V12 – INTRODUCTION AND NEW FEATURES

This document introduces the main features of the latest version, V12. The new release includes a new more modern look, offers the option for cloud licencing, and a host of new features across the package:-

- **Modern line style icons throughout with option for high-contrast icons**

- **Cloud licensing of software with internet connection – no need for USB dongle**

- **Beam saw optimisation - new parameter to encourage fuller books and fewer cutting cycles without over production**

- **Machine (Router) Loading Summary for nested jobs showing boards required in cutting pattern order**

- **Machining drawings from different sources can be mixed in the same part/cutting list (ie. MCLIB, DXF, flat MPR) and one-time drawing edits can be made in the cutting list**

- **woodStore view – a new option to show for each board the stock per bin number**

- **Cutting pattern display/print – new option to show for each part the sides that are edged**

- **Labels and forms can be exported as image files (formats bmp, jpg, png and emf)**

- **Nesting - an extended nesting pass considers placing small parts towards the middle of the pattern as well as offset from edge**

- **Nesting – improvements to stay down routing when using shaped parts with convex arcs**

- **Nesting – an option to add an extra preliminary routing pass for small parts and stay down routing**
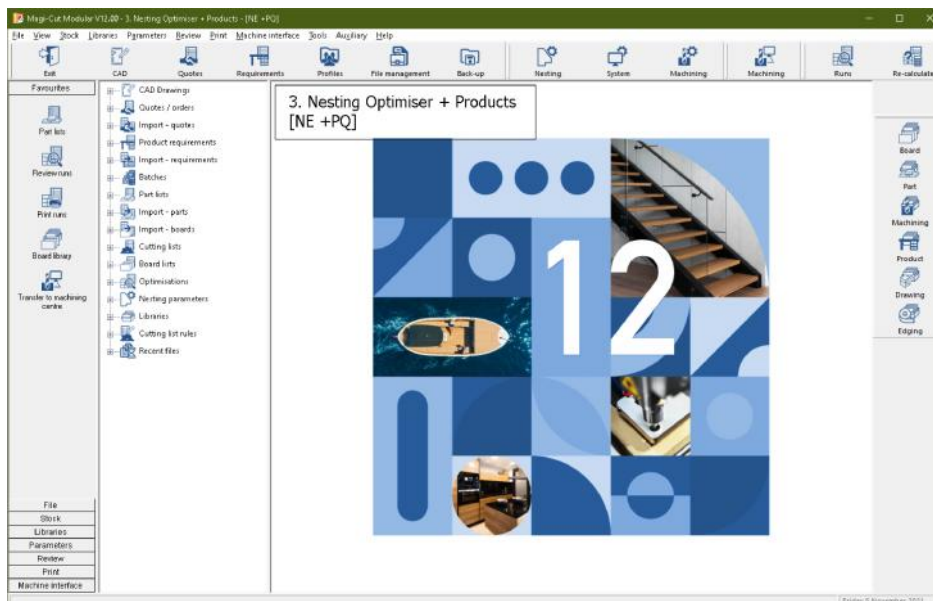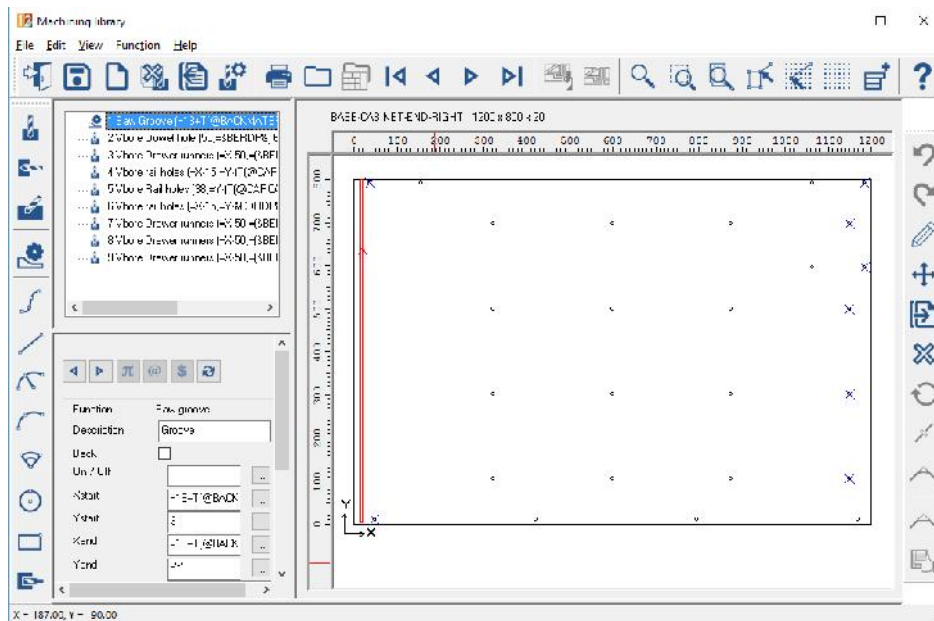
LOOK AND FEEL

Line style icons

V12 offers a more modern look with new flat line-style icons on tool bars and file trees, and also the option for high-contrast icons when using a dark background.
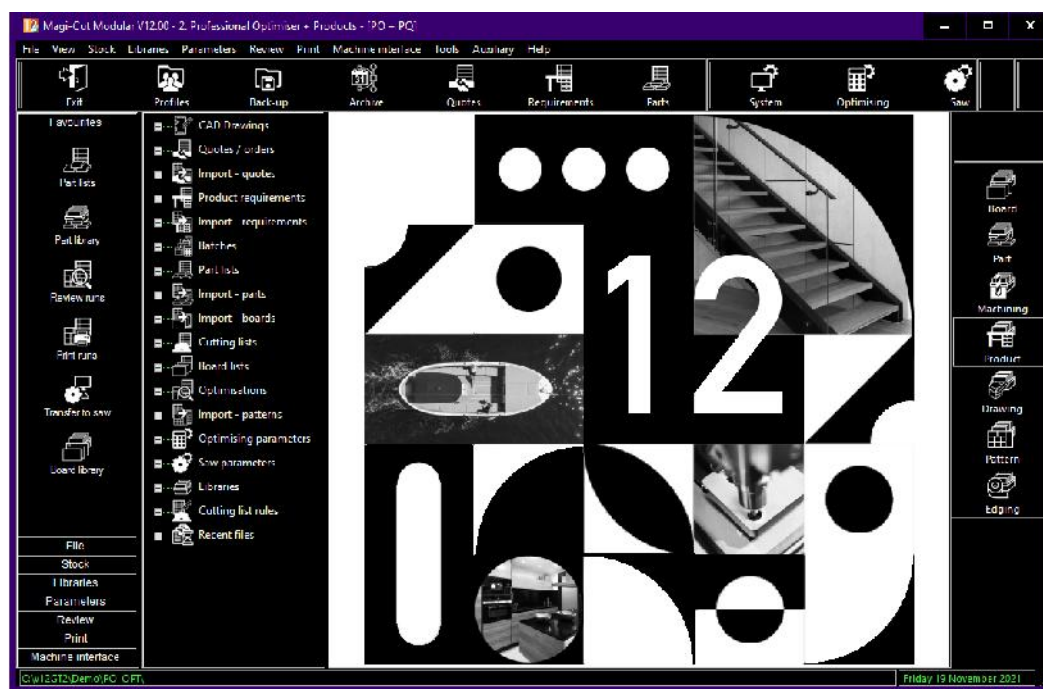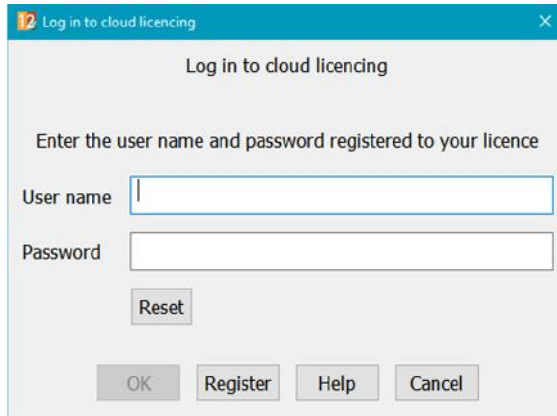
Line Style - Black
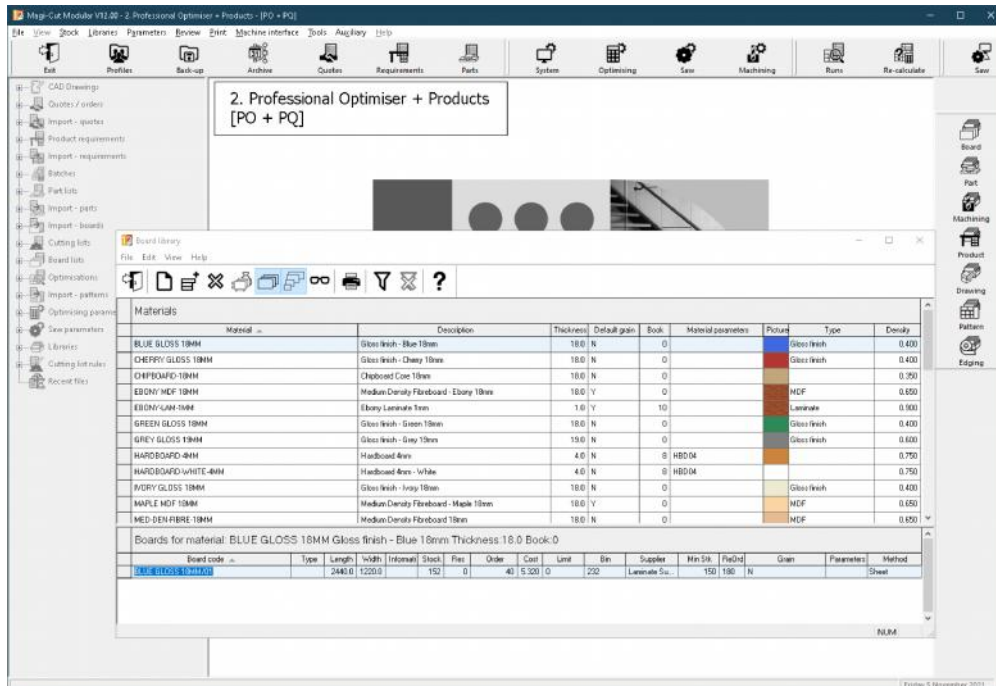
Line Style - Blue

Line Style – High Contrast

Cloud licencing

V12 offers the option of a cloud-based licence where security is handled via connection to internet. This avoids the use of the hardware USB dongle and offers greater flexibility in multi user environments and removes the need for client hosted licence servers.
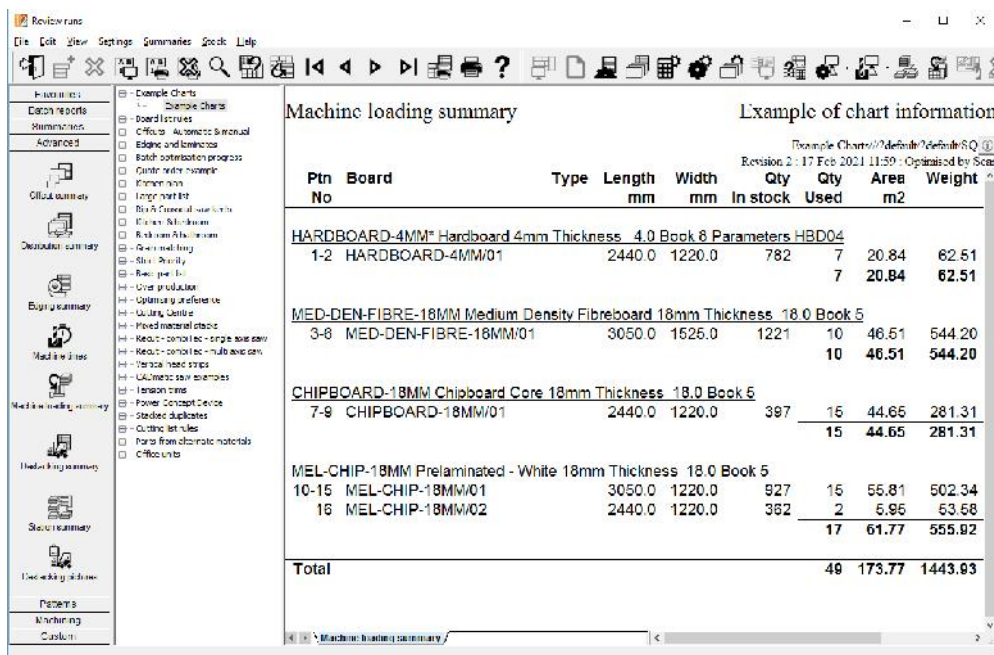

SUMMARIES & PATTERNS

Machine Loading Summary

There is a new machine loading summary for nesting jobs. This lists the boards required in pattern sequence as they are needing for loading. The layout is similar to the saw loading summary which has been renamed to machine loading summary.

Show edging on part in pattern display

There is a new feature in the pattern display to show the sides of the part that will be edged.


Individual cutting length in pattern summary

The pattern summary includes an extra column to show the cutting length on a pattern by pattern basis, as well as the total for the run.

Pattern summary

Ptn No	Board	Length mm	Width mm	Waste %	Yield %	Board Qty	Cutting length Total	Qty Cyc	Qty Rip	Qty Xct
1	CHIPBOARD-18MM/01	2440.0	1220.0	5.05	94.95	5	68.8	1	3	11
2	CHIPBOARD-18MM/01	2440.0	1220.0	5.74	94.26	5	70.0	1	3	12
3	CHIPBOARD-18MM/01	2440.0	1220.0	10.34	89.66	5	69.1	1	3	12
4	CHIPBOARD-18MM/01	2440.0	1220.0	7.41	92.59	5	65.0	1	3	9
5	CHIPBOARD-18MM/01	2440.0	1220.0	6.94	93.06	5	78.7	1	4	16
6	CHIPBOARD-18MM/01	2440.0	1220.0	9.74	90.26	5	66.9	1	3	11
7	CHIPBOARD-18MM/01	2440.0	1220.0	11.55	88.45	5	66.3	1	3	11
8	CHIPBOARD-18MM/01	2440.0	1220.0	8.65	91.35	5	86.8	1	4	19
9	CHIPBOARD-18MM/01	2440.0	1220.0	10.14	89.86	5	65.5	1	3	10
10	CHIPBOARD-18MM/01	2440.0	1220.0	8.61	91.39	5	72.2	1	3	13
11	CHIPBOARD-18MM/01	2440.0	1220.0	8.43	91.57	5	78.2	1	3	14
12	CHIPBOARD-18MM/01	2440.0	1220.0	13.12	86.88	5	70.4	1	3	12

Pattern preview & pattern display - customisable extra fields

It is possible to configure additional fields to be shown above the pattern in full or preview mode. The fields include:- Board type, Bin, Board Information, Board extra Information and Parts produced.
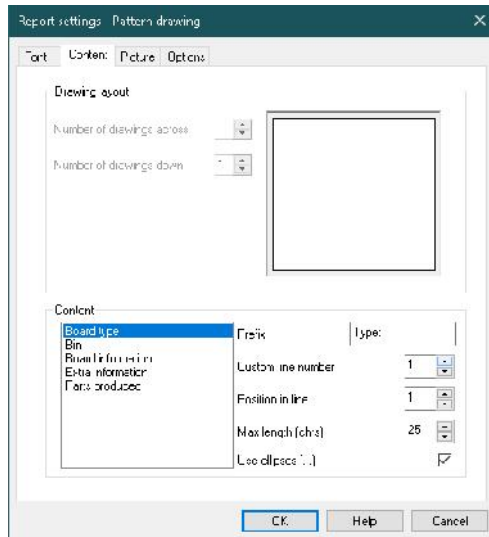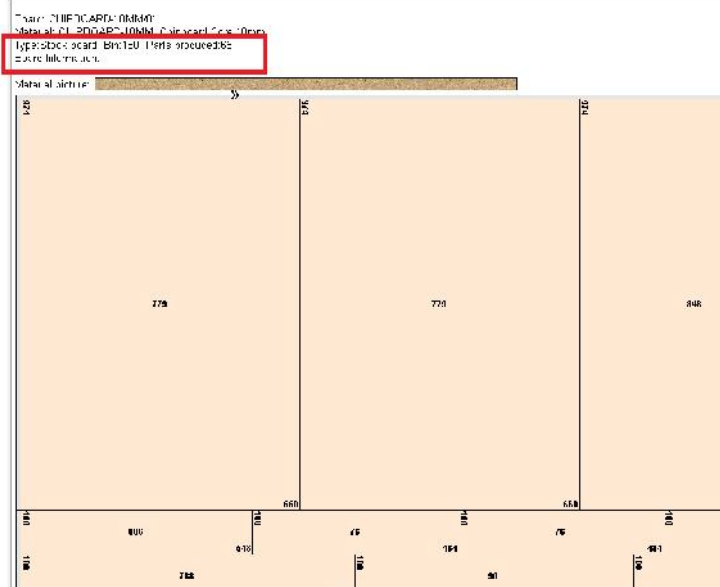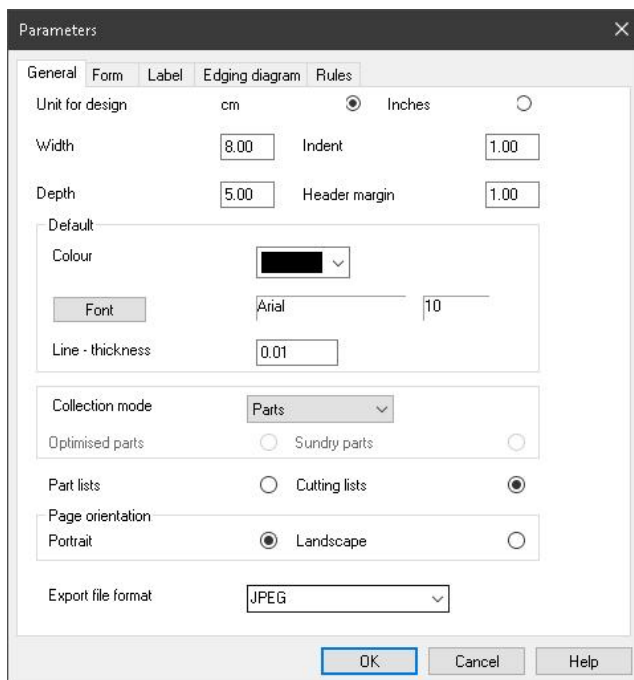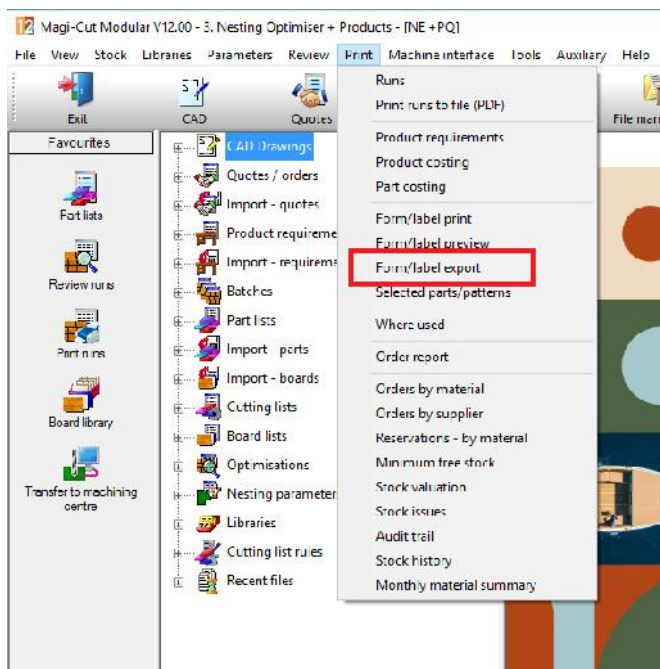
LABELS

Export of label as an image file (jpg, png, emf, bmp)

A new option allows the user to export labels as image files for printing in external applications. The formats supported are: .png, .bmp, .emf, .jpg.

Stand-alone printing option for forms and labels

It is now possible to run the form and label printing options from stand-alone commands, and from within other applications.

V12 includes a new stand alone utility to print form/labels from the command line (formout.exe).
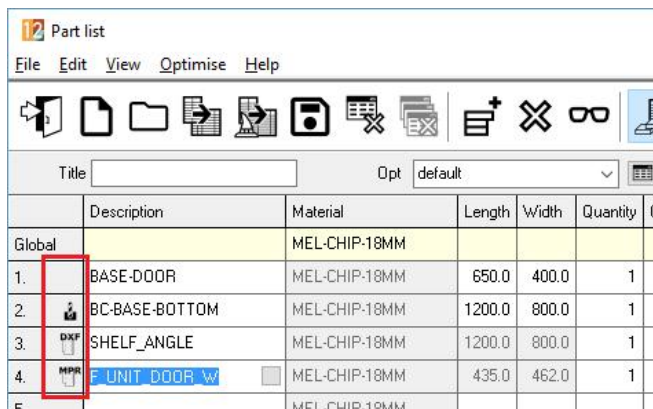
FORMOUT.EXE <tlf file> [<data source>] [/PRINT:<printername]

e.g. FORMOUT.EXE design_fp test /PRINT:printername
where the _fp means a part list form, so test is the name of a part list

NESTING/MACHINING

Part list/Cutting list – mixed drawing source

Mixed drawing sources supported for part list import and entry. A major enhancement to the handling of machining drawings, allows a user to mix the formats of drawings in one part list. The following drawing sources can be mixed In one list:- Machining library, Part library, woodWop MPR, DXF.   At the cutting list stage, the fully evaluated drawings can be amended as required and are held with the job. The original master/parametric drawings remain in the library, or woodWop folders for future use.
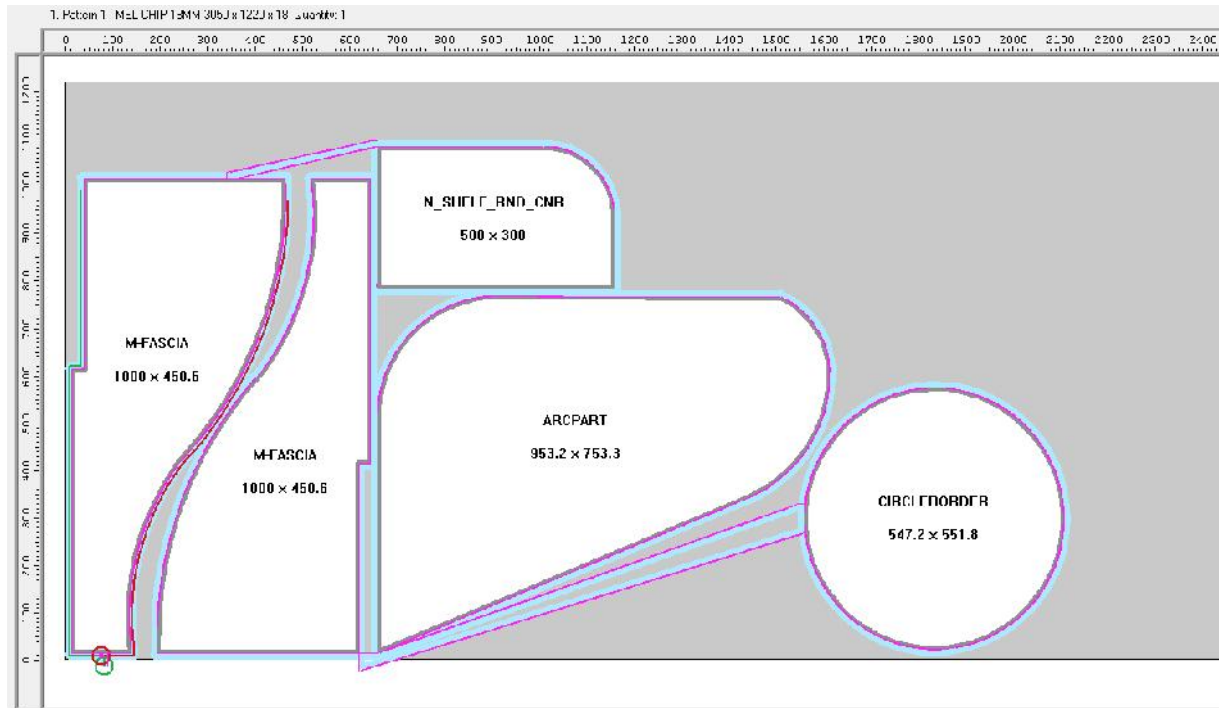
Nesting - using stay down – with curved parts

The nesting stay down mode has been improved for shaped parts where there are adjacent convex arcs, so that the number of separate contours required is as low as possible.

Nesting - small parts towards middle of the pattern

The nesting algorithm has been improved, so that it will place small parts towards the middle of the pattern when feasible. This will save material that is sometimes lost when small parts are offset from the edge of the board.
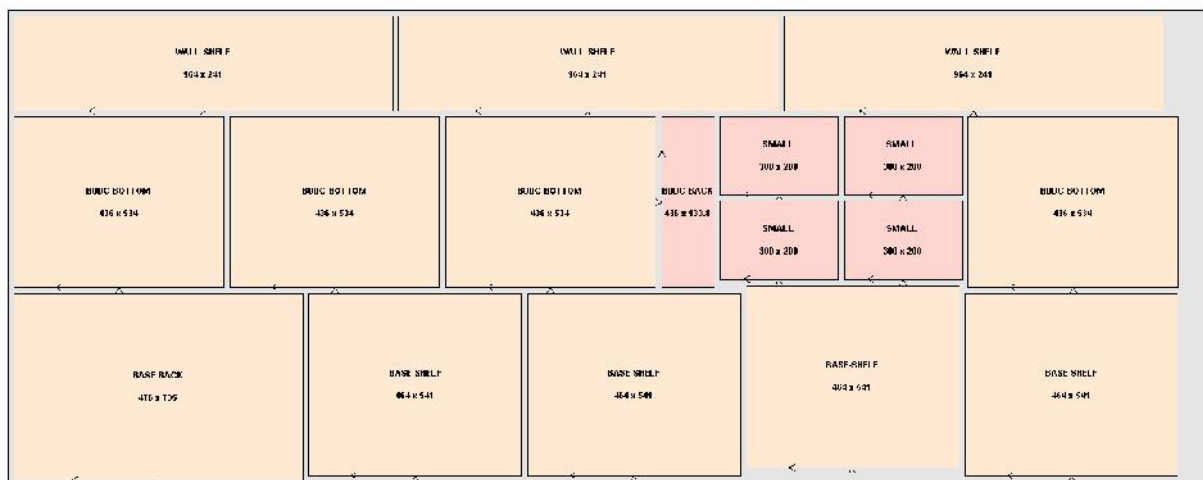
Multiple passes for nested small parts and stay down routing

There is a new option to rout small parts in two passes, and also to obtain two passes for the stay down routing. This is accomplished by the use of a new machining center parameter 'Preliminary pass routing'.

Tooling info from flat MPR files

The process for importing flat (non-parametric) MPR files has been enhanced to include the import of extra tooling data. This means that more of the MPR instruction values are imported into the software. Some of these values (like Feed and Speed) will appear in specific boxes in the Toolbox dialog (e.g. Feed speed and Spindle speed). Others will appear in the 'Other' edit box.

Contour macro in MPR
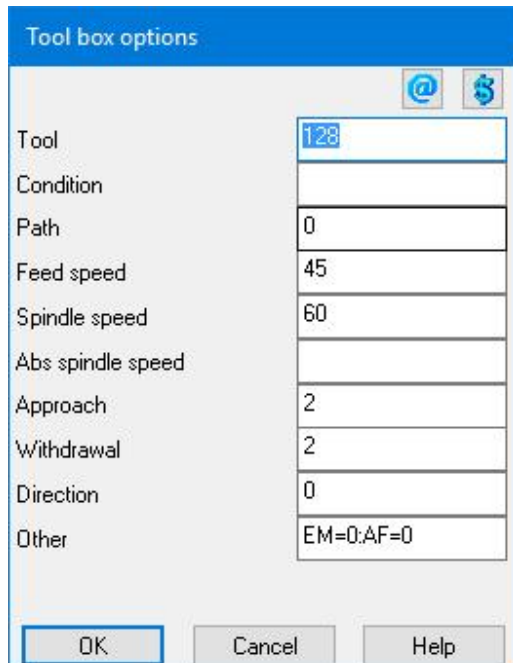
Contour pass tooling

Tool box options

Tool	128
Condition	
Path	0
Feed speed	45
Spindle speed	60
Abs spindle speed	
Approach	2
Withdrawal	2
Direction	0
Other	EM=0:AF=0

OK   Cancel   Help

Always preserve offcut orientation for nesting

V12 includes two new nesting parameters handling offcuts: -

i) Preserve orientation of non-grained offcuts – this will keep the length/width of the offcut with reference to the length/width of the board even though it is non-grained. Normally an offcut length is the longest side unless material is grained.
ii) Consider grained offcuts in both orientations – this will allow the test for an offcut against minimum length and width to check both orientations even if material is grained.

Homag - Woodwop 8 - new file format MPRXE

Version 12 handles the new woodWop MPRXE format. Provided the system parameters 'Use WoodWOP V6/V7 files' and 'Use ProjectX manager' then V12 will automatically look for MPRXE files.

STOCK/STORAGE

Board library/list - extra info field

A new field has been added to the board library – 'Extra Information' (50 chrs)

The Extra board information field can be selected for display on the following summaries:- Board summary, Offcut summary, Custom forms (board collection).

It is also added to the BDX file format, Pattern Exchange import / export (Boards and offcut records), Board import parameters, Label / form designer (board collection mode), Board list sort options (System parameters), Stock control - Fields for updating existing stock (System parameters), Board list file view (main menu, file management) and Board list rules

woodStore view - add board qty to bin numbers

This version includes a woodstore view option to add the board quantities for each board at each bin - the quantity appears in brackets after the bin name / number. An example is shown below.

Boards			
Board code ▲	Material	Stock	Bin
163186	STW19_A	46	109(46)
163187	STW19_A	0	
163188	STW19_A	0	
163189	STW10_A	3	103(1) 106(1) 108(1)
163190	STW13_A	1	106(1)
163191	STW16_A	27	100(2) 101(1) 102(12) 103(3) 104(3) 105(2) 106(3)
163192	STW16_A	0	

Import / Adjust stock from file - specify cost method

This update allows costs specified in board library import formats to be interpreted as either cost per unit area (per M2 or per Ft2) or cost per sheet. Similarly, cost method has been added to board import parameters.

OPTIMISING

Optimising full books – minimising saw cycles

There is a new parameter that will encourage the optimiser to achieve full books as much as possible with the aim of reducing the number of patterns and cycles. There is inevitably a trade off with yield, and the four settings allow the user to decide what the balance is. This does not require the use of over production.

Batch summary

Run	Optimising Parameters	Parts produced m2	Boards m2	Saw Time	Pattern Cost	Qty Parts	Qty Boards	Sheets used Qty	Qty Ptn	Qty Cyc	Waste (% Boards)	Av Yield
00015	default	4633.24	4950.42	25:51	15896.04	15360	1663	1663	312	322	6.41	93.59
00025	MinCycleLow	4633.24	4938.51	22:42	15703.50	15360	1659	1659	233	263	6.18	93.82
00026	MinCycleMedium	4633.24	4959.35	20:58	15678.65	15360	1666	1666	230	253	6.58	93.42
00027	MinCycleHigh	4633.24	4971.26	20:34	15693.18	15360	1670	1670	229	252	6.80	93.20

Material parameter for spare optimising parameter

There is a new spare parameter on the Trims page of the material parameters. This is used to override the spare optimising parameter. The existing spare parameter on the Limits & Speeds page is used to override the spare saw parameter.
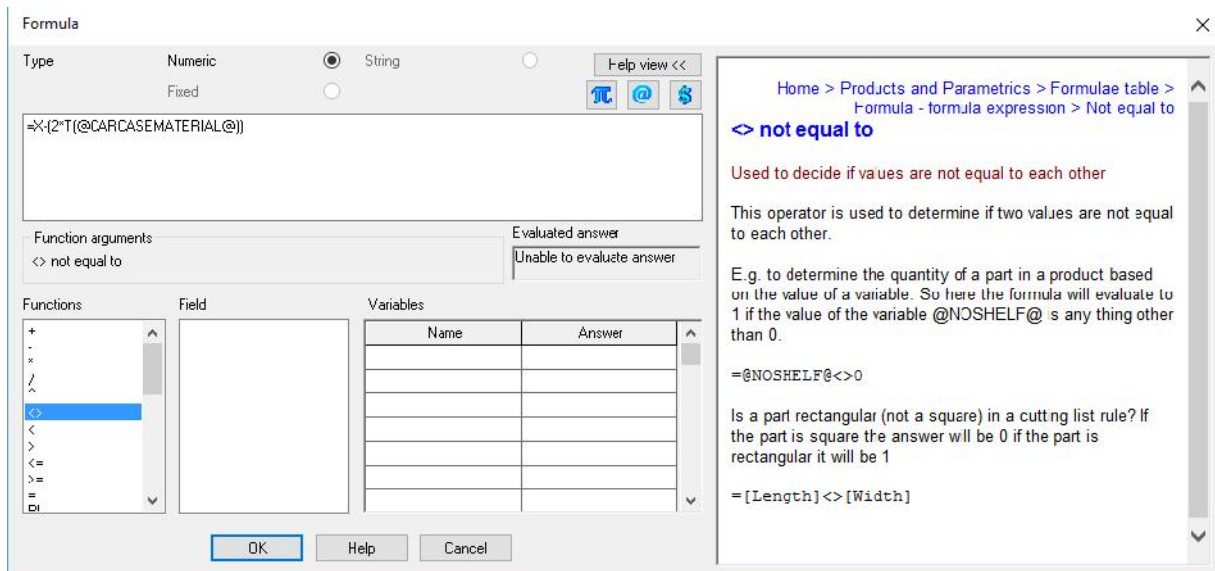
RULES & FORMULAE

Improvement to formula evaluation dialog for clarity

The dialog for entry of formulae has been enhanced by the integration of the Help window, showing the format and purpose of each function.

Cutting list rules - new field, line number

V12 allows the use of a new field when constructing rules for the cutting list, namely the line number. This can be useful for passing the line number in a string to an information box. The line number column itself cannot be altered by a cutting list rule.