



# Maestro optiwise



THE STRONGEST WOOD TECHNOLOGIES ARE IN OUR DNA

# HMI AND NAVIGATION BAR - window structure

navigation bar

working and content area

toolbar



# HMI AND NAVIGATION BAR – navigation bar

The image shows a screenshot of the Maestro Optiwise HMI interface. At the top, there is a navigation bar with several elements:

- On the far left, a box containing two circular icons (one with a clock, one with a gear) is labeled "Operation's log".
- Next to it, a box containing two circular icons (one with a link, one with a status) is labeled "Machine link and machine status".
- In the center, a box containing four rectangular buttons (blue, grey, orange, green) is labeled "Navigation commands: 4 working environments.".
- On the far right, a box containing a square icon with a house symbol is labeled "Home: Landing page (custom)".

The main content area of the HMI displays the text "Maestro optiwise" in large blue font, followed by "The best sizing formula" in a smaller blue font. To the right of this text is a circular graphic containing a 3D wireframe of a rectangular object with a pie chart icon. At the bottom right of the HMI is the "scm" logo with the tagline "woodworking technology".

# HMI AND NAVIGATION BAR – working environments



## **UTILITY:**

It includes the tool for importing data from a spreadsheet and a number of program "utility" functions, such as importing and exporting cut lists, material stocks, and the entire optiwise database



## **STOCK:**

Includes panels stock and edges stock



## **ORDERS:**

includes all created jobs (already optimized or still to be optimized)



## **AGENDA:**

DASHBOARD that contains all production-related statistical information: graphs, activity calendar, ...

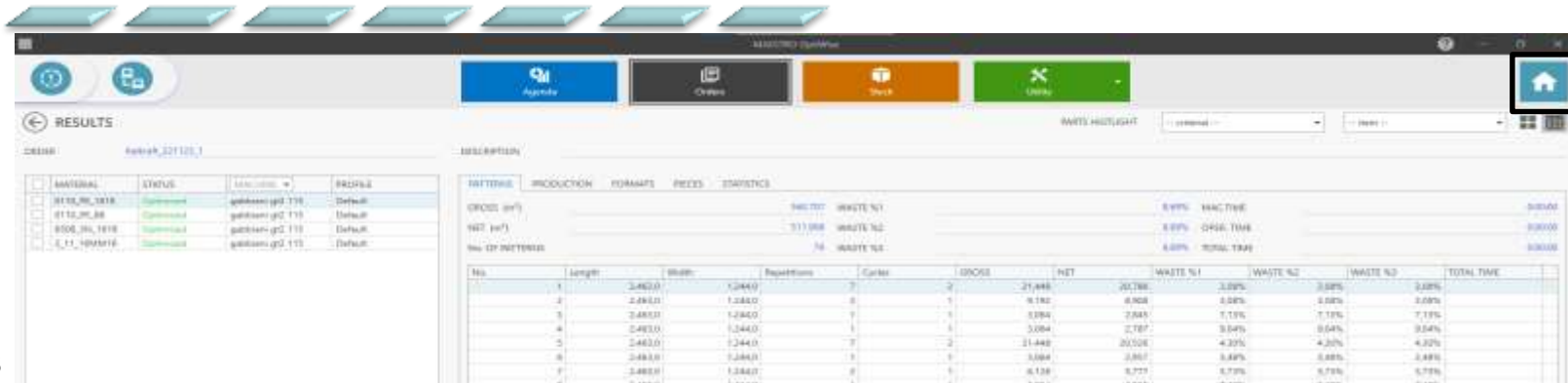
# HMI AND NAVIGATION BAR – dual data display modes

Within each work environment there are 2 different data visualization modes:

- **graphic visualization:**



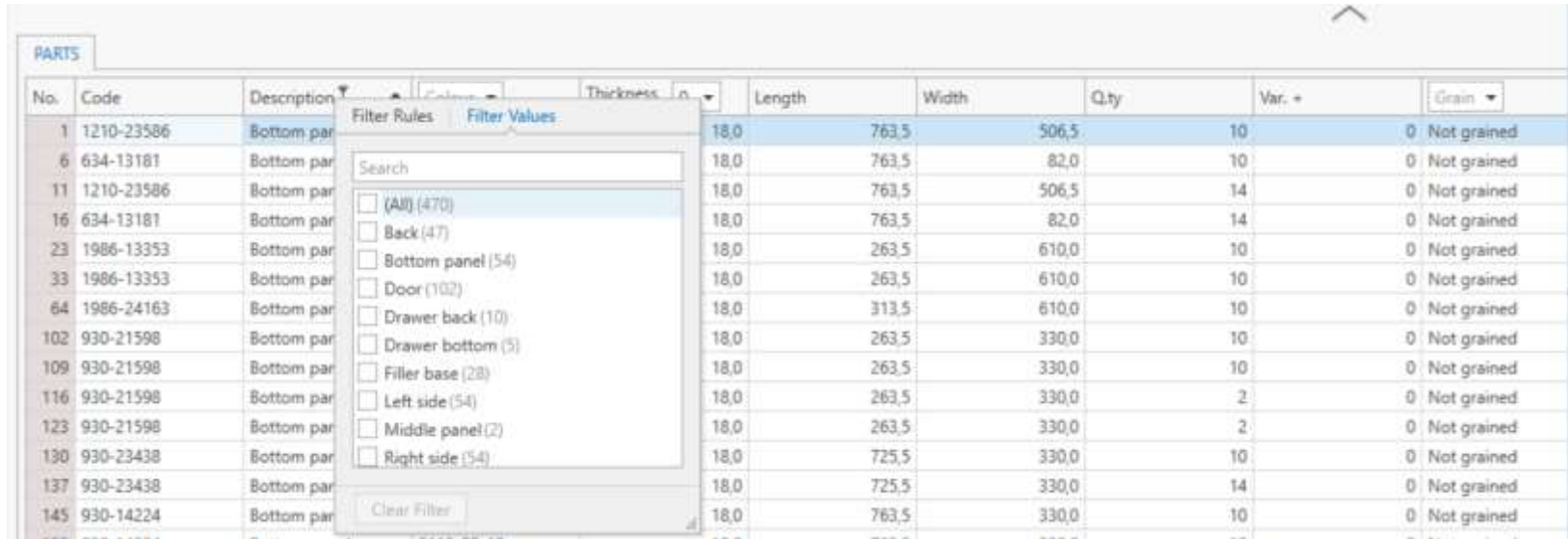
- **tabular visualization:**



# HMI AND NAVIGATION BAR – custom tabs

**Each tab has the ability to be customized :**

It is possible to customize the order of columns and filter the display of data, quite similar to Excel



No.	Code	Description	Thickness	Length	Width	Qty	Var.	Grain
1	1210-23586	Bottom par		18,0	763,5	506,5	10	0 Not grained
6	634-13181	Bottom par		18,0	763,5	82,0	10	0 Not grained
11	1210-23586	Bottom par		18,0	763,5	506,5	14	0 Not grained
16	634-13181	Bottom par		18,0	763,5	82,0	14	0 Not grained
23	1986-13353	Bottom par		18,0	263,5	610,0	10	0 Not grained
33	1986-13353	Bottom par		18,0	263,5	610,0	10	0 Not grained
64	1986-24163	Bottom par		18,0	313,5	610,0	10	0 Not grained
102	930-21598	Bottom par		18,0	263,5	330,0	10	0 Not grained
109	930-21598	Bottom par		18,0	263,5	330,0	10	0 Not grained
116	930-21598	Bottom par		18,0	263,5	330,0	2	0 Not grained
123	930-21598	Bottom par		18,0	263,5	330,0	2	0 Not grained
130	930-23438	Bottom par		18,0	725,5	330,0	10	0 Not grained
137	930-23438	Bottom par		18,0	725,5	330,0	14	0 Not grained
145	930-14224	Bottom par		18,0	763,5	330,0	10	0 Not grained

Filter Rules Filter Values

Search

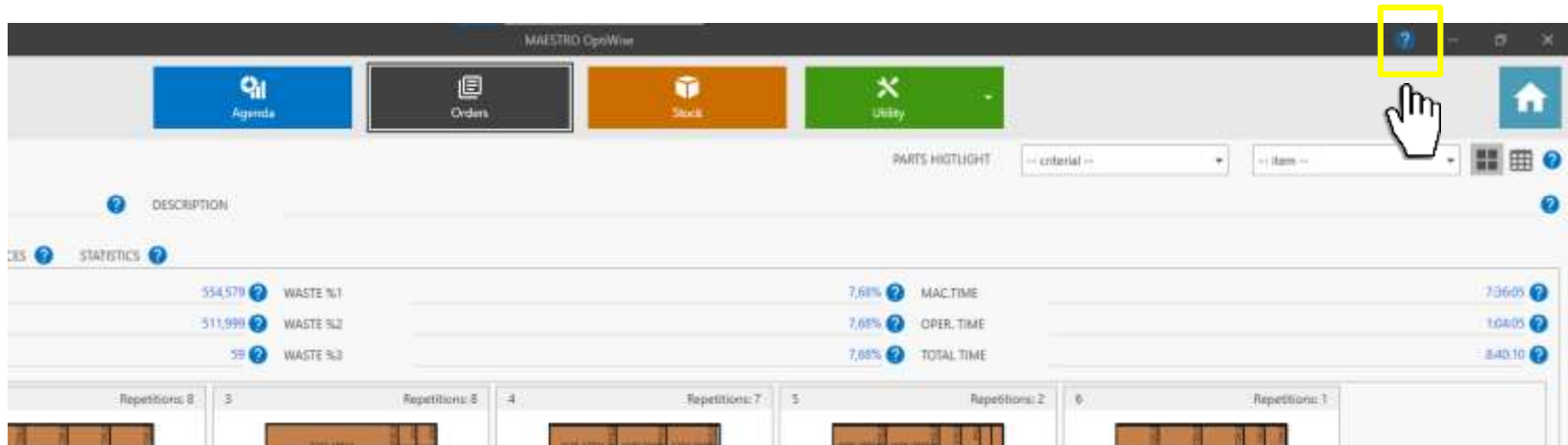
- (All) (470)
- Back (47)
- Bottom panel (54)
- Door (102)
- Drawer back (10)
- Drawer bottom (5)
- Filler base (28)
- Left side (54)
- Middle panel (2)
- Right side (54)

Clear Filter

# HMI AND NAVIGATION BAR– help online command

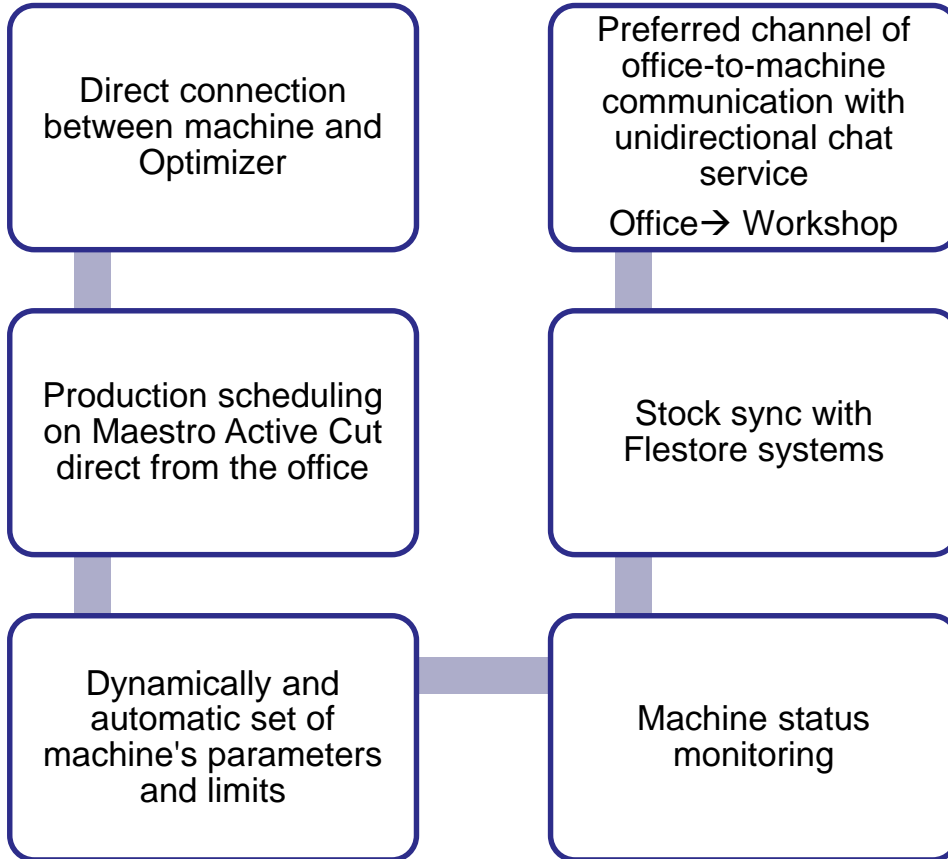


In the portion above the navigation bar, in addition to the classic quick commands, there is also a "Help" button:



This command provides the user with the main information about each parameter, subsection, or button.

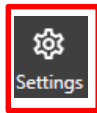
# Dynamic machine link- Advantages





# SETTINGS/CONFIGURATION



The configuration page can be reached from any window via the gear  button in the lower right corner and present at any page.

It is divided i 3 main areas:

## Functions for machine profiles:

is found above the topic menu and allows management of machine/s' profiles

## Parameters names:

It lists the parameters

## PARAMETERS:

In this area there are the parameters' value

The screenshot shows the 'CONFIGURATION' page with the following sections:

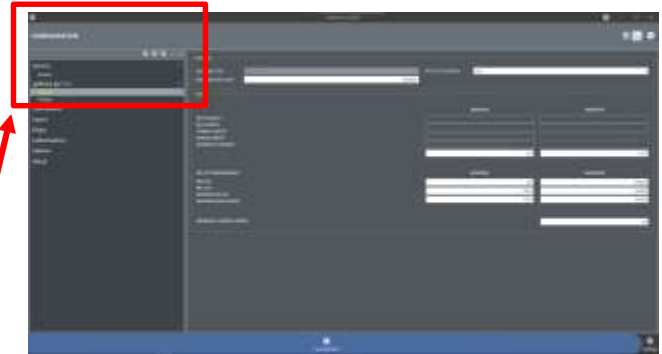
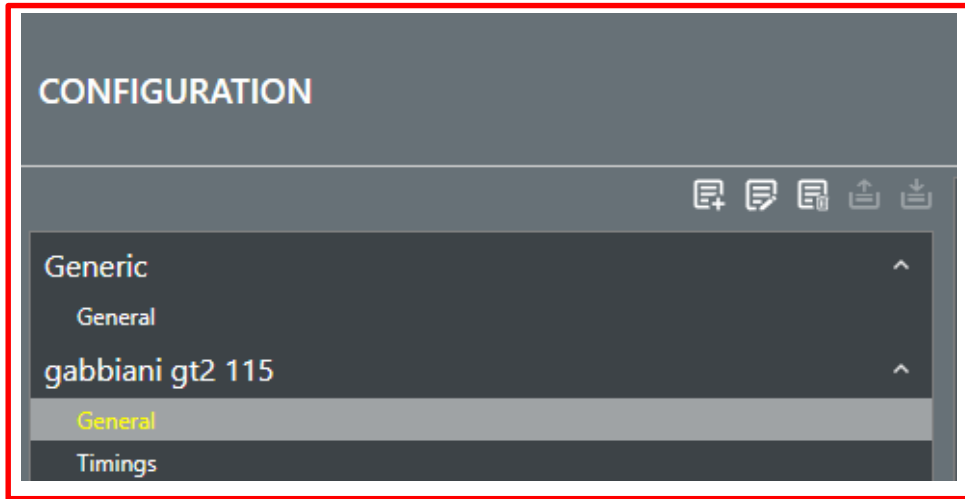
- GENERAL:** MACHINE TYPE (Dropdown), MACHINE LINE CODE (Text), PRO-CLIP POSITION (Dropdown).
- LIMITS:** MILL LENGTH (Text), MILL WIDTH (Text), FORWARD LENGTH (Text), FORWARD WIDTH (Text), MILLING THICKNESS (Text).
- MANAGEMENT:** PRO-CLIP MANAGEMENT (Text), PRO-CLIP (Text), PRO-CLIP ADDRESS (Text), PRO-CLIP ADDRESS (Text), PRO-CLIP ADDRESS (Text).

Tables of values are visible on the right side of the page:

	MIN/MAX	MIN/MAX
	1000	0.0000
	1000	0.0000
	1000	0.0000
	1000	0.0000
	1000	0.0000
	1000	0.0000

	MIN/MAX	MIN/MAX
	1000	0.0000
	1000	0.0000
	1000	0.0000
	1000	0.0000
	1000	0.0000
	1000	0.0000

# MACHINE PROFILE/S – command bar



To insert a new machine profile

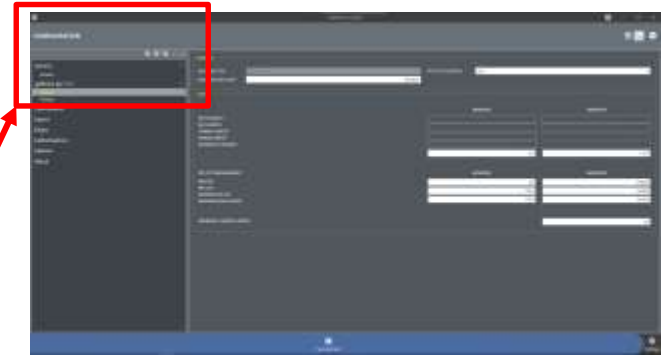
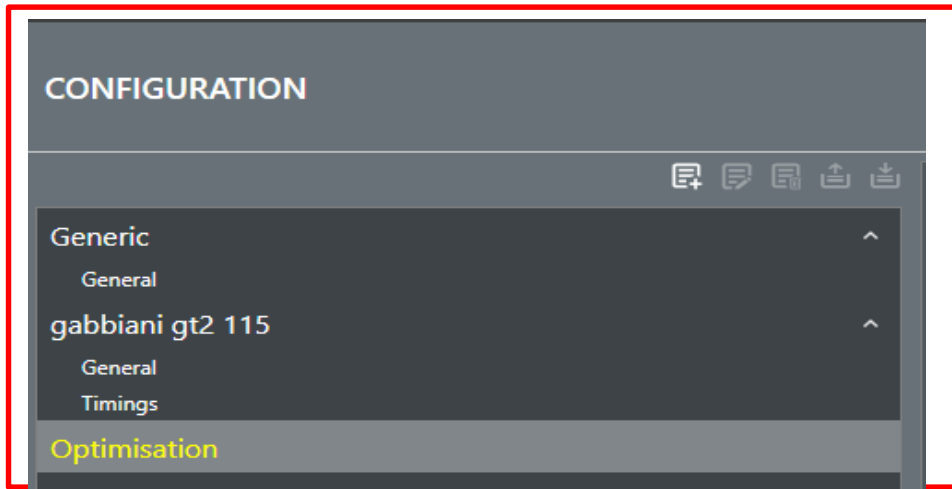


To modify an existing machine profile



To delete an existing machine profile

# Optimization parameters – command bar



To insert a new «optimization parameters profile»

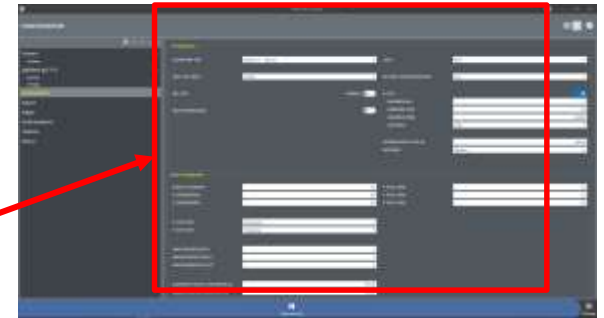
# Optimization parameters – parameters values



This section allows to set the parameters that condition the optimization (algorithm, trims, n. of cut levels etc.)

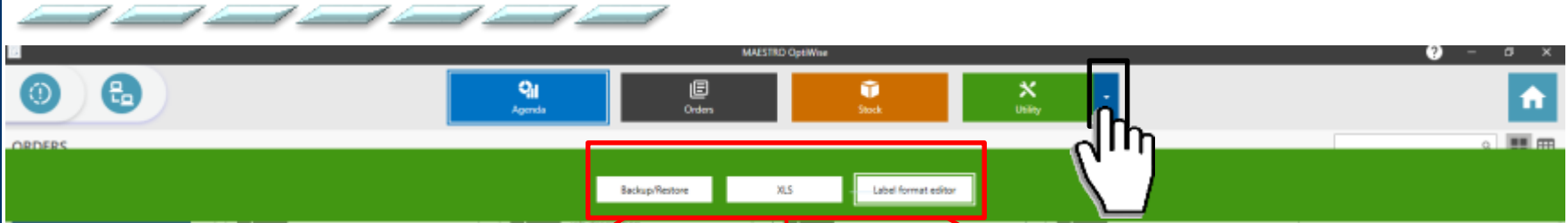
The screenshot shows a software interface for configuring optimization parameters. It is divided into several sections:

- Optimization:** Includes fields for 'Algorithm', 'Type', 'Number of cuts', 'Initial cut level', 'Maximum number of cuts', and 'Maximum number of iterations'.
- Basic Parameters:** Includes fields for 'Cost of material', 'Cost of waste', 'Cost of trim', 'Cost of cut', 'Cost of cut level', 'Cost of cut level', 'Cost of cut level', and 'Cost of cut level'.
- Advanced Parameters:** Includes fields for 'Advanced parameters', 'Advanced parameters', 'Advanced parameters', and 'Advanced parameters'.



# HMI AND NAVIGATION BAR – Menu Utility

The Utility menu consists of 3 Sections:



Click on the arrow

## Back-up / Restore

- Import/Export DB
- Import/Export JOBS

## XLS

- Import CUT LISTS
- Import MATERIALS STOCK

## LABLE EDITOR

- Tool for labels editng

# OPTIMIZATION PROCESS

## VIDEO CAPTURE – OPTIMIZATION PROCESS



# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

**BUILT IN SPREADSHEET FOR DIRECT IMPORTING OF CUT LISTS AND MATERIALS /STOCK**

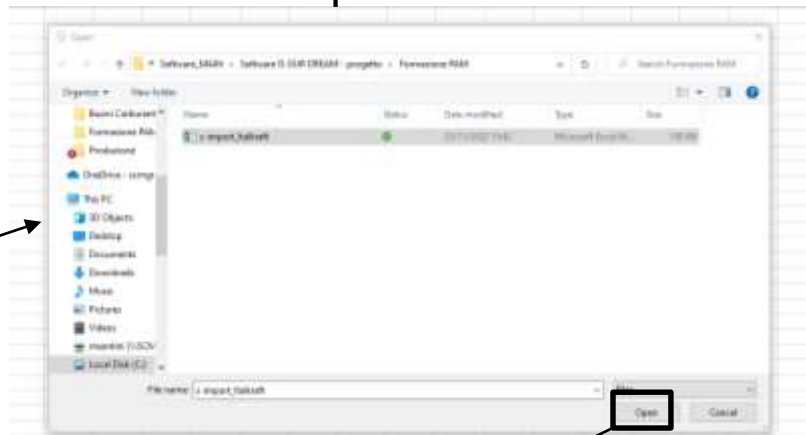
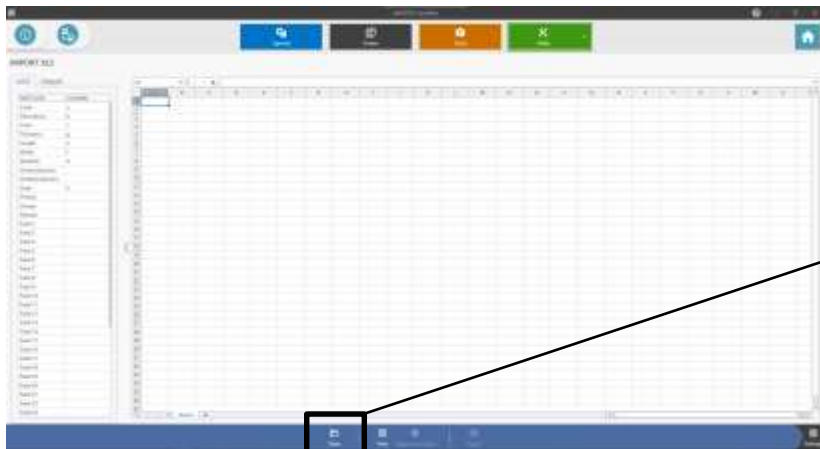
Click on the arrow and select from the drop-down menu "XLS"



The screenshot shows the 'IMPORT XLS' interface. On the left is a sidebar with a list of materials. The main area is a spreadsheet with columns for 'Code', 'Description', 'Unit', 'Price', 'Stock', 'Length', and 'Weight'. A dialog box titled 'Properties' is open over the spreadsheet, showing options for 'Color', 'Finish', 'Medium', 'Layout', 'Default', 'View', 'Display', and 'Color'. The 'Color' dropdown is currently set to 'Black'. The 'OK' and 'Cancel' buttons are at the bottom of the dialog.

# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

How to open the Excel file inside optiwise:



## NOTES

- The electronic spreadsheet can be also manually filled.
- Modification and/or new editing done on the electronic spreadsheet inside optiwise won't save the changes on the original spreadsheet file

Code	Description	Color/Material	Qty required	Length	Width	Thickness	Gain
12102330	Bottom panel	0110_PE_16	10	180.0	508.0	16	0
1168-2003	Left side	0110_PE_16	10	120.0	810.0	16	0
1152-2000	Right side	0110_PE_16	10	120.0	810.0	16	0
450-2098	Back	010_PE_8	10	113.7	186.0	8	0
034-1210	Support strip	0110_PE_16	20	180.0	62.0	16	0
034-1210	Bottom panel	0110_PE_16	10	180.0	62.0	16	0
140-2053	Door	0100_SH_16	10	117.0	287.0	16	0
140-2101	Door	0100_SH_16	10	117.0	287.0	16	0
005-0009	Left side	0110_PE_16	10	140.0	140.0	16	0
000-0016	Right side	0110_PE_16	10	140.0	140.0	16	0
12102330	Bottom panel	0110_PE_16	14	180.0	508.0	16	0
1168-2003	Left side	0110_PE_16	14	120.0	810.0	16	0
1152-2000	Right side	0110_PE_16	14	120.0	810.0	16	0
450-2098	Back	010_PE_8	14	113.7	186.0	8	0



# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

To give each Excel column the specific field:

IMPORT XLS

PARTS FORMATS

PART DATA	COLONN
Code	a
Description	b
Color	c
Thickness	g
Length	e
Width	f

Fill out the tab according with the spreadsheet columns

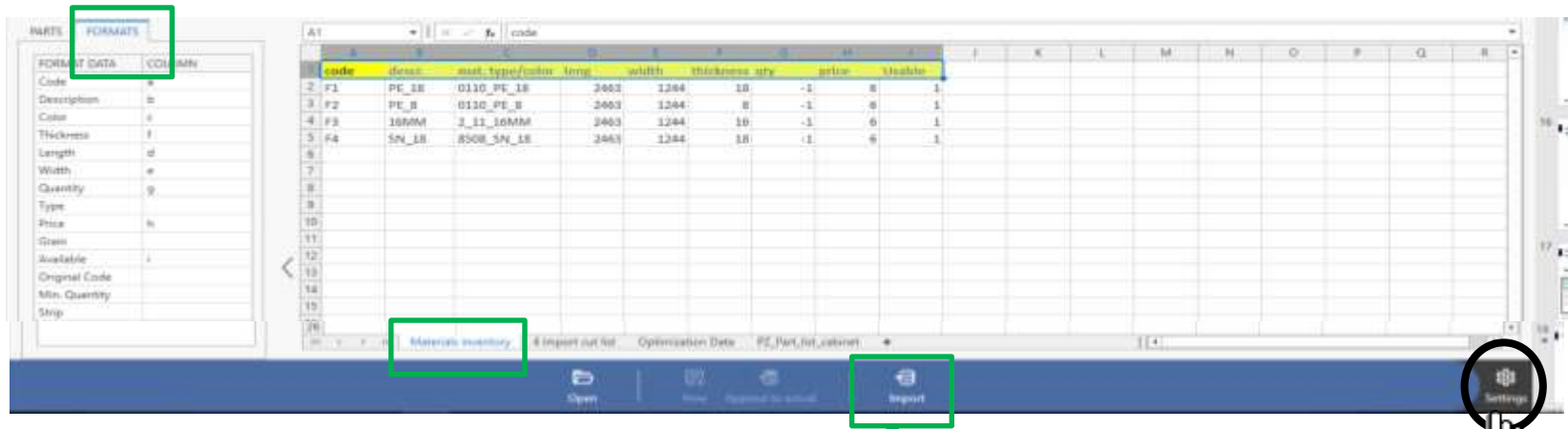
	A	B	C	D	E	F	G	H	I	J	K	L
1	Code	Description	color/material	qty required	length	width	thickness	grain				
2	1210-23586	Bottom panel	0110_PE_18	10	783,5	506,5	18	0				
3	1339-2930	Left side	0110_PE_18	10	720,0	610,0	18	0				
4	1352-20961	Right side	0110_PE_18	10	720,0	610,0	18	0				
5	436-20696	Back	0110_PE_8	10	713,7	789,0	8	0				
6	634-12116	Support strip	0110_PE_18	20	783,5	82,0	18	0				
7	824-12101	Bottom panel	0110_PE_18	10	783,5	506,5	18	0				

**ATTENTION**

- Selecting the "PARTS" table configures the Cut List.
- Selecting the "FORMATS" table configures the panels warehouse (material stock)

# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

When importing the materials stock (panels warehouse):



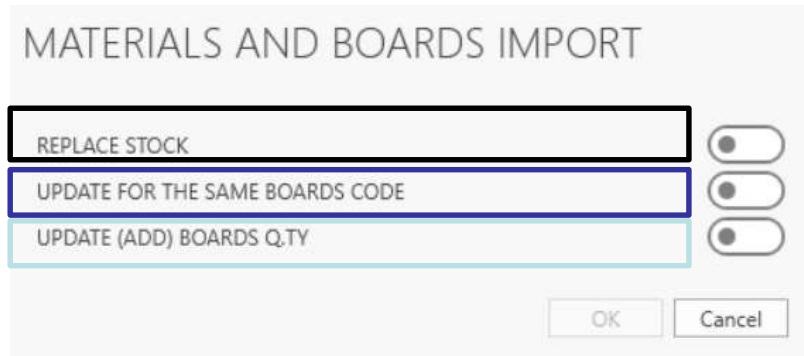
- Select the lines
- Ensure that the xls Column-Field association is correct → fill out the tab «FORMATS»
- **Select the command «import»**



Deletes all existing stock (if present) by overwriting it

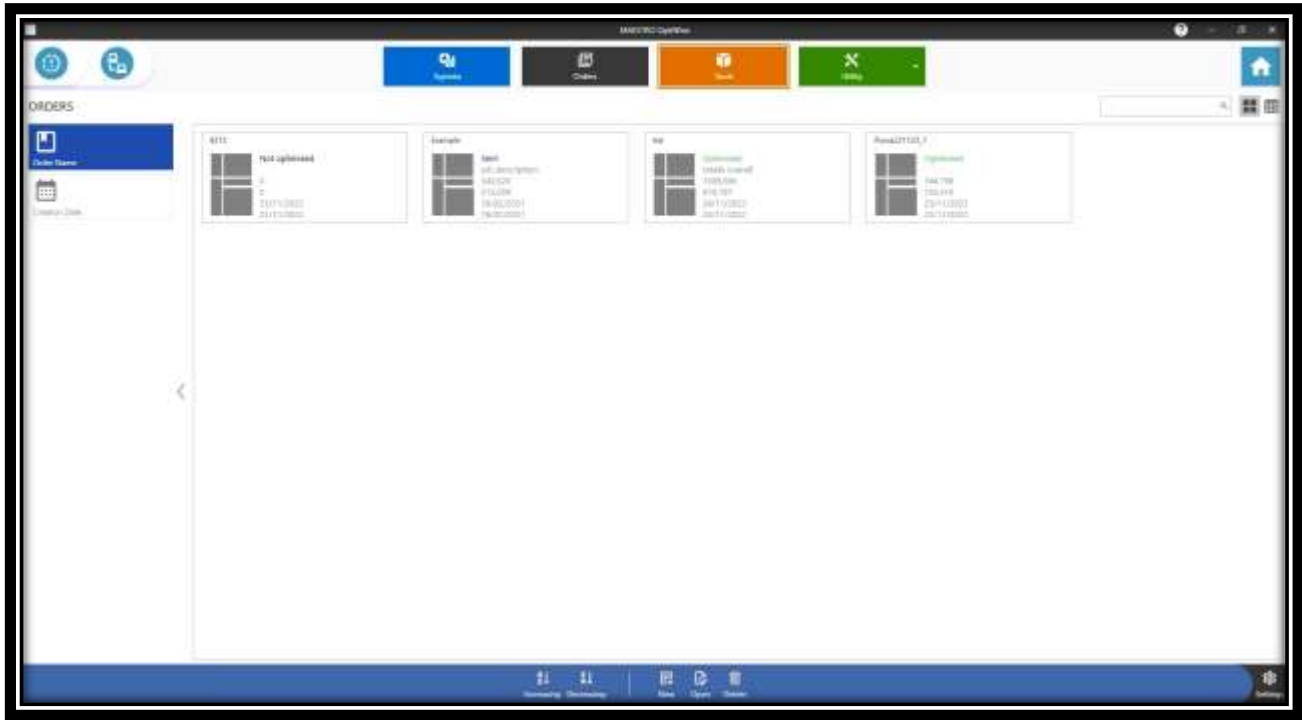
Adds new formats to the inventory by updating the quantities of materials already in stock having the same ID

For equal codes it sums the quantities of panels in stock



# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

## Materials IMPORT



# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

## IMPORT XLS

FORMAT DATA	COLUMN
Code	a
Description	b
Color	c
Thickness	f
Length	d
Width	e
Quantity	g
Price	h
Grain	
Available	i
Original Code	
Min. Quantity	
Strip	

	A	B	C	D	E	F	G	H	I	J
1	code	descr.	mat. type/color	leng	width	thickness	ty	price	Usable	
2	F1	PE_18	0110_PE_18	2463	1244	18	-1	6	1	
3	F2	PE_8	0110_PE_8	2463	1244	8	-1	6	1	
4	F3	16MM	2_11_16MM	2463	1244	16	-1	6	1	
5	F4	SN_18	8508_SN_18	2463	1244	18	-1	6	1	
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										

- Column **Quantity**: set the quantity of panels available in stock or:
  - \*set **0** if not available
  - \*set **-1** if it's not necessary to manage the panels warehouse (infinite quantity)
- Column **Available**: **COMPULSORY FIELD**
  - \*set **0** if not available (not usable)
  - \*set **1** if available (usable)

# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

Go back to and click the arrow on command **UTILITY** and open the xls file with the cut list



**IMPORT XLS**

**PARTS** | FORMATS

PART DATA	COLOMN
Code	a
Description	b
Color	c
Thickness	g
Length	e
Width	f
Quantity	d
Overproduction	
Underproduction	
Field 23	

Be sure that the columns have been correctly assigned on the parts' configuration tab

Code	Description	color/material	qty required	length	width	thickness	grain
1210-2358	Bottom panel	0110_FE_18	10	783,5	508,5	18	0
1339-29					510,0	18	0
452-205					510,0	18	0
436-205					789,0	8	0
834-121					82,0	18	0
834-131					82,0	18	0
740-29553	Door	8508_SN_18	10	717,0	397,0	18	0
740-27061	Door	8508_SN_18	10	717,0	397,0	18	0
885-5895	Left side	0110_FE_18	10	140,0	540,0	18	0
834-5844	Support strip	0110 FE_18	20	263,5	82,0	18	0

import cut list

Open | New | Append to actual | Import

# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

## When importing the cut list


The screenshot shows the MAESTRO OptiWise software interface. At the top, there are navigation buttons for 'Agencia', 'Orders', 'Stock', and 'Unity'. Below this is the 'IMPORT XLS' dialog with a 'PARTS' tab selected. A table of data is shown, with columns: Code, Description, color/material, qty required, length, width, thickness, and grain. The 'Import' button in the bottom toolbar is highlighted with a red box and an arrow pointing to a callout box.

Code	Description	color/material	qty required	length	width	thickness	grain
1210-23585	Bottom panel	0110_PC_10	10	763.0	500.0	10	0
1210-23582	Left side	0110_PC_10	10	720.0	010.0	10	0
1210-23581	Right side	0110_PC_10	10	720.0	010.0	10	0
000-00000	None	0110_PC_0	10	713.7	100.0	0	0
004-12119	Topport strip	0110_PC_10	10	705.0	02.0	10	0
004-12121	Bottom panel	0110_PC_10	10	705.0	02.0	10	0
140-23025	Door	0008_SH_10	10	717.0	007.0	10	0
140-23081	Door	0008_SH_10	10	717.0	007.0	10	0
000-0000	Left side	0110_PC_10	10	140.0	240.0	10	0
000-0000	Right side	0110_PC_10	10	140.0	240.0	10	0
1210-23586	Screen panel	0110_PC_10	10	705.0	000.0	10	0

- Select the lines
- Ensure that the xls Column-Field association is correct → fill out the tab «PARTS»
- Select the command «New» and assign the name of the new optimization project/job on the dialog window

The 'New job' dialog box has the following fields and controls:

- NAME:
- DESCRIPTION:
- OPEN JOB AFTER IMPORT:
- Create:
- Cancel:

 It allows to add lines/parts to a job already created

### NOTE

Does no matter if you are processing one or more materials/types in fact optiwise will automatically split the material types to create an individual job/optimization for each material types.

# OPTIMIZATION PROCESS – Data IMPORT (cut list and materials stock)

## When importing the cut list

New job

NAME

DESCRIPTION

OPEN JOB AFTER IMPORT

Create Cancel

If enabled

The software will automatically open the new job in order to quick start the optimization



If not enabled

The job is however created and saved in the “Orders” environment but optiwise remains at the Excel screen to allow any other jobs to be imported. The new job can be recall to be optimized from the section “Orders”



Click here

# DEEPENING – Search filters in "Orders" section



The screenshot shows the Maestro Optiwise software interface. At the top, there is a navigation bar with icons for Home, Orders, and a search icon. Below the navigation bar, the main content area features the Maestro Optiwise logo and the tagline "The best sizing formula". To the right of the logo is a circular icon depicting a wooden board with a grid and a circular saw blade. Below the logo and tagline is the SCM logo with the text "woodworking technology". At the bottom of the interface, there is a dark blue bar with a small icon on the right side.

**Maestro**  
optiwise  
The best sizing formula

**scm**  
woodworking technology

The order section contains all created and/or imported orders that have been fully or partially processed/ optimized or that are not optimizable (**error**) due to lack of material or because parts have been requested that are not compatible with the set parameters (optimization's and/or machine's)



# DEEPENNG – Editing tools in the "Orders" section

MAFORO ClientWeb

Approve Orders Send Reply

ORDER

ORDER: [Field]  
SKU: [Field]  
MATCH: [Field]  
BASIC SPECIFICATIONS: [Field]  
NOTE: [Field]

DESCRIPTION: [Field]  
CUSTOMER: [Field]  
ADDRESS: [Field]  
TELEPHONE: [Field]  
EMAIL: [Field]

CREATED ON: [Field]  
CHANGED ON: [Field]  
DELIVERED ON: [Field]  
PRIORITY: [Field]  
IMPORTANCE: [Field]  
STATUS: [Field]

TELEPHONE: [Field]  
TELEPHONE: [Field]  
Select a date: [Field]

Not optimized

PARTS

No.	Code	Description	Color	Thickness	Length	Width	Qty	Use	Class	Version	Notes
6	part_16	DETM	mat_30	10.0	250.0	1.200.0	96	0	Not prepared	0	
6	part_17	DETM	mat_30	10.0	300.0	1.200.0	96	0	Not prepared	0	
7	part_18	DETM	mat_30	10.0	300.0	1.000.0	96	0	Not prepared	0	
7	part_19	DETM	mat_30	10.0	250.0	1.200.0	96	0	Not prepared	0	
7	part_11	DETM	mat_30	10.0	250.0	1.200.0	96	0	Not prepared	0	
11	part_19	DETM	mat_30	10.0	300.0	1.200.0	144	0	Not prepared	0	
10	part_18	DETM	mat_30	10.0	300.0	1.200.0	144	0	Not prepared	0	
6	part_14	DETM	mat_30	10.0	300.0	1.000.0	144	0	Not prepared	0	
4	part_12	DETM	mat_30	10.0	300.0	1.200.0	144	0	Not prepared	0	
2	part_10	DETC	mat_30	10.0	300.0	1.200.0	144	0	Not prepared	0	
1	part_09	DETM	mat_30	10.0	300.0	1.000.0	144	0	Not prepared	0	

The "order" page allows numerous fields to be edited in order to detail the order/job as much as possible.

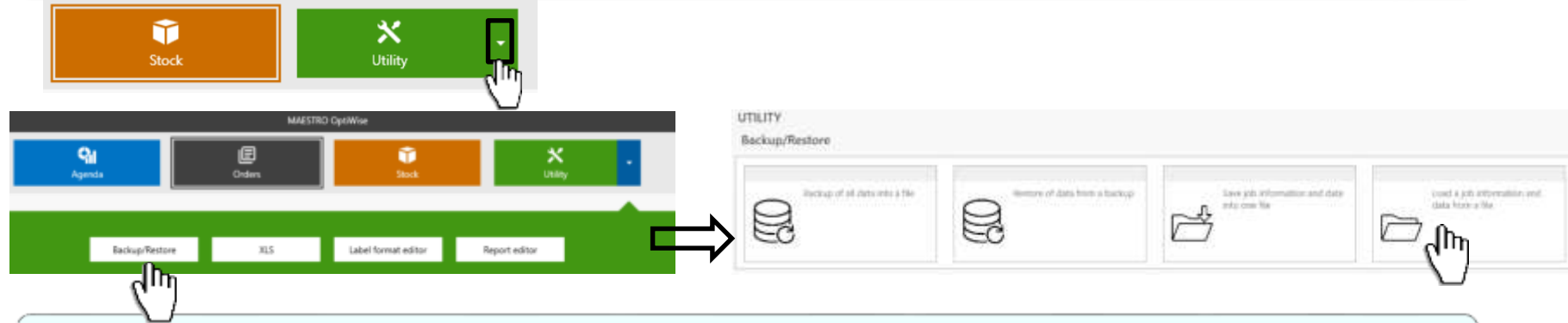
Home Search Add Edit Delete Groups Recent Records Reports Settings

# DEEPENING – Importing of jobs and material stock from previous SCM's optimizers software

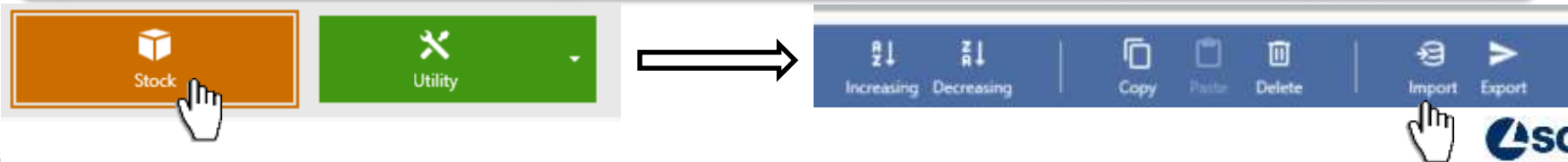
optiwise allows you to import orders/jobs created by old SCM's optimizers software (Maestro ottimo cut or Maestro perfect cut) without the need to re-type or re-import from a spreadsheet.

For the importing are necessary only 2 actions:

## Jobs/orders importing from the "Utility" section



## Materials importing from the "Stock" section



# OPTIMIZATION PROCEDURE—Generalities of the optimization process

## ATTENTION

### PERFECT OPTIMIZATION DOES NOT EXIST

you always have to find a compromise between 2 production needs

Scrap Percentage

Time Required for the Job/Order  
Execution

Normally, these two parameters are inversely proportional, i.e. as the rejection rate is reduced usually the job execution time increases and vice versa

The goal of optimization, then, is to find the best trade-off between scrap and lead time, relative to cost. For one customer, it may be more important to keep scrap low at the expense of time in order to reduce material costs as much as possible;

In other cases, however, it can make sense to save on production time, so as to clear the backlog, or to reduce fixed energy costs.

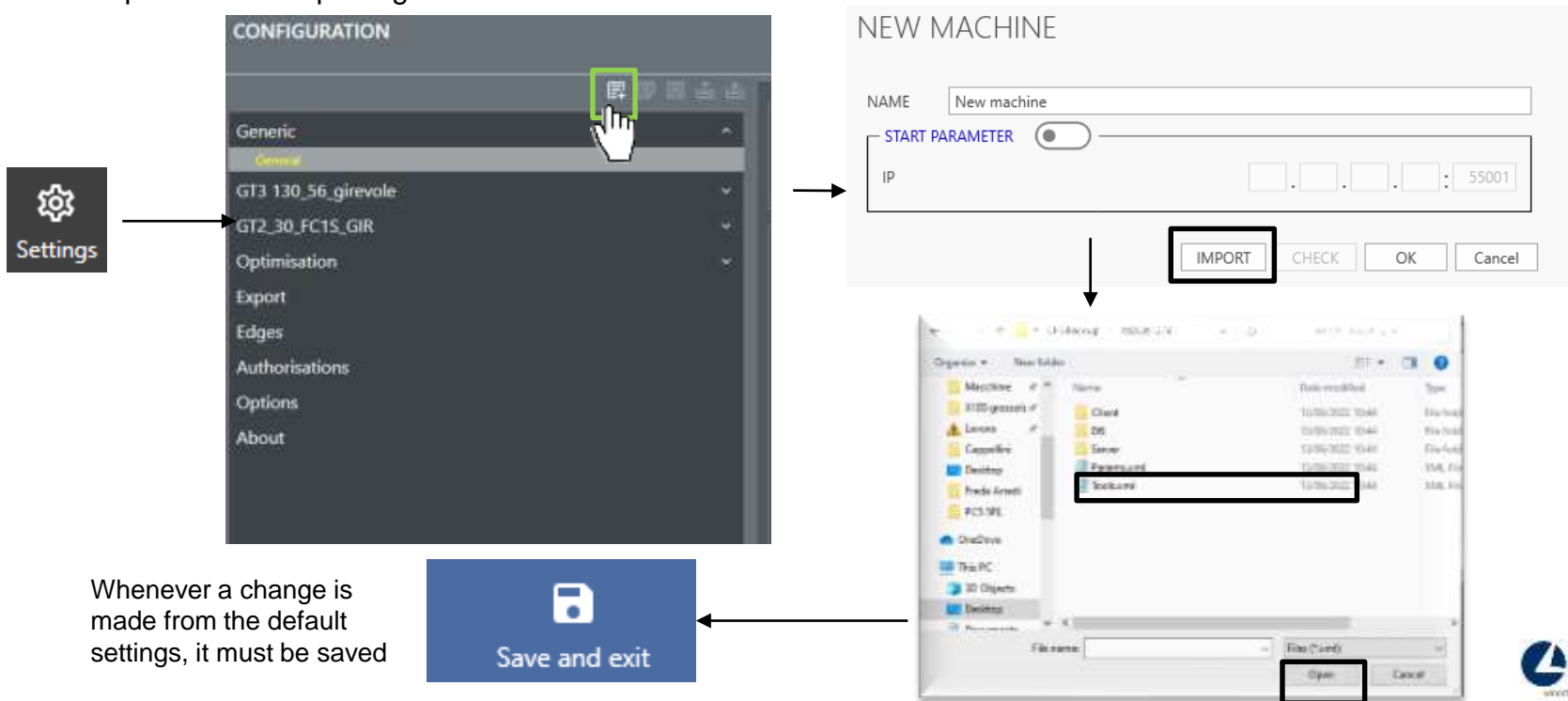
# OPTIMIZATION PROCEDURE – Generalities of the optimization process

## Time calculation

To be able to perform the time calculation, it is necessary to connect the machine to the optimizer, or to import the parameters of the desired panel saw machine.

In order to insert the parameter configuration related to a panel saw, the following steps must be followed:

Machine's parameters importing for the time calculation

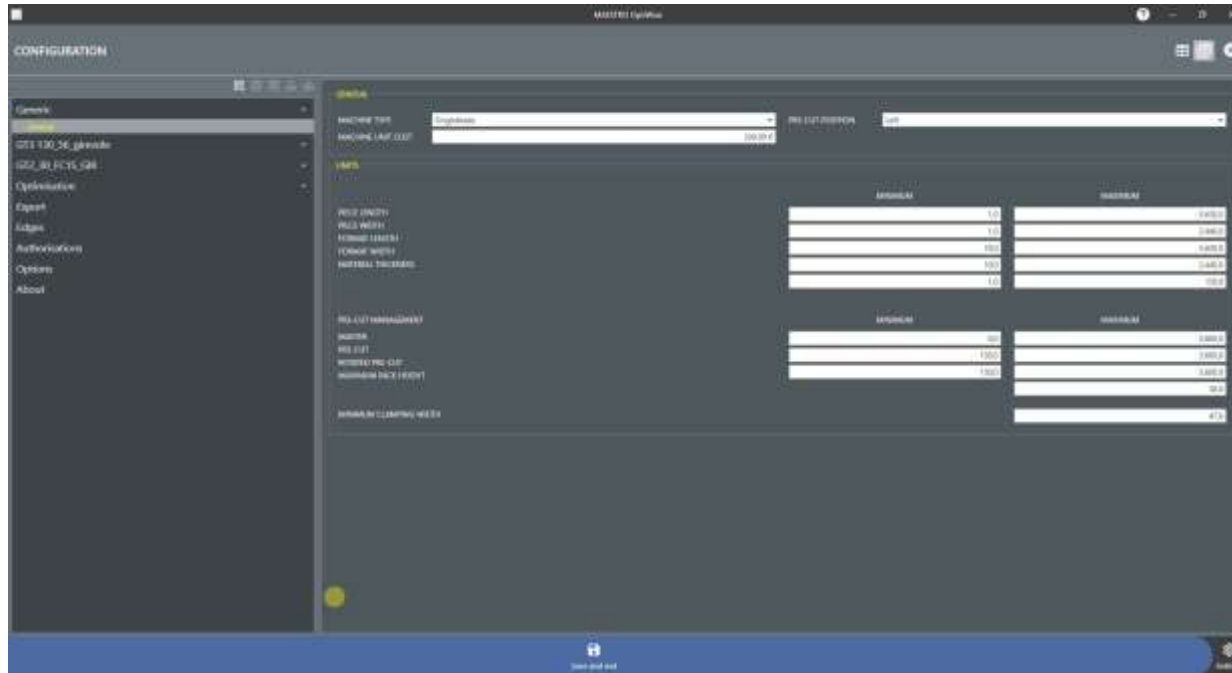


Whenever a change is made from the default settings, it must be saved



# OPTIMIZATION PROCEDURE – Generalities of the optimization process

## Time calculation



### ATTENTION

Once the machine(s) needed for the optimizations have been entered, this operation will no longer be necessary as it will remain in memory within the optiwise database

# OPTIMIZATION PROCEDURE– Orders/Jobs processing (optimization)

Once a new job order is created, the first step for optimization is as follows:

The screenshot displays the AMARINO Desktop software interface. At the top, there is a navigation bar with buttons for 'Agenda', 'Orders', 'Stock', and 'Utility'. Below this, the 'ORDER' section contains several input fields: 'ORDER' (containing 'SOLO\_DOORS\_030120'), 'DESCRIPTION', 'CUSTOMER', 'ADDRESS', 'TELEPHONE', 'EMAIL', 'CREATED ON', 'CHANGED ON', 'DELIVERED ON', 'PRIORITY', 'IMPORTANCE', and 'STATUS'. A 'PARTS' table is visible below the order form, listing various items with columns for No., Code, Description, Color, Thickness, Length, Width, Qty, Vol., Draw, Weight, and Notes. A 'Results' button is highlighted in the bottom toolbar, with a callout box labeled 'Results' pointing to it.

No.	Code	Description	Color	Thickness	Length	Width	Qty	Vol.	Draw	Weight	Notes
42	43		300	22.0	2,070.0	98.0	1	0	Not planned	0	
42	43		300	22.0	2,070.0	98.0	1	0	Not planned	0	
38	42		300	22.0	3,000.0	148.0	1	0	Not planned	0	
37	45		300	22.0	2,070.0	148.0	1	0	Not planned	0	
16	38		300	22.0	2,070.0	98.0	1	0	Not planned	0	
34	37		300	22.0	2,070.0	98.0	1	0	Not planned	0	
16	38		300	22.0	2,070.0	148.0	1	0	Not planned	0	
31	34		300	22.0	2,070.0	148.0	1	0	Not planned	0	
6	6		830	22.0	2,070.0	108.0	1	0	Not planned	0	
4	4		830	22.0	2,070.0	108.0	1	0	Not planned	0	
2	3		830	22.0	2,070.0	108.0	1	0	Not planned	0	
1	1		830	22.0	2,070.0	108.0	1	0	Not planned	0	

Click on «Results» - With this action, optiwise groups of all parts that are to be produced from the same material/typology

# OPTIMIZATION PROCEDURE– Orders/Jobs processing (optimization)

After clicking on "Results," the work page shown below will open.

**OPTIMIZATION and TIME CALCULATION will be carried out from here.**

**MATERIAL:** this lists the "jobs" created. An "order/Job" is created for each material in the imported cut list that will include all parts to be produced with the same material

**MACHINE:** Here you select the machine on which you want the time calculation (machine's parameters must be imported/linked)

**STATUS:** Here you find the "optimization status" for each material. (Not Optimized, Optimized, Error etc.)

**PROFILE:** Here you can select the OPTIMIZATION PARAMETERS PROFILE (which will condition optimization in favor of time or material)

**Description:** This section reports the results of the optimization process for each material. The cutting patterns will be represented here (sheet "Patterns") and also all statistics related to each material. The sheet "Patterns" allows also the tabular view which shows the time needed to process each cutting pattern (over the total time)

# OPTIMIZATION PROCEDURE – Orders/Jobs processing (optimization)

After clicking on "Results," the work page shown below will open.

**OPTIMIZATION** and **TIME CALCULATION** will be carried out from here.



**A) Optimization and time calculation carried out independently**

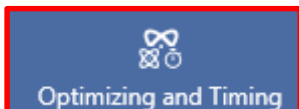
**B) Optimization and time calculation carried out at the same time**



1) Only panels optimization



2) Time calculation after the panels optimization (a machine must be selected)



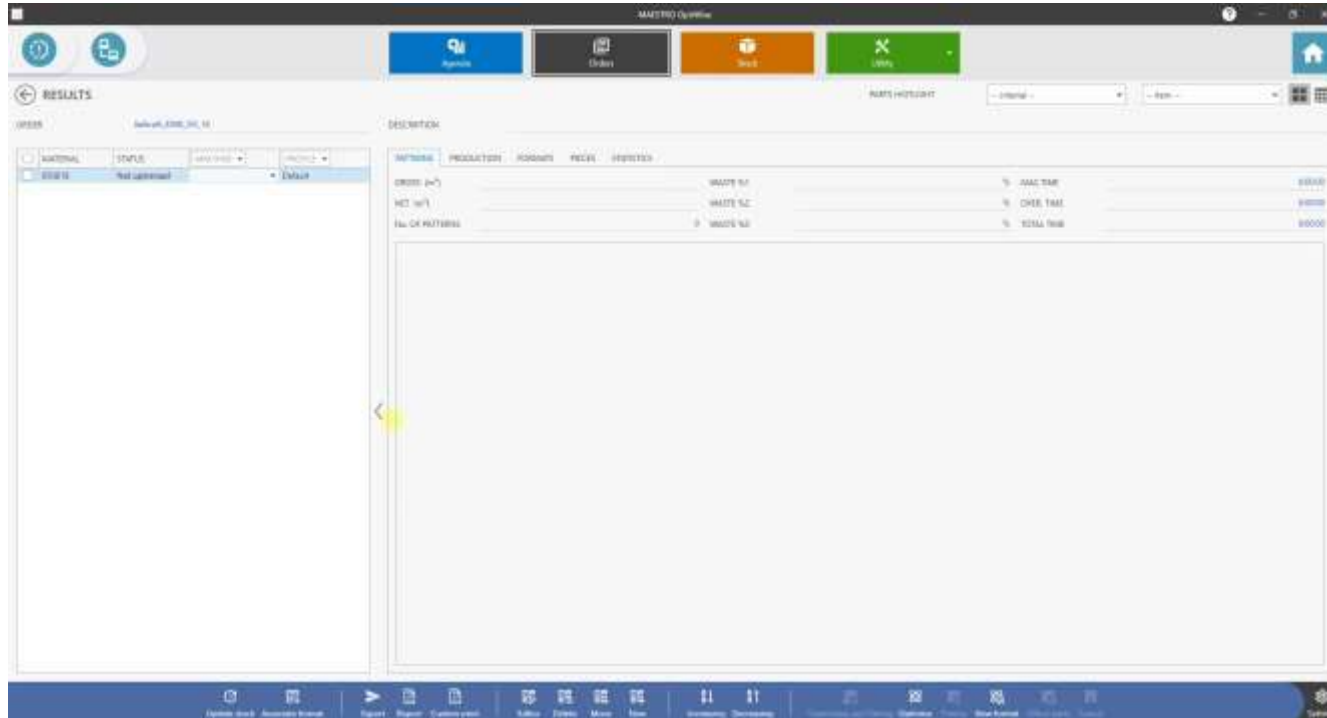
Panels optimization and time calculation at the same time



# OPTIMIZATION PROCEDURE– Orders/Jobs processing (optimization)

## OPTIMIZATION and TIME CALCULATION

Recap VIDEO



# OPTIMIZATION PROCEDURE– Results

The page is divided into three areas:

The screenshot displays a software interface with three main sections:

- Materials list:** A table on the left side of the interface listing materials with columns for material ID, status, and description. The table contains several rows of data.
- Results:** A large central area containing a table with columns for material, production, volume, price, and quantity. Below the table are several panels showing cutting patterns (layouts) for different materials, each with associated statistics and dimensions.
- Command bar:** A horizontal bar at the bottom of the interface containing various icons for navigation and functionality.











A red box highlights the Results section, and a yellow box within it contains the following text:

Sub-sections where are displayed the obtained cutting patterns and their timings as well as all the statistics related to the costs, to the used material, waste %, obtained panels and and off-cuts/inventories

A green box highlights the Command bar at the bottom of the interface.

# OPTIMIZATION PROCEDURE– Results

## - Toolbar commands:

-  Update stock  
Update the warehouse by unloading the used material and loading the generated remnants
-  Associate format  
Allows modification or custom association of formats to the selected material
-  Export  
Function for sending programs directly to the machine
-  Report  
Allows to preview the report of the optimization performed
-  Custom print  
Allows to create custom data reports
-  Editor  
It opens the page for the cutting patterns EDITING of the selected material (same action happens with the double click on the selected cutting pattern)
-  Delete  
It deletes the selected cutting pattern
-  ON-OFF command. When ON-  It allows to move a cutting pattern.
-  New  
It allows to create a new cutting pattern(s). Activating this function brings up a window with the material formats available for the job. After selecting the desired format or creating a new one, the cutting patterns editing/editing section will be open

# OPTIMIZATION PROCEDURE– Results

## - Toolbar commands:



Increasing

Sorts the patterns in ascending order with respect to the square meters of floor area of material format (cutting pattern)



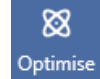
Decreasing

Sorts the patterns in descending order with respect to the square meters of floor area of material format (cutting pattern)



Optimizing and Timing

Performs panel optimization and timing calculations of selected materials (check mark enabled) at the same time



Optimise

Performs (only) the panel optimization of selected materials (check mark enabled) at the same time



Timing

Performs (only) the time calculation of selected materials (check mark enabled) at the same time



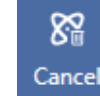
New format

Performs optimization from a certain (selected) cutting pattern forward



Offcut parts

Performs optimization of all parts (panels/pcs) that were not optimized with the first optimization due to incompatibilities between parts measurements and optimization parameters set for the material . On click, a box opens that allows redefining a set of optimization parameters specifically for these unoptimized parts

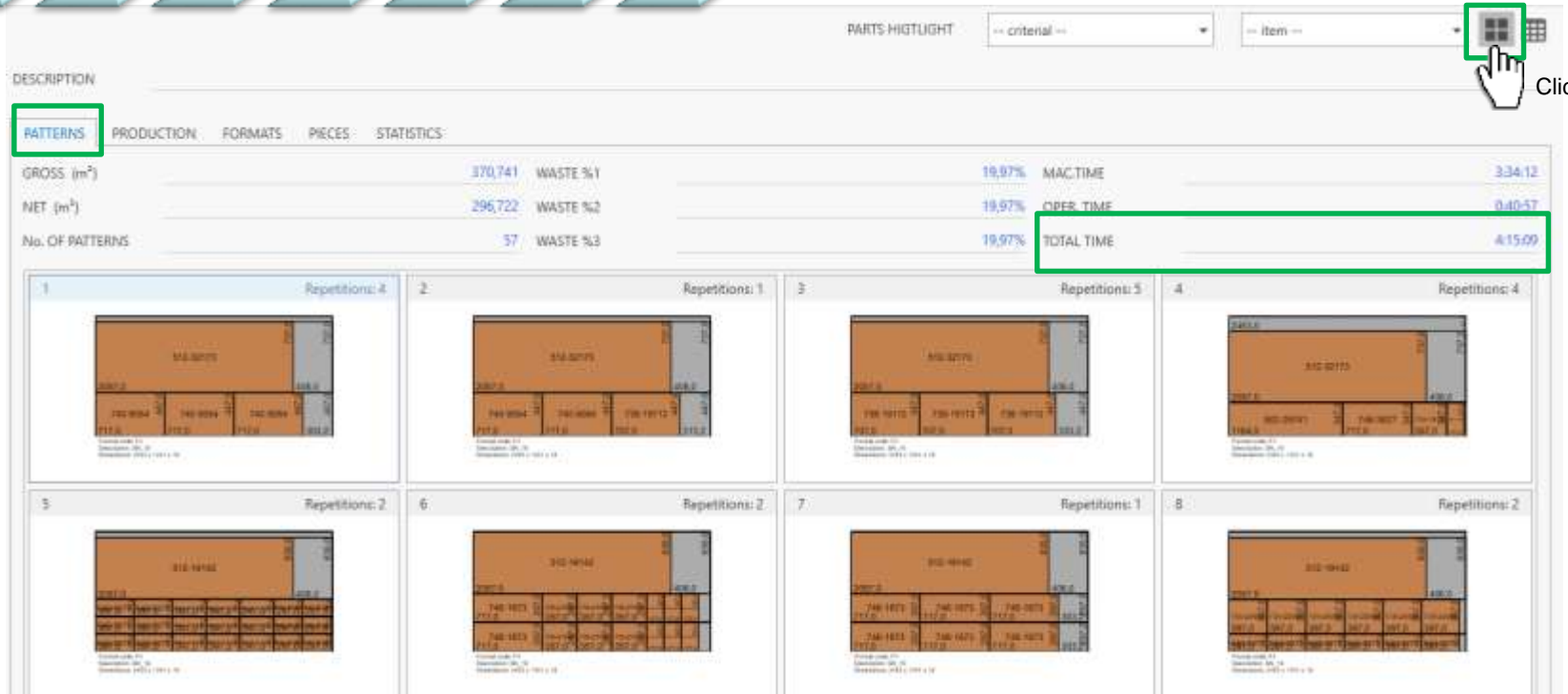


Cancel

Stops the optimization process by completing only the optimization(s) already started (in progress before the "Cancel" command)

# OPTIMIZATION PROCEDURE– Results

## Graphic visualization:



**Note:** Double-clicking on the desired pattern will open the cutting pattern editor that allows you to view the details for each one

# OPTIMIZATION PROCEDURE – Results

## Tabular visualization:

PARTS HIGHLIGHT -- criterion -- -- item --

DESCRIPTION

**PATTERNS** #PRODUCTION #FORMATS #PIECES STATISTICS

GROSS (m<sup>2</sup>) 370,741 WASTE %1 19,97% MAC.TIME 3:04:12  
NET (m<sup>2</sup>) 296,722 WASTE %2 19,97% OPER. TIME 0:40:57  
No. OF PATTERNS 57 WASTE %3 19,97% TOTAL TIME 4:15:09

No.	Length	Width	Repetitions	Cycles	GROSS	NET	WASTE %1	WASTE %2	WASTE %3	TOTAL TIME
1	2,463,0	1,244,0	4	1	12,256	9,010	19,14%	19,14%	19,14%	00:04:12
2	2,463,0	1,244,0	1	1	3,064	2,473	19,29%	19,29%	19,29%	00:06:54
3	2,463,0	1,244,0	5	1	15,320	12,320	19,58%	19,58%	19,58%	00:04:00
4	2,463,0	1,244,0	4	1	12,256	9,444	22,95%	22,95%	22,95%	00:04:30
5	2,463,0	1,244,0	2	1	6,128	5,192	15,27%	15,27%	15,27%	00:03:34
6	2,463,0	1,244,0	2	1	6,128	5,367	12,41%	12,41%	12,41%	00:03:49
7	2,463,0	1,244,0	1	1	3,064	2,584	15,67%	15,67%	15,67%	00:03:46
8	2,463,0	1,244,0	2	1	6,128	5,156	15,86%	15,86%	15,86%	00:04:41
9	2,463,0	1,244,0	1	1	3,064	2,572	16,07%	16,07%	16,07%	00:03:15
10	2,463,0	1,244,0	10	2	30,640	24,828	18,97%	18,97%	18,97%	00:03:42
11	2,463,0	1,244,0	6	1	18,384	13,432	26,94%	26,94%	26,94%	00:03:31
12	2,463,0	1,244,0	1	1	3,064	2,574	16,00%	16,00%	16,00%	00:04:46
13	2,463,0	1,244,0	1	1	3,064	2,570	16,12%	16,12%	16,12%	00:04:55
14	2,463,0	1,244,0	2	1	6,128	5,267	14,05%	14,05%	14,05%	00:04:25
15	2,463,0	1,244,0	1	1	3,064	2,640	13,84%	13,84%	13,84%	00:03:15
16	2,463,0	1,244,0	1	1	3,064	2,623	14,40%	14,40%	14,40%	00:04:00
17	2,463,0	1,244,0	1	1	3,064	2,264	26,09%	26,09%	26,09%	00:03:37
18	2,463,0	1,244,0	1	1	3,064	2,409	21,37%	21,37%	21,37%	00:03:43
19	2,463,0	1,244,0	1	1	3,064	2,260	26,74%	26,74%	26,74%	00:03:50
20	2,463,0	1,244,0	1	1	3,064	2,566	16,25%	16,25%	16,25%	00:04:49
21	2,463,0	1,244,0	4	1	12,256	9,554	22,04%	22,04%	22,04%	00:04:20
22	2,463,0	1,244,0	2	1	6,128	4,942	19,36%	19,36%	19,36%	00:04:01
23	2,463,0	1,244,0	2	1	6,128	5,198	15,18%	15,18%	15,18%	00:04:14
24	2,463,0	1,244,0	14	3	42,888	35,896	16,32%	16,32%	16,32%	00:03:47
25	2,463,0	1,244,0	1	1	3,064	2,756	10,05%	10,05%	10,05%	00:02:28
26	2,463,0	1,244,0	1	1	3,064	2,174	29,05%	29,05%	29,05%	00:04:03
27	2,463,0	1,244,0	2	1	6,128	4,594	25,03%	25,03%	25,03%	00:04:20
28	2,463,0	1,244,0	11	2	33,704	27,787	17,55%	17,55%	17,55%	00:03:26



Click here

# DEEPENING – Cutting pattern EDITOR

The cutting pattern editing window is divided into four areas:

Information area related to panels/pieces and of the cutting pattern

Working and display area of cutting pattern

Area that allows you to select the cutting pattern on which you want to make changes or see its details

Here the cutting list related to the selected material is available for automatic insertion of parts within the cutting pattern. It is also possible to edit new parts/panels

No.	Code	Color	Length	Width	Required	Ordered	Delta %	Price
39	840-8221	8508_SPL_18	177.8	287.8	38	18	-50.00%	8.00 €
251	840-8223	8508_SPL_18	177.8	287.8	4	2	-50.00%	8.00 €
387	840-8230	8508_SPL_18	177.8	287.8	38	38	0.00%	8.00 €
422	840-8230	8508_SPL_18	177.8	287.8	4	4	0.00%	8.00 €
458	840-1156	8508_SPL_18	177.8	247.8	24	24	0.00%	8.00 €

# DEEPENING – Cutting pattern EDITOR

## - Toolbar commands:



Allows to enter an **head-cut** to the imputed measure in the box



Allows to enter a **rotated head-cut** to the imputed measure in the box



Deletes the head-cut



It shifts the pre-cut to the left of where you clicked the mouse by a distance equal to the value imputed in the box



Deletes the remnants from the selected cutting pattern



Separates side-by-side cuts (block) so that pieces can be deleted individually by double-clicking



When you manually edit a cutting pattern it allows you to rotate the selected material format (cutting pattern must be empty)



It saves the changes made and returns to the previous page.



# OPTIMIZATION PROCEDURE – Report

RESULTS

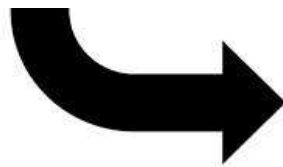
ORDER: Italkraft

<input checked="" type="checkbox"/>	MATERIAL	STATUS	MACHINE	PROFILE
<input checked="" type="checkbox"/>	0110_PE_1818	Optimised	GT3 130_56_girevole	Custom
<input checked="" type="checkbox"/>	0110_PE_88	Optimised	GT3 130_56_girevole	Custom
<input checked="" type="checkbox"/>	8508_SN_1818	Optimised	GT3 130_56_girevole	Custom
<input checked="" type="checkbox"/>	2_11_16MM16	Optimised	GT3 130_56_girevole	Custom

Put a check mark in the boxes for the materials for which you want to generate a statistical data report

Report

Click here



Job: Italkraft

SCM S.p.a

Description:

GENERAL STATISTICS

Type	Pat.	Cycles	Time	Qty	Waste %1	Waste %2	Waste %3	Line time	MP	MP'	MP%	MP%	
Colour													
0110_PE_1818	81	88	0:00:00	2498	0.06%	0.06%	0.06%	0:00:16	810.00	8.22			
0110_PE_88											88.81	79	
8508_SN_1818											88.73	1.28	
2_11_16MM16											27	25.94	41

MATERIALS

Code	Type	Material	Initial	MP	MP'		
F1	0110_PE_1818	0110	Infinito	539.20	0.71		
F2	0110_PE_88	0110	Conv	133.84	1.47		
F4	8508_SN_1818	8508	Infinito	272.74	0.67		
F5	2_11_16MM16	2_11	Infinito	19.33	2.9		
			362	Infinito	Infinito	1112.22	18.14

Export Document...

Export format: Pdf

File path: Pdf

Open file after

More Options: Pdf, Docx, Xls, Csv, Txt, Image

After generating the report you will be able to decide in which file format to export it

Export

Click here



**Many thanks for  
your kind attention**