depending on whether the board dimensions exceed the maximum parameter values or are less than the minimum parameter values.

Note - For rectangular nesting if the 'Depth of nesting table: Pre-cut width of board' parameters are set the pre-cut minimum and maximum width of the board must be valid for the size of nesting table.

Nesting parameters - Priority (new option 'mix with next lowest')

Priority 4

Parts with the next lowest level of priority can be placed in any of the previously generated patterns.



Nesting - use Board library limits

The Shaped nesting optimiser now allows users to set a 'limit' value of '9' for certain boards - this allows the quantity of these boards used by the Shaped nesting optimiser to exceed the quantity in the board list. When the quantity used exceeds the board list quantity a warning is displayed:

For Shaped nesting optimisations the following board limit values can be used:-

Board limit 0 - do not exceed quantity in stock

Board limit 8 - unlimited stock

Board limit 9 - unlimited stock, a warning is displayed when the quantity used exceeds the quantity in the board list

Nesting - Extra checks on part positions

There are now some extra checks on the layout of parts in nested patterns, for example, to check that parts do not overlap each other or borders.

Tension trims

Tension trims now deal with close fitting patterns by excluding the last tension trim where this is appropriate.

↔ <u>Navigation</u>

Updated toolbars and icons throughout

Version 9 is updated with true colour toolbars and button bars for all applications. This consistency through the different screens helps to make options easier to find and understand. The icons for each optimising options follow the icons from earlier versions but are clearer and applied throughout.

At the main screen:-



At Review runs:-

🔢 Review runs								_		×
File Edit View Se	ettings Summaries Help									
Favourites										
Batch summary	Standard toolbar			Q	1 2 2 2	n 🚺	∢) N 📲 🦪	×	st
Management summary	WHITE-LAW-INN			v				Part red///derauit	derauit/2	хC
Pattern summary	Function toolbar)						× Statistic	Value	•
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🕱 Pattern	Circuito	<u> </u>		0.00	LUC.	<i>a</i> —		Rotated patterns	0	
	Scrap		0.80	0.01	1.77%			Recut patterns	0	
	Core trim		0.00	0.00	0.00%			Number of cycles	7	
	Boards	33	45.29	0.05	100.00%			Cutting length	70.2	
								Throughput (M3/Hr)	0.2	
								Waste (%Parts)	4.52%	Ξ
								Waste (%Boards)	4.33%	
	Sheets used		45.29	0.05	100.00%	5.340	241.86			
	Offcuts used		0.00	0.00	0.00%		0.00			
Batch reports	Offcuts created		-1.16	0.00	-2.56%	0.000	0.00			
Summaries	Net material used		44.13	0.05	97.44%	5.340	241.86			
Advanced	Cutting time	0:12Hr				0.000	0.00			
Patterns	Total parts	123	43.33	0.04	95.67%	5.582	241.86			
Machining										-
Custom	Management su	mmary 🖉	ashboar	d 🖌 Out	put <mark>(</mark> P ∢ [111	•	

The toolbars can be slid into any required position.

Note - To achieve the best appearance, it is recommended that the system display settings are set to True colour (32 bit).

The size of icons and buttons bars can be set at the main screen (View menu) and applies to all screens.

At the View menu at each screen the toolbars can be switched on or off and the options (buttons) shown on each bar can be set via the option: View - Modify toolbars, for example:-

🔞 Modify toolbars	×
Standard toolbar Function toolbar	
Exit Exit C Insert C Delete Print view Delete print layout C Zoom Move up Move down First Previous Next Last Print summaries Print Help	
OK Help Cancel]

(The toolbars available and the options available depend on whether the user is working with 'Review runs', 'Part list'...). These are:-

Main screen Review runs Cad drawings Machining library Machining editor Nested pattern editor Drawing library

The report bar in Review runs can be modified separately from the Toolbars and operates in the same way as in the previous version.

😡 Review runs										X
File Edit View Set	tings Summaries H	lelp								
	📳 💱 😽	Q 📫		M	< ▶			< ? 📴		
Favourites	Manageme	nt sun	nmar	y		Exa	ampl	e of basic p	art li	st
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## Pattern proview	Required parts	123	43.33	0.04	95.67%			Number of patterns	7	
1 allein pieview	Flus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	0	
Pattern	Offcuts	2	1.16	0.00	2.56%			Rotated patterns	0	
	Scrap		0.80	0.01	1.77%			Recut patterns	0	
	Core trim		0.00	0.00	0.00%			Number of cycles	7	
	Boards	33	45.29	0.05	100.00%			Cutting length	70.2	-
								Throughput (M3/Hr)	0.2	-
								Waste (%Parts)	4.52%	
Batch reports								Waste (%Boards)	4.33%	
Summaries	Sheets used		45.29	0.05	100.00%	5.340	241.86			
Advanced	Offcuts used		0.00	0.00	0.00%	0.000	0.00			
Pottorno	Offcuts created	-	-1.16	0.00	-2.56%	0.000	0.00	-		
Fallenis	Net material used	0.4011	44.13	0.05	97.44%	5.340	241.86			
Machining	Cutting time	0:12Hr				0.000	0.00			Ŧ
Custom	Management	t summary _/	Dashb	oard 🔏	Dutput / 🔸			III	•	

Standardised file and item selection dialogs

General selection of files and other items

The selection dialog is updated and is applied to most cases where items are listed and selected - including Parameters - so there is a consistent and easier to use interface across the software. Extra options are added to easily change the view of the list. For example, at the part list.

😯 Part lists			×
File 🔺	Title	Date	A
Alternate materials	Example of alternate materials	11/05/2012 16:53	_
Basic part list	Example of basic part list	11/05/2012 17:05	=
Bedroom & bathroom	Example Prod reg 03	11/05/2012 16:32	
📲 Bedroom & bathroom-01	Example Prod reg 03	11/05/2012 16:33	
I Bedroom & bathroom-02	Example Prod reg 03	11/05/2012 16:33	
🚚 Bedroom & bathroom-03	Example Prod reg 03	11/05/2012 16:33	
📕 Cutting list rules	Example of cutting list rules	11/05/2012 16:54	
Edging and laminates	Example of edging and laminates	11/05/2012 16:57	
🚊 Example Charts	Example of chart information	11/05/2012 17:06	
📕 Kitchen & bedroom	Example Prod reg 01	11/05/2012 16:34	
📕 Kitchen & bedroom-01	Example Prod reg 01	11/05/2012 16:35	
📕 Kitchen & bedroom-02	Example Prod reg 01	11/05/2012 16:35	•
Find	🔲 Filte	:r	
	OK Help	Cancel	.4

The toolbar at the top contains several options:-

delete selected item

change path - used when selecting one of the following file types: MPR, DXF, CSV, BKP file (for restore) or EXE, COM or BAT file (for saw / machining post transfer)

browse - this is available when selecting a part code in the part library or a product code in the product library. If the button is set then when an item is highlighted in the selection dialog the full details will appear underneath in the part /product library dialog

change view - the options are: Details, List, Small icon, Large icon.

The view type can be individually set for each selection type. e.g. Part lists can be selected in details view and materials selected in large icon view.

For Selection types where there is unique drawing available per item (e.g. part list, formula item, board code ...) a relevant image is displayed.

Materials			X
			•
MFC18-DAK	MFC18-RED	MFC18-TEAK	
MIRROR-GLASS	OAK-LAM-1MM	PARTICLBRD-25MM	Ξ
			•
Find	Tilter		
ОК	Edit Help	Cancel	

Date column

For selection dialogs based on files in 'Details' view mode an additional column 'Date' is displayed. This shows the last modified date of each file. Each column can be sorted by clicking on the appropriate header column so files can be either shown in name order or in date modified order.

(The Filter option to adjust the contents of the list is the same as in the Previous version)

Optimising / Saw / Nesting / Material parameters

The new standard select dialog is also used for parameter lists.

😨 Optimising paramete	ers		×
xde	•		
File 🔺		Title	Date
🖸 New			
🗐 New from template			
🚰 default		Standard Optimiser	17/05/2012 12:32
📲 🕍 destack		Destacking Optimiser	24/04/2012 14:14
👔 🖉 duplicates		Stacked duplicate parts	24/04/2012 14:14
👔 lite		Lite Optimiser	24/04/2012 14:14
👔 multi-axis		Angular Optimiser	24/04/2012 14:14
PCD 👔		Standard Optimiser	24/04/2012 14:14
👔 rctype4		Unrestricted Recuts	24/04/2012 14:14
	Find	Filter	
	ОК	Edit Help	Cancel

The 'New' and 'New from template' options appear and work in the same way as for the previous version.

Optimising/Nesting selection dialog

In the part list and batch dialogs when selecting a parameter list either a optimising parameter file or a nesting parameter file can be selected depending on the part list. When the selection button is pressed for this option the selection dialog displays with a tab offering the choice of Optimising or Nesting parameters.

Upt	default	\searrow	•		ę	àaw	default	-			
terial	Length	Width	Quantity	Over	Under	Grain	Edge	Edge Btm	Edge Top	Edge Left	
				0%	0%	N	0000				
ĸК	🔄 🔣 Op	timising	paramete	ers							×
INY											
INY		SPO	S		-						
ĸК			النغار								
١K	Optir	nising par	ameters	Nesting	parame	ters					
INY	File 4	.					Title		C)ate	
ιK		lew									
INY	1 I N	lew from t	emplate								
١K	- 👔 d	lefault					Stand	lard Optimiser	1	7/05/2012 12:32	
INY		estack					Desta	icking Optimiser	2	4/04/2012 14:14	
ιK		uplicates					Stack	ed duplicate parts	2	4/04/2012 14:14	
INY		te					Lite O	ptimiser	2	4/04/2012 14:14	
INY		nulti-axis					Angul	ar Optimiser	2	4/04/2012 14:14	
ĸ		CD .					Stand	lard Optimiser	2	4/04/2012 14:14	
ĸК		ctype4					Unres	tricted Recuts	2	4/04/2012 14:14	
INY											
INY				Find				Filter			
ιK											
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CH											

Note - The system parameter: 'Select using parameters' is removed as the View is now set by the view dialog.

Navigation bar – Quicker access between applications

Quick Navigation bar

Version 9 includes a new desktop toolbar (Quick Navigation bar) to enable users to navigate the program more easily.

At the main screen it is very similar to the 'Shortcut' bar (as for the previous version) - but the advantage is that it stays active and visible at all screens.



Moving to Review runs the Quick navigation bar is still available.



This makes it much easier to move from one part of the program to another.

The quick navigation bar is enabled from the 'Shortcut bar' option of the "View" menu on the main screen and can be used instead of the shortcut bar.

The Quick navigation bar is a stacked toolbar containing the same shortcuts as the standard Shortcut bar and its contents can be modified using the "Modify shortcut bar..." option of the "View" men

The Quick navigation bar is a desktop toolbar which can be docked on either the left or right hand side of the desktop and remains on top of all other windows.

When enabled the Quick navigation bar is minimized by default on the side of the desktop. To display the Quick navigation bar simply move the mouse pointer over the side of the desktop where it is docked and the Quick navigation bar will slide into view.



The docking position of the Quick navigation bar can be set by right clicking the mouse on one of the shortcut headers - right clicking the mouse on a shortcut header displays a popup menu with the

docking options, an option to close the Quick navigation bar and options to reposition the shortcut categories within the bar.

The width of the Quick navigation bar can be adjusted by dragging the right edge (if left docked) or left edge (if right docked).

When it is not possible to close the current application because the user is altering settings for that application the Quick navigation bar is not available and cannot be displayed.

Active Main Screen - Toolbars, Shortcut bar and Menu

In addition to the Navigation bar, the main screen remains active (this is different from the previous version) so it is possible to move to the main menu by clicking on it and using that to move around the program.

Batch screen - Direct access to edit cutting list, board list and parameters

Version 9 allows the cutting list, working board list, optimising / nesting parameters and saw parameters (when available) to be edited directly from the batch screen. This is useful for checking details at the last minute or if there are errors to sort out.

To edit one of these components, navigate to the required line of the batch and select one of the new edit toolbar buttons.

🔛 Bato	h optin:	nisation - Wall units				- • •
File E	idit Vi	iew Help				
*		12 12 12 12 12 12 12 12 12 12 12 12 12 1	✗∢∎ ਯ	r 🕐 S 🖡	1 🗐 🛣	/ 🖈 ?
	Batch na	ame Wall units	🔻 🔲 🛛 Des	cription od req 02-Room / flo	or number 📃 Print o	ptimisation results
	Tm	Optimising progress	Cutting list	Title	Run	Optimising paramete 🔺
Global						
1.			Wall units-01	Example Prod req 02	Wall units-01	default
2.			Wall units-02	Example Prod req 02	Wall units-02	default
3.			Wall units-03	Example Prod req 02	Wall units-03	default
4.			Large part list	Example of large part list	Large part list	DEFAULT
5.			Kitchen & bedroom-01	Example Prod req 01	Kitchen & bedro	DEFAULT
6.			Over production	Example of over production	Over production	default
7.						=
						-
						4
					F12 Continue	

The options are:-

Parts ... Boards ... Optimising parameters ... Saw parameters ...

They are also on the Edit menu.

It is also possible to access these files by clicking on a list button and selecting the file from the 'Select dialog' via the Edit button.

	Contine for	Tal-	Dum	0-1-1-1	-		
progress	Lutting list	1 Ide	Run		4		
	Wall units-01	Example Prod req 02	Wall units-01	default			
	Wall units-02 🚺 👘	Example Prod req 02	Wall units-02	default			
₩9	Cutting lists						
	xdçi] •					
	File 🔺	Title	Da	ate			
	art req	Example of basic pa	rtlist 17	//05/2012 12:34			
	PEdging and laminates	*Example of edging	and laminates 11	/05/2012 16:57			
	al Power Concept Device	Example of PCD	11	/05/2012 16:39			
	arts order & Products & Parts order	Example of quote	11	/05/2012 16:39			
	al Rectangular nesting	Example of rectangu	ılar nesting 11	/05/2012 16:39			
	al Small quantity optimiser 📃	Example of small qua	antity optimiser 11	/05/2012 16:39			
	al Stacked duplicates	Example of stacked	duplicate parts 11	/05/2012 16:40			
	a Tension trims	Example of tension t	rims 11	/05/2012 16:40			
	all units 🛃	Example Prod reg 02	2 11	/05/2012 16:40			
	😹 Wall units-01	Example Prod reg 02	2 11	/05/2012 16:41			
	Wall units-02	Example Prod reg 02	2 11	/05/2012 16:41			
	🛃 Wall units-03	Example Prod reg 02	2 11	/05/2012 16:41			
	Fi	nd	Filter				
		OK Edit	Help	Canc	el		

The cutting list and board list editing is restricted when the files are accessed from a batch screen - they only allow changes to the list selected so the options to move between lists are not available.

W	📆 Cutting list - Wall units-03												
F	ile E	dit View Help											
4													
	1	Description	Material	Length	Width	Quantity	Over	Under	Grain	Edge	Edge Btm		
	àlobal						0%	0%		0000			
	1.	DAVALL-BASE	MFC18-BEECH	964.0	281.0	3	0	0	Ν	0000	BEECH-TAPE-22MM		
	2.	D-WALL-DIVIDER	MFC18-BEECH	40.0	714.0	3	0	0	N	0000			
	З.	D-WALL-DOOR/L	MFC18-BEECH	496.0	748.0	3	0	0	Х	0000	BEECH-TAPE-22MM	-	
	4.	D-WALL-DOOR/R	MFC18-BEECH	496.0	748.0	3	0	0	Х	0000	BEECH-TAPE-22MM	=	
	5.	D-WALL-TOP	MFC18-BEECH	964.0	281.0	3	0	0	N	0000	BEECH-TAPE-22MM		
	6.	WALL-BACK	HARDBOARD-4MM	464.0	748.0	4	0	0	N	0000			
	7.	WALL-BACK	HARDBOARD-4MM	464.0	748.0	9	0	0	N	0000			
	8.	WALL-BACK	HARDBOARD-4MM	964.0	748.0	3	0	0	Ν	0000			
	9.	WALL-BASE	MED-DEN-FIBRE	464.0	281.0	4	0	0	Ν	0000	BEECH-TAPE-22MM		
	10.	WALL-BASE	MED-DEN-FIBRE	464.0	281.0	9	0	0	Ν	0000	BEECH-TAPE-22MM		
	11.	WALL-CORNER-BACK-L	HARDBOARD-4MM	510.0	730.0	2	0	0	Ν	0000			
	12.	WALL-CORNER-BACK-R	HARDBOARD-4MM	532.0	730.0	2	0	0	N	0000			
	13.	WALL-CORNER-BOTT	MED-DEN-FIBRE	532.0	532.0	2	0	0	Ν	0000			
	14.	WALL-CORNER-DOO	MFC18-BEECH	268.0	750.0	2	0	0	Ν	0000			
	15.	WALL-CORNER-DOO	MFC18-BEECH	250.0	750.0	2	0	0	N	0000			
	16.	WALL-CORNER-SHELF	MED-DEN-FIBRE	510.0	510.0	2	0	0	N	0000			
	17.	WALL-CORNER-TOP	MED-DEN-FIBRE	532.0	532.0	2	0	0	N	0000		-	
	_			11							•		

On exit from the editor, control returns to the Batch optimisation screen (or selection dialog).



Review runs - integrated dashboard and custom charts for most reports

Dashboard

The Management summary for a run now includes a Dashboard option which shows selections and custom management information. With the correct choice of chart and data the snapshots can provide a rapid insight into each run.



- Click on chart to move to a full screen view

The Dashboard is accessed from the tabs at the foot of the summary. The first is for the summary and second one if the for the dashboard. The dashboard displays a set of three fixed charts, statistics and up to three user generated charts. The remaining three tabs are full size versions of the three fixed charts.

The top section is always the fixed charts and statistics and the bottom area can be up to 3 user generated charts.

The first chart is a pie chart of the output generated - this is split into Required parts, Plus/Over parts, Offcuts, Scrap and Core trim.

The second chart is information about the different pattern types and their origin.

The first two items in the chart are the origin of the material for the patterns. Full sheet patterns are patterns that are created from full sheet patterns, whereas 'From offcut' are patterns created from existing offcuts.

Recut, rotated, headcut and total patterns are the totals of each of these pattern types in the run. Offcut patterns are the number of patterns that generate 1 or more offcuts.

The Open parts chart is a count of the open parts for each pattern.

When the mouse is moved over the dashboard the cursor changes to a hand when it is over one of the charts. If the mouse is double clicked at this point, the full size version of that chart will be displayed.

Double clicking on any chart will display the dashboard.

Right clicking on the dashboard or one of the full size dashboard fixed charts will bring up the dashboard settings dialog, right clicking on a chart on any other summary will bring up the chart settings dialog for that summary type.

Selecting user generated charts

Set up of the Dashboard is via the menu option: 'Chart settings'.

Dashboard settings			×
Chart 1	Yield %		
Chart 2	Board area		
Chart 3	Offcuts		
Print orientation	Portrait	Landscape	\odot
ОК	Help	Cancel	

The buttons are used to select a previously specified chart (see below). The names that are listed are from the title field of the chart settings dialog in the other summaries.

The orientation option is used to specify how the dashboard will appear on a printout.

Charts for reports

Each report (summary) can now include a customised chart or graph showing a snapshot of all or part of the data. (The management summary has an extra option; the Dashboard - see above)





For the Material summary:-



The charts are accessed from the tabs at the foot of each summary.

Chart set up

Charts are defined via the Chart Settings option that appears on the settings menu (for each Report).



The tab at the top is used to select which chart to setup/modify. Up to 3 charts can be defined for each summary.

For each chart the type is initially set to None, the button to the right is used to select the chart type. This can be a vertical/horizontal bar chart, a scatter graph, a vertical line plot or a pie chart.

Once the type is set the remaining controls in the dialog are enabled. The title field is used to specify the name of the chart, this name appears on the main review runs screen above the chart and on the tab control at the bottom. This name is also used to select this chart in the dashboard as explained later on.

The next set of controls are used to specify which field(s) are to be used for the chart. Note for a pie chart only 1 field should be selected and for a scatter graph only 2 fields must be selected.

The available column is a list of the fields in the current report and the chosen column is the fields chosen for this chart. After the field(s) are chosen they can be allocated a specific colour by first clicking on one in the chosen list box and then clicking on the field colour control below the chosen list box.

Normally the data for a chart is taken from the item lines of a summaries (e.g. a pattern summary has 10 patterns, so there are 10 items of information for the chart), but there may be cases where the value in the subtotal lines is more appropriate (e.g. total of board quantities used across materials, not patterns) and the 'Use subtotals' is used to select this method.

For example for the Board summary 'board quantity' by material may be a more compact chart than 'board quantity by board size'.



Boards by material



The 'Group by chosen fields' option is for bar charts only and places all the bars for each field value together. For example the cuts in patterns could be analysed by rip and cross cuts. If not grouped the chart is as follows:-



If the chart is grouped:-



Other chart settings

The 'background' option is used to select a colour to use for the background of the chart.

The pie chart colours are used to specify the three alternating colours that are used to colour in the wedges of a pie chart.

The font button is used to select the font that is used to display text on the charts.

The orientation option is how the chart will appear when it is printed. This might be different to the orientation of the summary text (e.g. portrait for the summary and landscape for the chart).

The image at the bottom is a preview of how the chart will look with specified settings. Note - It is not based on the actual data in the current report.

Axis - The axis values are all shown as decimal values. When a time field is used the value is changed to a decimal value. e.g. A cycle time of 03:30 would have a value of 3.5.

Scrolling - The scroll bar can appear on horizontal and vertical bar charts if there are lots of values to display. A horizontal scroll bar appears for vertical charts and a vertical scroll bar appears for horizontal charts.

Operation - The tabs at the bottom of the summary are used to change between a summary and any of its associated charts. The tabs take their name from the title provided in the chart settings dialog.

Review runs reports - extra columns for user-defined calculated values

Calculated fields

Calculated fields are formula based values that are based on other fields within the summary. They allow standard reports to be customised with extra columns of calculated data.

For example, the following Part summary includes a field that calculates the part perimeter.

🔛 Review runs															3
File Edit View	Se	ettings	Summaries H	elp											
1	X		R	Q 📫	8 🛃]	4			E	Ś	?		- 🍶 🍵	
Favourites Batch reports Summaries	P	art s	summary	7									E	Example	3
Management summary	CI	HIPBO	ARD-18MM									Exam	ple 3///d	lefault/default/S	Q
Part summary						T ()	-		-		T . 1				•
	⊢	No	Part /	Length	Width	lotal	From	0	10	m2 /	lotal	Mat	Mat	Perimeter	
🐺 Sundry parts	⊢		Description	mm	mm	кеq	STOCK	U	Proa	Рап	mz	/Рап	Iota	<u>∟N</u>	
Board summary	L		BOARD-18MM	Chipboard	Core 18	mm Thi	ickness	18.0) Book	<u>(5</u>					=
Pattern	⊢	1.	1	517.0	482.0	5	0		5	0.249	1.25	0.87	4.83	1.998	
summary	⊢	2.	2	482.0	248.0	9	0		9	0.120	1.08	0.42	3.4	1.460	
() locut europaer	⊢	3.	3	610.0	4/8.0	20	0		20	0.292	5.83	1.01	20.28	2.1/6	
ge input summary	⊢	4. 5	4 E	200.0	530.0	2	0		2	0.420	2 0.0	1.40	10.08	2.000	
💣 Material	H	6	6	689.0	3/8 0	6	0		6	0.405	2.50	0.83	5.00	2.000	
summary	⊢	7	7	689.0	180.0	5	ŏ		5	0 124	0.62	0.03	2 16	1 738	
	F	8.	8	352.0	255.0	1	õ		1	0.090	0.09	0.31	0.31	1214	
Advanced		9.	9	657.0	100.0	3	0		3	0.066	0.20	0.23	0.69	1.514	
Patterns		10.	10	890.0	240.0	3	0		3	0.214	0.64	0.74	2.23	2.260	
Machining		11.	11	690.0	408.0	8	0		8	0.281	2.25	0.98	7.83	2.196	
Custom	F	 ▶ \ Da	12 ort summary	702 0 Parts - Rev	and Pro	d /	0	4	2	0 202	0 66	1 10	0 DE	2 400	Ť.
				and The	quiutit	~,		1							.#1

Fields are set up (for each report) by the option: Settings - Report settings.

Part summary	
Content	Chosen
Length Inches Length Frac Width Inches Width Frac ft2 / Part Total ft2 Grain Edge Face Laminate Back Laminate Edge Diagram	Over Under Total Prod m2 / Part Total m2 Material cost /Part Material cost Total Perimeter//M Edge Btm Edge Top Edge Right
Title	Perimeter//M
alculation =	= ([Length mm]*2+[Width mm]*2)/1000
Decimal places Subtotals	3 🚔 Grand-total
Format	
Line - type	
Summary title File names Column headings Subheadings Data Subtotals	Font: Times New Roman, Size: 20 Use default 📝
Totals Program information Page numbers	Font Background
Preview	
Su	ummary title
Column widths	
Format	User defined 🗸 🗸
ОК	Help Cancel

For a new calculated field select one of the five 'Calculated field' options in the 'Available' box and move it over to the 'Chosen' box. Select the field in the 'Chosen' box. The calculated field boxes become available. Enter the details - the field can be given a title at this point.

The title is used to specify what names appear in the column heading for this field in the summary and the name in the chosen list box.

The name in the chosen list box will be updated when a title is changed and a different item is selected in the chosen list box.

The formula is used to specify what value appears in the column. The formula starts with the '=' symbol and then is like other formula used across the package. Only fields from the current summary can be used in a formula and the button to the right of the edit box is used to select one of these fields.

```
    Select a calculated field in the board summary
    Enter = in the edit box
    Click on the button and double click on the 'Length mm' field
The edit box will then show =[Length mm]
    Enter * in the edit box
    Click on the button and double click on the 'Width mm' field
The edit box will then show =[Length mm]*[Width mm]
```

In the summary this field will then show the area (in square millimetres).

A further example:-

```
=[Length mm]+[Width mm]
=[Cost]*1.20
=IF([Length mm]>2500,2500,[Length mm]) - Using an if statement in a
formula
=[Calculated field 1]*[ Calculated field 2] - Using a previous calculated
field in a calculated field.
= STR(LEFT([Part / Description],3)+[Total]) - This is used for processing
text based fields
```

The decimal places control is used to specify the amount of decimal places to show for the calculated field answers. This can range from 0 to 5, the default is 2.

Initially the calculated field values only appear on item lines, but they can also appear on subtotal lines and the grand total line. The subtotals and grand-total check boxes are there to specify which of these lines they appear on. Note - totals are not always available an all summaries - totals are not available on the destacking summary and subtotals are not available on the batch summary.

Note - If fractional inch values or times are used in a formula the value is first converted to decimal.

Field totals

For Version 9 some extra total values are automatically calculated for relevant reports. (These were not available in the previous version).

😡 Review runs														
File Edit View	S	ettings	Summ	aries He	lp									
	\times		AB	×	2 🖷	2		4			-	3?	Celer,	
Favourites														
Batch reports	Þ	art s	um	marv					Exa	ampl	le of i	hasid	e nar	t list
Summaries	۴.	arts		intar y						mp	0	ousi	e pui	t IISt
	L .													
Management summary	W	HITE-I	LAM-1	1MM						E	Basic part	list///de	efault/de	fault/M2
														*
Part summary		No	Part /	Length	Width	Total	From	Over	Total	m2 /	Total	Mat	Mat	Peri
🐺 Sundry parts			Des	. mm	mm	Req	Stock	Under	Prod	Part	m2	/Part	Total	
118. 0. 1	\vdash	10/1 UTC	- 1	48484 10/6:			Thisle	1	0.01-	10				
summary	\vdash		<u>1</u>	1200 0	725.0			ness 1.	<u>0 000k</u>	0.970	20.00	E 20	227.05	
	H	2	2	1200.0	600.0	22	0		22	0.070	16.50	1.64	207.00	
Pattern summary	H	3	3	790.0	450.0	16	ő		16	0.750	5.69	2 20	35.22	
	H	4	4	580.0	200.0	28	Ő		28	0.116	3.25	0.72	20.11	
input summary						110	0		110		63.72		394.55	. =
Material							-	-						
summary		Total				110	(0)	110		63.72		394.55	•
							\sim							
Advanced	L .													
Advanced														
Patterns														
Machining														-
Custom	4	▶ \ Pa	rt sumi	mary (Pa	irts - Req	and Pro	od /	•			III			►

For example, the 'From stock' field at the part summary now has a total included.

The extra totals available are:-

Summary	Fields
Part sizes	Total prod, Cut and To Cut
Nesting sizes	Total prod, Cut and To Cut
Job costing	Area and quantity totals for each section
Part	From stock
Offcut	Total
Station	Bsb qty, Part Qty
Patterns	No Rip, No Xct

Note - these new total values will also appear in the file created when a report is exported. The new totals do not change the order of the values on each line.

Review runs - Direct access to edit cutting list, board list and parameters.

Version 9 of the software allows the cutting list, working board list and parameters to be edited for individual runs from within Review runs. Optimising/nesting, saw and material parameters may be edited (where available).

(Cutting lists, board lists ... can also be edited from the Batch screen - see above).

🔢 Review runs										×
File Edit View	Settings Summaries	Help								
	a 🖪 🗗 👌			5	📕 - 🛃	5 - [*] =		8	C
Favourites										
Batch reports	Managemen	nt sum	ımar	W		Εv	amn	le of basic r	hart li	st
Summaries	prianagemen	n sun	mai	y			amp		Jart II	St
Gammanes										
Reference Management summary	WHITE-LAM-1MN	A					I	Basic part list///defau	lt/default/l	M2
Bart aummany	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	
prant summary	Required parts	110	63.72	0.06	86.24%			Number of patterns	5	
🐺 Sundry parts	Plus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	1	
****	Offcuts	2	2.39	0.00	3.23%			Rotated patterns	0	
le Board	Scrap		7.78	0.01	10.53%			Recut patterns	1	
summary	Core trim		0.00	0.00	0.00%			Number of cycles	6	
\mu Pattern	Boards	19	73.89	0.07	100.00%			Cutting length	251.8	
summary								Throughput (M3/Hr)	0.2	
Input summary								Waste (%Parts)	15.96%	-
								Waste (%Boards)	13.76%	=
💣 Material	Sheets used		73.89	0.07	100.00%	5.340	394.55			
summary	Offcuts used		0.00	0.00	0.00%		0.00			
	Offcuts created		-2.39	0.00	-3.23%	0.000	0.00			
	Net material used		71.50	0.07	96.77%	5.340	394.55			
	Cutting time	0:25Hr				0.000	0.00			
Advanced	Total parts	110	63.72	0.06	86.24%	6.192	394.55			
Patterns										
Machining										-
Custom	Management :	summary /	Dashbo	ard 🖌 🕻	Dutput 🔏 F 🖪	(•	
	, 1		•							

Move to the required run and select one of the new edit toolbar buttons or options on the Edit menu.

(In this example the Function toolbar has been moved to the left - the default location is to the right).

The options are:-

```
Parts ...
Boards ...
Optimising parameters ...
Saw parameters ...
```

They are also on the Edit menu.

The cutting list/board list editors work in a restricted mode in these cases, allowing only changes to the list selected

	Cut	ting list - Basic part list										×
F	ile E	dit View Help										
1	1		୧ < ?									
	(Description) Material	Length	Width	Quantity	Over	Under	Grain	Edge	Edge Btm	-
L	alobal		WHITE-LAM-1MM				0%	0%	N	0000		
L	1.	1	WHITE-LAM-1MM	1200.0	725.0	44	0	0	N	0000		
L	2.	2	WHITE-LAM-1MM	1250.0	600.0	22	0	0	N	0000		_
L	3.	3	WHITE-LAM-1MM	790.0	450.0	16	0	0	N	0000		_
L	4.	4	WHITE-LAM-1MM	580.0	200.0	28	0	0	N	0000		_
	5.		WHITE-LAM-1MM				0	0	N	0000		
												E F
				111								F.

On exit from the editor, control returns to Review runs and the run is recalculated.

Editing in this way, after optimisation, can be useful for minor changes and late adjustments but any significant change in parts sizes, quantities, boards available ... may affect the optimising result. In this case the program deletes the patterns and prompts with an option to re-optimise the list.

Editing a run's optimising / nesting parameters and saw parameters - creating a parameter snapshot

This section applies only where more than one set of optimising / nesting or saw parameters are allowed. For optimising / nesting parameters: LO (with other modules), SO, PO or NE modules. For saw parameters: SO or PO modules. For LO, where only one set of parameters is allowed, the parameter editor is loaded with the current parameters.

Typically many runs use the same parameter lists so that if a parameter list is changed any existing results become invalid

To avoid invalidating other runs which use the same parameters, the program prompts to create a 'snapshot' of the parameters used by the run. The new parameters are named after the run.

Edit - Optimising parameters	
This will create a copy	of the parameters for the run
(OK Cancel

The new copy of the parameter list is shown in the parameter editor where changes may be made. If the parameters are saved they are permanently associated with the run. Otherwise the run reverts to using the original parameters and the snapshot is deleted.

Editing material parameters

Some runs have additional parameters for some or all of the materials used. If this is the case the material parameter option is enabled.

🔢 Review runs										×
File Edit View	Settings Summarie	s Help								
	2 📑 🗗 🌔			(📕 • 🌡	5 - [+		8	С
Favourites Batch summary	Manageme	nt sun	nmar	y		Ex	amp	le of basic 1	part li	.st
Reference Management summary							В	asic part list///?defau	lt/?default	:/??
Pattern	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	*
summary	Required parts	110	63.72	0.26	51.27%			Number of patterns	5	
## D .:	Plus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	2	
Pattern preview	Offcuts	57	56.09	0.22	45.13%			Rotated patterns	0	
proview	Scrap		4.47	0.02	3.60%			Recut patterns	2	
🗏 Pattern	Core trim		0.00	0.00	0.00%			Number of cycles	8	
	Boards	35	124.28	0.50	100.00%			Cutting length	321.1	
								Throughput (M3/Hr)	0.9	
								Waste (%Parts)	95.04%	-
								Waste (%Boards)	48.73%	=
	Sheets used		124.28	0.50	100.00%		338.75			
	Offcuts used		0.00	0.00	0.00%		0.00			
Batch reports	Offcuts created		-56.09	-0.22	-45.13%	0.000	0.00			
Ouromosiaa	Net material used		68.19	0.28	54.87%		338.75			
Summanes	Cutting time	0:34Hr				0.000	0.00			
Advanced	Total parts	110	63.72	0.26	51.27%	5.316	338.75			
Patterns										
Machining										-
Custom	Management	summary ,	Dashbo	ard 🖌 C	utput 🖌 📧				•	
			1							

When this option is selected, the list of material parameter files used by the run are shown in the selection dialog. An example is shown below.

😨 Material parameters	- (Run: Basic part list)	—
	•		
File 🔺		Title	Date
🞳 HBD04		Hardboard 4mm	24/04/2012 14:21
∰ Lam 3050x1525		Laminates 3050x1525	24/04/2012 14:21
	Find OK	Edit Help	Cancel

If any of the material parameter files are edited, the run is recalculated on return to review runs. Note for material parameters a snapshot is not used.
Review runs - File tree option to filter or group runs by a category

Review runs shows all available runs in the 'Runs pane' (Runs tree). This can sometimes make it difficult to locate the runs which match a specific name or those produced in a particular date range.

🔛 Review runs											×
File Edit View	Settings Summaries Help										
	× 🗗 🦻 🦓 🦄	📲 👪 🛛	♦			5	?	- Carl	🗌 🛃 🍶	2	7
Favourites Batch summary Management	Bedroom & bathroom Bedroom & Dathroom Basic part list M	Managem	ent su	mma	ry		Bed	room &	Ez	xamp	le
summary	Hum Large part list					-					
\mu Pattern	Example Charts	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	. ^
summary		Required parts	532	290.33	4.37	84.04%			Number of patte	11	
## Pattern	🗄 Small quantity optimiser	Plus/Over parts	47	0.00	0.00	0.00%			Readcut patterns	31	
preview	• Over production	Scran	41	23.20	0.21	0.74%			Recut patterns	26	
🗏 Pattern	Edging and laminates	Core trim		0.00	0.00	0.00%			Number of cycles	77	
	Cadmatic saw examples	Boards	115	345.47	4 97	100.00%			Cutting length	1354 4	
	Hum Tension trims	Dodido	110	040.41	4.01	100.0070			Throughput (M3	0.9	
	Elision dinis								Waste (%Parts)	18.99%	
	Em Cutting list rules								Waste (%Boards)	15.96%	
	Alternate materials	Sheets used		343.82	4.94	99.52%		969.66	, , , , , , , , , , , , , , , , , , , ,		Ξ
	• Nesting examples	Offcuts used		1.65	0.03	0.48%	1.550	2.56			
	• Nesting - Part library	Offcuts created		-23.28	-0.21	-6.74%	0.000	0.00			
	🗄 ····· Nesting - Machining library	Net material u	-	322.19	4.76	93.26%	•	972.22	•		
		Cutting time	5:50Hr				0.000	0.00			
Batch reports		Total parts	532	290.33	4.37	84.04%	3.349	972.22			
Summaries	Hesting - Online fipcut										
Advanced		Sundry - unit us	14				3.200	44.80			
Patterns		Total sundry						44.80			
Machining											
Custom		▲ ► \ Manageme	nt summar	Dash	board ,	K Output			III	•	T d
	,	, <u> </u>									

Version 9 enables the file tree to be filtered by name or date. Alternatively, runs can be grouped by date (week number).

Filtering / grouping options

A new option on the Review runs 'View menu': View - Filter / group runs ...

Filter / group runs					×
None					
Filter by name					
Filter by date		From	01/05/2012	-	
		То	18/05/2012	-	
Group by week					
ОК	Help	Can	ncel		

Filter by name

Only those batches, runs or cutting lists whose name contains the text entered are shown in the tree. The *Recent first* option is still observed and the text entered is displayed above the file tree to indicate that a filter has been applied (In this example 'Nest').



Filter by date

Select the date range required. Only those batches, runs or cutting lists whose modification time lies within the date range are shown in the tree. The *Recent first* option is still observed and the date range is displayed above the file tree to indicate that a filter has been applied.



Group by week

In this mode, the tree displays all of the runs but grouped by date into ISO week numbers (by modification date). The last 60 weeks are shown in groups, with earlier runs added to the *Older* group.

Weeks start on a Monday and Week 1 contains the first Thursday of the year. Weeks from previous years are indicated by the inclusion of the year at the start of the group name.

Only those groups which contain files appear in the tree. The group label appears in an additional column to the right of the filenames and alternate groups have a different background colour in order to easily identify the runs for each group.

*] (📉 🖷 🚱 🎘 🔍 唱 🚛	
Favourites	Week commencing	
Batch summary	Mesting exa Week 20 (14-May-2012) Mesting - P Mesting - M	Managemen
Management summary	Immediate and the second seco	
Pattem summary	Westing - DXF Kitchen plan Wall units	Description Qu Required parts Plus/Over parts
Pattern preview	Edroom &	Offcuts
👯 Pattern	Bed Basic part list Kitchen & b Term Part req Over produ	Core trim Boards
	Example Ch Week 19 (07-May-2012) Small quanti Edging and	Sheets used Offcuts used Offcuts created

If the *Recent first* option is selected, runs are sorted by date within the groups.

If a new batch is created in the run tree, this is temporarily assigned to the *New* group until the file tree is refreshed (at which point the new batch joins the correct week).

Favourites Batch summary	Bedroom & bathroom Bedroom & bathroom Basic part list Basic part list	Batch s
Management summary Pattern	Wew batch Witchen & bedroom Well units Well units Were Part req	Run
### Pattern preview	Mew batch Jarge part list Example Charts Batch as finite free encourses	Bedroom & Basic part li
購 Pattem	Small quantity optimiser Over production Edqing and laminates	

Note - If a filter is selected, this is reset to *None* when Review runs is restarted. The *Group by week* setting is persistent. The options available are listed below.

Review runs reports and export - option to specify decimal separator

Version 9 allows users to specify a decimal separator for number fields in Review runs reports. The desired separator is set in the "Decimal separator" Review runs parameter. Enter a separator character (e.g. ', ') or an ASCII character code (e.g. '44').

Parameters						×
Default summaries			Pattern display			
Printed	Exporte	Ь	Font size		10	* *
			Part identification	Item or de	escription	•
Information boxes on reports			Part sizes			V
Part sizes		\checkmark	Show part orientation			
Nested pieces		\checkmark	Saw kerf to scale			
Distribution summary		\checkmark	Bar codes			
Round large values to fit			Show strip sets on pat	tern		V
Use volume for boards and off	cuts		Export format	True colour (24-bit) Bitmap	-
Simulation scale		5	Screen		Board library picture	-
Show waste % or yield %	Waste	•	Printer		Monochrome	-
Decimal separator	$\boldsymbol{\mathcal{C}}$	46	Export file		Monochrome	-
Machining display		\smile	- Colour coding			
Font size		8 🌲	Colour - part			1-1
Part identification	Description	•	Colour part			J •
Part sizes			colour - recut part			J •
Show part orientation			Colour - grain match m	naster part] -
Show Safety	Parts		Colour - plus part] -
	Patterns	v	Colour - waste and ke	rf] •
Show expanded instructions			Colour - offcut] •
Show instructions on printouts						
	ОК		Help Cance	I		

This separator is used for all decimal dimension fields (millimetres and decimal inches), percentages, areas, volumes and costs. Text fields containing decimal numbers (e.g. information boxes, Input summary -parameters) use the default separator '.' (full stop).

Note - Pattern amendment does not use the defined separator and is always set to a full stop.

Note - Valid ASCII codes for separators for reports are 32-33, 35-47, 58-64, 91-96, 123-127



Material library - 50 Character board codes

V9 allows longer board codes up to 50 characters to be entered in the Board library - in previous versions board codes are limited to 25 characters in the Board library. This change also allows 50 character offcut codes to be used.

Note - board codes are still truncated to 25 characters in certain printed stock reports and board list prints.

Material codes

V9 also allows material codes up to 50 characters long to be entered in the Board library. These longer codes can also now be used throughout the program

Board library - option to view full sheets or offcuts only

It is sometimes useful to view only stock boards or only offcuts in the board library. There are 2 new options on the Board library 'View' menu.

View - Stock boards View - Offcuts - Click on the menu option to switch the view on or off.

Fil	Board library - Offcuts e Edit View Help	\sim											×
-	J 🛛 🕊 🗙 💐			5	?								
	Materials	\smile											*
	Material 🔺	Dea	scription		Thic	Default	Boo	Mat		Picture	Туре	D	ensit
	MFC18-EBONY	Prelaminated -	Ebony 1	8mm	18.0	N	0				MFC		0.40
	MFC18-OAK	Prelaminated -	Oak 18m	nm	18.0	N	0				MFC		0.40
	MFC18-RED	Prelaminated -	Red 18m	nm	18.0	N	0				MFC		0.40
	MFC18-TEAK	Prelaminated -	Teak 18	mm	18.0	N	0				MFC		0.40
	MIRROR-GLASS	Mirror Glass (su	undry)		5.0	N	0				Sundry		0.00
	OAK-LAM-1MM	Oak Laminate	1mm		1.0	Y	10				Laminate		0.90
	PARTICLBRD-25MM	Particle board :	25mm		25.0	N	0						0.551 ≡
	RED-LAM-1MM	Red Laminate	1mm		1.0	Y	10				Laminate		0.90
	TEAK-FOIL	Foil - teak (sun	idry)		0.1	Y	0				Sundry		0.00
	TEAK-LAM-1MM	Teak Laminate	e 1mm		1.0	Y	10				Laminate		0.90
	WHITE-ACRYLIC-12MM	Acrylic - White	12mm (s	undry)	12.0	N	0				Sundry		0.001 🚽
•		1			-							1	•
Γ	Boards for material: MFC18-TEAK Prelaminated - Teak 18mm Thickness:18.0 Book:0												
	Board code 🔺 Length Width		/idth	Informa	ition	Stock	< A	Alloc	Order	Cost	Limit		
1	×00125/0001	1011.0 780.0					1	0	0	1.550	0		
H	×00135/0003 564.0 488.0		188.0				1	0	0	1.550	0		
E	X00148/0001	95	0.0 6	20.0				1	U	U	1.550	U	-
•		III											•

The above example shows 'Offcuts only'. The options are also available on the toolbar (as highlighted above).

Note - If the library contents are printed - the filter set for the screen still applies

Note - Boards which have a board code beginning with 'X' *or* with board type *Offcut* are treated as offcuts by the report.

Note - board type names are now called Stock board and Offcut (previously Board or Offcut)

<u>Stock - option to update from Bargstedt SQL database and create board list just before</u> optimising

Version 9 includes an option to automatically overwrite stock in the board library from the Bargstedt SQL stock database and re-extract the working board lists for each run being optimised. This occurs immediately before optimising. This ensures the board library accurately reflects the current stock situation.

There is also an option to overwrite stock and validate runs before saw transfer. This ensures an accurate an up to date stock situation for the saw prior to cutting.

These options are controlled by a new System parameters on the Stock control page:

Overwrite stock and re-extract boards prior to optimising Overwrite stock and validate runs prior to saw transfer

System parameters	
General Paths and files Rules1 Rules2 Divide part lists Boards	s Stock control Routing / nesting Nesting
Stock control Action prior to overwriting stock from file Boards Offcuts None	Bargstedt SQL Server stock control database: Server name (or IP address)
Options for issuing stock Adjust boards Adjust offcuts Add new offcuts Adjust fittings Adjust edging Monthly material summary Board library import format	✓ ✓ ✓ ✓ ✓ ✓
Board list (BRD file) ASCII CSV (BDX file)	Fields update printing stack
Bargstedt (BESTAND.STK file)	Material
Bargstedt (SQL Server database) Bargstedt SQL Server stock control database Server name (or IP address) Overwrite stock and re-extract boards prior to optimising	
Overwrite stock and validate runs prior to saw transfer	Parameters
Synchronise board library changes Timeout	60 ×
	OK Print Help Cancel

Note - any manual edits to a working board list are lost when re-optimising.

<u>Inches</u>

The synchronisation / import of stock from the Bargstedt SQL stock database is also available in inches modes. The Bargstedt stock database stores dimensions in 1/1000". This may result in rounding errors when operating in fractional inches mode.

Stock valuation report - option to include full sheets or offcuts only

The stock valuation report (SC module) now includes to option of displaying only stock boards or offcuts within the specified material range. This is set at the Range dialog.

Stock valuation	
From BLUE-LAM-1MM To ZEITTINCC	Include Stock boards Offcuts
Cancel	

At the main screen:-

- Select: Print - Stock Valuation

At the report:-

- Select: File - Modify range

The following example shows 'Offcuts only'.

To restrict the report to offcuts, deselect the Stock boards option (and vice versa).

The program ensures that one option remains selected.

The Stock valuation report indicates that the list has been restricted by appending the text (*Offcuts*) or (*Stock boards*) to the range line. An example is shown below.

W Stock valuation File Edit View Settings Reports	Help						
	▶ №		?				
Stock valuation							
Range: BLUE-LAM-1MM - Z-FITTING	S (Offcuts)						
Board	Length	Width	Stock	Area m2	Volume m3	Cost /	Cost
MFC18-TEAK Prelaminated - Teak	18mm Thickne	ss 18.0 Grain I	<u>V Book 0</u>				
X00125/0001	1011.0	780.0	1	0.79	0.01	1.550	1.22
X00135/0003	564.0	488.0	1	0.28	0.00	1.550	0.43
X00148/0001	950.0	620.0	1_	0.59	0.01	1.550	0.91
				1.65	0.03		2.56
							2.56
							11.

Note - Boards which have a board code beginning with 'X' *or* with board type *Offcut* are treated as offcuts by the report.

Offcuts - Option for unique sequential ID for each offcut created

In production it is sometimes useful to have a unique ID for each offcut (even if there are several offcuts of the same size) produced when cutting a stack.

Version 9 includes a new System parameter: *Single quantity offcuts with unique names*. This parameter can be found in the 'Offcut names' section on the 'Rules 2' page of system parameters. When this parameter is set duplicate offcut sizes are not aggregated and patterns containing offcuts can only have a run quantity of one.

1 System parameters		×
General Paths and files Rules1 Rules2 Divide part lists Boards S	Stock control Routing / nesting Nesting	
Rules2	Offcut names: Single quantity offcut: unique names	s with
Sort product reports Sort into alphanumeric sequence Sort by category (parts, fittings, operations)	©	
Offcut allowance Restocking value for minimum size offcut Restocking value for maximum size offcut Cost reduction for minimum size offcut Cost reduction for maximum size offcut Offcut names Use run name and sequence in the run Use sequential number Last offcut number Sincle quantity offcute with unique papers	50 % 50 % 0 % 0 % Fields for defining duplicate parts 0 Image: Contract of the second sec	
Create cutting list options None Separate parts into quantity of 1 Combine duplicate part quantities (retain duplicates with quantity of zero) Combine duplicate part quantities (remove duplicates from list) Last part item tracking number	Length Width Vidth Orain Description Quantity Overs Unders Edge codes Edge Btm	II.
	OK Print Help	Cancel

When this parameter is NOT set a pattern with a run quantity more than 1 produces offcuts labelled with the same name:-

🔛 Review runs	
File Edit View	Settings Summaries Help
1	K 🕮 😳 🦮 🔍 📲 🏭 🛛 🔹 🕨 🚜 🥪 📍 🗾 🗋
Favourites	Pattern 1 of 3 Example-1
K Management summary	MED-DEN-FIBRE-18MM Example 1///default/SQ
Pattem summary	Board: MED-DEN-FIBRE-18MM/01 Waste: 22.25% Size: 2440.0 x 1220.0 x 18.0
### Pattem preview	Information: BIN 127 Material: MED-DEN-FIBRE-18MM Medium Density Fibreboard 18mm Boards: 7
Rattem	2 2 2 620 X 350 620 X 350 620 X 350 x x x x x 2 2 2 2 620 X 350 620 X 350 620 X 350 620 X 350 620 X 350 620 X 350 1 1
Batch reports	750 X 450 750 X 450 750 X 450
Advanced	
Patterns	Saw kerf: 4.8 Book height 5 Cycles 2
Machining	Rear rip trim with kerf - Rip: 10.0 Cross: 10.0 Retrim with kerf: 5.0
Custom	Pattern / Parts / Saw simulation /

The offcuts are represented as:-

XEXAMPLE1/0002 Qty: 14 (555.6 x 350.0)

When this parameter is set each offcut gets a unique ID and to achieve this all patterns have a run quantity of 1.

🔛 Review runs	
File Edit View	Settings Summaries Help
1	K 🖺 🚱 🞘 🔍 📲 🏭 M 🖪 🕨 树 🛃 🌍 🤰 🔛 🚽
Favourites	Pattern preview Example-1
Kanagement summary	MED-DEN-FIBRE-18MM Example 1///default/SQ
Pattem summary	Ptn:1 Board:1.MED-DEN-FIBRE-18 Ptn:2 Board:1.MED-DEN-FIBRE-18 Ptn:3 Board:1.MED-DEN-FIBRE-18 Qty:1 Material:MED-DEN-FIBRE-18 Qty:1 Material:MED-DEN-FIBRE-18 T
preview Rattern	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
	Ptn:4 Board:1.MED-DEN-FIBRE-18 Ptn:5 Board:1.MED-DEN-FIBRE-18 Ptn:6 Board:1.MED-DEN-FIBRE-18 Qty:1 Material:MED-DEN-FIBRE-18 Qty:1 Material:MED-DEN-FIBRE-18 Qty:1 Material:MED-DEN-FIBRE-18
Batch reports	
Summaries	
Advanced	
Patterns	
Machining	Commence Commence Commence Commence Commence
Custom	· · · · · · · · · · · · · · · · · · ·
	h.

Each offcut has a unique ID/

👿 Review runs											x
File Edit View	Setting	s Summaries Help									
1		🛓 🚯 😹 🔍		C		1			\$? 🛃 🗋	4
Favourites											
Batch reports	Offe	cut summar	v							Example	-1
Summaries			<i>.</i>							1	
Advanced											
	MED-1	DEN-FIBRE-18M	N						Exam	ple 1///default/default	/SQ
🌽 Offcut	No	Description	Length	Width	Total	Area	Cost	Cost /	Total	Offcuts per pattern	
summary		Decemption	mm	mm		m2	m2	Offcut	Cost	eneda per patient	
Distribution	4.	XEXAMPLE1/0004	2440.0	300.4	1	0.733	2.250	1.649	1.65	1/10	-
summary	5.	XEXAMPLE1/0005	2440.0	300.4	1	0.733	2.250	1.649	1.65	1/11	
n Edging	6.	XEXAMPLE1/0006	2440.0	300.4	1	0.733	2.250	1.649	1.65	1/12	
summary	7.	XEXAMPLE1/0007	2440.0	300.4	1	0.733	2.250	1.649	1.65	1/13	
A Machine times	8.	XEXAMPLE1/0008	555.6	350.0	1	0.194	2.250	0.438	0.44	1/1	
	9.	XEXAMPLE1/0009	555.6	350.0	1	0.194	2.250	0.438	0.44	1/1	
🌌 Saw loading	10.	XEXAMPLE1/0010	555.6	350.0	1	0.194	2.250	0.438	0.44	1/2	
summary	11.	XEXAMPLE1/0011	555.6	350.0	1	0.194	2.250	0.438	0.44	1/2	
J Destacking	12.	XEXAMPLE1/0012	555.6	350.0	1	0.194	2.250	0.438	0.44	1/3	
summary	13.	XEXAMPLE1/0013	555.6	350.0	1	0.194	2.250	0.438	0.44	1/3	=
Station	14.	XEXAMPLE1/0014	555.6	350.0	1	0.194	2.250	0.438	0.44	1/4	
summary	15.	XEXAMPLE1/0015	555.6	350.0) 1	0.194	2.250	0.438	0.44	1/4	
	16.	XEXAMPLE1/0016	555.6	350.0	1	0.194	2.250	0.438	0.44	1/5	
Dictures	17.	XEXAMPLE1/0017	555.6	350.0	1	0.194	2.250	0.438	0.44	1/5	
	18.	XEXAMPLE1/0018	555.6	350.0	1	0.194	2.250	0.438	0.44	1/6	
	19.	XEXAMPLE1/0019	555.6	350.0	1	0.194	2.250	0.438	0.44	1/6	
Patterns	20.	XEXAMPLE1/0020	555.6	350.0	1	0.194	2.250	0.438	0.44	1/7	
Machining	21.	XEXAMPLE1/0021	555.6	350.0	1	0.194	2.250	0.438	0.44	1/7	-
Custom	IT Î\	Offcut summary 1 0	ffcuts /	250.0	- 1		0.050	0 120	0 44	1/1/	×
	• لــــــــــــــــــــــــــــــــــــ	7//-									

Stock control - Option to record offcut history

Version 9 includes the option to record an offcut history in the audit trail. The option to audit offcut movements has been added to the *Audit trail - month / year end* procedure available from the Stock menu.



If this option is selected, any offcuts in the board library are assigned an opening balance in the audit trail. The following rules are also observed when the audit is maintained for offcuts.

- Issue stock no longer deletes offcuts from the board library when their stock quantity is used up.

- Offcuts with zero quantity are deleted from the board library by the month/year end procedure.

Board library parameters - default thickness and cost

Version 9 allows the entry of a default cost for new boards and a default thickness for new materials. These defaults supplement the existing defaults for board length and width.

At the Board library screen:-

- Select: File - Parameters

Parameters		X
Print grid lines		
Print colours		
User		
Board defaults	Length	0.0
	Width	0.0
	Thickness	15.0
	Cost	2.700
OK	Help	Cancel

The defaults for these are initially zero. As new boards and materials are entered in the library, the defaults are transferred to the board cost and material thickness fields.

Material density

This new field is used to store the density of a material in either metric tons per m³ or pounds per ft³ depending on the current measurement mode.

The range of values is:-

```
Metric measurement mode: 0.000 - 99.999 tons per m<sup>3</sup> (1 ton = 1000Kg)
Inches measurement modes: 0.000 - 99.999 pounds per ft<sup>3</sup>
```

Material weight fields - review runs and stock reports

Weight fields are available on the following reports.

Batch summary - Weight Parts field Management summary - Weight field (Weight of offcuts, boards and parts) Part summary - Weight field Board summary - Weight field Material summary - Weight Parts and Weight Boards fields

Stock - Orders by material - Weight field Stock valuation - Weight field

Monthly material report - Weight Parts and Weight Boards fields

The weight is kilograms or pounds depending on the current system parameter measurement mode. The weight field is located in the Available list in the report setting dialog.

If a material is specified that has no density set in the board library the weight = 0.

Weight is calculated as:

Area (board or part) x material thickness x quantity x material density

(The material density is set at the Board library).



Direct import & export of spread sheets in XLS/XLSX formats

Import XLS / XLSX

Part lists, boards lists and product requirements can be imported from XLS or XLSX files.

Part lists

At the 'Import parts parameters' dialog the part import format has two additional options at the bottom of the combo box - User defined order - Excel (XLS) and User defined order - Excel (XLSX).

At the main screen:-

- Select: File - Import parts

Parameters	
Import - parts	
Part import format	Part list order - ASCII CSV (PNX)
Field separator - parts	Part list order - ASCILCSV (PNX) Cabinet vision format
Import filename dialog	Product planner format
Import parts to cutting list only?	Batch - part list order (BTX & PNX)
Import PTX to unique names?	User defined order - ASCII CSV
Default	Parts & boards - ASCII CSV (PTX) Parts & boards - Access (MDB)
Optimising parameters	User defined order - Excel (XLS) User defined order - Excel (XLSX)
Saw parameters	DEFAULT
Material	
Quantity	
Grain	
Overs	%
Unders	%

For a user defined order a set of 'Part list import parameters' are also set up and these include options to specify the file extension etc. When the XLS or XLSX import type is selected the file extension specified in the part list import parameters is ignored and XLS or XLSX is assumed and only XLS/XLSX files are shown in the list box.

To import part list XLS /XLSX 'Stand alone' the command line the /FORMAT argument uses 20 for XLS and 21 for XLSX.

Board lists

In the import board parameters dialog the board import format also has the same two additional options. A suitable board list import parameters file is also required before the import can take place (*Main screen - File - Import - Boards*)

To import board list XLS /XLSX 'Stand alone' the command line the /FORMAT argument uses 30 for XLS and 31 for XLSX.

Product requirements

In the Requirements import parameters there is a field called 'CSV or Excel'. If this is set to 0, then the import file is treated as a text file, if this field is set to 1 the import file is treated as an XLS or XLSX file. Note when the field is set to 1 'Excel' the field 'Extension for CSV file' is not used.

Requirements import pa	rameters			×
Reference	Description			
pr import	Demo Produ	ct Import		
	Rang None, No	e one		
	Value		•	
5. Height	3			
6. Depth	4			
7. Header lines	1			
8. Import - header line	1			Print
9. CSV (0) or Excel (1)	1			Merge
10. Extension for CSV file	RQX			
11. Answer table	0			
12. Variable 1				Cancel
13. Variable 2				Help
14. Variable 3				
15. Variable 4			-	OK

Note - In Excel mode if there are two files with the same name (e.g. IMPORT.XLS and IMPORT.XLSX) the XLSX file is imported.

To import product requirement XLS /XLSX 'Stand alone' the command line the /FORMAT command needs to be use with either 1 for XLS or 2 for XLSX, the default of 0 is for CSV files.

Export XLS / XLSX

The summaries in review runs can be exported to XLS or XLSX files. A single summary can be exported in review runs or summaries from a batch of runs can be exported from the main menu or the command line.

Single summary export

At any summary (e.g. Pattern summary)

- Select: File Export (XLS or XLSX)

	A1 • (*	fx DEMO US	ER 1						
1	А	В	С	D	E	F	G	Н	
1	DEMO USER 1	Magi-Cut Modu T	uesday 22 Ma	ay 2012 13:01					
2	Part summary	Example	4						
3		Bedroom & bat	hroom///?defa	ault/?default/??					
4	No	Part / Descrip L	ength mm	Width mm	Total Req	From Stock	Over Under	Total Prod	m2 / Part
5	MFC18-TEAK Prelaminated - T	eak 18mm Thickn	ess 18.0 Boo	ok 5					
6	· · · ·	I BTH-CAB-BAC	664.00	564.00	4	0		4	0
7	4	BTH-CAB-BOT	664.00	143.00	4	0		4	0
8	1	5 BTH-CAB-DOC	347.50	448.00	4	0		4	0
9	-	7 BTH-CAB-DOC	347.50	448.00	4	0		4	0
10	9	BTH-CAB-END	161.00	598.00	4	0		4	0
11	1.	1 BTH-CAB-END	161.00	598.00	4	0		4	0
12	14	BTH-CAB-SHE	664.00	143.00	8	0		8	0
13	1	5 BTH-CAB-SHL	664.00	161.00	4	0		4	0
14	18	BTH-CAB-TOP	664.00	161.00	4	0		4	0
15	59	W-ROBE-BAS	964.00	578.00	10	0		10	0
16	63	3 W-ROBE-DOO	499.00	1201.00	5	0		5	0
17	70	W-ROBE-DOO	499.00	1201.00	5	0		5	0
18	7	W-ROBE-DRA	1000.00	225.00	10	0		10	0
19	80	W-ROBE-END	578.00	1782.00	5	0		5	1
20	92	2 W-ROBE-END	578.00	1782.00	5	0		5	1
21	93	3 W-ROBE-PLIN	964.00	125.00	5	0		5	0
22	103	3 W-ROBE-TOP	998.00	599.00	5	0		5	0
23					90	0		90	
24	MFC18-EBONY Prelaminated	- Ebony 18mm Thi	ckness 18.0	Book 5					
25		2 BIH-CAB-BAC	464.00	564.00	3	0		3	0
26		BIH-CAB-BOI	464.00	144.00	3	0		3	0
27		BIH-CAB-DOC	249.50	450.00	3	0		3	0
28		S BIH-CAB-DOC	249.50	450.00	3	0		3	0
29	10	BIH-CAB-END	162.00	600.00	3	0		3	0
30	12	BIH-CAB-END	162.00	600.00	3	0		3	0
31	1.	S BIH-CAB-SHE	464.00	144.00	6	0		6	0
32	10	BIH-CAB-SHL	464.00	162.00	3	0		3	0

This is an example of an export to Excel of a Part summary.

Multiple summaries export

At the main screen:-

- Select: File - Export Runs (choose XLS or XLSX)

When the export type is selected, the batch screen appears to select a batch and after this the standard export dialog appears so the export characteristics can be chosen in the usual way.

The XLS/XLXS batch based file is named after the batch name and the run based files are named after the run names. e.g. A batch called 'WALL UNITS' containing 3 runs called 'WALL UNITS-01', 'WALL UNITS-02' and 'WALL UNITS-03' respectively. The select summaries for the export are Batch, Job costing, Board, Part and Pattern summaries. This produces 4 XLS files.

'WALL UNITS.XLS' which will contain 2 sheets - 1 for the batch summary and 1 for job costing summary.

3 files 'WALL UNITS-01.XLS', 'WALL UNITS-02.XLS' and 'WALL UNITS-03.XLS' which each have 3 sheets - 1 for board summary, 1 for part summary and 1 for the pattern summary.

Stand alone - multiple summaries export

The summaries can also be exported on the command line via the OUTPUT.EXE option and by using the /EXPORT /XLS or /EXPORT /XLSX command line arguments,

Picture files (JPG) can be attached to product and part library

Picture files (JPEG or JPEG) can now be used in Part library or product library drawing. The picture file can either be automatically associated by having the same name as the part / product code or a picture file can be specified in the drawing code field.

Double clicking on the drawing in the drawing dialog in the part / product library pops up the editor associated with picture files.

💀 Product library	/				
File Edit Help	,				
100		<₽◀◣◁▶№?			-
Туре		Product			
Code		BEDSIDECAB			
Description	6. D-6	Bedside cabinet			
X Width	nx Der ⊘ ⊘			I Marshan R.	
Y Height	\odot				-
Z Depth	\odot				
Vertical position	\odot			PH00477	
B: #1	fx				
Price (rx)	0				
Answer table					
Memo	1	2	3		
	4	5	6		

The picture files are stored in the 'Path for library data' as individual files.

Integrated PDF - 'print to file' option

PDF files can be generated for review runs reports and stock reports via the integrated PDF generator.

The PDF generator is included with the program so there is no need to install a separate PDF report writer

This also avoids having to choose between the printer and a separate PDF driver each time reports are printed.

This option is available from:-

Main menu - via 'Print Runs to file (PDF)' option on the print menu. Review runs - 'Print to file (PDF)' option on the file menu. Stock reports - 'Print to file (PDF)' option on the file menu when viewing any stock report Stand alone generation of PDFs from review runs via Output.exe.

A PDF version of a summary.

🔁 Bed	Iroom & bathroomC.pdf - Adobe Acrobat									
1	Create 🔹 🛛 🎦 💾 🖨 🖂 🖗 🧐	🕹 🐶 🖻	Là Là							
	1 / 3] 102%	-	÷						Tools Cor	nment Share
	DEMO USER 1		Magi-Cu	ut Modula	r V9.0			Т	uesday 22 Ma	v 2012 13:25
									,	,
	Dattam anna amr								Erro	m 1 2 1
Ø	Pattern summary								Exa	mple 4
L.J.						Bedro	om &	bathroo	om///?default/	?default/??
	Ptn Board	Length	Width	Waste	Board	No	No	No	Total	
	No	mm	mm	%	Qty	Cyc	Rip	Xct	hh:mm:ss	
	Average book 1.4 (20.0) Bundle load	ling and pat	tern setu	p time					0:36:14	
	MEC18-TEAK Prelaminated - Teak 18	mm Thicknes	ss 180 B	ook 5						
	1 MFC18-TEAK/01	2440.0	1220.0	11.68	4	1	3	12	0:04:15	
	2 MFC18-TEAK/01	2440.0	1220.0	7.48	4	1	6	7	0:04:22	
	3 MFC18-TEAK/01	2440.0	1220.0	10.72	1	1	5	5	0:03:27	
	4 MFC18-TEAK/02	3050.0	1525.0	8.26	1	1	5	17	0:06:06	
	5 MFC18-TEAK/02	3050.0	1525.0	20.56	1	1	6	20	0:08:18	
	6 X00148/0001	950.0	620.0	34.60	1	1	2	5	0:01:39	
	7 X00125/0001	1011.0	780.0	14.06	1	1	3	2	0:01:35	
			-	11.36	13	7	30	68	0:29:42	
	MFC18-EBONY Prelaminated - Ebony	18mm Thick	mess 18.	0 Book 5						
	8 MFC18-EBONY/02	2440.0	1220.0	10.01	1	1	3	8	0:03:06	
	9 MFC18-EBONY/02	2440.0	1220.0	10.01	1	1	3	8	0:03:06	
	10 MFC18-EBONY/02	2440.0	1220.0	10.01	1	1	3	8	0:03:06	
	11 MFC18-EBONY/02	2440.0	1220.0	7.45	3	1	6	7	0:04:22	
	12 MEC18-EBONY/02	2440.0	1220.0	8.85	3	1	4	9	0.04.25	

Main menu

Selecting this option is like the 'Print Runs' option where the batch dialog appears first and then a dialog to select which reports to print. Note - PDF files are not available for forms.

Selecting the Print button will generate PDF files for the selected summaries in the path for export data. The files will be named as follows:

If any batch summaries are selected there will be 1 PDF file for the batch summaries named as <batchname>-batch.PDF.

Then the summaries are generated with a PDF file for each run and named as <runname>.PDF.

e.g. A batch called Test containing runs 00005 and 00006 would generate:

test-batch.pdf - containing batch reports 00005.PDF - summaries from first run 00006.PDF - summaries from second run

The '-batch' is added to differentiate where a single run batch has the same batch name as the run name,

Review runs

The Print to file (PDF) will generate a PDF file in the export path of the current summary. The file name will be <run name><report code>.PDF

e.g. A management summary in run 00005 generates 00005B.PDF

Stock reports

The Print to file (PDF) will generate a PDF file in the export path of the current stock report. The filenames are the same as the default filename generated when exporting a stock report.

Date Time report name.PDF

e.g. 2012-04-16 1519 Orders by supplier.PDF

Standalone review runs reports

The /PDF argument is used with OUTPUT.EXE to generate PDF files.

e.g. c:\v9\OUTPUT.EXE /PRINT /PDF /REPORTS:BC

This generates the same filenames as the Main menu print runs to file (PDF) option.

Note - The files generated are in PDF format version 1.7.

Picture formats for Online label PC

TH picture formats for Online label PC are now: BMP, WMP, EMF, JPG/JPEG

Security and data organisation

Improved network operation with user profiles & passwords

Version 9 introduces the concept of *User profiles* to replace and enhance the *User directory* features of the previous version.

The user profile stores those settings which are specific to a user (system parameters, customised view files ...). These settings are stored in a set of files in the user profile path. The other program paths and folders may be the same as the user profile path or these may be set to other locations.

The list of user profiles is displayed and managed from a new selection screen and there are new options to duplicate and password-protect user profiles.

Version 9 supports up to 1000 user profiles (a big increase on the available user directories of the previous versions).

User profile selection screen

This screen may appear when you first run the program or after selecting **File - User profiles** from the main menu.

The list of user profiles found by the program are displayed in the list control. By default, the program displays the name of each profile, its modification time and the current user (if any).

User profiles			
Name	Last accessed	Current user	New
🧖 Demo user 1	22/05/2012 11:10		Properties
Stemo user 2 Demo user 2	03/05/2012 11:07		Delete
🥂 Nesting (MPR)	03/05/2012 11:07		Unlock
			Duplicate
			Refresh
			Options
			Exit Help
			ОК

Profiles which are in use are denoted by the padlock symbol and text is shown in red.

In version 9 profile names may be up to 40 characters.

The columns shown and the order may be modified via the Options button.

If two user profiles have the same name, the program displays the profile path (in brackets) for the second profile to differentiate them. For example: *Demo user 1 (c:\v90\Demo\CopyOfUser1)*

If a user profile has no name entered in its properties, the program displays the profile path (in brackets) in the profile name column.

Initially the user profiles are sorted by name but it is possible to sort by any column, This is achieved by clicking on column heading. The current sort is retained by the program.

The tooltip for the profile name includes the profile path in brackets if this column is not currently displayed.

A user profile is selected by double-clicking or via the OK button.

Customising the User profile screen

The default columns are:

Profile name (taken from the profile properties) Last accessed Current user

Optional columns are:

User profile path Path for data (system parameters) Company name (system parameters Measurement mode Language The columns shown and the order may be modified via the Options button. An example is shown below.

Options	×
 Scan program, sub directories 	
Scan current drive	
Scan all connected drives	
Scan selected drive	
C:\ Browse	
Columns	
Name	
Last accessed	
Current user	
Path	
Company pame	
Measurement mode	
OK Help Cancel	

Columns are selected / de-selected with the checkbox. The column order is modified by dragging the items to new positions.

The program ensures that either Profile name or Profile path remains selected.

Password protection for user profiles

User profiles may optionally be password protected to prevent accidental selection by other users. The password is entered in the Properties dialog. An example is shown below.

Properties	X
Path	C:\v901\Demo\User1\
Description	Demo user 1
Password	
ОК	Help

Passwords may be any length and are case sensitive. If a password is entered, the program asks for it to be confirmed when OK is selected. An example is shown below. If the passwords do not match, an error message is reported and the program returns to the properties dialog.

If a password is associated with a user profile, the program prompts for this when the user profile is selected or if you attempt to delete it or modify its properties.

Duplicating a user profile

The *Duplicate* feature allows an existing user profile to be copied so that all of the common settings can be applied to a new user.

Highlight the user profile to be copied and select the Duplicate button. The Duplicate user profile dialog appears. An example is shown below.

User profiles			<u> </u>
Name	Last accessed	Current user	New
Stand Series Ser	22/05/2012 11:10		Properties
Demo user 2	03/05/2012 11:07		Delete
🧏 Nesting (MPR)	03/05/2012 11:07		Unlock
			Refresh Cancel Options Exit Help OK

The program prompts to enter the details for the new profile.

😨 Duplicate user profile		×
Path	From	To
User profile description	Demo user 2	
Path	C:\v901\Demo\User2	
	ОК Неф	Cancel

Enter a new user profile name and path. The path is validated and created if required.

If the same path is entered or the path contains an existing user profile, the program displays an error message. The program copies the user profile settings to the new path and the new user profile appears in the list (if the new path lies below the search path for user profiles - see options dialog).

Note - this feature does not duplicate other data files, only those files containing user profile settings. This means that, for example, the *path for data* (system parameters) contains the same path as the original user profile.

Note - The profile name is shown on the banner on the main screen - where this is different from the company name.

Shared control files

Some processes may allocate sequential numbers. For example, last sequential run number for optimising. When there is more than one user, it may be important that these sequential numbers are allocated correctly between the users so that run numbers generated by each user are unique.

Version 9 optionally allows this by allocating sequential numbers from a shared sequential number file. This replaces and simplifies the 'Share' options of the previous version.

The values shared are:

```
Last sequential run number (system parameters - Rules 1 page)
Last quote estimate number (new system parameter - Rules 1 page)
Last saw group number (system parameters - Rules 1 page)
Last offcut number (system parameters - Rules 2 page)
Last part item tracking number (system parameters - Rules 2 page)
Last drawing number (machining centre parameters - Generation page)
```

To activate this feature - decide where to store the shared sequential number file and ensure that all users have read / write access to this path. Enter this path in the new System parameter: *Path for shared control files*.

😨 System parameters	
General Paths and files Rules1 Rules2 Divide part	rt lists Boards Stock control Routing / nesting Nesting
Patha and files	
Path for data	C:\v901\Demo\Data\
Path for part lists	
Path for library data	C:\v901\Demo\Libs\
Path for stock libraries	
Path for import data	C:\v901\Demo\Import\
Path for export data	C:\v901\Demo\Export\
Path for accounts	C:\v901\Demo\Libs\
Path for customer data	C:\v901\Demo\Libs\
Path for shared control files	
Path for machine transfer log file	
Path for back-up	C:\v901\Demo\Backup\
Back-up interval (days)	
Spare	
Spare 1	
Spare 2	
	OK Print Help Cancel

When the path for shared control files has been entered, the parameters normally used to store the last sequential number for these processes are shown disabled on the parameter pages and an edit button is shown to the right of the edit control.

🐨 System parameters	••••
General Paths and files Rules1 Rules2 Divide part lists Boards Stock control Rout	ting / nesting Nesting
Rules1	Optimisations: Current batch name
Optimisations Use cutting list for name of optimised run Use sequential number for name of optimised run Last sequential run number Current batch name Last quote estimate number	Batch/321
Delete patterns when editing part list Export cutting list format None	Create data for Cutting times Cutting dimensions Cutting dimensions Edging Part drawings Transfer part drawings to saw Destacking Baseboard cutting list Exported cutting list Exported cutting list (parts only) Fronted cutting list (parts and boar)
ОК [Print Help Cancel

The parameters display the current value of the shared number.

Selecting the edit button allows the shared values to be edited directly. Clicking the OK button updates those shared numbers which have been changed. If the shared number file is being updated by another user at this instant, the program reports an error and returns to the dialog.

Note - In version 9, forms and label design files are stored in the *Path for data* (system parameter) rather than the user profile path. This allows the designs to be shared more easily between users.

Easier options for Back up and Restore of data

The Back up option (*Main screen - File - Back up*) is simplified to make the process easier to use. There are two options.

Back up Current user (previously 'Back up Full') Back up batch

The operation is the same as for previous versions.

The 'Restore' option is changed slightly (Main screen - File - Restore). The options are:-

Restore (previously 'Restore Full')

Retrieve batches (previously 'Restore batches')

Restore

This restores a back up of a User directory and data to a new location. Only a new location is allowed so existing data cannot be overridden

Retrieve batches

This retrieves (restores) one or more selected batches. A batch can only be restored to the directory it came from - so only the relevant back up files for the current user profile are shown in the list.

Copy / Convert

This option now shows the list of User profiles and not the folders.

Custom options and System details

Part list parameters - set defaults for material, overs, unders and grain.

When creating new part lists (via import parts or in the part list itself) default values can be automatically supplied for a set of the part list fields. These are:-

Material Quantity Grain Overs Unders

When a part is added to a part list or a part list is imported then if there is no value provided for a field, then the default field value is used. If the part item does have a field value the default field value is not used.

Part list

At any part list select: File - Parameters

Parameters	X
Default	
Optimising parameters	DEFAULT -
Saw parameters	DEFAULT -
Drawing source	Part library 🔹
DXF import - layer name rules	-
Material	CHIPBOARD 18MM
Quantity	
Grain	- ·)
Overs	5 %
Dividers	0 %
Categories for part list sort	
Fields for defining duplicate parts	2348
Default grain from material library	
Print	
Print by category	
New page per category value	
Print information boxes	
Print grid lines	
OK Help	Cancel

- Enter any default values required.

The material, quantity and grain values is used when adding a part to a part list. The overs/unders values are only used when creating a new part list and are set at the global level on the global line.

Import parts

The import parts parameters dialog contains the same 5 parameters and they behave the same way as the part list.

Note - these parameters only work on the following part import formats:

Part list order - ASCII CSV (PNX) Code and quantity - ASCII CSV (PNX) Batch - Part list order - ASCII CSV (BTX & PNX) Batch - Code and quantity - ASCII CSV (BTX & PNX) User defined order - ASCII CSV Batch - User defined order - ASCII CSV

Labels for single parts and individual patterns

Patterns and /or parts can be specifically selected and labels re-printed for these items. It is useful when printed labels are missed or damaged and have to be re-printed.

This is an extra choice on the 'Print - Labels' option. At the main menu:-

- Select: Print Labels
- Select: Selected parts/patterns
- Choose a label design (template)
- Choose a batch

The program prompts with a screen to select runs and specific patterns and parts within a run.

Selected parts/patterns			
Runs Bedroom & bathroom	Patterns 1 2 3 4 5 6 7 8 9 10 11 • Add	Parts 57. W-ROBE-BASE 79. W-ROBE-DRAWER	
Selection Run: Bedroom & bathroom Pattern: 7 Part: 93. W Run: Bedroom & bathroom Pattern: 10 Part: 79. W	-ROBE-PLINTH V-ROBE-DRAWER		Delete
ОК	Help	Cancel	

The runs list box is used to select one of the runs for the selected batch. After a run is selected, the patterns list box is filled out with list of patterns for the selected run.

When a pattern is selected the parts list box is filled out with the parts that occur in that pattern.

At this point either a single pattern or one or more parts from a pattern can be chosen for printing.

The add button below the patterns list box is used to add the current pattern for printing. *Note* - A pattern can only be added once.

The add button below the parts list box is used to add one or more parts for printing. Note - once single parts from a pattern are added, then the whole pattern cannot be added for printing.

When a pattern or parts are added they appear in the selection list box at the bottom of the dialog in the order they appear in the run / patterns.

If a pattern / parts are incorrectly added to the selection list box they can be selected and removed via the delete button.

V9 Minimum specification

The minimum hardware specification for V9 is listed below.

Processor speed 1.5Ghz Memory 1Gb (200Mb free) Hard disk 1GB free Display 1024 x 768 or higher USB port

The supported operating systems for this version are:

Windows XP Home Service Pack 3 Windows XP Professional Service Pack 3 Windows XP Professional X64 Edition Windows 2003 Server (32bit and 64bit versions) Windows Vista Service Pack 2 (32bit and 64bit versions) Windows 2008 Server (32bit and 64bit versions) Windows 7 (32bit and 64bit versions) Windows 2008 Server R2 x64 Edition Small Business Server 2011

System check tool - drive sizes shown in Gb

The display of drive sizes is now in Gigabytes (Gb) rather than Megabytes (Mb).

Memory (Mb):	Physical Total: 4096 ok Virtual Total: 8192	Free: 4096 ok Free: 8192 ok
Disk (Gb):	C:399.8(470.4) ok M:1583.3(2095.9) ok S: 85.5(465.7) ok Z:1005.9(1848.3) ok	D:393.9(460.1) ok N:1583.3(2095.9) ok T:178.2(465.7) ok

System parameter: Path for Forms / Labels

This parameter sets the location of form and label design files (TLF files).

• Enter the full path

or Click on the button to browse and select a path

If this parameter is left blank (the default), the program stores form / label design files in the *Path for data*. If the path is set any existing design files in the *Path for data* must be manually copied (via Windows Explorer) to the new path.

- Copy / Convert - when converting user profiles from this version onwards, if the *Path for forms / labels* is set, the contents are copied to the new location. When converting from earlier user profiles, no files are copied to the *Path for forms / labels*.

Backup / Restore - The back up system includes this path (if the path is set)

Path for pictures

This parameter sets the location for external image files (bmp, wmf, emf, jpg, jpeg).

• Enter the full path

or

Click on the button to browse and select a path

If this parameter is left blank (the default), the program stores picture files in the *Path for data*. If the path is set any existing picture files in the *Path for data* must be manually copied (via Windows Explorer) to the new path.

- Copy/Convert - when converting user profiles from this version onwards, if the path for pictures is set, the contents are copied to the new location. For converting from earlier user profiles no files are copied to this path.

- Back up / Restore - The back up system includes this path

- DXF files are still located in the *Path for import data* and MPR files are still located via the Information box '*MPR path*'; *Path for MPR files*; *Path for library data*



The following pages give an overview of the operation of V9 and the modules available.

- Standard Optimiser SO
- Professional Optimiser PO
- Lite Optimiser LO
- Nesting Optimiser NE
- Edges & Laminating EL
- Stock control SC
- Parts & Labels PL
- Products & Quotes PQ
- Machining Interface MI
- Destacking & Palletisation DS
- Cad drawings CA

The heart of any system is one (or more) of the Optimiser modules - these include all the standard features and reports for successful Optimising. The other modules can be added to match requirements and provide a fully integrated suite of Optimising and Production software.

V9 Main screen

All files and options are integrated at the Main screen.



- Enter part sizes

- Optimise

- Send cutting data to the saw

Standard Optimiser – SO

Adaptable cutting patterns with extended part information

The Standard Optimiser is designed for cutting batches of jobs on a single axis beam saw. It has the flexibility to deal with a wide range of part lists and part quantities and includes many extra features for dealing with offcuts, complicated cutting patterns and allows the part list to be fully customised via extra custom fields.

The optimiser supports transfer to a wide range of beam saws.

- Enter part sizes
- Optimise
- Send cutting data to the saw



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

🔛 Part	list - Example5									×			
File E	dit View Optimise Help												
*													
Т	itle Example 5	Opt default		-]	Saw	default		-				
	Description	Material	Length	Width	Quantity	Over	Under	Grain	Edge Btm	*			
Global						0%	0%			Ξ			
1.	BASE-BACK	HARDBOARD-4MM	476.0	735.0	1	0	0	N					
2.	BASE-BACK	HARDBOARD-4MM	976.0	735.0	1	0	0	Ν					
3.	BASE-BACK	HARDBOARD-4MM	976.0	735.0	1	0	0	N					
4.	BASE-BACK	HARDBOARD-4MM	476.0	735.0	1	0	0	Ν					
5.	BASE-BACK	HARDBOARD-4MM	876.0	735.0	1	0	0	N					
6.	BASE-BOTTOM	MEL-CHIP-18MM	464.0	582.0	1	0	0	Ν					
7.	BASE-BOTTOM	MEL-CHIP-18MM	564.0	582.0	3	0	0	N					
8.	BASE-BOTTOM	MEL-CHIP-18MM	464.0	582.0	1	0	0	Ν					
9.	BASE-CABINET-BOTTOM	MEL-CHIP-18MM	864.0	582.0	1	0	0	Ν					
10.	BASE-CABINET-DIVIDER	MEL-CHIP-18MM	560.0	533.3	1	0	0	Ν					
11.	BASE-CABINET-DOOR	MFC18-OAK	400.0	556.8	1	0	0	Х					
12.	BASE-CABINET-DRAWER	MFC18-OAK	400.0	184.3	3	0	0	Ν					
13.	BASE-CABINET-DRAWER-LONG	MFC18-OAK	900.0	184.3	1	0	0	N					
14.	BASE-CABINET-END-LEFT	MEL-CHIP-18MM	582.0	870.0	1	0	0	N					
15.	BASE-CABINET-END-RIGHT	MEL-CHIP-18MM	582.0	870.0	1	0	0	Ν					
16.	BASE-CABINET-RAIL-BACK	MEL-CHIP-18MM	864.0	150.0	1	0	0	N					
17.	BASE-CABINET-RAIL-FRONT	MEL-CHIP-18MM	864.0	150.0	2	0	0	Ν		Ŧ			
•		III							Þ				

In this example there are a large number of part sizes required in small quantities. The part list editor can be used to add items or change sizes and quantities as required.

Some list can have extra custom fields with information for reports or for part labels.

🔢 Part	Part list - Example 6												
File E	dit View Optimise He	lp											
*	考□ 🖻 🖄 💷 🎢 🖉 🖳 🖉 🦿 🖊												
Т	itle Example 6	Opt def	ault		•			Saw	default	-			
	Description	Material	Length	Width	Quantity	Over	Under	Grain	Edge Btm		*		
Global						0%	0%	N			=		
1.	BTH-CAB-BACK	MFC18-TEAK	664.0	564.0	4	0	0	N					
2.	BTH-CAB-BACK	MFC18-EBONY	464.0	564.0	3	0	0	N					
3.	BTH-CAB-BOTTOM	MFC18-EBONY	464.0	144.0	3	0	0	N					
4.	BTH-CAB-BOTTOM	MFC18-TEAK	664.0	144.0	4	0	0	N	EBONY-TAPE				
5.	BTH-CAB-DOOR-LEFT	MFC18-TEAK	349.5	450.0	4	0	0	N	EBONY-TAPE	EBC	-		
6.	BTH-CAB-DOOR-LEFT	MFC18-EBONY	249.5	450.0	3	0	0	N					
7.	BTH-CAB-DOOR-RIGHT	MFC18-TEAK	349.5	450.0	4	0	0	N	EBONY-TAPE	EBC	-		
8.	BTH-CAB-DOOR-RIGHT	MFC18-EBONY	249.5	450.0	3	0	0	N					
9.	BTH-CAB-END-LEFT	MFC18-TEAK	162.0	600.0	4	0	0	N	EBONY-TAPE	EBC	-		
10.	BTH-CAB-END-LEFT	MFC18-EBONY	162.0	600.0	3	0	0	N					
11.	BTH-CAB-END-RIGHT	MFC18-TEAK	162.0	600.0	4	0	0	N	EBONY-TAPE	EBC	-		
12.	BTH-CAB-END-RIGHT	MFC18-EBONY	162.0	600.0	3	0	0	N					
13.	BTH-CAB-SHELF	MFC18-EBONY	464.0	144.0	6	0	0	N					
14.	BTH-CAB-SHELF	MFC18-TEAK	664.0	144.0	8	0	0	N	EBONY-TAPE				
15	RTH-CAR-SHI F-RASE	ΜΕΓ18-ΤΕΔΚ	664.0	162.0	4	n	Π	N	FRONY-TAPE		Ŧ		

The system also provides a set of pre-defined fields which automatically calculate extra data.



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



The Board library stores a record for each material and a record for each board size (including any offcuts) for each material type.

w File	Board library File Edit View Help														
-	*] [] _= X i = [<i>P S</i> ?]														
	Materials														
	Material 🔺		Descrip	tion		Thic	Default	Boo	Mat		Picture	Туре	[)ensit	
	EBONY-LAM-1MM	Ebony La	aminate 1 m	nn		1.0	Y	10		連載		Laminate		0.90	
	GREEN-LAM-1MM	Green La	aminate 1 m	m		1.0	Y	10				Laminate		0.90	
	HARDBOARD-4MM	Hardboa	rd 4mm			4.0	N	8	Н					0.75	Ε
	MED-DEN-FIBRE-18MM	Medium I	Density Fib	preboard 1	8mm 1	18.0	N	0				MDF		0.65	
	MED-DEN-FIBRE-25MM	Medium I	Density Fib	reboard 2	5mm 2	25.0	N	0				MDF		0.65	
	MEL-CHIP-15MM	Prelamin	ated - Whi	te 15mm	-	15.0	N	0						0.50	
	MEL-CHIP-18MM	Prelamin	ated - Whi	te 18mm	-	18.0	N	0						0.50	I
1	MFC18-BEECH	Prelamin	ated - Bee	ch 18mm	-	18.0	N	0				MFC		0.40	i
	MFC18-BLACK	Prelamin	ated - Blac	k 18mm	-	18.0	N	0				MFC		0.40	I
	MFC18-EBONY	Prelamin	ated - Ebo	ny 18mm	-	18.0	N	0		法 私		MFC		0.40	
	MFC18-OAK	Prelamin	ated - Oak	18mm	-	18.0	N	0				MFC		0.40	-
•		1												•	
	Boards for material: MFC18	B-BEE(CH Prei	laminat	ted -	Be	ech 1	8mm	n Th	ickn	ess:1	8.0 Book:	0		Â
	Board code 🔺		Length	Width	Inf	forma	tion	Stock	4	Alloc	Order	Cost	Limit	Γ	Ξ
	MFC18-BEECH/01		3050.0	1525.0				170	2	0	215	3.210	0		
	MFC18-BEECH/02		2440.0	1220.0				163	0	0	205	2.960	0		-
•		111												•	
															ai

In this example the material MFC18-TEAK has two available board sizes 3050.0×1525.0 and 2440.0×1220.0 and several offcuts.

The Material column in the Part list associates each part with the correct material to use and the optimiser selects the optimum boards sizes to use for each job.

Optimising parameters are used to describe the type of cutting (trims, re-cuts, headcuts etc.) - these features may vary with different part lists.



Saw parameters are used to describe each saw; overall cutting length, position of clamps, fence speed ...



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 parameters lists with commonly used settings and add extra lists for one-off or special jobs.

Optimising

Optimisation produces the pattern layouts (balancing cutting times and waste) and a set of detailed reports on each job.

👿 Ва	atch o	otimisat	tion - Example	5				- • •		
File	Edit	View	Help							
-		P	<u>></u>		i 🗗 💞 🔗	🚑 💈 🐂) 🖌 🕺	?		
	Batch name Example5 🔹 🗐 Description Example 5 📄 Print optimisation results									
	Т	m Opt	imising progress	Cutting list	Title	Run	Optimising parameters	Saw parameters 🔺		
Glob	al									
	1.			Example5	Example 5	Example5	default	default		
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	3.			Kitchen plan	Example CAD Drawing	Kitchen plan	DEFAULT	DEFAULT		
	4.									
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•				III				•		
							F12 Continue			

Jobs can be batched together. This is useful where there are lot small orders in the day.

The results are shown in the section of the program 'Review runs'.

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

🔛 Review runs																	×
File Edit View	w Settings	Summa	ries Hel	р													
1.			x (2	j K	\triangleleft			5	?	Celar Celar		I.			P
Favourites Batch summary	Batch	sum	mary	,]	Exan	nple	5
Management summary																Examp	le5
Pattern	Run	Parts	Boards	Total	Pattern	No	No	Sheets	Offcuts	Offcuts	No	No	Av	Av	Av	Av	•
summary		m2	m2	Time	Cost	Parts	Boards	Used	Used	Created	Ptn	Сус	Waste	Scrap	Offcut	Yield	
## Pattern	Example5	89.93	108.70	3:27	334.36	235	34	33	1	19	34	34	17.27	9.34	7.93	82.73	
preview	Example 6	290.33	347.40	6:26	976.90	532	115	114	1	42	97	97	16.43	9.58	6.85	83.57	
# Pattern	Kitchen p	. /1.05	00.33	Z.44	221.74	200	20	20	0	0	20	20	10.77	11.20	0.01	03.23	
		452.11	542.43	12:37	1533.00	1000	177	175	2	67	159	159	16.65	9.80	6.85	83.35	·
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Select an item to	see the details	of each job.	The first report shown	is an overall	summary of the job.												
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👿 Review runs											×
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Favourites Batch summary	Example 5	Managem	ent su	ımma	ary				Exa	mple	5
summary	🗄 🗝 Bedroom & bathroom							E	xample5///?default/	?default/	sQ
	Example 1	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	*
summary	New batch	Required parts	235	89.93	1.39	82.73%			Number of patte	34	
	Part req Evample Charte	Plus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	21	
Pattem	Example Charts	Offcuts	19	8.62	0.13	7.93%			Rotated patterns	0	
preview	Basic part list	Scrap		10.15	0.14	9.34%			Recut patterns	21	
🗏 Pattern	Small quantity ontim	Core trim		0.00	0.00	0.00%			Number of cycles	34	
	Over production	Boards	34	108.70	1.66	100.00%			Cutting length	506.9	
	E large part list								Throughput (M3	0.5	
	Edigo part list								Waste (%Parts)	20.87%	
	• Cadmatic saw exam								Waste (%Boards)	17.27%	=
	Power Concept Device	Sheets used		107 91	1 65	99 27%		333 14	,		
		Offcuts used		0.79	0.01	0.73%	1.550	1.22			
	🗄 🗠 Stacked duplicates	Offcuts created		-8.62	-0.13	-7.93%	0.000	0.00			
Batch reports	🗄 Cutting list rules	Net material u.	-	100.08	1.53	92.07%		334.36	-		
Summaries	Alternate materials	Cutting time	3·27Hr				0 000	0 00			
Adverses	• Nesting examples	Total parts	235	89.93	1 39	82 73%	3 718	334 36			·
Advanced	Nesting - Part library	rotar purto	233	00.00		02.1070	0.110	004.00			
Patterns	Nesting - Machining lib	Sundry - unit us	40					60.32			
Machining	How Nesting - DXF	Total sundry	40					60.32			-
Custom	Rectangular nesting III	Managem	ent summar	y (Dash	nboard	KOutpu ∢		00.52		•	
	,	· · · ·		- 11		I					

A window shows the list of optimised jobs so it is easy to quickly check and review one job then another.

The Management summary includes the Dashboard which provides a graphical view of the summary.



This can be customised for almost any view and to include charts from other summaries.

Eile Edit View			
File Edit Viev			
	Ӂ 📲 🕵 🔆 🔍 📲		😸 🛫 📍 🛃
Favourites	Pattern preview		Example 5
Ranagement summary			Example5///?default/?default/SQ
Pattern summary	Ptn:16 Board:5.MFC18-OAK/02 Qty:1 Material:MFC18-OAK Cycles:1	Ptn:17 Board:5.MFC18-OAK/02 Qty:1 Material:MFC18-OAK Cycles:1	Ptn:18 Board:5.MFC18-OAK/02 Qty:1 Material:MFC18-OAK Cycles:1
Pattem preview Ratern	122! 196 964 X 1082 101! 169 11! 169 11! Ptn:19 Board:5.MFC18-OAK/02 Qty:1 Material:MFC18-OAK Cycles:1	"130! 136! 600 X 1082 600 X 1082 W-ROBE-END-LEFT! 578 X 1782 Ptn:20 Board:5.MFC18-OAK/02 Qty:1 Material:MFC18-OAK Cycles:1	143 150! 998 1000 X 600 998 X W-ROBE-END-RIGHT! 599 578 X 1782 578 X 1782 599 578 Ptn:21 Board:5.MFC18-OAK/02 Qty:1 Material:MFC18-OAK Cycles:1 500
Batch reports Summaries Advanced Patterns Machining Custom	163! 166! 90! 91! 92!	158 197! 158 93! 964 X 578	79 198 DDC-BACK 126

The cutting patterns are shown in a thumbnail preview.

The patterns can also be viewed full screen.

		_
Review runs		
File Edit Vie	ew Settings Summaries Help	L,
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Favourites Batch summary	Pattern 20 of 34 Example 5	5
Management summary	Example5///?default/?default/SQ	5
Pattern summary	Board: MFC18-OAK/02 Waste: 17.14% Size: 2440.0 x 1220.0 x 18.0 Material: MFC18-OAK Prelaminated - Oak 18mm Boards: 1	*
Pattern preview		
뿷 Pattem	W-ROBE-BASE WALL-DOOR!	
	964 X 578 500 X 750 126! 126!	
	W-ROBE-BASE 498 X 743	
	964 X 578	
Batch reports	X68 X 202.4 691,4 X 241,2	
Summaries	//////////////////////////////////////	
Advanced	Convict 4.0. Deals height 4. Contag 4	
Patterns	Rear rip trim with kerf - Rip: 10.0 Cross: 10.0 Retrim with kerf: 5.0	
Machining		
Custom	▲ ▶ \Pattern (Parts (Saw simulation /	

Further details of each cutting patterns are accessed from the tabs at the foot of each pattern.

The summaries include a list of patterns and cutting quantities, summary or parts produced, a list of offcuts produced ...

😡 Review runs											×
File Edit Vie	w Setting	s Summaries H	lelp								
			Q 📲						5	?]]]]]]]	2
Favourites											_
Batch reports	Offeu	it summa	ry							Example	e 5
Summaries			-							1	
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The Office A									Exampl	eo////derault//deraul	υsQ
summary	No	Descriptio	on Length	Width	Total	Area	Cost	Cost /	Total	Offcuts per pattern	
M. Edaina	L		mm	mm		m2	m2	Offcut	Cost		_
summary	0	lua anatan kina d	0.05 0		0.00						
64 Mashina		iue - restocking 1	12.05 Cost n	eduction	0.00						
times											≡
	HARDBO	ARD-4MM* Hard	dboard 4mm 1	Thickness	s 4.0 B	ook 8 Pa	arametei	rs HBD04	Min si	<u>ze 850.0 X 400.0</u>	
summary											
#利 Station	1.)	EXAMPLE5/000	1 2440.0	470.2	1	1.147	0.445	0.511	0.51	1/4	
summary	2.)	EXAMPLE5/000	2 952.0	457.2	1	0.435	0.445	0.194	0.19	1/7	
- Destacking					2	1.583			0.70		
pictures		D 19MM Drolomi	inated White	10	Thicknee	. 10 0 0	Pook 6	Min oizo	200 0 V	200.0	
		F-TOMIN FIEIAIN	mateu - vvnite		nicknes	5 10.01	DOOK D	win size	300.0 X	200.0	
	3.)	EXAMPLE5/000	3 2440.0	343.8	1	0.839	1.570	1.317	1.32	1/15	
	4.)	EXAMPLE5/000	4 451.6	282.0	1	0.127	1.570	0.200	0.20	1/15	
					2	0.966			1.52		
	MFC18-E	BEECH Prelamina	ated - Beech	<u>18mm Th</u>	nickness	18.0 B	ook 5 N	<u>lin size 3</u>	00.0 X 2	200.0	
Patterns			E 0444.0	210.2	1	0 740	1 605	1 202	1 20	1/24	
Machining	6 3		5 2414.Z	404.6	1	0.749	1.605	0.990	0.99	1/34	
Custom	I D V Of	fcut summary	Offcuts /	404.0			1.005	0.000			P .
		iout outlinuity //									

Where appropriate offcuts can be returned to the Board library and re-used.



Up to 3 chart views can be designed and included for each summary.

Summaries available include:-

Batch summary Management summary Pattern summary Part summary Board summary Offcut summary Saw loading summary Material summary Sundry parts Machine times

In addition a very wide variety of custom reports can be created with the Form & Label design option.

All the information from cutting is available for the reports and a set of pre-defined templates can be used as a starting point for your own reports which are fully integrated into the program.

🔛 Review runs		
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Favourites		
Batch reports	Optimised Part Details 3 of	Example 5
Summaries	- F	r · · ·
Advanced		
Patterns		Example5///?default/?default/SQ
Machining	Ontimized Parts	*
Custom	Optimised Parts	
	Run: Example5	Description: Example 5
Board Details	Edgebander setup time: 0:10 Saw setup time: 0:43	
	Part code: BASE-CABINET-DOOR Bottom edge:	Drawing name:
Details	Material code: MFC18-OAK Top edge:	00000924
	Quantity: 1 Grained	LOW
Part Details		
St Dattern		
Details	Part code: BASE-CABINET-DRAWER Bottom edge:	Drawing name:
	Length: 400.0 Width: 184.3	Part Volume: FIN SIZE400.0 x 184.3
	Quantity: 3 Non Grained Right edge:	LOW
	Part code: BASE-CABINET-DRAWER-LONG Bottom edge:	Drawing name: 00000926
	Length: 900.0 Width: 184.3 Left edge:	Part Volume: FIN SIZE900.0 x 184.3
1		
		1

The custom summary above shows a bar code and drawing for each part type.

Saw Interface

Optimising data can be sent directly to many types of saw in proprietary formats.

Saw interface parameters set up the transfer for each saw. Users typically transfer to a handful of different saws. For example, two different Holzma saws.

Mac	hine interface Tools	Auxiliar
	Holzma Cadmatic III	+
	Holzma Cadmatic IV	•
	ASCII Pattern Export	•
	Online label PC	•
	Weeke	
	2D-DXF	
	Nested DXF	

The saw controllers supported are:-

```
Direct link - Holzma Topmatic/Micromatic
Module programmer
```

Online label PC	
Holzma Cadmatic I	
Holzma Cadmatic II	
Selco CRLINK	
Holzma Cadmatic III/IV	
Homag Sawtech (Espana)	
Giben	
Schelling Commander 2 and	4
SCM	
SCM Seziona	
Ascii PTX	
MDB PTX	

This variety of saws includes many different types of saw but typically the Standard Optimiser is used with Single axis beam saws.

A large set of saw parameter files are provided covering the settings for a wide range of saw models.

Saw parameters - N	ew from template	— × —)
Select a parameter fi	ile template	
 HPL11 HPL11X HPL33 HPL33X HPL380X HPL510 HPL510X HPP250 HPP33 HPP350 	 HPP380 HPP510 HPV33 HPV33X HPV510 HPV510X HQD33 HQP11 HQS11 	
OK	Help	Cancel

Pattern editor

The standard optimiser deals with a wide range of jobs but smaller jobs often require the flexibility to make last minute changes as orders change or materials are not available. The pattern editor and pattern library allow 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.



In this example a part (that was cancelled) has been deleted. 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 and the cutting data can be sent to the saw.

The editor should be used carefully - if there are large scale changes it is better to re-optimise as the balance of costs and waste may change significantly.

Common patterns can be stored in the pattern library to use as templates for other jobs.

Export cutting data

As well as sending data to a saw cutting data can also be exported to our standard PTX (Pattern exchange) format; either as an ASCII file or MDB database file.

This format has been in use for many years and several manufacturers use it for extracting data for post processing for other machines:-

- transfer to other office or production database systems

- control of destacking machinery

- control of edgebanders
- sending information to other stations in a cutting line.

Full control of imported data and clean part lists

These days it is much more common for part list requirements to be imported from other systems such as an Order system or Sales database. In these cases the data is often in a variety of formats and the incoming data contains records and fields that are not used in optimising.

The *Part list import parameters* allow you to describe the format of almost any external file and to specify the fields required for optimising (part code, length, width quantity etc.)

It often happens, as well, that not all the part sizes can be optimised e.g. thin rails or bought in items. Using the *Cutting list rules* option allows any imported list to be further refined and corrected automatically.

The program can also deal smoothly with converting from data in fractional or decimal inches to millimetres (or vice versa).

Comparison of Optimisers

Comparison of each optimising module

	PO	SO	LO
Part list No. of lines (part sizes)	20,000	20,000	10,000
Total pieces	99,999	99,999	10,000
Maximum jobs in batch	250	250	
Transfer to Single saws	•	•	
Transfer to Angular saws	•		
Transfer to Saws with split	•	•	
fences			
Transfer to Cadmatic 4	•	•	•
Batch operation	•	•	
Strip production	•		
Full sheet over production	•		
Volume optimisation	•		
Small quantity optimisation	•	•	•
Control of open stacks	•	•	
Control of cutting (trims, recuts	•	Limited	Limited
)			
Cutting times	•	•	
Costs	•	•	•
Free cut analysis	•		
File management	•	•	•
System maintenance	•	•	•
Pattern editor & library	•	•	
Reports and summaries	•	•	Limited
(configurable)			
Custom reports	•	•	
Customised part list	•	•	
Board library	•	•	•
Form & label design	•	•	
Integrated local help	•	•	•
Links to website	•	•	•

Form & label design is for forms and labels at the Office



Large scale production – with full cost control

This is the most extensive optimising module. It gives full control over costs, cutting constraints and all cutting pattern features including the special requirements of larger scale production.

It is fully integrated with the PQ and PL modules (where these are used) and includes an interface to a large number of proprietary saws.

- Enter part sizes
- Optimise
- Send cutting data to saw



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
- Calculate part sizes from product requirements (PQ module)
- Import part sizes from external files or systems

The result is a list of Part sizes and requirements.

🐻 Part	M Part list - Example 9											
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T	itle Example 9	Opt default			- 🗉		Saw	defaul	t	•		
	Description	Material	Length	Width	Quantity	Over	Under	Grain	Edge Btm	Edge Top	Edge	
Global						0%	0%					
1.	BASE-BOTTOM	MEL-CHIP-18MM	464.0	582.0	20	0	0	N				
2.	BASE-BOTTOM	MEL-CHIP-18MM	564.0	582.0	40	0	0	Ν				
3.	BASE-BOTTOM	MEL-CHIP-18MM	464.0	582.0	32	0	0	Ν				Ξ
4.	BASE-CABINET-BOTTOM	MEL-CHIP-18MM	864.0	582.0	42	0	0	Ν				
5.	BASE-CABINET-DIVIDER	MEL-CHIP-18MM	560.0	533.3	48	0	0	Ν				
6.	BASE-CABINET-DOOR	MEL-CHIP-18MM	400.0	556.8	20	0	0	Ν				
7.	BASE-CABINET-DRAWER	MFC18-BEECH	400.0	184.3	32	0	0	Y				
8.	BASE-CABINET-DRAWER-LONG	MFC18-BEECH	900.0	184.3	33	0	0	Y				
9.	BASE-CABINET-END-LEFT	MFC18-BEECH	582.0	870.0	44	0	0	Y				
10.	BASE-CABINET-END-RIGHT	MFC18-BEECH	582.0	870.0	17	0	0	Y				
11.	BASE-CABINET-RAIL-BACK	MEL-CHIP-18MM	864.0	150.0	12	0	0	Ν				
12.	BASE-CABINET-RAIL-FRONT	MEL-CHIP-18MM	864.0	150.0	60	0	0	Ν				
13.	BASE-CABINET-SHELF	MEL-CHIP-18MM	464.0	560.0	60	0	0	Ν				
14.	BASE-DOOR	MFC18-BEECH	500.0	554.8	22	0	0	Y				
15.	BASE-DRAWER	MFC18-BEECH	500.0	184.3	18	0	0	Y				
16.	BASE-DRAWER	MFC18-BEECH	500.0	186.3	12	0	0	Y				
17.	BASE-DRAWER	MFC18-BEECH	600.0	245.2	40	0	0	Y				
18.	BASE-END-LEFT	MEL-CHIP-18MM	582.0	870.0	42	0	0	N				Ŧ
		III									•	
												зđ

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 (EL module) and if necessary dividing lists if they are too large to send to a saw in one go.

The part list can be customised with many pre-set and user defined fields - these are often important for volume production in tracking parts, dividing lists ...





Saw parameters are used to describe each saw; overall cutting length, position of clamps, size of waste flap ...



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



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



The Material column in the Part list associates each part with the correct material to use. It is possible using extra fields in the part list to allow for alternate materials on jobs, for example, for dividers or hidden items.



Optimisation produces 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.

🔛 Review runs										×
File Edit View	v Settings Summari	ies Help								
	*] _= >> 🖷 😳 🎘 🔍 🖷 🛃 🛛 🔺 🕨 🖂 🥩 ? 📃 🗌 🦼									
Favourites Management summary Example 9 Batch summary Example 9										9
Management summary								Example 9///defau	lt/default/\$	SQ
Pattern	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	*
summary	Required parts	1228	283.13	5.10	89.78%			Number of patterns	31	
## D .:	Plus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	4	
preview	Offcuts	20	4.08	0.07	1.29%			Rotated patterns	0	
proviou:	Scrap		28.14	0.51	8.92%			Recut patterns	17	
🧏 Pattern	Core trim		0.00	0.00	0.00%			Number of cycles	39	
	Boards	103	315.35	5.68	100.00%			Cutting length	1717.4	-
								Throughput (M3/Hr)	1.5	-
								Waste (%Parts)	11.38%	
Batch reports			245.25	c co	400.000/		070 40	Waste (%Boards)	10.22%	
Summaries	Sheets used		315.35	5.68	100.00%		9/6.40			
Advanced	Officute used		0.00	0.00	1.00%	0.000	0.00			
Bottorne	Net meterial used		-4.00	-0.07	-1.23%	0.000	0.00			
Fallenis	Cutting time	2-520	311.27	5.61	90.71%	50.000	104 07			_
Machining		3.00M	202.42	F 40	00 709/	30.000	134.07			Ŧ
Custom	Management	summary /	Dashboa	ird 🖌 Oi	itput 🔏 P 🖪			III	•	
										H

The Management summary includes the Dashboard which provides a graphical view of the summary.



This can be customised for almost any view and to include charts from other summaries.



The cutting patterns are shown in a thumbnail overview.

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

Review runs					
File Edit View	w Settings Summar	ies Help			
1		× 🔍 📲			N 🛃 🥩 ? 📑 🗋 4
Favourites Batch summary	Pattern 26	of 31			Example 9
Management summary					Example 9///default/default/SQ
Pattem summary	Board: MFC18-BEE Material: MFC18-BE	CH/02 ECH Prelaminate	Wast d - Beech 18r	e: 11.51% nm	Size: 2440.0 x 1220.0 x 18.0 Boards: 1
Rattem	BASE-D 40 500 X 554.	DOR BASE-DOOR 500 X 554.8	BASE-DOOR 500 X 554.8		
Batch reports	40 40	40 40	40	40 304.2 40 350	
Summaries	8		5	15	
Advanced					
Patterns	Saw kerf: 4.8 Book	height 1 Cycles 1	 a: 10.0 Dataina	with korf 5.0	
Machining	Rear rip trim with Ke	n - Rip. Tu.u Cros	s. iu.u ketrim	with Ken. 5.0	*
Custom	▲ Pattern / Pa	ts 🖌 Saw simulatio	n /	•	
					łł.

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

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

Each summary can include up to 3 custom charts to show aspects of the data. For example the Offcut Summary.

Review runs											×
File Edit Vie	w Settin	uns Summaries Heln									
· · ·	~ -			_				-	_		
											
Favourites											
Batch reports	Offc	ut summary	7							Example	e 9
Summaries		2								1	
Advanced									-		
									Exan	ple 9///default/defaul	t/SQ
Join Offcut	No	Description	Length	Width	Total	Area	Cost	Cost /	Total	Offcuts per pattern	
Summary			mm	mm		m2	m2	Offcut	Cost		
Distribution summary	Offende	value restaching 6.2	Contro	duction 0	00						
M. Edaina		value - restocking 6.5	Cost le	duction 0	.00						
summary											=
Machine	MEL-C	HIP-18MM Prelamina	ted - White	e 18mm T	hicknes	s 18.0 l	Book 5	Min size	<u>300.0 X</u>	200.0	
times	1	XEXAMPLE9/0001	1747 8	615.8	1	1 076	1 570	1 690	1 69	1/18	
🌌 Saw loading	2	XEXAMPLE9/0002	964.0	552.6	1	0.533	1.570	0.836	0.84	1/18	
summary	3.	XEXAMPLE9/0003	687.4	241.2	1	0.166	1.570	0.260	0.26	1/18	
	4.	XEXAMPLE9/0004	400.0	338.2	1	0.135	1.570	0.212	0.21	1/10	
	5.	XEXAMPLE9/0005	400.0	338.2	1	0.135	1.570	0.212	0.21	1/11	
	6.	XEXAMPLE9/0006	400.0	338.2	1	0.135	1.570	0.212	0.21	1/12	
	7.	XEXAMPLE9/0007	400.0	338.2	1	0.135	1.570	0.212	0.21	1/13	
	8.	XEXAMPLE9/0008	487.4	218.4	1	0.106	1.570	0.167	0.17	1/14	
	9.	XEXAMPLE9/0009	487.4	218.4	1	0.106	1.570	0.167	0.17	1/15	
Patterns	10.	XEXAMPLE9/0010	400.0	253.3	1	0.101	1.570	0.159	0.16	1/14	
Machining	11.	XEXAMPLE9/0011	400.0	253.3	1	0.101	1.570	0.159	0.16	1/14	-
Custom		Offcut summary (Offc	uts /	253.3	1	101	1 570	0 169	<u>n 16</u> III	1/15	F
		- 11				•					



The following custom chart 'Offcuts' shows the distribution of Offcut sizes.

The 'Chart settings' option for each summary allows a wide variety of custom charts to be set up.

Professional optimising

The Professional optimiser is designed for larger volumes of parts - up to the very largest; it balances the cutting time and costs against material cost to produce an effective solution.

The optimiser includes many specialist features which are often needed with volume production.

- Over production of parts (up to a full sheet)
- 'Strip production' option to allow ripping and cross cutting to appear on separate patterns.

This is often required where the cutting line separates ripping and cross cutting across separate saws (e.g. Kitchen worktops).



- Option to restrict the number of pallet groups.

The number of parts not completed at any time is kept below a fixed value. This helps with offstacking and later production processes where there are large volumes of parts.

- Free cut analysis.

This determines the optimum position for cutting jumbo boards - a free cut to split boards is often an option for those using high board volumes.

- Optimising parameters to control the number of different board sizes used and the order of part production (priority).

These are often more important for volume production.



Optimising data can be sent directly to many types of saw in proprietary formats.

Saw interface parameters are used to set up the transfer for each saw. Users typically transfer to a handful of different saws. For example, two different Holzma saws.

Mac	hine interface	Tools	Auxiliar					
	Holzma Cadm	natic 🎞	•					
	Holzma Cadm	Holzma Cadmatic IV						
	ASCII Pattern	•						
	Online label P	С	•					
	Weeke							
	2D-DXF							
	Nested DXF							

The saw controllers supported are:-

```
Direct link - Holzma Topmatic/Micromatic
Module programmer
Online label PC
Holzma Cadmatic I
Holzma Cadmatic II
Selco CRLINK
Holzma Cadmatic III/IV
Homag Sawtech (Espana)
```

```
Giben
Schelling Commander 2 and 4
SCM
SCM Seziona
Ascii PTX
MDB PTX
```

This variety of saws includes many different types of saw including full support for Angular systems (Holzma only) dealing with larger volumes of cutting.

- Single saws
- Angular saws
- Angular saw with turntable
- Separated Rip and Cross cut saws (strip production)
- Saws with split fences (or split fence devices)

Our pattern exchange format (PTX) is used by several manufacturers to control other machinery on the production line or send data back to the office.

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 and a pattern library. 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 amendment - Pattern 26 of 31										
File Edit View Help										
N	196			\$?			
Example 9	ю тісі	1000 11					Example 9/	//default/default		
Material: MFU18-BEECH Prelaminated - Beech I	18mm Thicknes:	S 18.0 BOOK I						Waste: 11.		
4. MFC10-BEECH/02 Material MEC18-BEECH										
Length 2440.0	40									
Width 1220.0	349.5	BASE-DO	OR	BASE	E-DOOR	BASE-DOOR	BASE-	-DOOR		
Thickness 19.0	X	EOO V EE		500 3	7 554 0	500 V 554 (FF4 0		
Cost 2,960	450	500 A 55	4.8	500 2	1 554.8	500 A 554.0	5 500 A	554.8		
Cost 2.360										
Retated N										
	40	40	4	10	40	40	40	204 2		
Current area	349.5	349.5	34	9.5	349.5	349.5	349.5	X X		
40. BTH-CAB-DOOR-LEFT	X	X	X		X	X ALEO	X	450		
Material MFC18-BEECH	450	450	4	50	450	450	450			
Length 349.5							DACE DE	AUED		
Width 450.0		ö			6		BASE-DR	AWER		
Rotated N	μ			1						
Free area										
Length 349.5										
Width 99.9										
Copy / insert between strips										
20		21				22				
14 14 36 1 1 14 36 10 1 1 10 1 1 1 <	I	9 9	9	10 I)) 58 × 87	9 9 12 582 5 13 X 10 870 8 11 11 11 11 11 11 11 11 11 11 11 11 11	9 10 82 58 X X 70 87 T			
4					111			F.		

In this example a part (that was cancelled) has been deleted. 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 and the cutting data can be sent to the saw.

The editor should be used carefully - if there are large scale changes it is better to re-optimise as the balance of costs and waste may change significantly.

Common patterns can be stored in the pattern library to use as templates for other jobs.

Form & label design is for forms and labels at the Office Full Edging calculations require the EL module

For a comparison of optimisers - see the 'Standard Optimiser' section above



Sheet optimising for custom Workshops

The Lite optimiser is designed for the smaller workshop. It is straightforward to use with a minimum of setup. It is for cutting lists with a wide variety of part sizes, small run quantities, typically cut '1 high'. The focus is on material savings rather than cutting time.

It is typically used with Sliding table saws, Vertical panel saws, or smaller Beam saws.

Cutting patterns can be directly downloaded to the Holzma Cadmatic 4 controller.

- Enter part sizes
- Optimise
- Patterns and cutting instructions



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
- Cut and paste from a spreadsheet
- Import part sizes from external files

The result is a list of part sizes.

🔢 Part	list - Bedroom & bathroom	1									×
File E	Edit View Optimise He	lp									
*		× ~ [卢	M	1	6	?			
Т	Title Bed / Bathroom Opt default - E Saw lite										
	Description Material Length Width Quantity Over Under Grain E										*
Global						0%	0%	N			_
1.	BTH-CAB-BACK	MFC18-TEAK	664.0	564.0	4	0	0	N			=
2.	BTH-CAB-BACK	MFC18-EBONY	464.0	564.0	3	0	0	N			
3.	BTH-CAB-BOTTOM	MFC18-EBONY	464.0	144.0	3	0	0	N			
4.	BTH-CAB-BOTTOM	MFC18-TEAK	664.0	144.0	4	0	0	N	EBONY-TAPE		
5.	BTH-CAB-DOOR-LEFT	MFC18-TEAK	349.5	450.0	4	0	0	N	EBONY-TAPE	EB	1
6.	BTH-CAB-DOOR-LEFT	MFC18-EBONY	249.5	450.0	3	0	0	N			
7.	BTH-CAB-DOOR-RIGHT	MFC18-TEAK	349.5	450.0	4	0	0	N	EBONY-TAPE	EB	i i
8.	BTH-CAB-DOOR-RIGHT	MFC18-EBONY	249.5	450.0	3	0	0	N			
9.	BTH-CAB-END-LEFT	MFC18-TEAK	162.0	600.0	4	0	0	N	EBONY-TAPE	EB	i
10.	BTH-CAB-END-LEFT	MFC18-EBONY	162.0	600.0	3	0	0	N			
11.	BTH-CAB-END-RIGHT	MFC18-TEAK	162.0	600.0	4	0	0	N	EBONY-TAPE	EB	i
12.	BTH-CAB-END-RIGHT	MFC18-EBONY	162.0	600.0	3	0	0	N			
13.	BTH-CAB-SHELF	MFC18-EBONY	464.0	144.0	6	0	0	N			
14.	BTH-CAB-SHELF	MFC18-TEAK	664.0	144.0	8	0	0	N	EBONY-TAPE		
15.	BTH-CAB-SHLF-BASE	MFC18-TEAK	664.0	162.0	4	0	0	N	EBONY-TAPE		
16	RTHLOARISHI FIRASE	MEC18-EBONY	0.434	162.0	3	n	Π	N		1	-
		III									

In this example there are a large number of different part sizes required in small quantities. Use the part list editor to check and adjust sizes as required.

Materials

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



The Board library stores a record for each material and a record for each board size (including any offcuts) for each material type.

W? Fil	Board library e Edit View Help								• 🔀
4	J 🗋 🚑 🛪 🧉] / S	?						
Γ	Materials								<u>^</u>
	Material 🔺	Description	Thic	Default	Boo	Picture	Туре	Density	
	BLUE-LAM-1MM	Blue Laminate 1mm	1.0	Y	10		Laminate	0.900	
	CHIPBOARD-18MM	Chipboard Core 18mm	18.0	N	0			0.350	=
	EBONY-LAM-1MM	Ebony Laminate 1mm	1.0	Y	10		Laminate	0.900	
	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	-
Γ	Boards for material: MEL-	CHIP-15MM Prelaminate	ed - V	Vhite 1	5m	m Thickness	s:15.0 Boo	ok:0	^
•	Board code 🔺	Lenath Width I	nforma	ition	Stock	k Alloc Orde	r Cost	Limit	Bin ▼

In this example the material MFC18-EBONY has 2 available board sizes 3050.0 x 1220.0 and 2440.0 x 1220.0. The 'Material' column in the Part list associates each part with the correct material to use and the optimiser works out the optimum boards sizes to use for each job.

A set of optimising parameters describe the constraints on cutting; saw kerf, trims ...



Another set of parameters (Saw parameters) are used to describe each saw; overall cutting length, cutting height ...



Optimisation produces the pattern layouts and a set of detailed reports on each job.

The first report shown is an overall summary.

🔢 Review runs										×	
File Edit View	Settings Summaries	Help									
	< 📳 🚱 🎘		26		4		1 🛃	} 🛷 ? E		4	
Favourites											
Batch summary	Batch summary Bed / Bathroom										
Reference Management summary							Bedro	oom & bathroom///lit	te/default/	sQ	
🗰 Pattern	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	*	
summary	Required parts	532	290.33	4.37	83.16%			Number of patterns	71		
## Pattern preview	Plus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	29		
	Offcuts	0	0.00	0.00	0.00%			Rotated patterns	0		
Rattern	Scrap		58.78	0.66	16.84%			Recut patterns	23		
	Core trim		0.00	0.00	0.00%			Number of cycles	71		
	Boards	115	349.11	5.03	100.00%			Cutting length	0.0		
								Throughput (M3/Hr)	0.0	=	
								Waste (%Parts)	20.25%		
								Waste (%Boards)	16.84%		
	Sheets used		347.73	5.01	99.60%		978.91				
	Offcuts used		1.38	0.02	0.40%	1.550	2.14				
Batch reports	Offcuts created		0.00	0.00	0.00%	0.000	0.00	-			
Summaries	Net material used		349.11	5.03	100.00%		981.05				
Advanced	Cutting time	0:00Hr				0.000	0.00				
Patterns	lotal parts	532	290.33	4.37	83.16%	3.379	981.05				
Custom			Deebbee		start (F					Ψ.	
Custom	Management	summary /	Dashboa	ia Yo	utput <u>A</u> H					æ	

The Management summary includes the Dashboard which provides a graphical view of the summary. This can be customised for almost any view and to include charts from other summaries.



A window (Runs pane) shows the list of optimised jobs so it is easy to quickly check and review one job then another.

🔛 Review runs												x
File Edit View	w Settings Sumi	naries	Help									
1	X 🗄 🞼		s 🔍 📲	t	٩		N 🛃	5	8 ?		2	
Favourites Batch reports Summaries	Bedroom & batt Bedroon Bedroon Bedroon Example 5 Example 3 Example 1	IT. ▲ 18	Manager	nent sı	ımm	ary				Bed / Bat	hroo	m
Management summary	• New batch								Bed	room & bathroom	//lite/lite/S	sQ
	Part req		Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	
Part Summan/	Example Charts		Required parts	532	290.33	4.37	83.16%			Number of patt	71	
Summary	Basic part list		Plus/Over parts	s 0	0.00	0.00	0.00%			Headcut patterns	29	
🐺 Sundry parts	Batch optimisat	on	Offcuts	0	0.00	0.00	0.00%			Rotated patterns	0	
W. Dened	Small quantity of the second sec	pt	Scrap		58.78	0.66	16.84%			Recut patterns	23	
Summary		=	Core trim		0.00	0.00	0.00%			Number of cycles	71	
Saminary	Edoing and lami		Boards	115	349.11	5.03	100.00%			Cutting length	0.0	
👹 Pattern	Cadmatic saw e	va								Throughput (M3	0.0	
summary	Bower Concent	De								Waste (%Parts)	20 25%	
🖉 Input	Tension trims									Waste (%Boards)	16.84%	
summary	Stacked duplic.		Sheets used		347 73	5 01	99 60%		978 91	(indice (indication)	10.0470	=
Waterial	Cutting list rules		Offcuts used		1 38	0.02	0.40%	1 550	2 1/			
summary	Alternate mate		Offcuts created		0.00	0.02	0.40%	0.000	0.00			
Cannary			Not material	<u>.</u>	240.11	5.02	100.00%	-0.000	0.00	-		
	• Nesting - Part li	o	Cutting time	0.004-	345.11	J.0J	100.00%	0.000	0.00			
	. Nesting - Machi	nin	Cutting time	0.000	200.22	4.07	02.40%	0.000	0.00			
	Nesting - DXF		i otai parts	532	290.33	4.31	63.16%	3.319	981.05			
		s										
Advanced	🗄 ····· Nesting - Offline	e ri	Sunary - unit u	s 14				3.200	44.80			
Patterns	🗄 ····· Kitchen plan		l otal sundry						44.80			-
Custom	Traducta 9 port	Þ	▲ ► \ Manager	ment summa	ry (Dasi	hboard	I ∫ Outp ∢			III	۰.	at

The cutting patterns are shown in a thumbnail preview.

Review runs	
File Edit View Settings Summaries Help	
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Favourites Batch reports Summaries Advanced	Bed / Bathroom
Patterns	Bedroom & bathroom///lite/lite/SQ
Pattern Ptn:1 Board:1.MFC18-TEAK/01 Ptn:2 Board: Qty:2 Material:MFC18-TEAK Cycles:1 Qty:1 Materia	1.MFC18-TEAK/01 Ptn:3 Board:1.MFC18-TEAK/01 al:MFC18-TEAK Cycles:1 Qty:1 Material:MFC18-TEAK Cycles:1
Pattem W-ROBE-END-LEFT! 59! W-ROBE-	END-LEFT! 59! W-ROBE-END-RIGHT! 59!
578 X 1782 964 578 W-ROBE-END-LEFT! X W-ROBE-END-LEFT! X 578 578 X X	X 1782 964 578 X 1782 964 END-RIGHT! X W-ROBE-END-RIGHT! X 578 578 578
578 X 1782 578	X 1782 578 X 1782
Ptn:4 Board:2.MFC18-TEAK/02 Ptn:5 Board: Qty:1 Material:MFC18-TEAK Cycles:1 Qty:1 Materia	2.MFC18-TEAK/02 Ptn:6 Board:2.MFC18-TEAK/02 al:MFC18-TEAK Cycles:1 Qty:1 Material:MFC18-TEAK Cycles:1
63 63 63 63 59 63 70	70 70 59 92! 59
X X X X 59 X X 1201 1201 1201 1201 1201 1201 1201	X X 59 1201 1201 5 5 5 5 7 7 7 7
Custom	
J	

The patterns can also be viewed full screen.

Review runs	
Favourites Batch reports Summaries	Pattern 1 of 71 Bed / Bathroom
Patterns	Bedroom & bathroom///lite/lite/SQ
Pattem sequence	Board: MFC18-TEAK/01 Waste: 8.85% Size: 2440.0 x 1220.0 x 18.0 Material: MFC18-TEAK Prelaminated - Teak 18mm Boards: 2
preview	
🧏 Pattern	W-ROBE-END-LEFT!
	578 X 1782 W-ROBE-BASE!
	964 X 578
	W-ROBE-END-LEFT!
	578 X 1782
	Saw kerf: 4.8 Book height 2 Cycles 1 Rear rip trim with kerf - Rip: 10.0 Cross: 10.0 Retrim with kerf: 5.0
Custom	Pattern / Parts / Cutting dimensions /

The tabs at the foot of each pattern show full further details.

The summaries include a list of patterns and cutting quantities, summary of parts produced, and a list of boards used.

🔛 Review runs													[
File Edit Viev	v Sett	ings Summaries H	elp											
	\times	🖺 🚱 🎘 (26		4		M	E		3?			2 🗗 🛃
Favourites Batch reports Summaries	Pat	tern summa	ary									Bee	1 / B	athroom
Management summary											В	edroom &	bathro	om///lite/lite/SQ
E Part	Ptn	Board	Len	Width	Waste	Yield	Board	No	No	No	Cycle	Total	Open	Total cuts 🔺
summary	No		mm	mm	%	%	Qty	Сус	Rip	Xct I	mm:ss	hh:mm	Part	per pattern
🐺 Sundry parts	Avera	age book 1.6 (23.2)	Bundle	loading	g and							0:00:00		E
W Board	MFC1	18-TEAK Prelaminate	ed - Teak	18mm	Thickne	ss 18	0 Book	4						
summary	1	MFC18-TEAK/01	2440.0	1220.0	8.85	91.15	2	1	0	0	0:00	0:00:00	3	0
	2	MFC18-TEAK/01	2440.0	1220.0	8.85	91.15	1	1	0	0	0:00	0:00:00	4	0
summary	3	MFC18-TEAK/01	2440.0	1220.0	8.85	91.15	1	1	0	0	0:00	0:00:00	3	0
- Summary	4	MFC18-TEAK/02	3050.0	1525.0	7.07	92.93	1	1	0	0	0:00	0:00:00	6	0
🖉 Input	5	MFC18-TEAK/02	3050.0	1525.0	7.07	92.93	1	1	0	0	0:00	0:00:00	6	0
summary	6	MFC18-TEAK/02	3050.0	1525.0	10.07	89.93	1	1	0	0	0:00	0:00:00	7	0
💣 Material	7	MFC18-TEAK/02	3050.0	1525.0	7.92	92.08	1	1	0	0	0:00	0:00:00	8	0
summary	8	MFC18-TEAK/02	3050.0	1525.0	11.80	88.20	1	1	0	0	0:00	0:00:00	7	0
	9	X00148/0001	950.0	620.0	20.07	79.93	1	1	0	0	0:00	0:00:00	4	0
	10	X00125/0001	1011.0	780.0	14.06	85.94	1	1	0	0	0:00	0:00:00	2	0
					9.10	90.90	11	10	0	0		0:00:00		0
	MFC	18-EBONY Prelamina	ated - Eb	ony 18r	nm Thic	kness	18.0 Bo	ok 4	_					
Advanced	11	MFC18-EBONY/02	2440.0	1220.0	9.84	90.16	3	1	0	0	0:00	0:00:00	3	0
Advanced	12	MFC18-EBONY/02	2440.0	1220.0	9.84	90.16	1	1	0	0	0:00	0:00:00	4	0
Patterns	13	MFC18-EBONY/02	2440.0	1220.0	9.84	90.16	3	1	0	0	0:00	0:00:00	3	0 +
Custom	I	Pattern summary (Yield % /	Cycle ti	me / R	ip and	cross	· · ·						E A

Summaries available include:-

Management summary Pattern summary Part summary Board summary Material summary Sundry parts

Cutting dimensions

The cutting dimensions for each pattern are shown on a tab at the foot of each pattern.



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Summaries	attern	1 01 / 1						bou / Buino	
Advanced									
Patterns							Bedro	om & bathroom///lite/lit	e/SQ
	AD/PRG:[41]	1							
👸 Pattern	Cut	Size	Qty	Part	Cut	Size	Qty	Part	
sequence	Head cut	1797.0	1		Trim	5.2	1		
Hattem	Main				Rip	964.0	1		
preview	Trim	5.2	1		Trim	0.2	1		
🧏 Pattem	Rip	578.0	2		Crosscut	578.0	1	W-ROBE-BASE	
	Irim	5.2	1		Rip	161.0	1		
	Crosscut	1/82.0	1	W-ROBE-END-LEFT	Irim	0.2	1		
	Head 1				Crosscut	598.0	1	BIH-CAB-END-LEFT	=
									-
Custom	Image: A large transformed to the second	n , (Parts), Cut	ting di	mensions /	•				►

The patterns and dimensions can also be printed for the run.

DEMO USER 1	Magi-Cut Modular V9.0		Wednesday 23 May 2012 10:56				
Pattern 1 of 71			Bed / Bathroom				
			Bedroom & bathroom///lite/lite/SQ				
Board: MFC18-TEAK/01 Material: MFC18-TEAK Prelaminated - Teak	Waste: 8.85% 18mm		Size: 2440.0 x 1220.0 x 18.0 Boards: 2				
	1801.8		638.2				
5.2 W-ROE 57	8E-END-LEFT! 18 X 1782		W-ROBE-BASE!				
578.0			964 X 578				
W-ROE	E-END-LEFT!						
57	'8 X 1782		BTH-CAB-END-LEFT! 30.4				
578.0							
	44.4		75.4				
Saw kerf: 4.8 Book height 2 Cycles 1 Rear rip trim with kerf - Rip: 10.0 Cross: 10.0	Retrim with kerf: 5.0						
No Part	Length Width Total	Cut Pe	erbrd Perptn Tocut				
Description	mm mm Prod	NIII	4 2 2				
 BritickB-END-LEFT 1.Edge Btm EBONY-TAPE, 2.Edge To W-ROBE-BASE 8.Finished size 964.0 x 578.0, 15.Part 86. W-ROBE-END-LEFT 8.Finished size 578.0 x 1782.0, 9.Draw 	p EBONY-TAPE, 3.Edge Left EB 964.0 578.0 10 graining Non Grained, 16.Volume 578.0 1782.0 5 ving name 00000067*, 15.Part gra	NIL ONY-TAPI NIL LOW, 18. NIL hining Non	E, 8.Finished size 162 1 2 8 Part area m2 0.6, 19.E 2 4 1 Grained, 16.Volume L				
	19	NIL	11				
AD/PRG:[41] Cut	Size	Qty	Part				
Head cut Main	1797.0	1					
Trim	5.2	1					
rtip Trim	578.0 5.2	2					
Crosscut Head 1	1782.0	1	W-ROBE-END-LEFT				



Optimising data can be sent directly to a saw with the Holzma Cadmatic 4 controller. The program is already set up for this.

For a comparison of optimisers - see the Standard Optimiser section above



A powerful tool for nested based manufacturing

Where parts are cut (and machined) at a Machining centre Nesting based optimisation is required. This handles both rectangular and shaped parts.

Nesting typically deals with bespoke or 'one off' jobs and small run quantities.

Data can be transferred to Weeke WoodWop or 2D DXF

- Enter part sizes
- Optimise
- Send cutting data to machining centre



The starting point of optimisation is a list of part sizes and/or drawings. This can be produced in a variety of ways

- Use external part files (MPR)
- Enter rectangular parts in the Part list grid

The result is a list of part sizes with attached drawings (where required).

Drawing - SHELF_CUTOUT_W							
	Variable	Value	Comment 🔺				
	L	720.00	Length				
	В	400.00	Width				
	D	18.0	Thickness				
	SAFETY	15	Safety distance				
	DIAMETER	8	Drill diameter				
	NO_HOLES	4	No of drill holes				
	DRL_DPTH	8	Drill depth				
	TOOL_NO	143	Routing tool				
	ОК	Help	Cancel				

In this example the drawings for parts are stored in external MPR files. The drawings are created in Weeke WoodWop. NE is fully integrated with Weeke WoodWop.

To use the Machining library to create drawings in a database (rather than external files) the MI module is required.

The NE optimiser includes the Machining editor and library for creating drawing templates and making changes to drawings but it cannot be used for creating and storing part drawings.

Nested optimising

Part sizes are optimised to produce a set of patterns for machining. Part lists can be optimised singly or in a batch.

The first summary shown for each job is an overview of cutting and costs.

Review runs								_		×
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1	< 📳 💱 🎘		25				X 🛃	, si 🕈 🕺		4
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Shaped fiesting - part fiorary dra								••••		
Summanes										
Management Nesting - Part library///NESTING/M-CENTRE/NE								NE		
TT. Det summer	Description	Quantity	m2	m3	Percent	Rate	Cost	Statistic	Value	
Tart summary	Required parts	64	14.91	0.29	60.71%			Number of patterns	6	
🚟 Sundry parts	Plus/Over parts	0	0.00	0.00	0.00%			Headcut patterns	0	
	Offcuts	2	3.74	0.07	15.23%			Rotated patterns	0	
Board summary	Scrap		5.91	0.12	24.06%			Recut patterns	0	
att Dattern	Core trim		0.00	0.00	0.00%			Number of cycles	6	
summarv	Boards	6	24.56	0.48	100.00%			Cutting length	0.0	
5.0								Throughput (M3/Hr)	0.0	
Input summary								Waste (%Parts)	64.72%	Ξ
- Material								Waste (%Boards)	39.29%	
summary	Sheets used		24.56	0.48	100.00%		121.23			
	Offcuts used		0.00	0.00	0.00%		0.00			
	Offcuts created		-3.74	-0.07	-15.23%	0.000	0.00			
	Net material used		20.82	0.41	84.77%		121.23			
Advanced	Cutting time	0:00Hr				0.000	0.00			
Patterns	Total parts	64	14.91	0.29	60.71%	8.131	121.23			
Machining										-
Custom	▲ ► \ Management summary { Dashboard { Output { F <					III	•			
										H

The management summary includes a Dashboard option which displays charts and snapshots of the data and can include selected custom charts.




The cutting patterns are shown in a thumbnail view.

Click on a thumbnail to see the pattern in full screen view. Further information about the cutting pattern is on the tabs at the foot of the drawing.



Use the machining editor to check the details and make any last minute changes to the cutting plan.

Parts can be moved or deleted and minor changes can be made to the borders. The machining instructions for each part (drilling, routing ...) can also be viewed at each part drawing.



Where the NE module is used with Weeke WoodWop the program automatically moves to the WoodWop editor when editing individual MPR parts.

Where the program is used with the **MI module** the machining library editor can be used for part drawings.

Machining library	
🔧 🏷 🗋 🐋 🛐 🥩 😭 😭 🚺 🗸 🕨 🖓 🏹 🧊	
M-DISPLAY-SIDE 600 x 900 x 20	P
▲ <> fx @ \$ Try E 0 200 400 600	_ /
Function Groove router	.1.
Back	
On/Off .	×
Xstart 450	
	D.
A Xend 450	
Yend 650 4 .	
Direction 0	
Width 8	
Depth 8	
Repeat Y	
Tool T=135:A=2:W=2 +	

- The editors should only be used for minor or last minute changes - if there are substantial changes then it is better to re-optimise the job as the balance of waste and costs may have changed significantly.

Machining Interface

The cutting data is sent to the machining centre via the 'Machining interface' option.

Mac	Machine interface						
	Weeke						
	Nested DXF						

With the 'Machining centre transfer parameters' several different transfers can be set up for the different machines available for a job.

The transfer options can be set up for:-

```
Weeke WoodWop MPR
2D DXF Non-layered
2D DXF Layered Nested
```

Settings include options for:-

- Splitting front and back instructions for horizontal drilling to different machines.Converting tool instructions from one format to another
- Convert inches data to millimetres
- Minimising the tool sequence



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



The Board library stores a record for each material and a record for each board size (including any offcuts) for each material type.

Materials Description Thic Default Boo Materials MFC18-0AK Prelaminated - Ebory 18mm 18.0 N 0 MFC 0.400 MFC18-0AK Prelaminated - Dak 18mm 18.0 N 0 MFC 0.400 MFC18-0AK Prelaminated - Red 18mm 18.0 N 0 MFC 0.400 MFC18-0AK Prelaminated - Red 18mm 18.0 N 0 MFC 0.400 MFC18-TEAK Prelaminated - Teak 18mm 18.0 N 0 MFC 0.400 MIRROR-GLASS Miror Glass (sundy) 5.0 N 0 Sundy 0.000 QAK-LAM-1MM Qak Laminate 1mm 1.0 Y 10 Laminate 0.900 PARTICLERD-25MM Particle board 25mm 25.0 N 0 Sundy 0.000 TEAK-FOIL Foil-teak (sundy) 0.1 Y 0 Sundy 0.000 WHTE-LAM-1MM Teak Laminate 1mm 1.0 Y 10 Laminate 0.900 WHTE-LAM-1MM Velta Laminate 1mm 1.0 Y	Eil	Board library e Edit View Help													×
Materials Description Thic Default Boo Mat Picture Type Density MFC18/04K Prelaminated - Ebory 18mm 18.0 N 0 MFC 0.400 MFC18/0AK Prelaminated - Oak 18mm 18.0 N 0 MFC 0.400 MFC18/0AK Prelaminated - Red 18mm 18.0 N 0 MFC 0.400 MFC18/0AK Prelaminated - Teak 18mm 18.0 N 0 MFC 0.400 MFC18/0AK Prelaminated - Teak 18mm 18.0 N 0 MFC 0.400 MRDR-GLASS Mirror Glass (sundy) 5.0 N 0 Sundry 0.000 DAK-LAM-1MM Dak Laminate 1mm 1.0 Y 10 Laminate 0.900 PARTICLBRD-25MM Particle board 25mm 25.0 N 0 Sundry 0.000 TEAK-FDIL Foil - teak (sundry) 0.1 Y 0 Sundry 0.000 WHITE-ACRYLIC-12MM Acrylic - White 12mm (su	-] 🗍 📕 🔭 📦]/	PS	۶	1?									
Material Description Thic Default Boo Mat Picture Type Density MFC18:E60NY Prelaminated - Ebony 18mm 18.0 N 0 MFC 0.400 MFC18:E60NY Prelaminated - Oak 18mm 18.0 N 0 MFC 0.400 MFC18:E6D 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 QAK-LAM-1MM Oak Laminate 1mm 1.0 Y 10 Laminate 0.900 PARTICLBRD-25MM Particle board 25mm 25.0 N 0 0.550 0.900 TEAK-FOIL Foil - teak (sundry) 0.1 Y 0 Sundry 0.000 TEAK-FOIL Foil - teak (sundry) 0.1 Y 0 Sundry 0.000 WHITE-ACRYLIC-12MM Acrylic -White 12mm		Materials													^
MFC18:E80NY Prelaminated - Ebony 18mm 18.0 N 0 MFC 0.400 MFC18:0AK Prelaminated - Oak 18mm 18.0 N 0 MFC 0.400 MFC18:RED Prelaminated - Red 18mm 18.0 N 0 MFC 0.400 MFC18:RED Prelaminated - Teak 18mm 18.0 N 0 MFC 0.400 MFC18:REAK Prelaminated - Teak 18mm 18.0 N 0 MFC 0.400 MIRROR-GLASS Miror Glass (sundry) 5.0 N 0 Sundry 0.000 QAK-LAM-1MM Oak Laminate 1mm 1.0 Y 10 Laminate 0.900 PARTICLBRD-25MM Particle board 25mm 25.0 N 0 0.550 0.900 RED-LAM-1MM Red Laminate 1mm 1.0 Y 10 Laminate 0.900 TEAK-FOIL Foil - teak (sundry) 0.1 Y 0 Sundry 0.000 WHITE-LACRYLIC-12MM Acrylic - White 12mm (sundry) 12.0		Material 🔺		Descript	ion	Thic	Default	Boo	Mat	Pict	ure	Туре	D	ensity	
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Board code Length Width Information Stock Alloc Order Cost Limit Bin MFC18-EBONY/01 3050.0 1220.0 805 0 185 5.760 0 MFC18-EBONY/02 2440.0 1220.0 523 0 42 5.210 0 +		Boards for material: MFC18	B-EBON	IY Prel	aminati	əd - Eb	ony 1	8mm	n Thi	icknes	s:18.	0 Book:	0		•
MFC18-EBONY/01 3050.0 1220.0 805 0 185 5.760 0 MFC18-EBONY/02 2440.0 1220.0 523 0 42 5.210 0 +		Board code 🔺		Length	Width	Informa	ition	Stock	(A	lloc Or	der	Cost	Limit	Bin	
MFC18-EB0NY/02 2440.0 1220.0 523 0 42 5.210 0 ▼		MFC18-EBONY/01		3050.0	1220.0			80	5	0 1	85	5.760	0		
		MFC18-EBONY/02		2440.0	1220.0			52	3	0	42	5.210	0		. *
	1.													•	

In this example the material MFC18-TEAK has two available board sizes 3050.0 x 1525.0 and 2440.0 x 1220.0 and several offcuts.

The Material column in the Part list associates each part with the correct material to use and the optimiser selects the optimum board sizes to use for each job.



Cutting parts on a Machining centre requires careful control of the pattern layout. The nesting parameters give full control of cutting process for features such as:-

- Board margins

- Safety margins
 Part separation
 Placement of offcuts
- Placement of waste cuts
- Rules for placing small parts near the board edge
- •••

Nesting parameters	- nesting Nesting) optimiser		
Nesting 1 Nesting 2	Nesting 3 Offcuts	3		
Nesting 1		Range		Optimiser type: Shaped nesting II
Optimiser type		Shaped nesting II	•	
Minimum part separatio	on - mm	10.0 🗸		
Board orientation		Lengthways	•	
Nesting origin		Top left	▼]	
Board margins - mm Top	15.0 👻	Bottom	15.0 👻	
Left	15.0 👻	Right	15.0 👻	
		Override m	argins for large parts 📃	
Board dimensions				
Min length	0.0	Max length	9999.0	
Min width	0.0	Max width	9999.0	
Depth of nesting tab	le: Pre-cut width of	board		
Min	0.0	Max	9999.0	Tolerance 0.0
Small parts				
Offset small parts from	the edge			Global step angle
Min. area for nesting o	on the edge - m2		0.000	Use global step angle
Minimum offset from th	ne edge - mm		100.0	Angle 90.00 -
			OK Smir A-	
			Save As	Heip Cancel

The nesting optimiser includes options for:-

- Shaped parts Rectangular parts only
- Calculate best position for pre-cutting jumbo boards

Grain matching

Nesting optimising often involves the visible parts of a product so grain matching can be important.

Grain matched parts can be set as a template in the machining editor and the template is used by the optimisers to ensure parts stay together and are cut from adjacent areas of board.



Summary of Nesting optimiser

	NE	NE + MI
Part list No. of lines (part sizes)	20,000	20,000
Total pieces	99,999	99,999
Maximum jobs in batch	250	250
Transfer to Weeke WoodWop	•	•
Transfer to 2D DXF	•	•
Full integration with Weeke WoodWop	•	•
Drawing database		•
External MPR / DXF files		•
Batch operation	•	•
Shaped parts	•	•
Optimise pre-cut	•	•
Grain matching	•	•
Full control of cutting	•	•
File management	•	•
System maintenance	•	•
Drawing editor	•	•
Reports and summaries (configurable)	•	•
Custom reports	•	•
Customised part list	•	•
Board library	•	•
Form & label design	•	•
Integrated local help	•	•
Links to website	•	•
Machining drawing editor - parts	WoodWop	WoodWop
		Machining editor
Machining drawing editor - patterns	Machining editor	Machining editor

Form & label design is for printing labels and forms at the office For MPR files Weeke WoodWop is required



Accurate application and costing of edge-banding materials



The program 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 and trims

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

🔢 Part	: list - Example 11												
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Т	Title Example 11 Opt default 🗸 📳 Saw default 🗸 📳												
	Description	Material	Length	Width	Qua	Grain	Edge Btm	Edge Top	Edge Left	Edge Right	Face Lania		
Global													
1.	BASE/TX1	MEL-CHIP-18MM	920.0	623.0	20	N							
2.	CAB-END/TD	MEL-CHIP-18MM	750.0	600.0	12	N		ASH-TAPE-22MM	ASH-TAPE-2				
3.	TOP-TD	MFC18-TEAK	1200.0	680.0	12	Y	TEAK-TAPE	TEAK-TAPE	TEAK-TAPE	TEAK-TAPE			
4.	DIVIDER/01	MEL-CHIP-18MM	920.0	140.0	15	N			1				
5.	TOP-RX-2	MFC18-TEAK	1100.0	420.0	10	Y	POSTFORM	POSTFORM	POSTFORM	POSTFORM			
6.	CORE-TP	CHIPBOARD-18MM	930.0	670.0	20	N	RED-TAPE-22	RED-TAPE-22MM	RED-TAPE-2	RED-TAPE-22MM	RED-LAM		

A set of extra fields at the Part list allow for the entry of the edging code for each edge of each part. The correct cutting sizes are produced automatically.

For example a finished length of 750.0 mm requires a cutting size of less (e.g. 748.5) if the part is edged by tape on any of the width edges.

Cutt	ting list - Example	11												
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Т	Title Example 11 Opt default - E Saw default - E													
	Description	Material	Length	Width	Qua	Grain	Edge Btm	Edge Top	Edge Left	Edge Right				
Global														
1.	BASE/TX1	MEL-CHIP-18MM	920.0	623.0	20	N								
2.	CAB-END/TD	MEL-CHIP-18MM	748.5	598.5	12	N		ASH-TAPE-22MM	ASH-TAPE-2					
3.	TOP-TD	MFC18-TEAK	1198.0	678.0	2	Y	TEAK-TAPE	TEAK-TAPE	TEAK-TAPE	TEAK-TAPE				
4.	DIVIDER/01	MEL-CHIP-18MM	920.0	140.0	15	N								
5.	TOP-RX-2	MFC18-TEAK	1100.0	420.0	10	Y	POSTFORM	POSTFORM	POSTFORM	POSTFORM				
6.	CORE-TP	CHIPBOARD-18MM	928.0	668.0	20	N	RED-TAPE-22	RED-TAPE-22MM	RED-TAPE-2	RED-TAPE-22MM				
7.	L0006	RED-LAM-1MM	948.0	683.0	20	Y								
8.														

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			×
Code			
Bottom	Тор	Left	Right
	004	030	
			Refresh
Length		Current - part	
		2. CAB-END/	'TD
	Width	Length	750.0
		Width	600.0
OK	He	lp	Cancel

With the PL module the edging diagram can be included on each part label to show clearly how the edging is produced. This is available with:-

- Printing labels at the Office (PL module)Printing labels at the Saw (Online label PC)

- Printing labels at the Saw (Cadmatic saw controller)

For the Cadmatic the information is passed to the Cadmatic controller on transfer of data to the saw.

- With the Parts & Labels module the edging requirements can be printed on a label as a bar code and used for processing at the edgebander after cutting.

Laminating



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

🔛 Pa	rt list - Exam	ple 11											
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	Length	Width	Qua	Grain	Edge Btm	Edge Top	Edge Left	Edge Right	Face Laminate	Back Laminate			
Globa	al												
1	. 920.0	623.0	20	N									
2	2. 750.0	600.0	12	N		ASH-TAPE-22MM	ASH-TAPE-2						
3	3. 1200.0	680.0	12	Y	TEAK-TAPE	TEAK-TAPE	TEAK-TAPE	TEAK-T					
4	4. 920.0	140.0	15	N									
5	5. 1100.0	420.0	10	Y	POSTFORM	POSTFORM	POSTFORM	POSTFO					
6	6. 930.0	670.0	20	N	RED-TAPE-22	RED-TAPE-22MM	RED-TAPE-2	RED-TA	RED-LAM				
7	7.												

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

ting list - Example	11									
dit View Opti	mise Help									
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itle Example 11		Opt defau	llt		•	🗉 Saw	default	-		
Description	Material	Length	Width	Qua	Grain	Edge Btm	Edge Top	Edge Left	Edge Right	Face L
BASE/TX1	MEL-CHIP-18MM	920.0	623.0	20	N					
CAB-END/TD	MEL-CHIP-18MM	748.5	598.5	12	N		ASH-TAPE-22MM	ASH-TAPE-2		
TOP-TD	MFC18-TEAK	1198.0	678.0	12	Y	TEAK-TAPE	TEAK-TAPE	TEAK-TAPE	TEAK-T	
DIVIDER/01	MEL-CHIP-18MM	920.0	140.0	15	N					
TOP-BX-2	MFC18-TEAK	1100.0	420.0	10	Y	POSTFORM	POSTFORM	POSTFORM	POSTFO	
CORE-TP	CHIPBOARD-18MM	928.0	668.0	20	N	RED-TAPE-22	RED-TAPE-22MM	RED-TAPE-2	RED-TA	RED-LA
L0006	RED-LAM-1MM	948.0	683.0	20	Y					
	dit View Opti Example 11 Description BASE/TX1 CAB-END/TD TOP-TD DIVIDER/01 TOP-BX-2 CORE-TP L0006	dit View Optimise Help	dit View Optimise Help Image: Construction of the second sec	dit View Optimise Help Image: Second Se	dit View Optimise Help Image: Constraint of the second secon	dit View Optimise Help Image: Constraint of the state of the sta	dit View Optimise Help Image: Second Se	dit View Optimise Help Constraint of the second se	dit View Optimise Help	dit View Optimise Help

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

Edging summary and costs

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

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Summaries	L'aging sam	iiidi y					-pro 11
Advanced							
				1	Example	11///defa	ult/default/??
Offcut summary	Code	Description	Material	Thickness	Cost	Total	Total 🔺
Distribution					m	m	Cost
summary	ASH-TAPE-22MM	Ash PVC Tape 22mm		1.5	0.750	16.68	12.51
Edging summary	TEAK-TAPE	Teak PVC Tape 22mm		1.0	0.840	46.08	38.71
	RED-TAPE-22MM	Red PVC Tape 22mm		1.0	0.750	65.60	49.20
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Station summary							
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Part	costing - full						Exa	mple 11
						Pa	rt costing	- full
No	Code /	Material /	Length	Width	Quanti	ty		
	Description	Description			Time	Ilea	Date	Cost
1	BASE/TX1	MEL-CHIP-18MM	920 0	623 0	20	use	Rate	COSL
	Finished size: 920.0 x 6 Part area m2: 0.6	23.0 Part graining:	Non Grained	Volume: 1	MED			
	BASE/TX1	MEL-CHIP-18MM	920.0	623.0	0.57	3	4.646	2.663
	Saw				0:41	0.011	50.000	0.565
					Total	cost :		3.227
2.	CAB-END/TD	MEL-CHIP-18MM	750.0	600.0	12			
	Edge Top: ASH-TAPE-22MM	Edge Left: ASH-TAPE	E-22MM Finish	ned size:	750.0 x	600.0		
	Part graining: Non Grain	ed Volume: MED Par	t area m2: 0.	4				
	CAB-END/TD	MEL-CHIP-18MM	748.5	598.5	0.44	8	4.646	2.081
	ASH-TAPE-22MM	Ash PVC Tape 22mm				1.390	0.750	1.043
	Saw Edgebander				0:35 0:31	0.010	50.000 30.000	0.493 0.258
					Total	cost :	-	3.875
3	TOP-TD	MEC18-TEAK	1200 0	680 0	12			
	Edge Btm: TEAK-TAPE Edg Finished size: 1200.0 x Edgebander: N/A	e Top: TEAK-TAPE Ec 680.0 Part graining	lge Left: TEAR g: Grained Vo	(-TAPE Ed lume: MED	ge Right Part a	: TEAK-T. rea m2:	APE 0.8	
	TOP-TD	MFC18-TEAK	1198.0	678.0	0.81	2	3.866	3.140
	TEAK-TAPE	Teak PVC Tape 22mm	ı			3.840	0.840	3.226
	Saw Edgebander				0:49 1:12	0.014 0.020	50.000 30.000	0.687 0.597
					Total	cost :	_	7.650

The part costing report shows the edging material costs and the Egdebander costs.

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

- Overlap for edgingGap between partsEdgebander speed
- Double sided or not

. . .



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.

	Edging library											
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	Code		Description	Material	Grain	Fun	Thick	Core trim	Cost	Edg	i 🔺	
	ASH-TAPE-22MM	Ash P\	/C Tape 22mm		N	1	1.5	0.0	0.750	Ν		
	BEECH-TAPE-22MM	Beech	PVC Tape 22mm		N	1	1.0	0.0	0.720	Ν		
	BLUE-LAM	Blue L	aminate	BLUE-LAM-1MM	Y	3	1.0	0.0	1.420	Ν		
	BULLNOSE	Bull no	sed edge		N	5	0.0	0.0	0.000	Ν		
	CORE-TRIM	Oversi:	ze cutting		N	0	0.0	20.0	0.000	Ν	-	
	EBONY-LAM	Ebony	Laminate	EBONY-LAM-1MM	Y	3	1.0	0.0	1.450	Ν		
	EBONY-TAPE	Ebony	PVC Tape 22mm		N	1	1.0	0.0	0.840	Ν		
	GREEN-LAM	Green	Laminate	GREEN-LAM-1MM	Y	3	1.0	0.0	1.420	Ν		
	GREEN-TAPE-22MM	Green	PVC Tape 22mm		N	1	1.0	12.0	0.550	Ν		
	LBROWN-TAPE	Light B	rown Tape		N	1	1.0	0.0	0.730	Ν	Ξ	
	MAHOGANY-LIP	Solid M	tahogany lip		N	2	25.0	10.0	1.850	Ν		
	OAK-LAM	0ak La	aminate	OAK-LAM-1MM	Y	3	1.0	0.0	1.360	Ν	-	
	OAK-TAPE-22MM	0ak P	/C Tape 22mm		N	1	1.0	0.0	0.840	Ν		
	POSTFORM	Postfo	med edge		N	4	0.0	0.0	0.000	Ν		
	RED-LAM	Red La	aminate	RED-LAM-1MM	Y	3	1.0	0.0	1.420	Ν		
	RED-TAPE-22MM	Red P	/C Tape 22mm		N	1	1.0	0.0	0.750	Ν		
	TEAK-LAM	Teak L	.aminate	TEAK-LAM-1MM	Y	3	1.0	0.0	1.400	Ν		
	TEAK-TAPE	Teak F	VC Tape 22mm		N	1	1.0	0.0	0.840	Ν		
	WHITE-LAM	White	Laminate	WHITE-LAM-1MM	Y	3	1.0	0.0	1.300	Ν		
	WHITE-TAPE-22MM	White	PVC Tape 22mm		N	1	1.0	0.0	0.550	Ν		
*											-	
•			I	1						•	н	

- 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.

Summary of Edges & Laminating

Edges and Laminating requires one of the Optimising modules: LO, SO or PO

	EL	EL + PL
Maximum items in library	99999	99999
Maximum length of edge code	25	25
Maximum laminates in board library	Unlimited	Unlimited
Edges	•	•
Laminates	•	•
Costing	•	•
Edging diagram with labels		•
Edging summary	•	•

Stock Control – SC

For accurate and efficient inventory management



A complete stock system for sheet materials but it can also be integrated with external systems such as the Bargstedt SQL server stock management system.

Offcuts generated in one optimisation can be sent back to the board library for use in later runs with customised cost adjustment.

The exact amount of stock can be reserved for future jobs.

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 for cutting are removed from the library and any offcuts generated by the run are entered as new items in the library.

Control physical stock

The board inventory is shown in the Board library.

Eile	Board library - Edit View Help														x
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	Materials														Â
	Material 🔺		Descript	ion		Thic	Default	Boo	Mat		Picture	Туре	D	ensity	
	BLUE-LAM-1MM	Blue Lan	ninate 1mm	I		1.0	Y	10				Laminate		0.900	
	CHIPBOARD-18MM	Chipboar	d Core 18r	nm	·	18.0	N	0						0.350	=
	EBONY-LAM-1MM	Ebony La	aminate 1 m	m		1.0	Y	10				Laminate		0.900	
	GREEN-LAM-1MM	Green La	aminate 1 m	m		1.0	Y	10				Laminate		0.900	
	HARDBOARD-4MM	Hardboa	rd 4mm			4.0	N	8	н					0.750	
	MED-DEN-FIBRE-18MM	Medium	Density Fib	reboard 18	8mm ⁻	18.0	N	0				MDF		0.650	
	MED-DEN-FIBRE-25MM	Medium	Density Fib	reboard 28	5mm :	25.0	N	0				MDF		0.650	
	MEL-CHIP-15MM	Prelamin	ated - Whit	e 15mm		15.0	N	0						0.500	
	MEL-CHIP-18MM	Prelamin	ated - Whil	e 18mm		18.0	N	0						0.500	
	MFC18-BEECH	Prelamin	ated - Bee	ch 18mm	•	18.0	N	0				MFC		0.400	
	MFC18-BLACK	Prelamin	ated - Blac	k 18mm		18.0	N	0				MFC		0.400	
	MFC18-EBONY	Prelamin	ated - Ebor	ny 18mm	•	18.0	N	0		電影		MFC		0.400	Ŧ
	Boards for material: MFC18	B-BEE	CH Prel	aminat	ed -	Be	ech 1	3mn	n Th	iickn	ess:18	8.0 Book:	0		Â
	Board code 🔺		Length	Width	In	forma	tion	Stoc	k /	Alloc	Order	Cost	Limit	Bin	-
	MFC18-BEECH/01		3050.0	1525.0				170	12	0	215	3.210	0		
1	MFC18-BEECH/02		2440.0	1220.0				163	01	0	205	2.960	0	•	

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Description Material Length Width Quantity Grain Part layout Destack t Global MFC18.BEECH 0 base1 A 1. BASE-BACK MFC18.BEECH 476.0 735.0 90 N base1 A 2. BASE-BACK MFC18.BEECH 976.0 735.0 100 N base1 A 3. BASE-BACK MFC18.BEECH 976.0 735.0 120 N base1 A 4. BASE-BACK MFC18.BEECH 476.0 735.0 210 N base1 A 5. BASE-BACK MFC18.BEECH 476.0 735.0 210 N base1 A 6. BASE-BOTTOM MFC18.BEECH 464.0 582.0 32 N base1 A 7. BASE-BOTTOM MFC18.BEECH 464.0 582.0 100 N base1 A 9. BASE-CABINET MFC18.BEECH 464.0	т	itle Example 10	Op	t default		- [Saw default		-
Global MFC18-BEECH 4 1. BASE-BACK MFC18-BEECH 476.0 735.0 90 N base1 A 2. BASE-BACK MFC18-BEECH 976.0 735.0 100 N base1 A 3. BASE-BACK MFC18-BEECH 976.0 735.0 120 N base1 A 4. BASE-BACK MFC18-BEECH 976.0 735.0 210 N base1 A 4. BASE-BACK MFC18-BEECH 476.0 735.0 210 N base1 A 5. BASE-BACK MFC18-BEECH 464.0 582.0 32 N base1 A 6. BASE-BOTTOM MFC18-BEECH 464.0 582.0 100 N base1 A 7. BASE-CABINET MFC18-BEECH 464.0 582.0 100 N base1 A 9. BASE-CABINET MFC18-BEECH 560.0 533.3 88		Description	Material	Length	Width	Quantity	Grain	Part layout	Destack t	A
1. BASE-BACK MFC18-BEECH 476.0 735.0 90 N base1 A 2. BASE-BACK MFC18-BEECH 976.0 735.0 100 N base1 A 3. BASE-BACK MFC18-BEECH 976.0 735.0 120 N base1 A 4. BASE-BACK MFC18-BEECH 476.0 735.0 210 N base1 A 5. BASE-BACK MFC18-BEECH 476.0 735.0 65 N base1 A 6. BASE-BOTTOM MFC18-BEECH 464.0 582.0 32 N base1 A 7. BASE-BOTTOM MFC18-BEECH 464.0 582.0 100 N base1 A 9. BASE-CABINET MFC18-BEECH 464.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A 11	Global		MFC18-BEECH					base1	A	
2. BASE-BACK MFC18-BEECH 976.0 735.0 100 N base1 A 3. BASE-BACK MFC18-BEECH 976.0 735.0 120 N base1 A 4. BASE-BACK MFC18-BEECH 476.0 735.0 210 N base1 A 5. BASE-BACK MFC18-BEECH 476.0 735.0 65 N base1 A 6. BASE-BACK MFC18-BEECH 464.0 582.0 32 N base1 A 7. BASE-BOTTOM MFC18-BEECH 464.0 582.0 100 N base1 A 8. BASE-CABINET MFC18-BEECH 464.0 582.0 100 N base1 A 9. BASE-CABINET MFC18-BEECH 464.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A	1.	BASE-BACK	MFC18-BEECH	476.0	735.0	90	N	base1	A	
3. BASE-BACK MFC18-BEECH 976.0 735.0 120 N base1 A 4. BASE-BACK MFC18-BEECH 476.0 735.0 210 N base1 A 5. BASE-BACK MFC18-BEECH 876.0 735.0 65 N base1 A 6. BASE-BOTTOM MFC18-BEECH 464.0 582.0 32 N base1 A 7. BASE-BOTTOM MFC18-BEECH 464.0 582.0 100 N base1 A 8. BASE-CABINET MFC18-BEECH 464.0 582.0 100 N base1 A 9. BASE-CABINET MFC18-BEECH 464.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 560.0 533.3 88 N base1 A 11. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A <tr< th=""><th>2.</th><td>BASE-BACK</td><td>MFC18-BEECH</td><td>976.0</td><td>735.0</td><td>100</td><td>N</td><td>base1</td><td>A</td><td></td></tr<>	2.	BASE-BACK	MFC18-BEECH	976.0	735.0	100	N	base1	A	
4. BASE-BACK MFC18-BEECH 476.0 735.0 210 N base1 A 5. BASE-BACK MFC18-BEECH 876.0 735.0 65 N base1 A 6. BASE-BOTTOM MFC18-BEECH 464.0 582.0 32 N base1 A 7. BASE-BOTTOM MFC18-BEECH 464.0 582.0 100 N base1 A 8. BASE-BOTTOM MFC18-BEECH 464.0 582.0 120 N base1 A 9. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 560.0 533.3 88 N base1 A 11. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A 12. BASE-CABINET MFC18-BEECH 90.0 184.3 100 N base1 A 13. BASE-CABINET MFC18-BEECH 582.0 870.0 31	3.	BASE-BACK	MFC18-BEECH	976.0	735.0	120	N	base1	A	
5. BASE-BACK MFC18-BEECH 876.0 735.0 65 N base1 A 6. BASE-BOTTOM MFC18-BEECH 464.0 582.0 32 N base1 A 7. BASE-BOTTOM MFC18-BEECH 564.0 582.0 100 N base1 A 8. BASE-BOTTOM MFC18-BEECH 464.0 582.0 120 N base1 A 9. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 11. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A 12. BASE-CABINET MFC18-BEECH 400.0 184.3 100 N base1 A 13. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A <th>4.</th> <th>BASE-BACK</th> <th>MFC18-BEECH</th> <th>476.0</th> <th>735.0</th> <th>210</th> <th>N</th> <th>base1</th> <th>A</th> <th>E</th>	4.	BASE-BACK	MFC18-BEECH	476.0	735.0	210	N	base1	A	E
6. BASE-BOTTOM MFC18-BEECH 464.0 582.0 32 N base1 A 7. BASE-BOTTOM MFC18-BEECH 564.0 582.0 100 N base1 A 8. BASE-BOTTOM MFC18-BEECH 464.0 582.0 120 N base1 A 9. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 560.0 533.3 88 N base1 A 11. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A 12. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A 13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A <	5.	BASE-BACK	MFC18-BEECH	876.0	735.0	65	N	base1	A	
7. BASE-BOTTOM MFC18-BEECH 564.0 582.0 100 N base1 A 8. BASE-BOTTOM MFC18-BEECH 464.0 582.0 120 N base1 A 9. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 11. BASE-CABINET MFC18-BEECH 560.0 533.3 88 N base1 A 12. BASE-CABINET MFC18-BEECH 400.0 184.3 100 N base1 A 13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 <td< th=""><th>6.</th><td>BASE-BOTTOM</td><td>MFC18-BEECH</td><td>464.0</td><td>582.0</td><td>32</td><td>N</td><td>base1</td><td>A</td><td></td></td<>	6.	BASE-BOTTOM	MFC18-BEECH	464.0	582.0	32	N	base1	A	
8. BASE-BOTTOM MFC18-BEECH 464.0 582.0 120 N base1 A 9. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 560.0 533.3 88 N base1 A 11. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A 12. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A 13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A<	7.	BASE-BOTTOM	MFC18-BEECH	564.0	582.0	100	N	base1	A	
9. BASE-CABINET MFC18-BEECH 864.0 582.0 90 N base1 A 10. BASE-CABINET MFC18-BEECH 560.0 533.3 88 N base1 A 11. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A 12. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A 13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 <t< th=""><th>8.</th><td>BASE-BOTTOM</td><td>MFC18-BEECH</td><td>464.0</td><td>582.0</td><td>120</td><td>N</td><td>base1</td><td>A</td><td></td></t<>	8.	BASE-BOTTOM	MFC18-BEECH	464.0	582.0	120	N	base1	A	
10. BASE-CABINET MFC18-BEECH 560.0 533.3 88 N base1 A 11. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A 12. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A 13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 464.0 560.0 43 N base1 <	9.	BASE-CABINET	MFC18-BEECH	864.0	582.0	90	N	base1	A	
11. BASE-CABINET MFC18-BEECH 400.0 556.8 22 X base1 A 12. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A 13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 464.0 560.0 43 N base1 A 18. BASE-CABINET MFC18-BEECH 500.0 554.8 23 X base1	10.	BASE-CABINET	MFC18-BEECH	560.0	533.3	88	N	base1	A	
12. BASE-CABINET MFC18-BEECH 400.0 184.3 120 N base1 A 13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 464.0 560.0 43 N base1 A 19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A </th <th>11.</th> <th>BASE-CABINET</th> <th>MFC18-BEECH</th> <th>400.0</th> <th>556.8</th> <th>22</th> <th>×</th> <th>base1</th> <th>A</th> <th></th>	11.	BASE-CABINET	MFC18-BEECH	400.0	556.8	22	×	base1	A	
13. BASE-CABINET MFC18-BEECH 900.0 184.3 100 N base1 A 14. BASE-CABINET MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 864.0 560.0 43 N base1 A 18. BASE-CABINET MFC18-BEECH 464.0 560.0 43 N base1 A 19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A	12.	BASE-CABINET	MFC18-BEECH	400.0	184.3	120	N	base1	A	
14. BASE-CABINET· MFC18-BEECH 582.0 870.0 31 N base1 A 15. BASE-CABINET· MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET· MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET· MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET· MFC18-BEECH 464.0 560.0 43 N base1 A 19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A	13.	BASE-CABINET	MFC18-BEECH	900.0	184.3	100	N	base1	A	
15. BASE-CABINET MFC18-BEECH 582.0 870.0 100 N base1 A 16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 464.0 560.0 43 N base1 A 19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A	14.	BASE-CABINET	MFC18-BEECH	582.0	870.0	31	N	base1	A	
16. BASE-CABINET MFC18-BEECH 864.0 150.0 40 N base1 A 17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 464.0 560.0 43 N base1 A 19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A	15.	BASE-CABINET	MFC18-BEECH	582.0	870.0	100	N	base1	A	
17. BASE-CABINET MFC18-BEECH 864.0 150.0 44 N base1 A 18. BASE-CABINET MFC18-BEECH 464.0 560.0 43 N base1 A 19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A	16.	BASE-CABINET	MFC18-BEECH	864.0	150.0	40	N	base1	A	
18. BASE-CABINET· MFC18-BEECH 464.0 560.0 43 N base1 A 19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A	17.	BASE-CABINET	MFC18-BEECH	864.0	150.0	44	N	base1	A	
19. BASE-DOOR MFC18-BEECH 500.0 554.8 23 X base1 A	18.	BASE-CABINET	MFC18-BEECH	464.0	560.0	43	N	base1	A	
	19.	BASE-DOOR	MFC18-BEECH	500.0	554.8	23	×	base1	A	_
			NECTORE COL	F00.0	101.0		0	1. 4		

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

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Favourites	
Batch summary	Pattern preview Example 10
Kanagement summary	MFC18-BEECH Example 10///default/M2
Pattem summary	Ptn:1 Board:1.MFC18-BEECH/01 Ptn:2 Board:1.MFC18-BEECH/01 Ptn:3 Board:1.MFC18-BEECH/01
Hattern preview	Qty:11 Material:MFC18-BEECH Qty:2 Material:MFC18-BEECH Qty:2 Material:MFC18-BEECH
n Pattern	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	Ptn:4 Board:1.MFC18-BEECH/01 Ptn:5 Board:1.MFC18-BEECH/01 Ptn:6 Board:1.MFC18-BEECH/01 Qty:1 Material:MFC18-BEECH Qty:1 Material:MFC18-BEECH Qty:1 Material:MFC18-BEECH
Batch reports	
Summaries	2 3 3 3 3 3 3 23 23 23 24
Advanced	
Patterns	3 3 3 3 3 4 4 231 231 231
Machining	
Custom	· · · · · · · · · · · · · · · · · · ·
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The quantity of boards required is calculated by the optimization.

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

👿 Tr	ansfer	to saw	Holzma Cadm	natic IV - Example 10				- 0 -	3
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	Batc	n name	Example 10	-	Description Example 10				
	T	n Opt	imising progress	Cutting list	Title	Run	Optimising parameters	Saw parameters	*
Globa	al								
	1.			Example 10	Example 10	Example 10	default	default	
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The Board library is updated.

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	Materials														^
	Material 🔺		Descrip	tion		Thic	Default	Boo	Mat		Picture	Туре	[Density	
	BLUE-LAM-1MM	Blue Larr	ninate 1mm	I		1.0	Y	10				Laminate		0.900	
	CHIPBOARD-18MM	Chipboar	d Core 18r	nm	1	18.0	N	0						0.350	=
	EBONY-LAM-1MM	Ebony La	aminate 1 n	m		1.0	Y	10		18.8	GI A	Laminate		0.900	
	GREEN-LAM-1MM	Green La	aminate 1 m	m		1.0	Y	10				Laminate		0.900	
	HARDBOARD-4MM	Hardboa	rd 4mm			4.0	N	8	Н					0.750	
	MED-DEN-FIBRE-18MM	Medium (Density Fib	reboard 18	8mm 1	18.0	N	0				MDF		0.650	
	MED-DEN-FIBRE-25MM	Medium (Density Fib	reboard 2	5mm 2	25.0	N	0				MDF		0.650	
	MEL-CHIP-15MM	Prelamina	ated - Whi	te 15mm	1	15.0	N	0						0.500	
	MEL-CHIP-18MM	Prelamina	ated - Whi	te 18mm	1	18.0	N	0						0.500	
	MFC18-BEECH	Prelamina	ated - Bee	ch 18mm	1	18.0	N	0				MFC		0.400	
	MFC18-BLACK	Prelamina	ated - Blac	k 18mm	1	18.0	N	0				MFC		0.400	
	MFC18-EBONY	Prelamina	ated - Ebo	ny 18mm	1	18.0	N	0		读书		MFC		0.400	-
	Boards for material: MFC18	B-BEE	CH Prei	aminat	ed -	Be	ech 1	8mn	n Th	iickr	iess:1	8.0 Book:	0		Â
	Board code 🔺		Length	Width	Inf	forma	tion	Stock	k A	Alloc	Order	Cost	Limit	Bir	1 E
	MFC18-BEECH/01		3050.0	1525.0				168	2	0	215	3.210	0		
	MFC18-BEECH/02		2440.0	1220.0				136	3	0	205	2.960	0		
	XEXAMPLE10/0001		864.0	445.2					1	0	0	1.480	0		_
	XEXAMPLE10/0002		900.0	211.0					1	0	0	1.605	0		
1	I XEXAMPLE10/0003		464.0	333.0					1	01	0	1.480	0	1	
								_	-						

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

Stock allocation and receipts

The SC module includes a full set of options for the allocation and receipt of stock. Allocation can be used after optimizing to reserve the stock for the job. Receipts are used to record incoming stock and adjust stock levels.

The Board library includes fields for Stock on order and Allocated stock and the optimiser takes account of the allocated stock (reserved stock) when optimising so that reserved stock is not used.

File	Board library e Edit View Help													-		×
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	Materials															Â
	Material 🗻		Descript	ion		Thic	Default	Boo	Mat		Picture		Туре	D	ensity	
	BLUE-LAM-1MM	Blue Larr	ninate 1mm			1.0	Y	10				L	aminate.		0.900	
	CHIPBOARD-18MM	Chipboar	d Core 18r	nm		18.0	N	0							0.350	E
	EBONY-LAM-1MM	Ebony La	aminate 1 m	m		1.0	Y	10			1	L	aminate		0.900	
	GREEN-LAM-1MM	Green La	aminate 1 m	m		1.0	Y	10				L	aminate		0.900	
	HARDBOARD-4MM	Hardboa	rd 4mm			4.0	N	8	н						0.750	
	MED-DEN-FIBRE-18MM Medium Density Fibreboard 18mm 18.0 N 0 MDF 0.650															
	MED-DEN-FIBRE-25MM	Medium I	Density Fib	reboard 2	5mm :	25.0	N	0				M	1DF		0.650	
	MEL-CHIP-15MM	Prelamin	ated - Whit	e 15mm		15.0	N	0							0.500	
	MEL-CHIP-18MM	Prelamin	ated - Whit	e 18mm		18.0	N	0							0.500	
	MFC18-BEECH	Prelamin	ated - Bee	ch 18mm		18.0	N	0				M	1FC		0.400	
	MFC18-BLACK	Prelamin	ated - Blac	k 18mm		18.0	N	0				М	1FC		0.400	
	MFC18-EBONY	Prelamin	ated - Ebor	ny 18mm	·	18.0	N	0		48.		M	1FC		0.400	Ŧ
	Boards for material: MEL-C	HIP-18	3MM Pr	elamin	ateo	3-V	vhite '	18m	mΤ	bick	ness:1	8.0) Book	::0		•
	Board code 🔺		Length	Width	In	forma	tion 🌔	Stoc	k /	Alloc	Order) (Cost	Limit	Bir	<u> </u>
	MEL-CHIP-18MM/01 3050.0 1220.0 BIN 150 933 13 248 3.180 0 150															
	MEL-CHIP-18MM/02 2440.0 1220.0 BIN 151 370 46 40 3.140 0 151 +														-	
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Run EXAMPLE 10	Referenc	e Example 10		Cut date 2	23/05/2012	
Code	Quantity	Material	Length	Width	Thickness	*
MFC18-BEECH/01	20	MFC18-BEECH	3050.0	1525.0	18.0	
MFC18-BEECH/02	267	MFC18-BEECH	2440.0	1220.0	18.0	
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A stock allocation screen deals with stock reservation.

Stock is ordered via the Order screen:-

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Code BSR-STKORD-05		Supplier General Boards Inc			C) elivery o	late 09/	08/2010	
Code	Quantity	Material	Length	Width	Thickness	Order	Rec	Rem	*
MEL-CHIP-15MM/01	120	MEL-CHIP-15MM	3050.0	1220.0	15.0	120	0	120	
MEL-CHIP-15MM/02	110	MEL-CHIP-15MM	2440.0	1220.0	15.0	110	0	110	
MEL-CHIP-18MM/01	170	MEL-CHIP-18MM	3050.0	1220.0	18.0	170	0	170	
MEL-CHIP-18MM/02	40	MEL-CHIP-18MM	2440.0	1220.0	18.0	40	0	40	
MFC18-BEECH/01	200	MFC18-BEECH	3050.0	1525.0	18.0	200	0	200	
MFC18-BEECH/02	65	MFC18-BEECH	2440.0	1220.0	18.0	65	0	65	
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Code BSR-STKORD-0	5	E Supplier General	Boards I	nc				Delivery date	09/08/2010	
Code	Quantity	Material	Len	Width	Thickn	Order	Rec	Rem	Cost	*
MEL-CHIP-15MM/01		MEL-CHIP-15MM	3050.	1220.	15.0	120	0	120	2.590	
MEL-CHIP-15MM/02		MEL-CHIP-15MM	2440.	1220.	15.0	110	0	110	2.560	
MEL-CHIP-18MM/01		MEL-CHIP-18MM	3050.	1220.	18.0	170	0	170	3.180	
MEL-CHIP-18MM/02		MEL-CHIP-18MM	2440.	1220.	18.0	40	0	40	3.140	
MFC18-BEECH/01		MFC18-BEECH	3050.	1525.	18.0	200	0	200	3.210	
MFC18-BEECH/02		MFC18-BEECH	2440.	1220.	18.0	65	0	65	2.960	
										4 []

Stock receipts are recorded in the Receipts screen.

Pre-laminated material - where boards are laminated prior to cutting the stock update automatically keeps track of both core material and laminate material used.



Laminates and core material are stored in the Board library.

Stock reports

A range of reports are available for monitoring the stock process.

Orders by material Orders by supplier Allocations by material Stock valuation Minimum free stock Monthly material summary Stock issues summary Audit trail report Stock history End of month/year

Each report can be viewed on screen and printed.

Orders by Material

W Orders by material	Reports H	lelp								x
	<i>s</i>		<	▶ ▶ ?						
Orders by material										
Board	Length mm	Width mm	Stock	Order	Date	Order Qty	Area m2	Cost / m2	Order Cost	^
MED-DEN-FIBRE-18MM Me	dium Den 3050 0	sity Fibre	eboard 1 1221	8mm Thickness BSR-STKORD-0	<u>18.0 Grain N</u> 8 31/08/10	Book 0	720 94	4 500	3244 25	II
	0000.0	1020.0		Den emone i	0 0 11 00 10	155	720.94	-	3244.25	
MED-DEN-FIBRE-25MM Me MED-DEN-FIBRE-25MM/01	<u>dium Den</u> 2440.0	sity Fibre 1220.0	<u>eboard 2</u> 1089	5mm Thickness BSR-STKORD-0	<u>25.0 Grain N</u> 8 31/08/10	Book 0 190	565.59	6.300	3563.23	
MEL-CHIP-15MM Prelaminat	ted - Whit	e 15mm	Thickne	ss 15.0 Grain N	Book 0	150	505.55		5505.25	
MEL-CHIP-15MM/01	3050.0	1220.0	901	BSR-STKORD-0 BSR-STKORD-0	5 09/08/10 7 23/08/10	120 55 175	446.52 204.66 651 17	2.590	1156.49 530.06 1686 54	
						113	551.17		1000.34	
MEL-CHIP-15MM/02	2440.0	1220.0	729	BSR-STKORD-0	5 09/08/10	110 110	327.45 327.45	2.560	838.27 838.27	
										đ

Minimum free stock

Minimum free stock File Edit View Settin	ngs Repo	rts Help								
		8	1 1			?				
Minimum free s	tock									
Board	Length	Width	Stock	Alloc	Free	Min Stk	Order	ReOrder	Supplier	
	mm	mm			Stock					
GREENLAM 1MM Gr	oon Lamin	ato 1mm	Thickny		Grain	V Book 10				
GREEN-LAM-1MM/01	3050.0	1525.0	32	<u>:55 1.0</u> 0	32	50	0	60	Laminate Supply Co	
										=
MEC18-OAK Prelamin	ated - Oak	18mm T	hicknes	e 18.0	Grain N	Book 0				
MFC18-OAK/02	2440.0	1220.0	118	<u>9</u>	109	120	42	150		
				_						
OAK-LAM-1MM Oak L	aminate 1	Mm Thic	kness 70	<u>1.0 Gra</u>	IN Y BOO	<u>0K 10</u>		100	Lessiente Osselu Os	
OAK-LAM-1MM/01	3050.0	1525.0	10	0	10	100	55	120	Laminate Supply Co	
UAK-LAIVI-TIVIIVI/UZ	2440.0	1220.0	59	U	59	100	40	120	Laminate Supply Co	
TEAK-LAM-1MM Teak	Laminate	1mm Thi	ickness	1.0 G	<u>rain Y B</u>	ook 10				-
										t

Stock issues

1 Stock issues								
File Edit View Settings Reports He	elp							
	4 4		?					
Stock issues								
Range: 29-Jul-10 To 23-May-12								
Board	Length	Width	Issue	Area	Volume	Cost /	Total	
	mm	mm		m2	m3	m2	Cost	
MED-DEN-FIBRE-25MM/01	2440.0	1220.0	2	5.95	0.15	6.300	37.51	
				5.95	0.15	-	37.51	
MEL-CHIP-15MM Prelaminated - White MEL-CHIP-15MM/02	<u>15mm Thickne</u> 2440.0	<u>ess 15.0 Grain</u> 1220.0	<u>N Book 0</u> 1	2.98 2.98	0.04	2.560	7.62 7.62	E
MEL-CHIP-18MM Prelaminated - White	18mm Thickne	ess 18.0 Grain	N Book 0					
MEL-CHIP-18MM/01	3050.0	1220 0	7	26.05	0 47	3 180	82 83	
MEL-CHIP-18MM/02	2440.0	1220.0	17	50.61	0.91	3.140	158.90	
				76.65	1.38	-	241.73	
MFC18-BEECH Prelaminated - Beech	18mm Thicknes	s 18.0 Grain I	N Book 0					
MFC18-BEECH/01	3050.0	1525.0	20	93.03	1.67	3.210	298.61	-

The module includes options to consolidate the library at a period end and has a full audit trail. There are also options to manage stock and update costs etc.

All the stock reports can be fully customized and all have print options.

DEMO USER 1				Modular V9	.0		V	Vednesday 23 May 2012 14:56
Orders by material								
Board	Length	Width	Stock	Order	Order	Cost /	Order	
	mm	mm			Qty	m2	Cost	_
	dium Dor	oity Eibr	aboard 1	10mm Thicknoos 10	0 Grain		< 0	-
MED-DEN-FIBRE-18MM/01	3050.0	1525.0	1221	BSR-STKORD-08	155	4 500	3244 25	
					155	-	3244.25	-
MED-DEN-FIBRE-25MM Me	edium Der	nsity Fibro	eboard 2	25mm Thickness 25	5.0 Grain	n N Bool	<u>« O</u>	
MED-DEN-FIBRE-25MM/01	2440.0	1220.0	1089	BSR-STKORD-08	190	6.300	3563.23	_
					190		3563.23	
MEL-CHIP-15MM Prelamina	ited - Whit	te 15mm	Thickne	ess 15.0 Grain N Bo	ok 0			
MEL-CHIP-15MM/01	3050.0	1220.0	901	BSR-STKORD-05	120	2.590	1156.49	
				BSR-STKORD-07	55		530.06	
					175	-	1686.54	-
MEL-CHIP-15MM/02	2440.0	1220.0	729	BSR-STKORD-05	110	2,560	838.27	
					110	-	838.27	-
MEL-CHIP-18MM Prelamina	ited - Whit	te 18mm	Thickne	ess 18.0 Grain N Bo	ok 0			
MEL-CHIP-18MM/01	3050.0	1220.0	933	BSR-STKORD-05	170	3.180	2011.57	
				BSR-STKORD-07	40	_	473.31	
					210		2484.88	

For this printed report only the Stock quantity is shown. All the data for printed reports can be exported to an external file.

Integration with external stock systems

These days it is quite common for stock and orders etc. to be held in external systems including mechanical stock handling systems. The SC module can be integrated with external systems.

- Full integration with the Bargstedt SQL server materials system
- Import/Export options for materials and boards
- Option to run external linking programs automatically

This later allows the Board library to be kept in sync with external databases.

The board library has a full set of editing options to allow manual adjustments and changes.

Stock control of parts

With the PL module the stock control options include the control of parts so that over produced parts can be stored and taken into account in future lists by reducing the requirement for that part.

Stock control of Fittings and Edging material

With the PL, PQ and EL modules the stock control options include the control of fittings (hardware) items in the Part library and Edging material in the Edging library (solid edging and laminate sheets).

Summary of Stock Control

Stock control requires one of the Optimising modules; LO, SO, PO, NE

	SC	SC + EL	SC + PQ + PL	SC + PL
Stock records	Unlim.	Unlim.	Unlim.	Unlim.
Stock reports (configurable)	•	•	•	•
Export stock data	•	•	•	•
Audit trail	•	•	•	•
Stock control of parts			•	•
Stock control of edging material		•		
Stock control of fittings			•	
Integration with external systems	•	•	•	•
Update stock after optimising	•	•	•	•
Stock orders and receipts	•	•	•	•
Reserve stock	•	•	•	•
Board library (mdb)	•	•	•	•
Integrated local help	•	•	•	•
Links to website	•	•	•	•

The Board library is the common Access MDB format.



For better management and tracking of parts

The Parts & Labels module provides a database for parts and a form and label designer. It is useful where the same parts are used again and again in different cutting lists and where extra information is needed for each part for later processing, admin or bar codes,

Parts can be added to any cutting list with minimum data entry - this saves times and avoids costly mistakes.

Parts database

😨 Part library						
File Edit Help						
		ا م ک א 📚	▶ ?			
Туре		Part 🔹			· ·	
Code		CORNER-DOOR/L				
Material		@DOORMATERIAL@				
Description	fx Def	Corner door left		\$		
Length	•	=@CDR@+T(@DOORMATERIAL@)		fx		
Width	۵ ۵	=Y-2-@PH@		Ø		
Grain		Variable 💌	Edge 0 0 0 0			
						^
Edge Btm			@EDGING@			
Edge Top			@EDGING@			
Edge Left			@EDGING@			
Edge Right			@EDGING@			
Face Laminate						
Back Laminate						
Edge Diagram						
Finished size						
Drawing name						
Step angle						=

The data entry screen provides an easy way to enter part details.

The part details include the standard items such as material code, length and width but any amount of user defined information can be stored with each part using extra fields (information boxes). This extra data can also be included on labels and reports to help with later processing of the part.

The part library can also include a picture of the part from a graphics file such as BMP or MPR. For some parts it is often useful to include a picture of the part on a label to help identify the part quickly.

Ref:Example 1		CLOBAL FURNITURE LTI
Part code: DOORS-3TD		
Material: Prelaminated - Black	k 18mm	
Length: 620.0 mm	Width:	425.0 mm
Finished size:620.0 x 425.0		QTY: 1
ď,	DOOR9-3TD	
	MFC18-BLACK	
, Þ	EXAMPLE 1 EXAMPLE 1	
		15/02/201

At any cutting list the items in the library can be accessed by a single click and the part can be added to the list.

Typically only one or two items of information need to be adjusted such as the quantity required or possibly the material to use.

🔢 Part	list - Bedroom & bathroo	m													
File E	dit View Optimise H	lelp													
-	1 🖻 🔁 🗖		>	S & 🗾	2	5		ø	?						
т	itle Bed / Bathroom			Opt lite			-		Saw	defaul	t	-			
	Description			Material	Length	Width	Quantity	Over	Under	Grain	Edge Btm	Edge Top	Edge Left	Edge Right	Face Larr
Global								0%	0%	N					
1.	BTH-CAB-BACK			MFC18-TEAK	664.0	564.0	4	0	0	Ν					
2.	BTH-CAB-BACK			MFC18-EBONY	464.0	564.0	3	0	0	Ν					
3.	BTH-CAB-BOTTOM	(1		
4.	BTH-CAB-BOTTOM		Parts	5											
5.	BTH-CAB-DOOR-LEFT		5												
6.	BTH-CAB-DOOR-LEFT		\sim		•										
7.	BTH-CAB-DOOR-RIGHT	Ì													
8.	BTH-CAB-DOOR-RIGHT					Г							-		
9.	BTH-CAB-END-LEFT					ł			-		ŀ		-		
10.	BTH-CAB-END-LEFT					ŀ			-		-		-		
11.	BTH-CAB-END-RIGHT					l					L				
12.	BTH-CAB-END-RIGHT					<u> </u>									
13.	BTH-CAB-SHELF			BASE-BACK			BA	\SE-BO	ттом			BASE-CAE	BINET-BOT	ГОМ	
14.	BTH-CAB-SHELF		_			_					_				
15.	BTH-CAB-SHLF-BASE		- ŀ ;	1 1 1 I			¢								
16.	BTH-CAB-SHLF-BASE														
17.	BTH-CAB-TOP														
18.	BTH-CAB-TOP		1.1	,			¢								
19.	DDC-BACK														
20.	DDC-BACK			BASE-CABINE I-DIVID	ΕH		BASE	-CABIN	EI-DUI	JR		BASE-CAB	INET-DRAV	WER	
21.	DDC-BACK	1	_			-					-	<u> </u>			
22.	DDC-BOTTOM	1	Ľ		. :	· ·									
23.	DDC-BOTTOM		Ľ												-
24.	DDC-BOTTOM			Eiu						liker					
25.	DDC-SIDE-LEFT			Fir						nter					
26.	DDC-SIDE-LEFT				0K		Edi	t	[He	lp)	Can	cel		
27.	DDC-SIDE-LEFT			_											
28.	DDC-SIDE-RIGHT					511.0	2		- 0	14			1		

Form & Label designers

The module includes a designer screen so that almost any style of label (typically a small adhesive label) or a full form (a one page report or a route card) can be set up.

These are labels or forms for printing in the Office.

The data on the form or label can be chosen from any of the data set up for each part in the Part database. For example:-

```
Material code
Length
Width
...
Part drawing
User defined details
Barcodes
Logos
...
```

The designer allows for the creation of a barcode for any of the items on the form or label, for example, barcodes for the part code and quantity.



The designer screen is easy to use and a variety of templates are already set up to use as a starting point.

Here is the design screen:-

M Label design (Patterns) - Part CNC Label	- • •
File Edit Parameters view Loois Help	
Ref: Reference GLOBAL FURNITURE LTD	
Part code: Code	
Material: Material description	
Length: Length - millimetres Width - millimetres	
Finished size: Finished size OTY	<u></u>
Date	
3.86 7.76	

Each label or form is fully customisable.



The following is part of the design for a larger form/report.

The designers include several options to help create effective designs.

Grid, guidelines and snap options - to help place items on the design Different templates - with alternative designs and styles Quick preview - to check the layout Data preview - to make an accurate check of the layout

The Part library and label designer together make a powerful addition to the program.

Parts & Labels with Products & Quotes (PQ) module

When used the with the PQ module the Part library extends the flexibility of the program since it can be used to define parts using variables and formulae for the part information.

😨 Part library	
File Edit Help	
Туре	Part
Code	BASE-CABINET-DOOR
Material	@DOORMATERIAL@
Description fx Def	Base cabinet door
Length 💿 🔘	=×/2·50 fx 6
Width 💿 🔿	=Y-4-@PH@-&CABINET_DRAWER&
Grain	X ▼ Edge 0 0 0 0 □
Edge Btm	@EDGING@
Edge Top	@EDGING@
Edge Left	@EDGING@
Edge Right	@EDGING@

The same part entry in the part library can be used for a range of colours, materials or sizes.

In this example the Material is defined by a variable '@DOORMATERIAL@' and the Length and Width are defined by formulae.

This single part library entry can produce the correct specification for a range of cabinet doors in different materials, colours and sizes.

The PQ module is required to use the Part library in this way.

Fittings, Sundry parts, Operations

Requires the PQ module

The parts database can also include fittings (hardware).

Fittings can include typical ironmongery items such handles, hinges and brackets and also larger 'bought in' appliances.

🔛 Part library		
File Edit Help		
	⋉⋷⋌⋌⋏⋏⋈⊘	
Туре	Fitting -	
Code	Z-DOUBLE	
Material	+	
Description	Pull handle	
Cost	1.210	

🕎 Part library	
File Edit Help	
Туре	Part
Code	SN/235/1
Material	
Description fx Def	Aluminium guard
Length 🔿 🔿	1224.0 fx
Width 🔘 🔘	140.0
Grain	Variable Edge 0 0 0 0
Edge Btm	
Edge Top	
Edge Left	

The library can also include 'bought in' or sundry parts that are required but are ready to use.

The operations required for each part can also be included in the database. These are items such as, clamping, assembly, packing - where these can be allocated on a 'per part' basis.

😨 Part library		
File Edit Help		
	$\blacksquare \checkmark \land $	
Туре	Operation •	
Code	Y-ASSEMBLY	
Material	-0P	
Description	Cabinet Assembly	
Cost	6.500	

Mo		0														~
Eile I	otes / orders - Products (o parts order														^
																_
Order		Order date	Customer code		:=	Custome	r name		📃 Delivi	ery date	E EN	lote	s			
Produ	Products & parts order 01/12/2010 CS1001				Kitchens Direct			14/1	14/12/2010 Credit			lit OK	. ОК 👻			
					Delivery eddess				5	t	No 9	Gat De	eliveries	-		
	Contact John Smith Ashford Boad			Unit 7				5					•			
	Torma 20 Dava						Canal Road				_				•	
	Terms 30 Days			Birmingham								•				
	Status	•												1	Single base u	init
Extra	customer information		Postcode	B11 2R>	<		Postcode	B12 4	มา			-	and the second	**		
Taker	n by Customer i	reference	Description			Optimisi	ng DEFAU	LT	-	0.00		-	I.			
			Example of quo	ote		Saw	DEFALL	I T	-	0.00		ſ	Ú			
Varia	ables Mode		Edit					_								
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	والمال المالة				▶_ ≥	▶ ∕ =		u j								
N.	C-4-	lata			Product				Part		,		0	Unit anima	Total arises	-
No	Code	Infor	mation	Width	Product Height	Depth	Material	Length	Part Width	Grain	Edge	Inf	Qty	Unit price	Total price	
No 1	Code BASE-SINGLE	Infor Single base unit	mation	Width 500.0	Product Height 870.0	Depth 600.0	Material	Length	Part Width	Grain	Edge	Inf	Qly 7	Unit price 43.02	Total price 301.14	^
No 1 2	Code BASE-SINGLE BASE-SINK	Infor Single base unit Sink base unit	mation	Width 500.0 1000.0	Product Height 870.0 870.0	Depth 600.0 600.0	Material	Length	Part Width	Grain	Edge	Inf	Qty 7 2	Unit price 43.02 46.02	Total price 301.14 92.04	
No 1 2 3	Code BASE-SINGLE BASE-SINK WALL-DOUBLE	Infor Single base unit Sink base unit Double wall unit	mation	Width 500.0 1000.0 1000.0	Product Height 870.0 870.0 750.0	Depth 600.0 600.0 300.0	Material	Length	Part Width	Grain	Edge	Inf	Qty 7 2 5	Unit price 43.02 46.02 38.65	Total price 301.14 92.04 193.25	Â
No 1 2 3 4	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE	Infor Single base unit Sink base unit Double wall unit Single wall unit	mation	Width 500.0 1000.0 1000.0 500.0	Product Height 870.0 870.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material	Length	Part Width	Grain	Edge	Inf	Qty 7 2 5 3	Unit price 43.02 46.02 38.65 23.37	Total price 301.14 92.04 193.25 70.11	
No 1 2 3 4	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE	Infor Single base unit Sink base unit Double wall unit Single wall unit Deliver separately	mation	Width 500.0 1000.0 1000.0 500.0	Product Height 870.0 870.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material MED-D	Length	Part Width	Grain	Edge		Qty 7 2 5 3	Unit price 43.02 46.02 38.65 23.37	Total price 301.14 92.04 193.25 70.11	
No 1 2 3 4 5 5	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-DOOR	Infor Single base unit Sink base unit Double wall unit Single wall unit Deliver separately Fixed size unit doo	mation	Width 500.0 1000.0 500.0	Product Height 870.0 870.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material MED-D MED-D	Length 495.0	Part Width 570.0	Grain N	Edge		Qty 7 2 5 3 4	Unit price 43.02 46.02 38.65 23.37 4.02 4.50	Total price 301.14 92.04 193.25 70.11 16.08 18.00	•
No 1 2 3 4 5 6 7	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT	Infor Single base unit Sink base unit Double wall unit Single wall unit Deliver separately Fixed size unit doo Fixed size unit end Fixed size unit end	mation or J left J right	Width 500.0 1000.0 500.0	Product Height 870.0 870.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N	Edge 00000 00000 0000		Qty 7 2 5 3 4 4 4	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92	
No 1 2 3 4 5 6 7 8	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-LEFT Z-SINGLE	Infor Single base unit Sink base unit Double wall unit Deliver separately Fixed size unit doo Fixed size unit end Fixed size unit end Single Knob	mation vr I left J right	Width 500.0 1000.0 1000.0 500.0	Product Height 870.0 870.0 750.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N	Edge 0000 0000 0000		Qty 7 2 5 3 4 4 4 4 23	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48 0.95	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92 21.85	
No 1 2 3 4 5 6 7 8 9	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-RIGHT 2-SINGLE Y-PACKING	Infor Single base unit Sink base unit Double wall unit Deliver separately Fixed size unit end Fixed size unit end Fixed size unit end Single Knob Packing	mation	Width 500.0 1000.0 1000.0 500.0	Product Height 870.0 750.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 	Part Width 570.0 870.0 870.0	Grain N N N	Edge 0000 0000 0000 0000		Qty 7 2 5 3 4 4 4 4 23 14	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48 0.95 6.00	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92 21.85 84.00	
No 1 2 3 4 5 6 7 8 9 10	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-RGHT 2-SINGLE Y-PACKING	Infor Single base unit Sink base unit Double wall unit Deliver separately Fixed size unit doo Fixed size unit end Fixed size unit end Single Knob Packing	mation	Width 500.0 1000.0 500.0	Product Height 870.0 750.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N	Edge 0000 0000 0000		Qty 7 2 5 3 4 4 4 4 23 14	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48 0.95 6.00	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92 21.85 84.00	
No 1 2 3 4 5 6 7 8 9 10 11	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-RIGHT 2-SINGLE Y-PACKING	Infor Single base unit Sink base unit Double wall unit Deliver separately Fixed size unit end Fixed size unit end Fixed size unit end Single Knob Packing	mation	Vidth 500.0 1000.0 500.0 500.0	Product Height 870.0 750.0 750.0 750.0	Depth 600.0 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N	Edge 0000 0000 0000		Qty 7 2 5 3 3 4 4 4 4 23 14	Unit price 43.02 46.02 38.65 23.37 4.02 4.02 4.50 4.48 0.95 6.00	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92 21.85 84.00	
No 1 2 3 4 5 6 7 8 9 10 11 12	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-LEFT Z-SINGLE Y-PACKING	Infor Single base unit Sink base unit Double wall unit Single wall unit Defiver separately Fixed size unit doo Fixed size unit end Fixed size unit end Single Knob Packing	mation	Vidth 500.0 1000.0 500.0	Product Height 870.0 870.0 750.0 750.0 750.0	Depth 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N N	Edge 0000 0000 0000		Qty 7 2 5 3 4 4 4 4 4 23 14	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48 0.95 6.00	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92 21.85 84.00	
No 1 2 3 4 5 6 7 8 9 10 11 12 13 13	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-LEFT Z-SINGLE Y-PACKING	Infor Single base unit Sink base unit Double wall unit Deliver separately Fixed size unit doo Fixed size unit end Fixed size unit end Single Knob Packing	mation xr d left d right	V/idth 500.0 1000.0 500.0	Product Height 870.0 750.0 750.0 750.0 750.0	Depth 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N	Edge 0000 0000 0000		Qty 7 2 5 3 4 4 4 4 23 14	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48 0.95 6.00	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92 21.85 84.00	
No 1 2 3 4 5 6 7 8 9 10 11 12 13 14 4 5 6 7 8 9 10 11 12 13 14 12 13 14 10 10 10 10 10 10 10 10 10 10	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-RIGHT Z-SINGLE Y-PACKING	Infor Single base unit Sink base unit Double wall unit Deliver separately Fixed size unit doo Fixed size unit end Fixed size unit end Single Knob Packing	mation xr d left J right	V/idth 500.0 1000.0 500.0	Product Height 870.0 750	Depth 600.0 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N N	Edge 0000 0000 0000 0000		Qty 7 2 5 3 3 4 4 4 4 23 14	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48 0.95 6.00	Total price 301.14 92.04 193.25 70.11 16.08 18.00 17.92 21.85 84.00	
No 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 5 6 7 8 9 10 11 12 13 14 15 10 10 10 10 10 10 10 10 10 10	Code BASE-SINGLE BASE-SINK WALL-DOUBLE WALL-SINGLE F-UNIT-DOOR F-UNIT-END-LEFT F-UNIT-END-LEFT F-UNIT-END-RIGHT 2-SINGLE Y-PACKING	Infor Single base unit Sink base unit Double wall unit Deliver separately Fixed size unit doo Fixed size unit end Fixed size unit end Single Knob Packing	mation	Vvidth 500.0 1000.0 500.0	Product Height 870.0 750.0 750.0 750.0 10 1 750.0 10 1 750.0 10 1 750.0 10000000000000000000000000000000000	Depth 600.0 600.0 300.0 300.0	Material MED-D MEL-CH MEL-CH	Length 495.0 585.0 585.0	Part Width 570.0 870.0 870.0	Grain N N N N N	Edge 0000 0000 0000 0000		Qty 7 2 5 3 4 4 4 4 4 23 14	Unit price 43.02 46.02 38.65 23.37 4.02 4.50 4.48 0.95 6.00	Total price 301.14 92.04 1133.25 70.11 16.08 18.00 17.92 21.85 84.00	

These items are added to the 'Order' so that a full specification (and costing) of the job is available.

Parts & Labels with the Machining Interface (MI) module

The Part library is fully integrated with the Machining Interface; the part picture can be a machining drawing from the parametric Machining library. So any pictures and details created in the machining library can be passed through to the part label or form.

🔞 Part library									
File Edit Help									
		1?	ĺ						
Туре	Part 👻								
Code	BASE-CABINET-END-LEFT								
Material	@CARCASEMATERIAL@								
Description fx Def	Base cabinet end left		\$						
Length 💿 🔿	=Z-T(@DOORMATERIAL@)		fx						
Width 🔍 🔿	=Y		@						
Grain	No 🔻	dge 0 0 0 0							
Edge Btm									
Edge Top									
Edge Left		@EDGING@							
Edge Right									
Eace Laminate									

The part library can also be integrated with:-

External bitmap (BMP) drawing WoodWop MPR drawings

The MI module is required to use the Part library with the parametric machining library

Parts & Labels with the Online PC option

The PL module can be used with the Online PC option for designing and printing labels at the saw. The Online PC option is typically used where there is no saw controller or the saw controller only has limited set of options.

Information and labels from the PL module are automatically sent to the Online PC option to allow the viewing and printing of part information at the Saw.

Summary of Parts & Labels

- The form and label designer is not directly used for printing labels at the saw (other than via the Online PC option). It can be used to create designs for some saw controllers (e.g. Cadmatic) but there are often also label design options with many saw controllers.

- Typically the PL module is used with one of the optimising modules LO, SO or PO but it can also be used as a stand-alone module as a 'Parts only' option.

PL module includes:-

Parts database (part library) Form designer Label designer

	PL	PL + PQ	PL + MI	PL + Online PC
Maximum items in library	99999	99999	99999	99999
Parts	•	•	•	•
Sundry parts		•		
Fittings		•		
Operations		•		
Maximum length for part code	50	50	50	50
Form designer and templates	•	•	•	•
Label designer and templates	•	•	•	•
Parametric parts		•	•	
Parametric drawings			•	
External part drawings	•	•	•	•
Printing at Office	•	•	•	•
Printing at Saw				•
Import parts to database	•	•	•	•
Import external drawings to database	•	•	•	•

The number of designs for the form designer or label designer is unlimited.
Printing at the Saw is typically handled by software at the saw controller


For fast response to enquiries and orders

The Products & Quotes module is for accurate quotations and processing orders quickly and easily. It is most useful where the cutting requirements arise in producing assembled products; kitchens units, bedroom units, housings, furniture ...

The product library can detail any job:-

- Standard product ranges
- Custom products
- Products with extra parts and fittings
- Can include lipping and bought in items ...

The key to the module is that the product detail is very flexible - a single definition can cover a wide range of customer or production variations.

For each order once the customer request for colour, material, size, fittings are specified the program can calculate the full set of materials, sizes, and quantities for all the parts in the product.

The result is a cutting list ready for the saw or machining centre.

Orders screen

A versatile order screen allows the entry of order for quotes or production.

🔛 Quo	😨 Quotes / orders - Products & parts order															
File E	File Edit Options Help															
Order	:=	Order date	Customer code		:=	Custome	r name		🛄 Delive	ery date	P	lote	s			
Produ	icts & parts order	01/12/2010	CS1001			Kitchens	Direct		14/1	2/2010		Cred	it OK		•	
			lauria addess				D - K					No S	iat De	liveries	•	
	Contact John Smith		Ashford Boad		_		Delivery addres	2		4					•	
	Tarra 20 Dave		Birmingham				Canal Road								•	
	Tenns Soldays						Birmingham								•	
	Status Estimated	•													Single base ι	unit
Extra	customer information		Postcode	B11 2R>	:		Postcode	B12 -	4JJ			=		<u>م</u>	_	-
Taker	n by Customer	reference	Description			Ontimioi	DEFAU	II T	-	1	-	-	1			
			Example of que	ote		C Suu			•	Over		_	nî.			
Varia	bles Mode		Edit			3944	DEFAU	LI	•	U						
) FT FT 2	Þ 🎤 🚫	*	×.	20) %										
					Product				Part							
No	Code	Infor	mation	Width	Height	Depth	Material	Length	Width	Grain	Edge	Inf	Цţу	Unit price	I otal price	
1	BASE-SINGLE	Single base unit		500.0	870.0	600.0							7	43.02	301.14	
2	BASE-SINK	Sink base unit		1000.0	870.0	600.0							2	46.02	92.04	
3	WALL-DOUBLE	Double wall unit		1000.0	750.0	300.0							5	38.65	193.25	
4	WALL-SINGLE	Single wall unit		500.0	750.0	300.0							3	23.37	70.11	
		Deliver separately														
5	F-UNIT-DOOR	Fixed size unit doo	lf				MED-D	495.0	570.0	N	0000		4	4.02	16.08	
6	F-UNIT-END-LEFT	Fixed size unit end					MEL-CH	585.0	870.0	N	0000		4	4.50	18.00	
1	F-UNIT-END-RIGHT	Fixed size unit end	Iright				MEL-UH	585.0	870.0	N	0000		4	4.48	17.92	
9		Single Knob										\vdash	23	6.00	21.60	
10	TH AGNING	1 doking											14	0.00	04.00	
11																
12																
13																
14																
15																
16																Ŧ
1																

The top section allows for the entry of customer details, delivery and invoice address etc. In the grid enter the required products and other items.

Full costs are shown and the system can be set to several different pricing models.

Products and other items are selected from the product library.



Where the product is defined as a parametric (variable) product the Order screen prompts for the customer's requirements (and production requirements).

🔛 Global variables	
E Merge	Range
Door Material	MFC18-OAK
Back Material	E
Edging Material	EBONY-LAM
Handle type	
Room number	
OK Default	Help Cancel

The requirements can vary for each product line even for the same style of product.

There are a full set of facilities (variables, look up tables, formulae) with the Product library for creating parametric products.



Once the order is complete the order can be estimated at the single click of a button.

Totals				×
Date		11/04/2006		
Discount code	A	Per order discount	%	5.0
Tax code	MIDLAN	Tax rate		17.5
Overhead	0.0	Percentage for ma	rk up	0.0
Total order cost				025.04
Duerbeed amount				820.94
				0.00
Mark up - amount				0.00
Total order amount				825.94
Order discount amount				-41.30
Order amount - including dis	scount			784.64
Carriage				0.00
Invoice total pre tax				784.64
Tax				137.31
Total due				921.96
				Cancel

The order status can be tracked and the Form & Label designer can be used to produce customer documents:-

Quotation Advice note Delivery note

...

Once an order is confirmed the order is optimised and the cutting patterns produced ready to send to the saw or machining centre.



The production and delivery documents are set up in the Form & Label designer - the program includes many different templates to help with the design of forms.

GLO	BAL FURN	TURE L	TD		
Fumit	ure House, 27 Wood Lane, Telephone: +44 (0)117 933 6323 Fax:	Histol, BS1 2XK, +44 (0)117 933 6487	Orde	er confi	rmatio
Date: 23/05/2012	Order No. Products & p	oarts order (Our ref.		
Payment terms: 30 Days	Delivery expected: 14/	12/2010	our ref.		
Customer address Kitchens Direct Ashford Road Birmingham		Delivery address Unit 7 Canal Road Birmingham			
B11 2RX		B12 4JJ			
Item Code	Information		Quantity	Unit £	Total £
1 BASE-SINGLE Width: 500.0 Height: 870.0 Depth: 600.0	Single base unit Carcase: MED-DEN-FIBRE-18MM Finish: MFC18-OAK Handle: Z-DOUBLE		7	43.76	306.32
2 BASE-SINK Width: 1000.0 Height: 870.0 Depth: 600.0	Sink base unit Carcase: MED-DEN-FIBRE-18MM Finish: MFC18-OAK Handle: Z-DOUBLE		2	46.96	93.92
3 WALL-DOUBLE Width: 1000.0 Height: 750.0 Depth: 300.0	Double wall unit Carcase: MED-DEN-FIBRE-18MM Finish: MFC18-OAK Handle: Z-DOUBLE		5	39.18	195.90
					/

The module produces a full breakdown of product costing.

DEMO USER 1 Modular V9.0 Wednesday 23 Ma	y 2012 15:40
Product costing Exam	ple of quote
Ref Products & parts order Description Example of quote	
Optimising DEFAULT Over 0 Ne Code Otta Information Width Nather Dath	
No code Uty information width height hepth	
1. BASE-SINGLE 7 Single base unit 500.0 870.0 600 DOORMATERIAL: MFC18-OAK CARCASEMATERIAL: MED-DEN-FIBRE-180M BACKMATERIAL: HARDBOARD-40M EDGING: OAK-TAFE-220M HANDLETYPE: Z-DOUBLE FE: HINGE: LEFT SHELFDEPTH: 400.0 BOCMMUTERIAL: BHL	.0
RH: 150.0 DR: 1	
Code Qty Description Material Length Width Item co Time Fer hou	st Total
BASE-END-LEFT 1 Base unit end le MED-DEN-FIBRE-1 582.0 870.0 6.35	5 6,355
Description: Base unit end left Material: MED-DEN-FIBRE-180M BASE-END-RIGHT 1 Base unit end ri MED-DEN-FIBRE-1 582.0 870.0 6.35 Description: Base unit end right Material: WED-DEN-FIBRE-180M	5 6,355
BASE-BACK 1 Base unit back HARDBOARD-4MM 476.0 735.0 1.00	6 1.006
BASE-BOTTOM 1 Base unit floor MED-DEN-FIBRE-1 464.0 582.0 3.48 Material: MED-DEN-FIBRE-198M	7 3,487
BASE-FLINTH 1 Base unit plinth MED-DEN-FIBRE-1 464.0 125.0 1.06 Material: MED-DEN-FIBRE-18MM	0 1.060
BASE-RAIL-FRONT 1 Base unit rail f MED-DEN-FIBRE-1 464.0 150.0 1.52	4 1.524
Description: Base unit rail front Material: MED-DEM-FIBRE-1800 BASE-RAIL-BACK 1 Base unit rail b MED-DEN-FIBRE-1 464.0 150.0 1.02 Description: Base unit rail back Material: MED-DEN-FIBRE-1800	5 1.025
BASE-SHELF 1 Base unit shelf MED-DEN-FIBRE-1 464.0 400.0 1.36	5 1.365
Material: MED-DEN-FIBRE-18MM BASE-DRAWER 1 Base unit drawer MFC18-OAK 500.0 186.3 2.60	6 2,606
BASE-DOOR 1 Base unit door MFC18-OAK 500.0 554.8 4.25	5 4.255
+BUDC 1 Base unit drawer carcase 462.0 148.3 546.0 BUDC-LEFT 1 Drawer carcase 1 WHITE-ACRYLLC-1 546.0 136.3 1.32	0 1.320
Description: Drawer carcase left Material: WHITE-ACRYLIC-12MM BUDC-RIGHT 1 Drawer carcase r WHITE-ACRYLIC-1 546.0 136.3 1.32	0 1.320
BUDC-BACK 1 Drawer carcase b WHITE-ACRYLIC-12MM BUDC-BACK 1 Drawer carcase b WHITE-ACRYLIC-1 438.0 136.3 1.32	0 1.320
Description: Drawer carcase back Material: WHITE-ACRYLIC-12MM	0 1 320
Description: Drawer carcase base Material: WHITE-ACRYLIC-12MM	0 1.320
Z-DRAWER-SCREW 13 Acrylic drawer s WHITE-ACRYLIC-1 0.120 Description: Acrylic drawer screw	1.560
Z-DOUBLE 2 Pull handle WHITE-ACRYLIC-1 1.210	2.420
Description: Hinge 180 HKK123-321	0.800
Z-DOWEL 22 Dowel WHITE-ACRYLIC-1 0.120	2,640
Z-SHELF-SUPPORT 4 Shelf support WHITE-ACRYLIC-1 0.190	0.760
Z-MONNER 2 Drawer Funner WHIE-ACKINC-1 0.430 ZS40-8-CSUNK-SCREW 8 Cauk Screw 40mm WHIE-ACKINC-1 0.010	0.860
Description: Csunk Screw 40mm No8	
Y-ASSEMBLY 180 Cabinet Assembly WHITE-ACRYLIC-1 6.500	0,325
	43,763
2. BASE-SINK 2 Sink base unit 1000.0 870.0 600 DOORMATERIAL: MFC18-OAK CARCASEMATERIAL: MED-DEN-FIBRE-18MM BACKMATERIAL: HARDBOARD-4MM EDGING: OAK-TAPE-22MM HANDLETYPE: Z-DOUBLE FE: SHELFDEPTH: 400.0 ROOMNUMBER: PH: 125.0 RH: 150.0 DR: 1	
Code Qty Description Material Length Width Item Time Part	/
BASE-END-LEFT 1 Base unit end le MED-DEN-FIBRE-1 582.0 870.0 6	r

M Paulaura							2
Keview runs	o.w. o						<u> </u>
File Edit View	Settings Summaries Hel	p			Te		_
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Favourites							
Batch reports	Job costing			Exa	imple of	f quot	te
🍇 Job costing					1	1	
💐 Fittings					Products &	parts or	ler
(2) Operations	Code	Description	Quant Linear	Area	Cost	Total	*
operations							
	Board	Material	Quant	Area	Cost/m2	Total	
	HARDBOARD-4MM/01	HARDBOARD-4MM 2440.0 x 122	5	14.884	0.890	13.247	
	MED-DEN-FIBRE-18	MED-DEN-FIBRE-18MM 3050.0 x	7	32.559	4.500	146.514	
	MFC18-OAK/01	MFC18-OAK 3050.0 x 1220.0	1	3.721	3.300	12.279	Ε
	MFC18-OAK/02	MFC18-OAK 2440.0 x 1220.0	3	8.930	2.970	26.523	
	MEL-CHIP-18MM/02	MEL-CHIP-18MM 2440.0 x 1220.0	2	5.954	3.140	18.694	
			18	66.048		217.258	
	Sundry	Material	Quant Linear	Area	Cost	Total	
	WHAC12/01	WHITE-ACRYLIC-12MM	28		1.320	36.960	
			28			36.960	
	Edaina	Description	Quant		Cost/m	Total	
Summaries	OAK-TAPE-22MM	Oak PVC Tape 22mm	113,300		0.840	95.172	
Advanced	WHITE-TAPE-22MM	White PVC Tape 22mm	8.840		0.550	4.862	
Patterns		·	122.140			100.034	
Machining							
Custom	Fitting	Description	Quant		Cost	Total	-
					4 0 4 0	77 540	

There is also a full breakdown for the costs of all parts and other items in the order.



The heart of the PQ module is the product library for building and storing parametric products.

The product library deals with custom or variable products in product ranges.



A single parametric product record can be defined to cover a wide range of options. The program automatically works out the correct part sizes and quantities based on the customer and/or production requirements.

In the above example there are two products produced from the same template. One with different materials, different sizes and one with no back.

This approach is very efficient and accurate since the program does all the calculating of sizes and quantities as the product requirements change from customer to customer.

10 Product library						
File Edit Help						
	K 🖻 🥩 🖡					-
Туре	Product 🔹					
Code	BASE-DOUBLE					
Description	Double base unit					
fx Def XWidth ◯ ◙	1000.0					
Y Height 🔘 🎯	870.0					
Z Depth 🔿 💿	600.0					
Vertical position 💿 💿					1	
fx Price ((v)	=IF((X<=1000),33.00,42.2	0)]	
Answer table						
Memo 1		2	3			
4		5	6			
7		8	9			
10	1					
Add Insert Delete	Parts Su	bs @ fx \$				
Pa	rt Quan	Description	Material	Length	Width	*
1. D-BASE-END-LEFT	1	Double base unit end L	@CARCASEMATERIAL@	=Z-T(@DOORMATERIA	=Y	
2. D-BASE-END-RIGH	T 1	Double base unit end R	@CARCASEMATERIAL@	=Z-T(@DOORMATERIA	=Y	
3. BASE-BACK	1	Base unit back	@BACKMATERIAL@	=&INTERNAL_WIDTH&	=&BACK_PAN	E
4. D-BASE-BOTTOM	1	Base unit floor	@CARCASEMATERIAL@	=&INTERNAL_WIDTH&	=Z·T(@D00R	
5. BASE-PLINTH	1	Base unit plinth		=&INTERNAL_WIDTH&	=@PH@	
5. D-BASE-RAIL-FRUN	1	Double base unit rail F		=&INTERNAL_WIDTH&	=@RH@ _@RH@	
8 BASE-SHELE	1	Base unit shelf		-&INTERNAL_WIDTH&	-@SHELEDE	
9 D-BASE-DOOB/L	1	Base unit door left		=X/2-2	=Y-2-@PH@	
10. D-BASE-DOOR/R	1	Base unit door - right	@DOORMATERIAL@	=X/2-2	=Y-2-@PH@	
11. D-BASE-DIVIDER	1	Base unit divider	@CARCASEMATERIAL@	40.0	=Y-2*T(@CAR	
12. ZDD4B-BROWN-HA	ANDLE 2	Handle 4'' D Brown	+			-

The product entry screen allows the product to be detailed.

The details can include a drawing (from an external file e.g. bmp) or a drawing from the built-in drawing library.

The important point is that the product details such as Material or Length can be defined as variables e.g. @CARCASEMATERIAL@ or formulae &INTERNAL_WIDTH&

The variable is answered at the order screen where the customer material is entered e.g. TEAK or BEECH-18MM and the formula is pre-defined formula that depends on the material thickness. There are tables for defining variables, lookup tables, and formulae.



A customer database is included in Quote for entering and storing customer and sales details.

🔛 Custo	mer datal	base									• ×
File Re	cord Vi	ew Help									
*	B				-	×	5	⇒ ?			
Custom	er code	(Cust	omer name				
CS100	1					Kito	hens Direct				
Invoice	address							Delivery ad	dress	+ •	$\leq >$
Ashford Birming	d Road Iham							Unit 7 Canal Roa Birminghar	n n		
Postcoo	de	B11 2RX			Telephone			Postcode		B12 4JJ	
Contact	t	John Smit	h		0121 344 (5798		Fax	0121	455 3321	
Notes	:					Payme	ent terms	30 D a	iys		
1	Credit OK					Disco	unt code	Δ	1		
2	No Sat De	eliveries				- Anal	lusis codes				
-				_		1	MIDLANDS				
3											
4						2					
5						3					
						<u> </u>					

The task of building up the product details can be quite a lengthy and complex process - but the program includes many examples and templates to aid the process.

Summary of Products & Quotes

Products & Quotes requires one of the Optimising modules; LO, SO, PO, NE Products & Quotes usually requires the PL module for parametric products

	PQ + PL
Product records	Unlimited
Customer records	Unlimited
Drawing library	•
External product drawings	•
Parametric products	•
Quotations	•
Job costing	•
Product costing	•
Flexible orders	•
Form & Label designer	•
Printed forms	•
Integrated local help	•
Links to website	•



For fast set up of CNC machinery

Where parts contain additional machining such as grooves, routs, drilling and cut-outs the Machining interface module is used to create and store the part drawings (via the Machining library) and also send the correct machining instructions for each part to the CNC machining centres.

Most machining centre formats are supported including DXF, Weeke WoodWop, and other proprietary formats.

The MI interface requires one of the Optimiser modules LO, SO or PO or the Nesting optimisers (NE) for shaped parts.

Machining drawings

The machining editor provides full facilities for creating machining drawings. A wide variety of machining functions are provided:-

Saw groove
Horizontal drilling
Vertical drillings
Cut-outs
Arc router
Circle router
Pockets
Contours
Vacuum pods

Eile Ei	hining library dit View Eunci	tion Help		
		🔹 🖹 🜮	📸 N 🔹 Þ 🕅 🔍 🏹 🏹 💻	?
~~	<> fx	@ \$ Ty E	BASE-CABINET-END-LEFT 600 x 870 x 20 0	
	Function Description Back	Saw groove Groove		
	On / Off Xstart	=X-18-T(@BACKMATEF		X
2	Ystart Xend Yend	3 =X-18-T(@BACKMATEF =Y	40	×
	Direction Width Depth	0 =T(@BACKMATERIAL@ 6		${}$
	Repeat Offset			
		+		

The pane at the left shows the details of each instruction and the full part is shown in the diagram at the right.

Drawings can be set up with formulae so they are fully parametric and automatically adjust if the part size changes. Common machining patterns can be dealt with by one drawing assigned to many different parts.

Drawings are stored in the Machining library

External drawings – where the drawings are external files such as DXF or Weeke MPR the Machining editor can still be used to view and adjust drawings and the drawing information is sent to a machining centre via the Machining Interface.

DXF drawings suitably layered can also be imported to the Machining library.

Shaped parts

The drawing editor allows for contours to define shaped parts.



Each machining instruction can include extra tooling information to allow for tool speeds, tool path compensation etc.

Use the mouse to quickly draw the function and use the boxes at the left to add the detailed measurements where required.

The transfer of machining data to CNC machines is set up via the following parameters:-

```
Machining centre parameters
Machining centre transfer parameters
```

The machining centre parameters set up the general features for the machining drawings/instructions such as the Drawing origin, and specific features for proprietary machines such as the 'Park mode' for Weeke/WoodWop.

The Machining centre transfer parameters control the transfer of data to the machining centre. File format, where files are located and whether there are separate files for Front and Back instructions. A wide range of transfer formats are supported:-

Weeke/WoodWop V4/V5 (MPR) Weeke/WoodWop V2.5 (MPR) 2D DXF non layered 2D DXF layered Biesse RoverCad (CID) Morbidelli Aspan V3.2 (ASC) Morbidelli Aspan V4.0 (ASC) Busellato Autolink (DXF) ASCII PTX MDB PTX

The machining centre transfer parameters also include a Tooling replacement table, so that tooling instructions can be translated to a specific format for a machine. This allows for a single set of drawings which can then be interpreted for different CNC machines.

For most parameters there is a clear picture of the setting involved and examples of the set up.



Machining summary and costs

The costing for a job includes the machining times and costs.

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💐 Fittings				INESI	ing - Machini	ng norary
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		MEL CUID 19MM 2050 0 v		14 004	2 190	47 221
	MEL-CHIP-18M	MEL-CHIP-18MM 2440.0 x	1 4	8 930	3 140	28 041
			7	23.814	0.140	75.373
	Operation	Description	hh:mm	C	ost per h	Total
	Machining centre		1:15		50.000	62.625
						62.625
						407.000
	lotal					137.998
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The job summary includes the machining drawings (with all dimensions resolved and calculated) and reports for each type of instruction.

Machining drawing

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a a mooning proview	Cut size: 520 x 600 x 18.0 Drawing: CORNER-BOTTOM
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Machining instructions

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Machining	No	Fn	Descripti	Xstart	Ystart	Xend	Yend	Width	Depth	Offset	Rpt	Dir	Tool	*
	001	Saw	Groove	20	0	20	600	4	8		-			
🛔 🛔 Machining preview	002	Saw		22	20	520	20	4	9					
Machining drawings	006	Vrout		0	0	0	600	0	18.3					
Machining drawings	007	Vrout		0	600	270	600	0	18.3					
📌 Machining editor	008	Vrout		270	600	270	350	0	18.3					
	009	Vrout		270	350	520	350	0	18.3					
33 Nested Preview	010	Vrout		520	350	520	0	0	18.3					Ξ
A Nested Drawings	011	Vrout		520	0	0	0	0	18.3					
	014	Vrout		-10	-4.14	-10	604.14	0	0					
	015	Vrout		-10	604.14	-4.14	610	0	0					
	016	Vrout		-4.14	610	274.14	610	0	0					
	017	Vrout		274.14	610	280	604.14	0	0					
	018	Vrout		280	604.14	280	360	0	0					
	019	Vrout		280	360	524.14	360	0	0					
	020	Vrout		524.14	360	530	354.14	0	0					
	021	Vrout		530	354.14	530	-4.14	0	0					Ŧ
Custom	4	\ Drav	ving 🖌 Instru	ctions 1	λInstru	ctions 2	🖌 Ins 🦄						•	•

With the Parts & Labels module route cards or labels for each machined parts can be printed at the office.

🔢 Review runs				
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Batch reports	Optimised Pa	rt Details 1	Shaped nesting	- machini
Summaries				
Advanced		.		
Patterns	MEL-CHIP-18MM	Nesting	 Machining library///NESTIN 	NG/M-CENTRE/NE
Machining	Ontimised Parts			*
Custom				
	Run: Nesting - Machinin	g library	Description: Shaped	nesting - machinin
Board Details	Edgebander setup time: 0:00 S	aw setup time: 0:00		
瓣 Material Details	Part code: CORNER-BOTTOM	Bottom edge:	Drawing name:	
	Material code: MEL-CHIP-18NM	Top edge:	0001493F	
Optimised Part	Length: 520.0 Width: 600.0	Left edge:	Part Volume:	FIN SIZE520.0 x 600.0
Details	Quantity: 9 Non Grained	Right edge:	LOW	
Pattern Details				
	Part code: CORNER-BOTTOM	Bottom edge:	Drawing name:	
	Material code: MEL-CHIP-18MM	Top edge:	0001494F	
	Length: 750.0 Width: 700.0	Left edge:	Part Volume:	FIN SIZE750.0 x 700.0
	Quantity: 8 Non Grained	Right edge:	LOW	
	Part code: CORNER-SHELF	Bottom edge:	Drawing name: 00014055	
	Length: 490.0 Width: 570.0		Part Volume:	FIN SIZE490.0 x 570.0
	Quantity 4 Non Grained	Diaktedae	LOW	*
J] •			F.

With the pattern editor last minute adjustments can be made to any drawing before sending the data to the CNC machining centre.

External drawings - The drawing editor and transfer of data to a CNC machine can be integrated with the use of external drawing files such as DXF and MPR.



In this case the stand-alone drawings can be used with parts so items do not have to be duplicated in the machining library or drawn twice.

Summary of Machining Interface

- Machining Interface requires one of the Optimising modules: LO, SO, PO or the Nesting Optimiser NE.

	MI	MI + PL
Machining drawings	99999	99999
Machining functions (drill, route)	•	•
Support for proprietary formats	•	•
Support for DXF	•	•
Transfer to machining centre	•	•
Shaped drawings	•	•
Labels for drawings		•
Parametric drawings	•	•

Destacking & Palletisation - DS

Efficient offstacking and faster through flow

The DS module provides for the set up and planning of the destacking process so that parts are distributed to pallets or baseboards efficiently after cutting.

Parts can be destacked manually or with specialised destacking equipment. The DS module is flexible enough to cope with many destack situations including the use of automatic machinery.

A straightforward example is where parts are manually destacked on to fixed size pallets around the saw.



Each location around the saw is a 'Station'.

The optimisation takes account of the destacking requirements and parts are only destacked to stations that are large enough. The required quantity of each part is completed before the station is cleared ready for the next part.

Destacking parameters

The destacking parameters are used to describe the number, size and type of each station. Typically there might 4 or 5 stations available.

Destacking parameters					
	Ran 0-9999.9, 0	ge -9999.9,			
	Value			•	
1. Size of station 1	3000.0	3000.0	A		
2. Size of station 2	3000.0	3000.0	A		
3. Size of station 3	6500.0	6500.0	A	E	
4. Size of station 4	6500.0	6500.0	A		
5. Size of station 5	1000.0	1000.0	M		Print
6. Size of station 6	4000.0	4000.0	M		
7. Size of station 7	6500.0	6500.0	S		
8. Size of station 8	6500.0	6500.0			
9. Size of station 9	6500.0	6500.0			Cancel
10. Size of station 10	6500.0	6500.0			
11. Size of station 11	6500.0	6500.0			Help
12. Size of station 12	6500.0	6500.0			
13. Size of station 13	6500.0	6500.0		-	OK

The destacking layout to use is set by information in the Part list (Part list information boxes).

Destacking library

The layout for destacking on to a pallet or baseboard is at its simplest the number in the length and the number in the width, for example, 3×3 or 2×1 .

The styles to use are defined in the Destacking library. In this example there are different styles for baseboards and pallets.

👿 D	Destacking library															
File	Edit View	Help)													
1	∜ ♥ 🔭 🗊 🏟 🥩 🕺															
	Beference		Pallet/Baseboa	rd/Rur	nners						Part	stack			Stacks	-
	helelence	Ту	Material	Thk	Len	Width	Lay	Per	Max	Ма	0ve	Over	Lay	LW	Per stn	
	BASE1	1	MEL-CHIP-15MM	15.0	2000	2000	1x1	1	40	1000	0	0	2x2	L	2	
	BASE2	1	MED-DEN-FIBRE-25MM	25.0	3500	3000	1x1	2	100	3000	10	10	4×4	W	2	
	PLT/1	0	CHIPBOARD-18MM	18.0	3020	3200	1x1	1	50	2000	0	0	3x3		2	
	PLT/2	0	CHIPBOARD-18MM	18.0	2020	2020	1x1	0	45	1500	5	0	2x3	L	2	
	PLT/3	0	CHIPBOARD-18MM	18.0	1000	1000	1x1	0	50	1500	0	0	1x1		2	
	1															-

The library can hold many hundreds of styles but typically only a handful of styles are required. They can be set to match your requirements for stacking and processing.

Optimising and Destacking

The Destacking calculations are part of the optimising process and all the information is calculated during optimisation.

The destacking style to use for each part is set at the Part list using extra fields (Part list information boxes).

😡 Part	M Part list - Example 10											
File E	dit View Optimise Help											
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Т	Title Example 10 Opt default - E Saw default -											
	Description	Material	Length	Width	Quantity	Grain	Part layout	Destack t.,	*			
Global		MFC18-BEECH						Α				
1.	BASE-BACK	MFC18-BEECH	476.0	735.0	90	N	PLT/1	A				
2.	BASE-BACK	MFC18-BEECH	976.0	735.0	100	N	PLT/1	A	=			
3.	BASE-BACK	MFC18-BEECH	976.0	735.0	120	N	PLT/1	A				
4.	BASE-BACK	MFC18-BEECH	476.0	735.0	210	N	PLT/2	A				
5.	BASE-BACK	MFC18-BEECH	876.0	735.0	65	N	PLT/1	A				
6.	BASE-BOTTOM	MFC18-BEECH	464.0	582.0	32	N	PLT/1	A				
7.	BASE-BOTTOM	MFC18-BEECH	564.0	582.0	100	N	PLT/2	A				
8.	BASE-BOTTOM	MFC18-BEECH	464.0	582.0	120	N	PLT/1	A				
9.	BASE-CABINET-BOTTOM	MFC18-BEECH	864.0	582.0	90	N	PLT/1	A				
10.	BASE-CABINET-DIVIDER	MFC18-BEECH	560.0	533.3	88	N	PLT/3	A				
11.	BASE-CABINET-DOOR	MFC18-BEECH	400.0	556.8	22	×	PLT/3	A				
12.	BASE-CABINET-DRAWER	MFC18-BEECH	400.0	184.3	120	N	PLT/2	A				
13.	BASE-CABINET-DRAWER-LONG	MFC18-BEECH	900.0	184.3	100	N	PLT/1	A				
14.	BASE-CABINET-END-LEFT	MFC18-BEECH	582.0	870.0	31	N	PLT/1	A				
15.	BASE-CABINET-END-RIGHT	MFC18-BEECH	582.0	870.0	100	N	PLT/1	A				
16.	BASE-CABINET-RAIL-BACK	MFC18-BEECH	864.0	150.0	40	N	PLT/2	A	Ŧ			
•								•				
									æ			

In this example several different pallet layouts are used. In many cases it may be necessary to specify different layouts for different parts, for example, it may dangerous to stack very small parts in a 4 x 4 layout.

The part list is optimised in the usual way. The Destacking information is shown in the 'Review runs summaries'. The optimisation automatically includes an advanced algorithm that ensures optimisation takes account of the stations sizes set in the Destacking parameters.

📆 Review runs	
File Edit View Sett	tings Summaries Help
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Favourites	
Batch reports	Destacking pictures Example 10
Summaries	
Advanced	MFC18-BEECH Example 10///default/default/M2
🎉 Offcut summary	
🔊 Distribution summary	Part:1.BASE-BACK Quantity:90 Part:2 Quantity:100 Part:3 Quantity:120 Stacks:1 Stn:11 Patterns:7-38 Stacks:1 Stn:1 Patterns:1-35 Stacks:2 Stn:2 Patterns:2-38
🎉 Edging summary	Pallet:1500x1200 Pallet:1500x1200 Pallet:1500x1200 Ellet:1500x1200 Pallet:1500x1200 Pallet:
Achine times	
aw loading summary	BASE-BACK! BASE-BACK! 476 X 735 476 X 735 BASE-BACK! BASE-BACK! BASE-BACK! BASE-BACK!
🖉 Destacking summary	BASE-BACK! BASE-BACK! 076 X 735 076 X 735 076 X 735 076 X 735
Station summary	476 X 735 476 X 735
E Destacking pictures	
	Part:4 Quantity:210 Part:5.BASE-BACK Quantity:65 Part:6 Quantity:32
	Stacks:2 Stn:7 Patterns:5-41 Stacks:1 Stn:3 Patterns:3-33 Stacks:1 Stn:22 Patterns:12-39
	Pallet:1500x1200 Pallet:1500x1200 Pallet:1500x1200 Style:PLT/1 Quantity:1 Style:PLT/1 Quantity:1
	BASE-BACK! BASE-BACK!
	476 X 735 476 X 735 BASE-BACK! BASE-BACK!
	BASE-BACK! BASE-BACK! 876 X 735 876 X 735
Patterns	476 V 735 476 V 735
Machining	
Custom	• Commentation (1997)

The Destacking pictures show the layout for each part.

These can be used for controlling and checking the destack process.

Two other reports are available:-

Station summary

This shows how each station is loaded and the order of parts arriving at each station.

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Summaries					J						r		
Advanced	MFC	18-BEEC	СН						Exa	mple	10///default/d	efault/N	v 12
🌽 Offcut summary	Bsh	Length	Width	Bsh	Part	Part /		Part	Part	Part	Part	Part	
Distribution summary	No	mm	mm	Qty	No	Description		Qty	Ln	Wd	Orientat	Ht	
Edging summary	Statio	on numbe	er 1			•							
Machine times	PLT/	1 1500.0	1200.0	1	2.	BASE-BACK		100 100	2	1	!	50	
Saw loading summary	Statio	on numbe	r 2										
Pestacking summary	PLT/	1 1500.0	1200.0	2	3.	BASE-BACK		120 120	2	1	!	50	
Station summary				_									
式 Destacking pictures	Static PLT/	<u>on numbe</u> 1 1500.0	<u>r 3</u> 1200.0	1 1	5.	BASE-BACK		65 65	2	1	!	<mark>50</mark>	
Patterns	Statio	on numbe	<u>er 4</u>										
Machining	PLT/2	2 1300.0	1000.0	0	7.	BASE-BOTTOM		100	2	1		45	-
Custom	4 1	\ Station	summar	y / 📍			•	100		III		•	đ
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Destacking Summary

This shows for each cutting pattern how the parts are produced and the sequence they arrive at stations.

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Distribution summary		Parts		Description		mm	mm			Pictures	=
	1	1	2.	BASE-BACK		976.0	735.0	1	66	2 1!	
Edging summary	2	2	3.	BASE-BACK		976.0	735.0	2	12	2 1!	
And Machine times	3	6	5.	BASE-BACK		876.0	735.0	3	8	2 1!	
			7.	BASE-BOTTOM		564.0	582.0	4	4	21	
🌌 Saw loading			25.	BASE-END-RIGHT		582.0	870.0	5	4	21	
summary			29.	BASE-PLINTH		564.0	125.0	6	2	23	
Testacking summary	4	6	2.	BASE-BACK		976.0	735.0	1	1	2 1!	
			3.	BASE-BACK		976.0	735.0	2	5	2 1!	
Station summary	5	7	3.	BASE-BACK		976.0	735.0	2	5	2 1!	
# Destabling sisters			4.	BASE-BACK		476.0	735.0	7	2	21	
Base Destacking pictures	6	10	23.	BASE-END-LEFT		582.0	870.0	8	7	21	
			24.	BASE-END-LEFT		582.0	870.0	9	1	21	
			40.	BASE-SHELF		464.0	400.0	10	1	33	
Patterns	7	14	1.	BASE-BACK		476.0	735.0	11	6	2 2!	
Machining			9.	BASE-CABINET-BOTTOM		864.0	582.0	12	2	12	
Custom		Destart	21	BASE-DRAWER		500.0	186.3	13	2	11	T
Custom		Destacki	ng sur	nmary /	₹						<u>.</u>

Using Destacking information

- All the reports can be easily printed and used at the Destacking area or for planning.

- For Holzma/Bargstedt destacking machinery the destacking information can be downloaded (via the Saw interface) for use by automatic destacking machinery.

- Labels for each pallets and/or each stack can be printed in the office if used with the 'Parts & Labels' (PL) module.

<u>Baseboards</u>

Many customers offstack to cut to size baseboards rather than pallets. Destacking can be set up for this (or a mixture of both).

Destacking pictures for baseboards:-

Review runs			- 11-1-							.
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Batch reports	Des	tack	ing picture	S				E	xample	e 10
Summaries			01						1	
Advanced	MEC1	8-BEE	СН				Exam	nle 10/	//default/defa	mit/M2
🌽 Offcut summary							LAun	pic 10/	dentile den	
避 Distribution summary	Part:1. Stacks	BASE-E	BACK Quantity:90 1:11 Patterns:7-38	Part:2 Stacks:1 St	Quanti n:1 Pattern	ity:100 is:1-35	Part:3 Stacks:1	Stn:2	Quantity 2 Patterns:	120 2-38
🚆 Edging summary	Basebo Style:E	bard:6.9 BASE1	052x1470 Quantity:1	Baseboard:1 1 Style:BASE1	952x1470 Qua	antity:1	Baseboar Style:BA	rd:1 195 SE1	2x1470 Quanti	ity:1
Machine times	۲, T			BASE-BACK	BASE-BAC	к	BASE-B	ACK E	ASE-BACK	
aw loading summary	1	1		976 X 735	976 X 73	5	976 X	735 9	76 X 735	
JE Destacking summary				BASE-BACK	BASE-BAC	к	BASE-B	ACK E	BASE-BACK	
💱 Station summary	1	1		976 X 735	976 X 73	5	976 X	735 9	76 X 735	
💑 Destacking pictures	<u> </u>]			-				
	Part:4		Quantity:210	Part:5.BASE-6	BACK Quan	tity:65	Part:6		Quantit	y:32
	Stacks	:2 St	n:7 Patterns:5-41	Stacks:1 St	n:3 Pattern	is:3-33	Stacks:1	Stn:22	2 Patterns:12	2-39
	Baseb	Dard:69	0uantitu:2	Baseboard:2 1	/52x14/0	untitur 1	Style-BA	rd:16.92 ⊆⊏1	8x1164 Ouanti	iter 1
	Style.L	AGET	Quantity.2		Qua	inuty. i	Style.DA	JL I	Quanti	ty. 1
	4	4		BASE-BACK I	BASE-BACK		6	6		
		-		876 X 7358	376 X 735					
Batterne				BASE-BACK E	BASE-BACK					
Machining	4	4					6	6		
Custom]	876 X 7358	376 X 735					-
	1									-

👿 Cutt	ting list - Example 10-								
File E	dit View Optimise	Help							
*				2		\$?		
Т	itle Baseboards	Op	t		-		Saw		-
	Description	Material	Length	Width	Quantity	Grain	Part layout	Destack t	*
Global		MEL-CHIP-15MM				N			
1.	2×	MEL-CHIP-15MM	1952.0	1470.0	2	N			
2.	5	MEL-CHIP-15MM	1752.0	1470.0	1	N			
3.	7	MEL-CHIP-15MM	1128.0	1164.0	1	N			
4.	25*	MEL-CHIP-15MM	1164.0	1740.0	6	N			
5.	29	MEL-CHIP-15MM	1128.0	250.0	1	N			=
6.	4×	MEL-CHIP-15MM	952.0	1470.0	3	N			
7.	40	MEL-CHIP-15MM	928.0	800.0	1	N			
8.	9	MEL-CHIP-15MM	1728.0	1164.0	1	N			
9.	21	MEL-CHIP-15MM	1000.0	372.5	1	N			
10.	34×	MEL-CHIP-15MM	1928.0	300.0	2	N			
11.	11	MEL-CHIP-15MM	800.0	1113.5	1	N			
12.	12	MEL-CHIP-15MM	800.0	368.5	1	N			
13.	13	MEL-CHIP-15MM	1800.0	368.5	1	N			
14.	28×	MEL-CHIP-15MM	1928.0	250.0	2	N			
15.	39	MEL-CHIP-15MM	1928.0	800.0	1	N			
16.	6×	MEL-CHIP-15MM	928.0	1164.0	2	N			
17.	27×	MEL-CHIP-15MM	928.0	250.0	2	N			-

The program also provides a cutting list for the Baseboards ready for optimising.

Flexible Destacking

The destacking options are very flexible and can be set up for:-

- Offstacking to the floor (no station sizes)
- Offstacking to a mix of automatic and manual stations
- Offstacking to include one or more 'Overflow' stations
- Use of 'Pallet groups'

Pallet groups

The program also includes more general options to take account of Pallet groups. For example, a field (information box) is available at the part list to set a pallet group number for each part.

This ensures the optimisers arrange the pattern layouts so parts in the same pallet group are finished before considering parts from other pallet groups. This speeds up later production and assembly operations and helps with delivery times for specific parts.

For example, a customer recently needed to set up their system to produce 1 job at a time and used the Pallet group option for this. The flexibility of the optimisers also allowed 'changeover' patterns where one group finished and the next started so waste was minimised.

Summary of Destacking

- Destacking requires optimising module: PO

	DS	DS + PL	DS + Homag
Maximum items in library	9999	9999	9999
Maximum number of stations	20	20	20
Automatic machinery	•	•	•
Manual destacking	•	•	•
Allow overflow stations	•	•	•
Pallet groups	•	•	•
Fixed pallets	•	•	•
Baseboards	•	•	•
Destack to floor	•	•	•
Labels for stacks or pallets		•	
Destack pictures	•	•	•
Destack summary	•	•	•
Station summary	•	•	•
Download to destack machinery			•

- The DS option can also be modified for one-off of special equipment - ask for a quote

CAD Drawings – CA

Easy to use 2D drawing and room layout

A flexible design tool for laying out jobs e.g. Office spaces, Kitchens, Washrooms ...

- Create room layout
- Add products
- Optimise

Provides full costing, drawings and supporting documents.

Layout can be exported in DXF format.

CAD drawing library

Use the screen and integrated tools to produce a space or room layout and position products on the layout.



A set of tools allow for quick and accurate entry of the room details.

Wall Door Window

Plus all the usual drawing tools, arc, line, circle, ellipse, text ...

Here the Window tool is used to add a window,



Products were re-positioned as a result of the change.

14 16 4 Proper × Product BASE-DRAWER Drawers-MFC18-OAK Description Number Δ 4069.12 Xstart 3480.04 Ystart Width 500.0 870.0 Height 600.0 Depth 0 Angle 0.0 Vertical position Automatic dimensioning V Variables 87 Line colour Line weight 0 OK Try Help Cancel 19

Details of each product are shown via the Properties pop-up

Use the Product tool to add products to the drawing.



The view can be switched between the plan view and an elevation along a selected wall.



Any drawing can be added to a diagram layout - so that a full annotated drawing can be produced if required.



Product requirements

Once the drawing is complete the product requirements can be calculated automatically by the program.



The requirements are then ready for optimising in the usual way.

Alternatively the program can produce a full Quotation for the Products and Quotes module.

The Quotation can be processed and optimised as required.

Summary of CAD Drawings

Products & Quotes requires one of the Optimising modules; LO, SO, PO, NE Products & Quotes usually requires the PL module for parametric products

	PQ + PL
Product records	Unlimited
Customer records	Unlimited
Drawing library	•
External product drawings	•
Parametric products	•
Quotations	•
Job costing	•
Product costing	•
Flexible orders	•
Form & Label designer	•
Printed forms	•
Integrated local help	•
Links to website	•