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

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Line Style - Blue



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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.

	Log in to cloud licencing	
Enter the	user name and password registered to your licenc	e
User name	[
Password		
	Reset	

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.

Console Charts	Ptn No HARDI 1-2 MED-D	Board BOARD-4MM [*] Hardboard HARDBOARD-4MM/01 DEN-FIBRE-18MM Mediu	Type	2440.0	1220.0	Revision 2 Qty In stock	Trample Ch 17 Feb 20 Qty Used	arts//?defau	formatio bradefault SQ brands of by S Weight 62.51 62.51
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	MEL-O	HIP-18MM Prelaminated	- White 18m	m Thickne	ss 18.0	Book 5			
	10-15	MEL-CHIP-18MM/01		3050.0	1220.0	927	15	55.81	502.34
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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

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.

Ptn	Board	Length	Width	Waste	Yield	Board	Cutting length	Qty	Qty	Qty
No		mm	mm	%	%	Qty	Total	Сус	Rip	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
з	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.

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Diev	ving as	out						
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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.

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	Title		Opt de	fault		~	
		Description	Material	Length	Width	Quantity	0
Glo	bal		MEL-CHIP-18MM				
1.		BASE-DOOR	MEL-CHIP-18MM	650.0	400.0	1	Γ
2.	à	BC-BASE-BOTTOM	MEL-CHIP-18MM	1200.0	800.0	1	t
3.	DXF	SHELF_ANGLE	MEL-CHIP-18MM	1200.0	800.0	1	t
4.	MPR	F_UNIT_DOOR_W	MEL-CHIP-18MM	435.0	462.0	1	t
5	-		MEL-CHIP-18MM				t

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'.

Drawing	Generation	Nested patterns	Machining times	WoodWop tools 1	WoodWop tools 2	Ro
Set the p	parameters for	nested patterns	Ra	nge	Pr	elimi
Prelimi Apply	nary pass rout	ing				
	ing thickness	0.0	mm			
all all	arts pass roul					
	ea of part	9.99		m2 Bord	lerarea 🗌	
Max sm	allest side	250.0	D	mm		
Remain	iing thickness	1.0		mm		
Tool se	ttings	T=12	28:RK=1:A=0:W=0	:RI=1:EM=1	+	
Final p	ass routing					
Depth	offset	0.3				
			28:RK=1:A=0:W=0			

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

	1:0	Approach mod	Vertical	Separate mode	
-D- 📕 Endpoint	1:4	side	🕴 centric 💌	Tool number	128
Forwards		Withdrawal mc	O Vertical	Feed	45
trimming direct	manual 😒	ONOFFon-the	fly	Feed Oscillatio	
		Z dimension	12.00	Speed	60
		distance	0	Speed input	🚱 Percent 💌

Contour pass tooling

Tool box options		
		@ \$
Tool	128	
Condition		
P <mark>a</mark> th	0	
Feed speed	45	
Spindle speed	60	
A <mark>b</mark> s spindle speed		
A <mark>pproach</mark>	2	
Withdrawal	2	0
Direction	0	
Other	EM=0):AF=0
ОК	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 gty 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.

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	Parts produced	Boards	Saw	Pattern	Qty	Qty	Sheets used	Qty	Qty	Waste	Av
	Parameters	m2	m2	Time	Cost	Parts	Boards	Qty	Ptn	Сус	(% Boards)	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

rims	Limits	Rules	Recuts	Offcuts	Offcuts 2	Advanced					
Set tł	ne remaini	ing paran	neters								
Cons	ider cuttin	ig time				\checkmark	Advanced optimiser options				
Cost per hour						50.000	0.000 Extended optimiser time				
Optimising preference Faster cuttin						Higher yield	Extended recut optimisation Extended head cut optimisation Extended board combinations				
Allow	full sheet	overs									
Desta	ack with s	tation siz	es								
Plus j	part prefe	rence			Medium	~					
Allow	mixed ma	aterial sta	icks								
Preference for stacked patterns Medium					Medium	~					
Information boxes					None Low						
Box	for pallet	group	1	None	Medium High						
	Boxes f	or match	ing parts ir	n strip							
		Availa	ble				Chosen				
		Edge Edge Edge	Тор		î	>>					

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.

rims	Limits and speed	s Rules	Offcuts ar	nd waste	Offcuts 2	Tension trim		
Set th	e parameters for tr	ms						
				- Ra	ange			
Optim	iser type			-			Y	Ī
Sav	v blade thickness							
Rip		0.0	~	Crosscut		0.0	~	
Mini	mum rip trim (inc sa	aw blade th	iickness)					
Front		13.0	\sim	Rear		13.0	~	
Mini	mum crosscut trim	(inc saw b	ade thickne	ess)				
Front		13.0	~	Rear		13.0	~	
Ονε	erride rip and crosse	cut trims						
방상상업 방방방방 방법 것같은 관계가 가지 가지 않는 것같이			🗌 Min rip I	trim (inc bl	ade)	0.0	~	Max strips per bloc
Override crosscut trim			🗌 Min cro	sscut (inc	blade)	0.0	~	Max parts per strip
Retrin	n after head cut (in	c saw blad	e thickness)		10.0	~	
Spare	(Optimising)							
MULT	ann aimension ior	ecut (inc s	aw biade tr	icknessj				-

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.

Туре	Numeric	String	0 F	elp view <<	
	Fixed		T	@ \$	Home > Products and Parametrics > Formulae table >
X-(2*T(@CAR	CASEMATERIAL@))		hadricand	I Internet Internet	Formula - formula expression > Not equal to
					Used to decide if values are not equal to each other
					This operator is used to determine if two values are not equal
Function argur	ments		Evaluated answer		to each other.
<> not equal to	3		Unable to evaluat	te answer	
unctions	Field	Variables	1		E.g. to determine the quantity of a part in a product based on the value of a variable. So here the formula will evaluate to 1 if the value of the variable @NOSHELF@ s any thing other
e x	^	Nam	e Answe	er 🔨	than 0.
					=@NOSHELF@<>0
					Is a part rectangular (not a square) in a cutting list rule? If
×					
() ()					the part is square the answer will be 0 if the part is rectangular it will be 1
					the part is square the answer wll be 0 if the part is

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.

Bal	hes								
Pa	12	Cutting list rules default							
In	File	Edit Help							
In	-		₫ ?	Formula					
c.	No	Feld	Expression	Турс	Numorio	0	String		
Вч	1.	Part graning	Grained		Fixed	0			
0	2.	Part graning	Non Grained	="Line: '+[Line number]					
In	3. Volume 4. Volume		LOW						
·"			MED						
9	5	Volume	нан						
Sa	Б.	5mall part	Ŷ						
[7. Quantity		C	Function arguments					
Lit	8.	Part cros m2	-([Long/h]*[\/idt/])/1000000						
c.	.9	Grain	1	2	2000				
Re	10.	Edgebander	#CELL(Edgebander,[Material code], Edge])	Functions	Field		VariaEle≎		
1	11.	Part code & ≋iz∋ ref	=STR(LEFT([Part code],7)-[Finishec size])	CELL	[Thickness] [Quantity]	~	Name		
ſ	12.	Ma:erial code	-STR((REPLACE(MEL-FACE-C IIP-TEAK,MEL-FACE-CI	INSTR	[Giari]		1		
ſ	13.		=STR("Line: '+[Line number])	LEN	[Over] [Under]				
- [14.			MID	[Edge]				
1	15.			REP_ACE BIGHT	[Line number]				
	16.			BINSTR	(Edge 3tm) (Edge Top)				
	17			TOLOWER	[Edce_eft]				