

CutOpti

Manual
Rev. 2024-12-26
English.

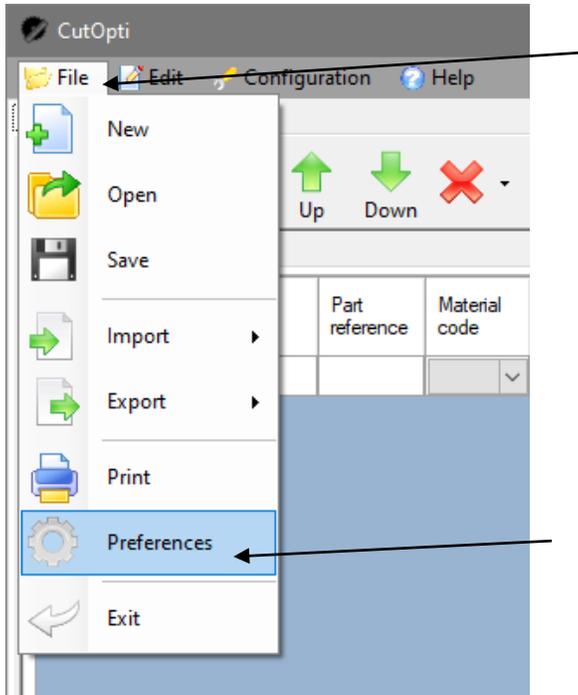


Get the most out of your raw material inventory.

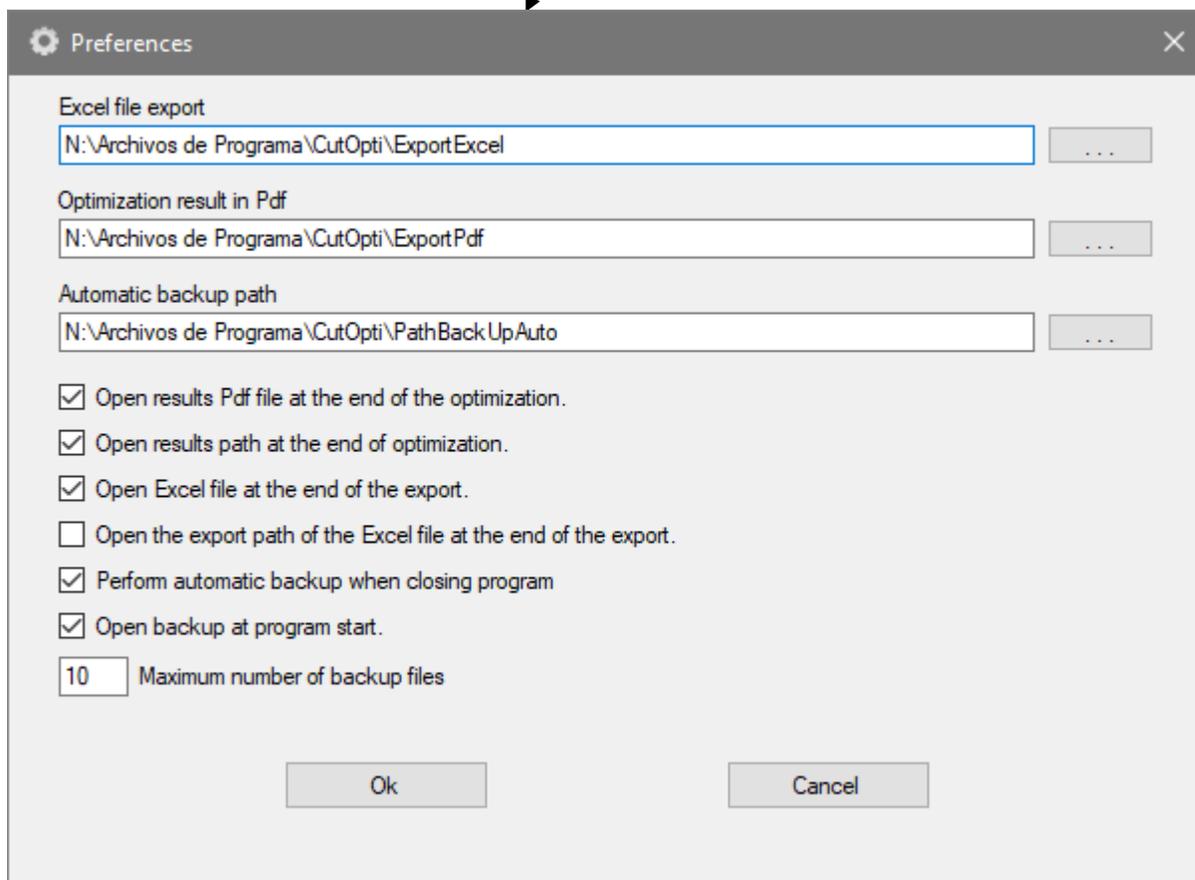
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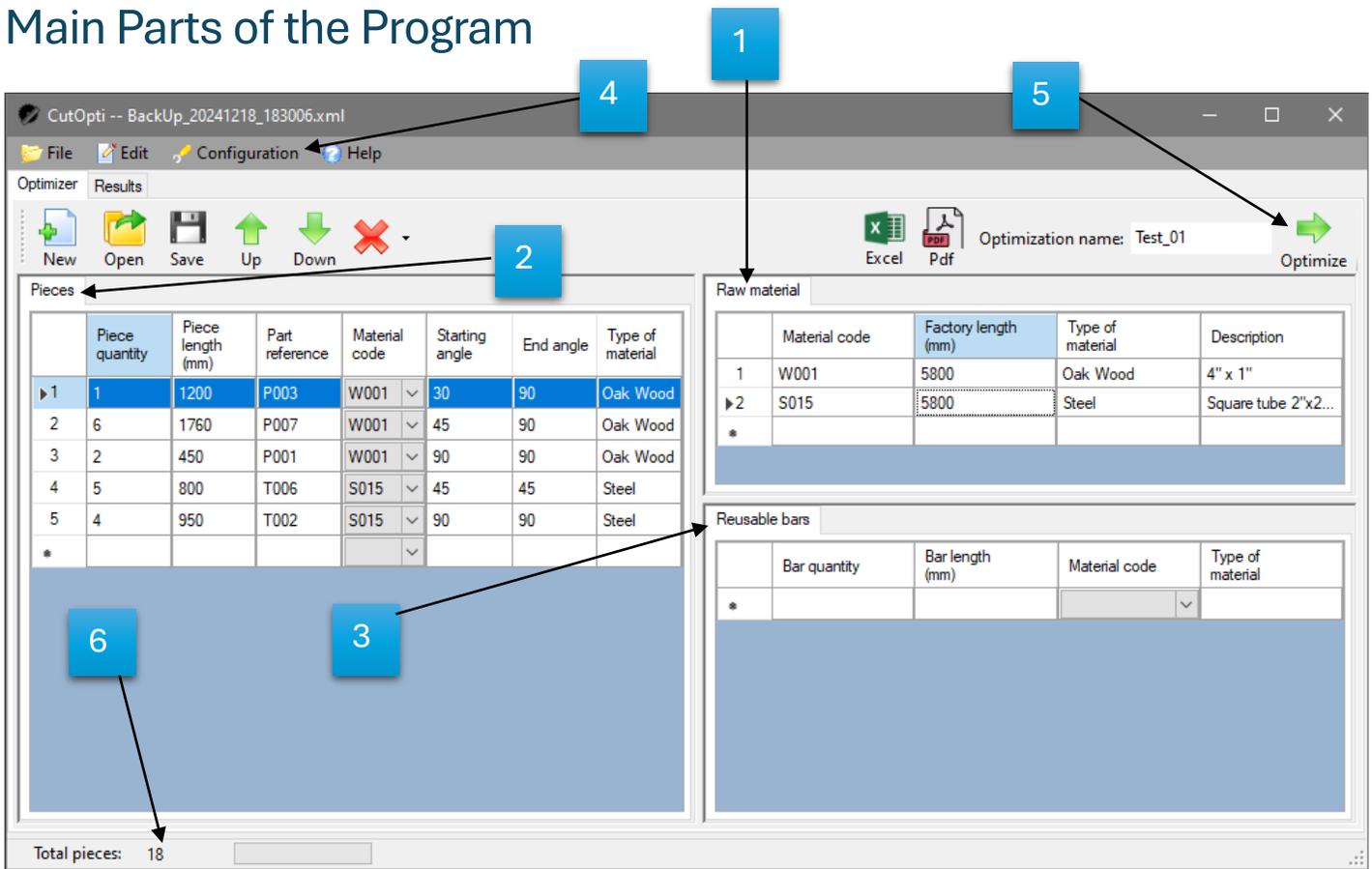
Program Preferences



Excel File Export: Select the path for exporting the Excel file. If deleted, it will reset to the program's installation directory.
Optimization Results in PDF: Select the path where the optimization results will be saved for manual access.
Automatic Backup Path: Every time the program is closed, a backup will be saved in this path. You can change it if desired.



Main Parts of the Program



1. Raw Material Box:

Register your raw materials, define a material code, specify the factory length in mm, material type, and a description if necessary. The description is optional for the program.

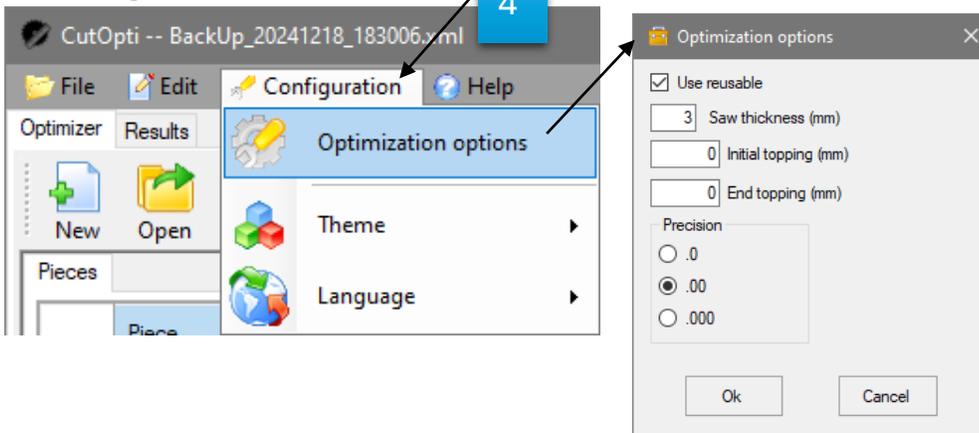
2. Parts Box:

Register the project parts you want to optimize.

3. Reusable Bars:

If you have leftover bars from previous projects and wish to use them again, register them here.

4. Configuration:



Optimization Options:

Saw Thickness: Enter the measurement of the saw kerf here.

Initial and Final Trim: In certain cases, factory bars may get damaged at the ends during transportation. If this is your case, enter the measurement in mm that you wish to discard from the ends.

5. Optimize:

Press this button to proceed with the optimization of the pieces.

6. Status Bar:

Displays the total number of pieces in the pieces table.

Dropdown menu

Pieces							
	Piece quantity	Piece length (mm)	Part reference	Material code	Starting angle	End angle	Type of material
1	1	1200	P003	W001	30	90	Oak Wood
▶2	6	1760	P007	W001	45	90	Oak Wood
3	2			W001	90	90	Oak Wood
4	5			S015	45	45	Steel
5	4			S015	90	90	Steel
*							

Copy

Paste

Add row

Move up

Move down

Delete

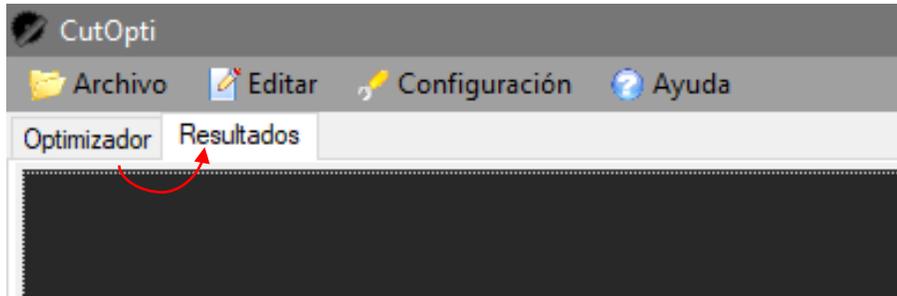
Select the part you want to edit and right-click to display the following options:

- Copy: Copies all the content of the part (row) to paste it later.
- Paste: Select the row where you want to insert the copied line; the line will be inserted at the top of the selected row.
- Add row: A new row will be added at the top of the selected row.
- Move up: Moves the selected row up.
- Move down: Moves the selected row down.
- Delete: Completely deletes the selected row.

These options can be used in all three sections: parts, raw materials, and reusable bars.

Optimization results

After successfully completing the optimization, the program will display the results in the results tab in PDF format.



To view the results in the results viewer, you must have "Acrobat Reader PDF" or "Acrobat Pro PDF" installed beforehand.



Name of the optimization PDF file

Saw blade thickness.

Optimization name: test_02
Saw thickness (mm): 3.0 mm
Unit of measurement: mm

File: Optimization_test_02_20241227_212848.pdf

OPTIMIZATION DETAILS

RAW MATERIAL

Number of bars	Material code	Type of material	Length	Piece quantity
2	1X1X3/32	ACERO	5,800.0	29

Leftover bars of raw material

Number of bars	Material code	Length
1	1X1X3/32	74.8
1	1X1X3/32	5,281.0

Information of required raw material bars.

Information of leftover pieces from the raw material bars.

REUSABLE BARS

Number of bars	Material code	Length	Piece quantity
1	1X1X3/32	1,500.0	2
1	1X1X3/32	1,500.0	2
1	1X1X3/32	1,500.0	2
1	1X1X3/32	1,500.0	2
1	1X1X3/32	3,200.0	9
1	1X1X3/32	3,200.0	9
1	1X1X3/32	3,200.0	9

Information of required reusable bars.

Leftover reusable bars

Number of bars	Material code	Length
1	1X1X3/32	42.4
1	1X1X3/32	15.8
1	1X1X3/32	15.8
1	1X1X3/32	15.8

Information of leftover pieces from the reusable bars.

Details for cutting the pieces from the reusable bars.

CUTTING REUSABLE BARS

Bar N °: 1 Material code: 1X1X3/32 Length: 1,500.0

Piece quantity: 2, Excess length: 42.4

Part reference	Quantity	Length	Starting angle	Piece	End angle	Control
C5PH	1	800.8	90°	<input type="text"/>	90°	<input type="checkbox"/>
C3PH	1	650.8	90°	<input type="text"/>	90°	<input type="checkbox"/>

Details for cutting the pieces from the raw material bars.

CUTTING RAW MATERIAL BARS

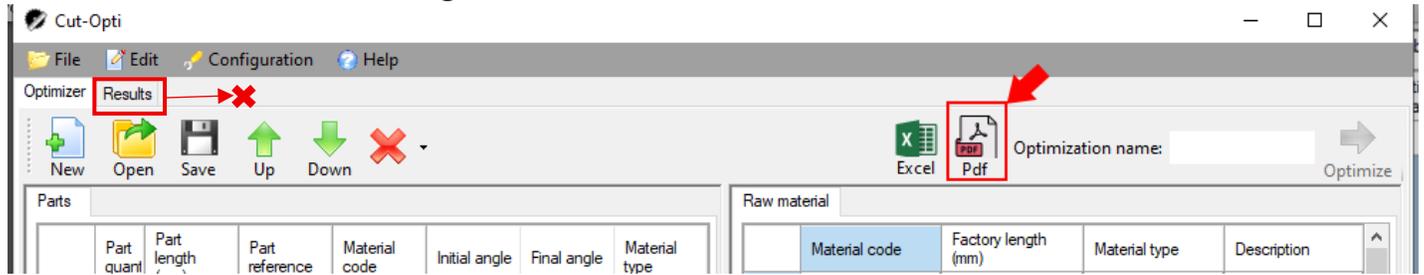
Bar N °: 1 Material code: 1X1X3/32 Length: 5800

Piece quantity: 26, Excess length: 74.8

Initial topping (mm): 0.0, End topping (mm): 0.0

Part reference	Quantity	Length	Starting angle	Piece	End angle	Control
C4PV	1	350.8	90°	<input type="text"/>	90°	<input type="checkbox"/>
C5PV	4	350.8	90°	<input type="text"/>	90°	<input type="checkbox"/>
C1PH	4	250.8	90°	<input type="text"/>	90°	<input type="checkbox"/>
PROF	17	170.0	90°	<input type="text"/>	90°	<input type="checkbox"/>

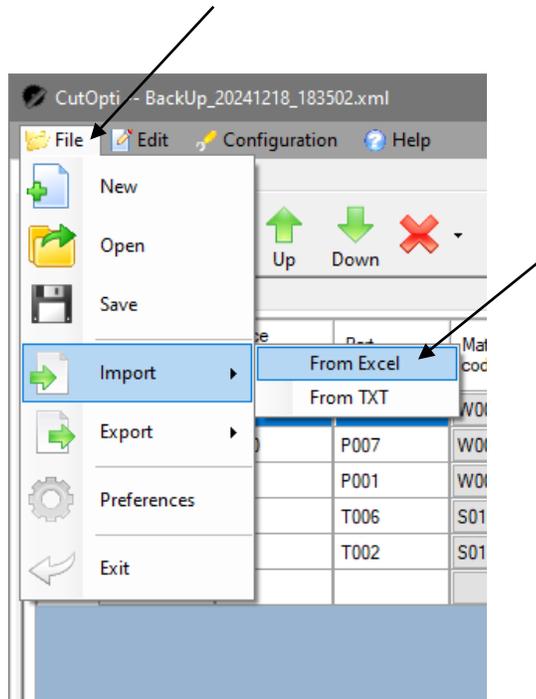
The results section is not working



If the optimization information does not appear in the results section, you can directly access the export directory by clicking the “PDF” button located at the top right. In this directory, you will find the results saved in PDF format.

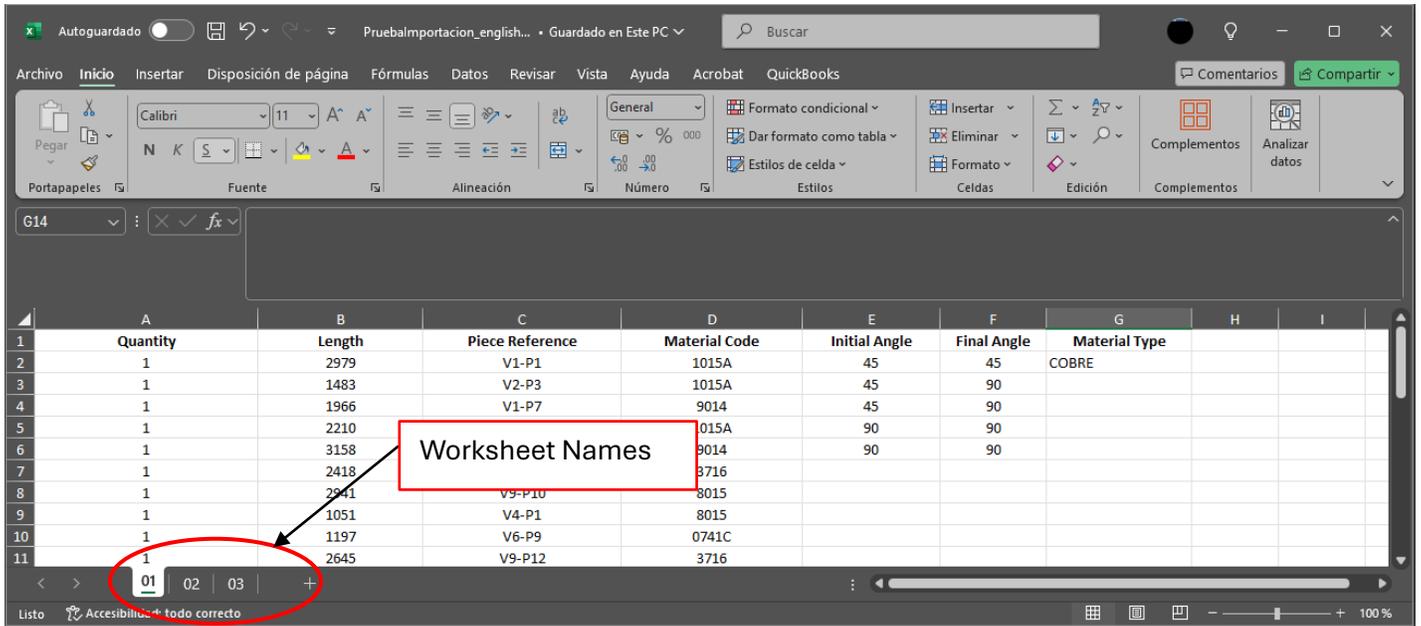
Import

Import from Excel (.xlsx, .xl, .xlsm)



Select this option to import (input) information from an Excel file. To ensure a successful import, the sheets in the Excel file must follow a specific format.

Excel File Format



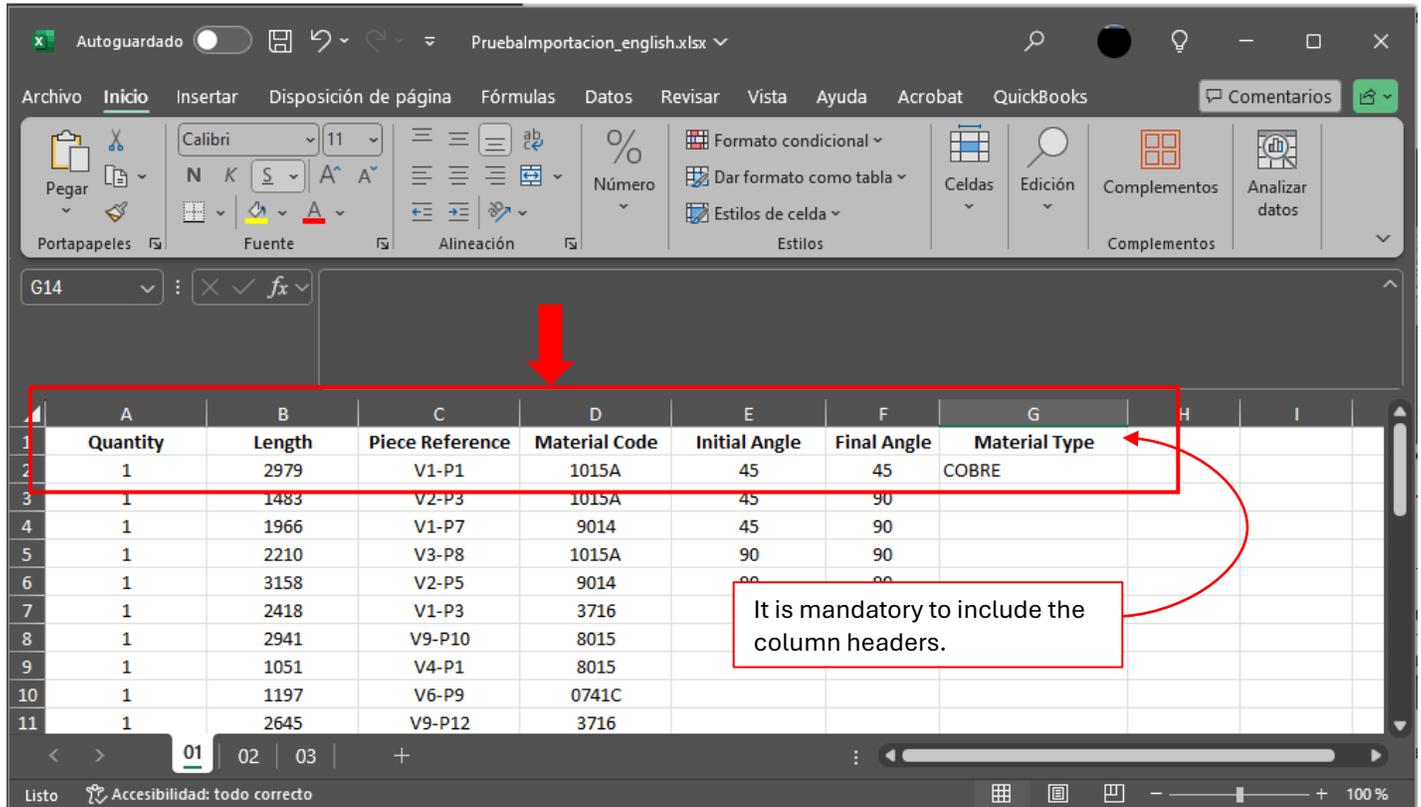
Worksheet Names:

- 01: **"Piece Table"** - This sheet will contain the rows to be entered into the piece table of Cut-Opti.
- 02: **"Raw Material Table"** - This sheet will contain the rows to be entered into the raw material table of Cut-Opti.
- 03: **"Reusable Bars"** - This sheet will contain the rows to be entered into the reusable bars table of Cut-Opti.

Note: Assign the worksheet names exactly as shown above: 01, 02, and 03. If a different name is used, an import error will be displayed.

Order of Columns:

Worksheet 01 / "Piece Table"



	A	B	C	D	E	F	G	H	I
1	Quantity	Length	Piece Reference	Material Code	Initial Angle	Final Angle	Material Type		
2	1	2979	V1-P1	1015A	45	45	COBRE		
3	1	1483	V2-P3	1015A	45	90			
4	1	1966	V1-P7	9014	45	90			
5	1	2210	V3-P8	1015A	90	90			
6	1	3158	V2-P5	9014	90	90			
7	1	2418	V1-P3	3716					
8	1	2941	V9-P10	8015					
9	1	1051	V4-P1	8015					
10	1	1197	V6-P9	0741C					
11	1	2645	V9-P12	3716					

The column order must be exactly the same as shown in the image above.

It is mandatory to include the column header title, *but it is not necessary for the column name to be identical to the one in the image.*

Worksheet 02 / "Raw Material Table"

Material code	Factory length (mm)	Material type	Description
1015A	5800	Steel	Frame
9014	5800	Wood	Window
3716	5800	Teflon	Bushing
8015	5800	Steel	
0741C	5800	Steel	
2783	5800	Steel	

The column order must be exactly the same as shown in the image above.

It is mandatory to include the column header title, *but it is not necessary for the column name to be identical to the one in the image.*

Worksheet 03 / "Reusable Bars Table"

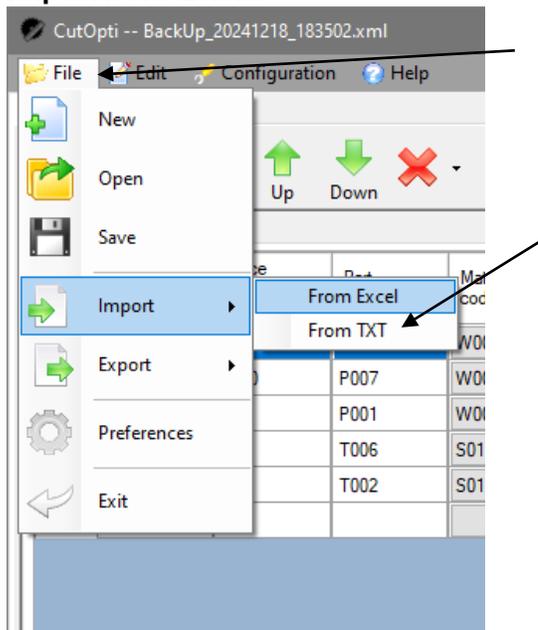
Cantidad de barra	Longitud de barra (mm)	Codigo de material	Tipo de material
1	3800	3716	Teflon
2	4200	8015	ACERO
5	2500	0741C	

The column order must be exactly the same as shown in the image above.

It is mandatory to include the column header title, *but it is not necessary for the column name to be identical to the one in the image.*

Note: You can omit (discard) placing the "02" sheet. The program will automatically create the raw material codes using the information from the pieces and reusable bars sections. In this case, the default factory length assigned will be 5800 mm. After the import is completed, change it if necessary.

Import from .txt file



Select this option to import (enter) information from a ".txt" file. To ensure a successful import, the content of the file must follow a specific format.

Format of the .txt file content

```

Exportacion_01_en.txt x
1 01
2 4,250.8,C1PH,1X1X3/32,90,,STEEL
3 4,350.8,C1PV,1X1X3/32,90,90,STEEL
4 4,350.8,C2PH,1X1X3/32,90,90,STEEL
5 4,350.8,C2PV,1X1X3/32,90,90,STEEL
6 4,650.8,C3PH,1X1X3/32,90,90,STEEL
7 4,350.8,C3PV,1X1X3/32,90,90,STEEL
8 4,350.8,C3PV,1X1X3/32,90,90,STEEL
9 4,350.8,C4PH,1X1X3/32,90,90,STEEL
10 4,350.8,C4PV,1X1X3/32,90,90,STEEL
11 4,800.8,C5PH,1X1X3/32,90,90,STEEL
12 4,350.8,C5PV,1X1X3/32,90,90,STEEL
13 20,170.00,PROF,1X1X3/32,90,90,STEEL
14 02
15 1X1X3/32,5800,STEEL,?????
16 8015,5800,Wood,?????
17 03
18 4,1500,1X1X3/32,STEEL
19 3,3200,1X1X3/32,STEEL
20 2,2200,8015,Wood
  
```

01 – Pieces Table: It means that the following lines contain the information that will be added to the pieces table.

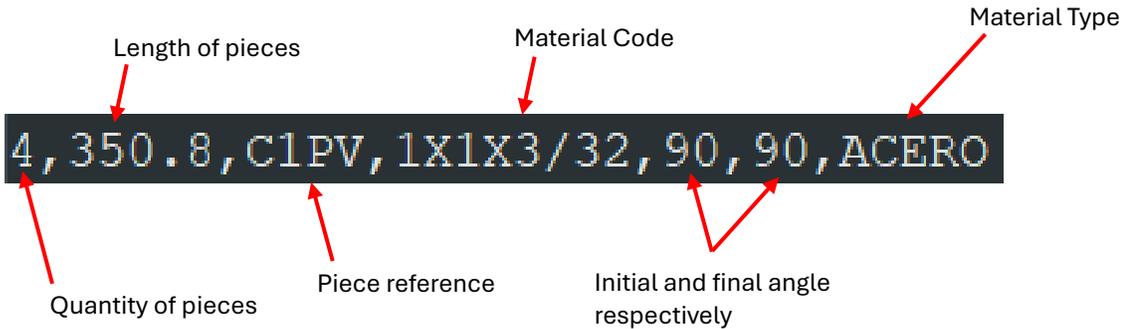
02 – Raw Materials Table: It means that the following lines contain the information that will be added to the raw materials table.

03 – Reusable Bars Table: It means that the following lines contain the information that will be added to the reusable bars table.

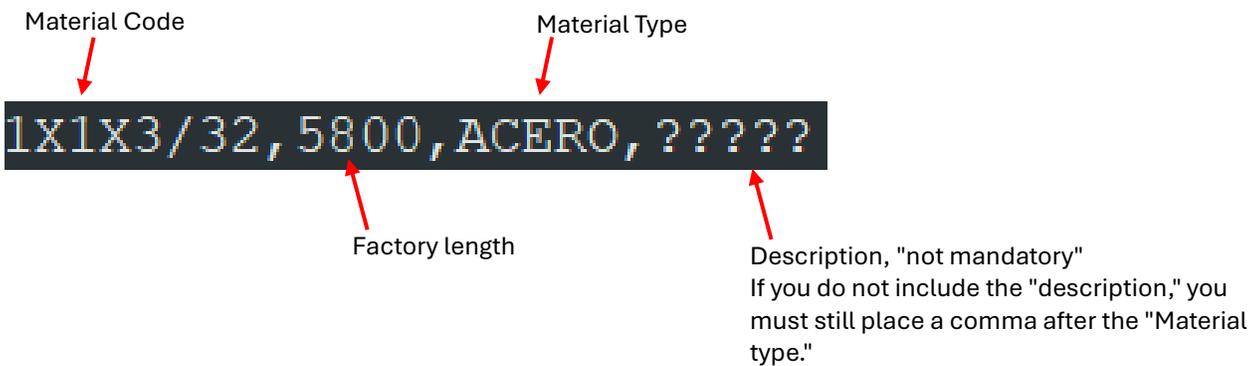
Important:

- It is mandatory to place the index numbers 01, 02, and 03 at the top; do not place any other numbers.
- The indices can be in any order with their respective contents following the index.
- It is mandatory to always include the information for raw materials under index 02.
- You can import the parts list (01) and raw materials (02), without reusable bars (03).
- You can import the reusable bars list (03) and raw materials (02), without the parts list (01).
- You can import raw materials (02), without the parts list (01) and reusable bars (03).

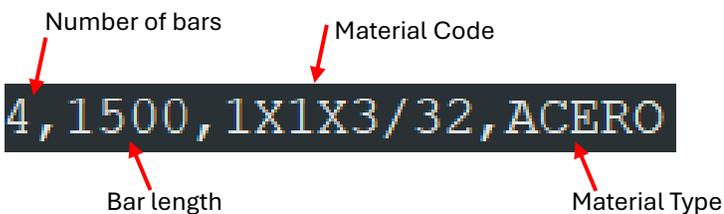
01: parts list, content order



02: Raw material table, content order

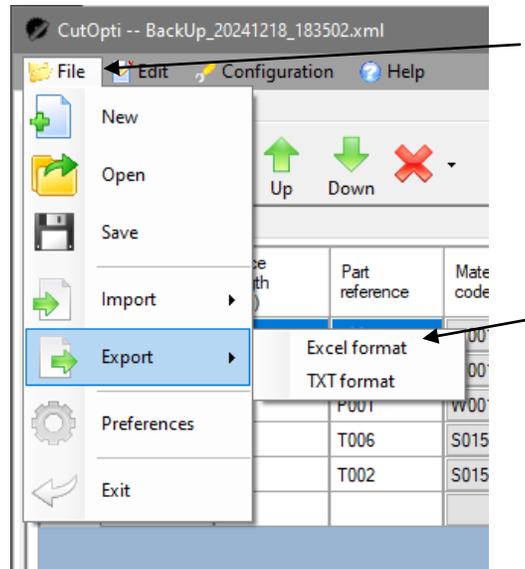


03: Reusable bars table, content order



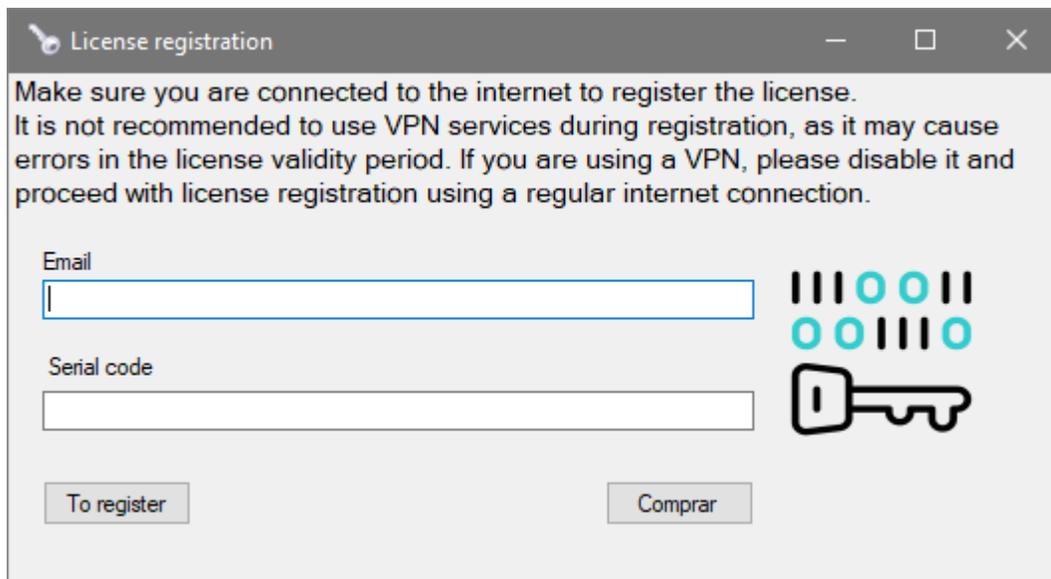
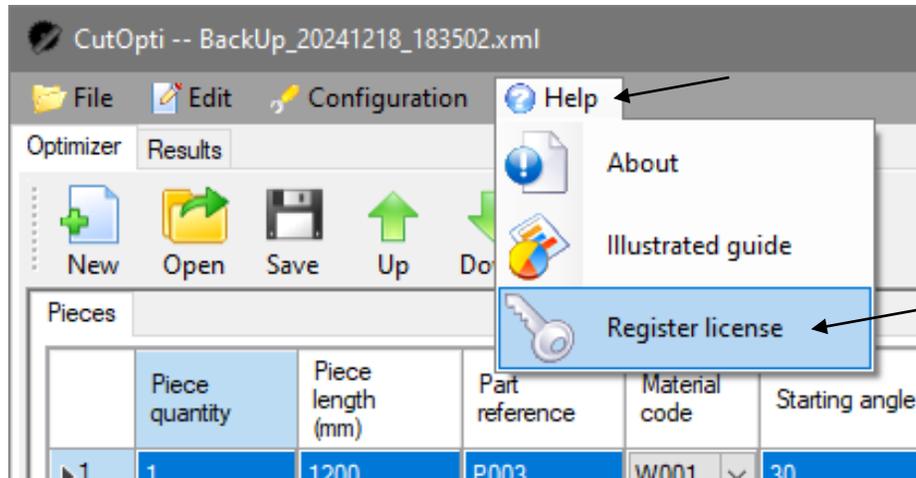
Note: The information separator is the character (,) – comma, do not use any other separator or tabulation.

Export



Select this option to export the information to an Excel or txt file.

Register license



Enter the email you used to register the license purchase and the serial code sent to your email.