

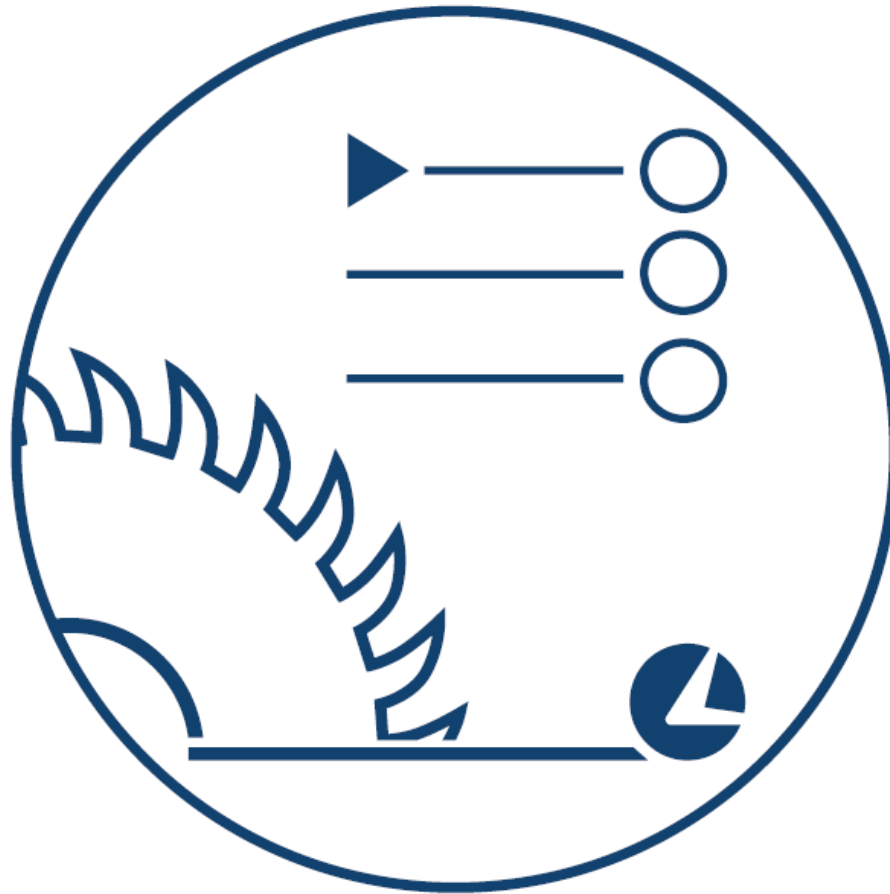


Maestro Cut

Software for automatic single blade beamsaw

09/10/2017





MAESTRO CUT UTILITY



De-tensioning cut 1/3

- Semi-automatic list mode: it is possible to insert, between 2 cuts, a sequence of de-tensioning cuts, which allow to reduce tensions inside the material.

Semi-automatic
List | Filler | Macro

Instr	Quote	Rep	Width	Depth
A	1000,00	1	0,00	0,00
I	200,00	2	0,00	0,00
I	300,00	1	0,00	0,00

Reset
Measure Width: 0,00
Measure Length: 0,00
Length: 1300
Package: 125,0
Enable Postforming
Unload
Play Recovery
Detension

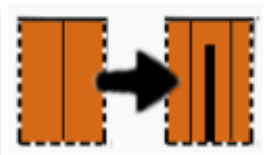
Instr	Quote	Rep	Done	Width	Depth
A	1000,00	1	0	0,00	0,00
D	982,80	1	0	0,00	0,00
D	752,80	1	0	0,00	0,00
D	518,40	1	0	0,00	0,00
D	184,00	1	0	0,00	0,00
A	970,00	1	0	0,00	0,00
I	204,40	1	0	0,00	0,00
I	30,00	1	0	0,00	0,00
I	204,40	1	0	0,00	0,00
I	30,00	1	0	0,00	0,00
I	304,40	1	0	0,00	0,00
I	30,00	1	0	0,00	0,00

31/08/2017 09:29

STOP

De-tensioning cut 2/3

- Graphic editor allows to insert de-tensioning cuts



Editing programs

New scheme

Scheme name: New scheme

Scheme description:

Swap	Length	Width	Thickness	Panel type	Panel material
	3660,00	2200,00	18,0	LIGNA_WHITE	

First cut

Longer cut

Carriage 100%

Work top 100%

Basement 100%

Pusher pos.: 0,0 Blade car.: 0,0 Op1 pos.: 0,0

Pusher speed m/s: 0,0 Blade car. speed m/s: 0,0 Blade pos. mm: 0,0



De-tensioning cut 3/3

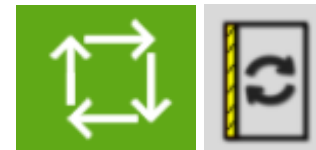
- Settings for de-tensioning cuts are placed on the parameters screen

Parameters

Nr	Description	M.U.	Value
27	Maximum stack height		10000
28	Maximum number of pieces per stack		50
29	Pieces label		Ligna2017
30	Enable profile labels without Id		OFF
31	Label type silhouettes without Id		
32	Print off-cut labels		OFF
33	Off-cut label		Ligna2017
34	Optimize precuts		None
35	Convert trims to off-cuts		OFF
36	Minimum trim length	mm	300
37	Minimum trim width	mm	300
38	Minimum size of scrap (H)	mm	50
39	Minimum area of scrap	m ²	1,0
40	Enable integration of stock remains		ON
41	Maximum Y side-by-side	mm	1400
42	Maximum X side-by-side	mm	1400
43	Enable maximum flexibility/matchability		ON
44	Enable SxSx Combined Cuts		ON
45	Enable Flex One Advance		ON
46	Enable Left/Right Combined Cuts		ON
48	Quota of detensioning cuts	mm	30
50	Slot distance from the edge for D detensioning cuts	mm	100
51	Using detensioning cuts		None
53	Finished pieces compiler optimization		OFF
54	Play Recovery		OFF

Carriage 100%
Work top 100%
Easement 100%

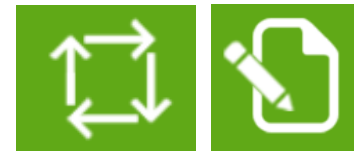
Pusher pos. mm 0,0
Blade carr. pos. mm 0,0
Cp1 pos. mm 0,0
Pusher speed mm/sec 0,0
Blade carr. speed mm/sec 0,0
Blade pos. mm 0,0



Dynamic trim cuts modification

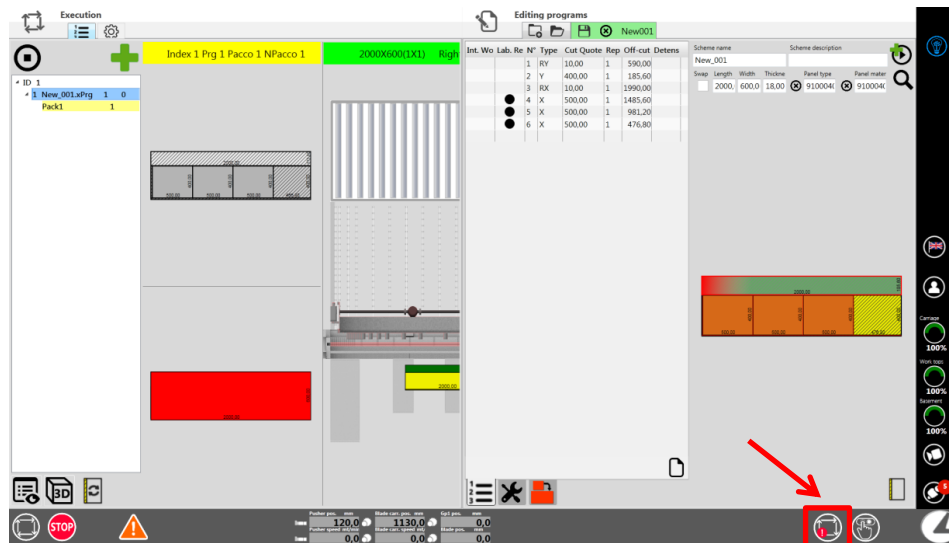
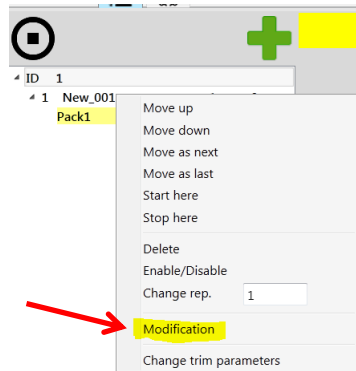
- All the trim cuts can be modified when executing the cutting schemes, before pushing the "START" button on the machine

Nr	Description	M.U.	Value
1	Trim automatic management		Max Head
2	Maximum trimming Y	mm	50
3	Maximum trimming X	mm	20



Cutting scheme dynamic modification

- The cutting scheme can be modified when executing cutting schemes, before pushing the "START" button on the machine
- It will open the editor with the programme list in order to make any modifications needed
- Push "ABORT" if you want to re-launch the same programme





Automatic filler 1/3

- This editor automatically generates cutting schemes based on a shape list to produce (editable or importable from file) and the panel list available (format and off-cut stocks)

Automatic filler

Code	Length	Width	Pieces to do	Made
aaa	363,00	783,00	14	14
bbb	347,00	783,00	3	3

Type	Code	Length	Width	Quantity	remains	In use	Note
LIGNA_WHITE	LIGNA_PANELSS	1220,00	346,00	25	25	0	
TYPE	MAT	1220,00	346,00	25	25	0	Materiale standard
TYPE	MAT_1	2000,00	2000,00	0	0	0	
ESSENTIAL_PORTUGAL	MAT_PORTUGAL	2750,00	1830,00	499	498	1	

Description	Length	Width
MAT_PORTUGAL_ESSENTI	1830,00	2750,00

- 1 – Shape of template to be created
- 2 – Table of panels available in the warehouse
- 3 – Scheme of cut patterns generated by the automatic filler feature
- 4 – Area with previews of generated cutting schemes



Automatic filler 2/3

- 1 - In the table of templates to be made, the rows corresponding to the templates included in the preview are highlighted
- 2 - The preview shows the pattern generated
- 3 - A button appears for saving the cutting pattern and putting it into the table of cutting patterns for execution
- 4 - Commands to change the order of execution of the cut patterns
- 5 - Button to execute the list of cutting patterns

Code	Length	Width	Pieces to do	Made
aaa	363.00	783.00	14	0
bbb	500.00	300.00	5	0
ccc	200.00	100.00	30	0
ddd	600.00	800.00	6	0

Type	Code	Length	Width	Quantity	remains	In use	Note
LIGNA_WHITE	LIGNA_PANELSS	1220.00	346.00	25	25	0	
TYPE	MAT	1220.00	346.00	25	25	0	Materiale standard
TYPE	MAT_1	2000.00	2000.00	0	0	0	
ESSENTIAL_PORTUGAL	MAT_PORTUGAL	2750.00	1830.00	499	498	1	

Description	Length	Width
MAT_PORTUGAL_ESSENTI	1830.00	2750.00



Automatic Filler 3/3

- Clicking on the execution button, under the cutting scheme list, opens the automatic execution window. Every time a scheme is ended, it is sent to execution the next one.
- From the schemes list is possible to eliminate/move the ones which haven't been executed yet

The screenshot displays the 'Automatic filler' software interface. It features a main window with several panels:

- Top Left:** A table with columns 'Code', 'Length', and 'Width'. It lists materials 'aaa', 'bbb', 'ccc', and 'ddd' with their respective dimensions.
- Top Center:** A table with columns 'Type', 'Code', 'Length', 'Width', 'Quantity', and 'remains'. It lists materials like 'LIGNA_WHITE', 'TYPE', 'MAT_1', and 'ESSENTIAL_PORTUGAL'.
- Bottom Left:** A 3D visualization of a cutting scheme, showing a grid of orange rectangular panels.
- Bottom Center:** A table with columns 'Description', 'Length', and 'Width'. It lists 'MAT_PORTUGAL_ES' with dimensions 1830.00 and 2750.00.
- Right Panel:** An 'Execution' window showing a list of execution steps, including 'ID 1' and '1AF_MAT_PORTUGAL_ESSEN'.
- Bottom Bar:** A status bar with various icons and numerical values, including a 'STOP' button, a warning icon, and performance metrics like 'Preston price' (120.0), 'Stack price' (1130.0), and 'CUT price' (0.0).



Off-cuts management 1/2

- The highlighted conditions, in the “general parameters” screen, convert automatically wastes into off-cuts

Nr	Description	M.U.	Value
25	Piece labels print		OFF
26	Composition Stack Label		2X2
27	Maximum stack height		10000
28	Maximum number of pieces per stack		50
29	Pieces label		Ligna2017
30	Enable profile labels without Id		OFF
31	Label type silhouettes without Id		
32	Print off-cut labels		OFF
33	Off-cut label		Ligna2017
34	Optimize precuts		None
35	Convert trims to off-cuts		ON
36	Minimum trim length	mm	300
37	Minimum trim width	mm	300
38	Minimum size of scrap (H)	mm	50
39	Minimum area of scrap	m ²	1,0
40	Enable integration of stock remains		ON
41	Maximum Y side-by-side	mm	1400
42	Maximum X side-by-side	mm	1400
43	Enable maximum flexibility/matchability		ON
44	Enable SxSx Combined Cuts		ON
45	Enable Flex One Advance		ON
46	Enable Left/Right Combined Cuts		ON
48	Quota of detensioning cuts	mm	30
50	Slot distance from the edge for D detensioning cuts	mm	100
51	Using detensioning cuts		None



Off-cuts management 2/2

- The off-cuts can be visualised/created/cancelled directly from materials storage

Magazine materials editor

Matters Type Formats

Standard Off-cuts

Code	Description	Type ID	Length	Width	Quantity	Price	Back
REST_1	MDF	LIGNA_WHITE	300,0	400,0	12	1200,0	
REST_2	LAMINATE	LIGNA_WHITE	1000,0	500,0	3	1200,0	

Pusher pos. min 120,0 Blade cart. pos. min 1130,0 Op1 pos. min 0,0
Pusher speed 0,0 Blade cart. speed pos 0,0 Blade pos. min 0,0



**Thank you for
your kind attention**