

# Material Table

Cutting parameters for different types of [material & thickness].

<http://www.g00.in>

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# Material Table

G0xin allows you to use only those **[material grades & thickness]** which have been described in the file `C:\g0xin\materials.csv`.

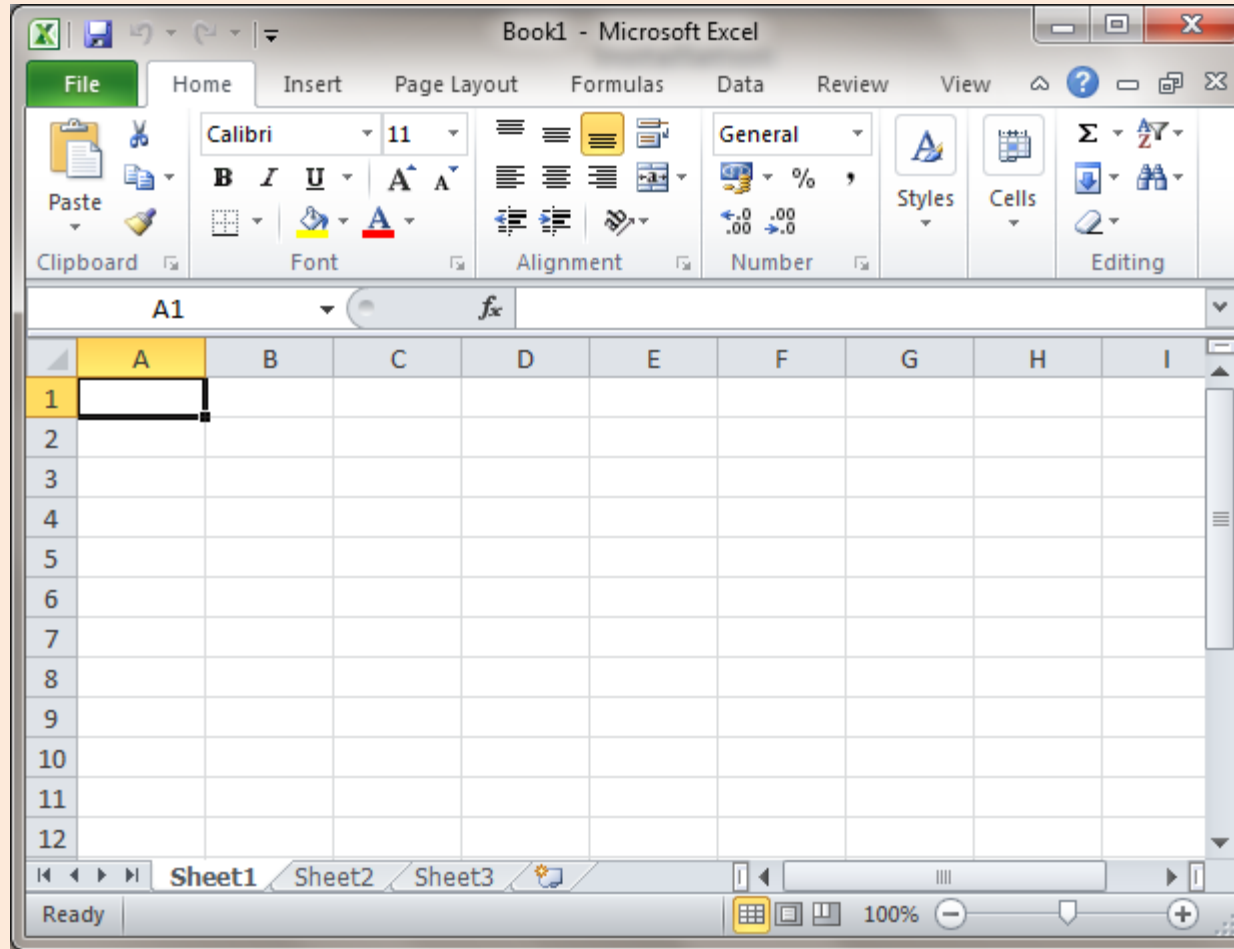
G0xin reads the nesting & cutting parameters (like toolsize) for each **[material grade & thickness]** automatically from this file, when you launch the software.

If you want to use a new **[material grade & thickness]**, you must add a new row in this file, using a suitable spreadsheet software.

## Note

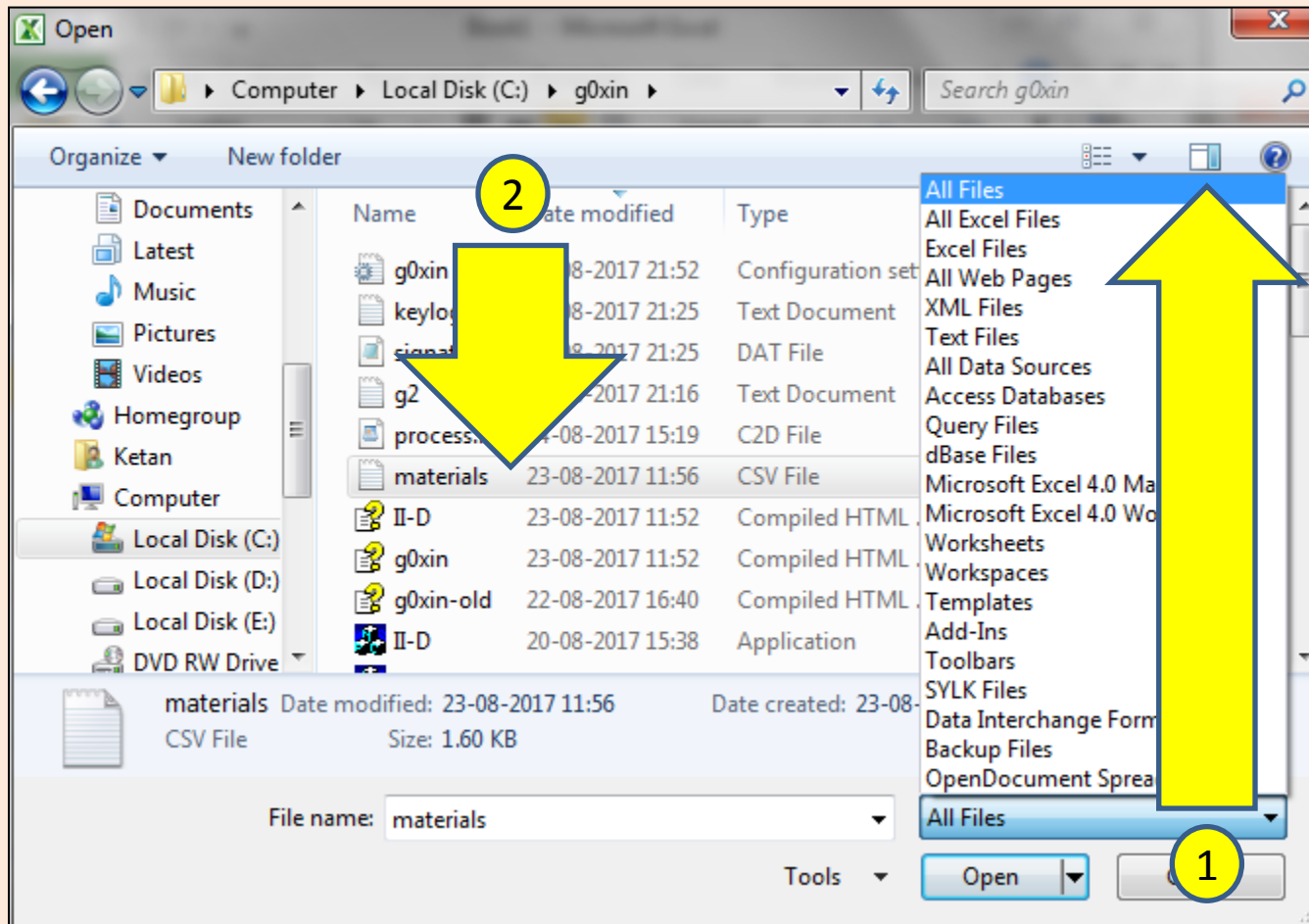
As far as possible, do not modify the nesting & cutting parameters after using them once. If you want to change the parameters of an old **[material grade & thickness]** type, add a completely new row with a slightly different material name, at the end of this file.

# Spreadsheet Software



Start any suitable software that displays the cutting data in the form of rows & columns.

# Open Material File



- 1) Select file type as either **All Files** or **CSV**.
- 2) Then, select the file **C:\g0xin\materials.csv** and open it.  
(A CSV file uses **COMA** to separate data defined in different columns.)

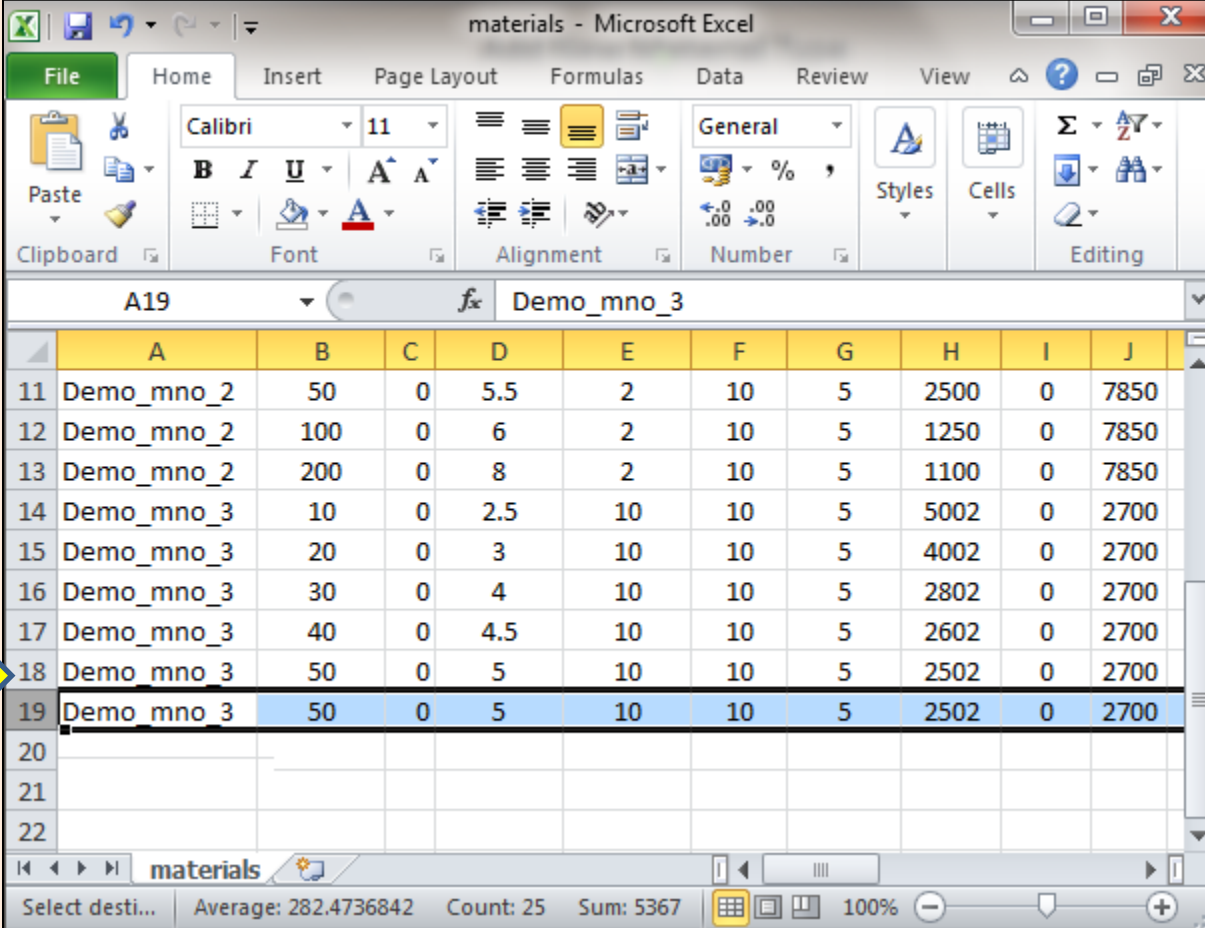
# Data

The screenshot shows a Microsoft Excel spreadsheet titled 'materials'. The data is organized as follows:

	A	B	C	D	E	F	G	H	I	J
3	#Name	Thickness	0	Tool_Dia	Clearance	Leadin	Leadout	Speed	Pierce	Densit
4	Demo_mno_1	1	0	0.1	2	10	5	2800	0	7850
5	Demo_mno_1	2	0	0.15	2	10	5	2600	0	7850
6	Demo_mno_1	4	0	0.2	2	10	5	1500	0	7850
7	Demo_mno_1	5	0	0.4	2	10	5	1300	0	7850
8	Demo_mno_1	8	0	0.5	2	10	5	1200	0	7850
9	Demo_mno_2	10	0	3	2	10	5	5000	0	7850
10	Demo_mno_2	20	0	3.5	2	10	5	4000	0	7850
11			0	5.5	2	10	5	2500	0	7850
12	Demo_mno_2	100	0	6	2	10	5	1250	0	7850
13	Demo_mno_2	200	0	8	2	10	5	1100	0	7850
14	Demo_mno_3	10	0	2.5	10	10	5	5002	0	2700

- 1) Each vertical column shows a nesting / cutting property. (Like, cutting speed, material name, etc.)
- 2) Each row contains a **unique** material type, identified by columns A & B (**material name & thickness**).
- 3) Nesting & cutting properties of each material type are shown in **column C onwards** in the same row.

# Add New Material Type



The screenshot shows a Microsoft Excel spreadsheet titled 'materials'. The ribbon includes File, Home, Insert, Page Layout, Formulas, Data, Review, and View. The active cell is A19, containing the formula 'Demo\_mno\_3'. The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J
11	Demo_mno_2	50	0	5.5	2	10	5	2500	0	7850
12	Demo_mno_2	100	0	6	2	10	5	1250	0	7850
13	Demo_mno_2	200	0	8	2	10	5	1100	0	7850
14	Demo_mno_3	10	0	2.5	10	10	5	5002	0	2700
15	Demo_mno_3	20	0	3	10	10	5	4002	0	2700
16	Demo_mno_3	30	0	4	10	10	5	2802	0	2700
17	Demo_mno_3	40	0	4.5	10	10	5	2602	0	2700
18	Demo_mno_3	50	0	5	10	10	5	2502	0	2700
19	Demo_mno_3	50	0	5	10	10	5	2502	0	2700
20										
21										
22										

The status bar at the bottom shows 'Average: 282.4736842', 'Count: 25', and 'Sum: 5367'. A yellow circle with the number '1' and an arrow points to row 19, which is highlighted in blue.

- 1) Go to the bottom of the file and copy the entire last row (eg. row no. 18 above) using the mouse.
- 2) Paste the selected data in the next row (eg. row no. 19, in this example).
- 3) Modify the data in the new row and save the file, as described later.

# Type Material Name & Thickness

The screenshot shows a Microsoft Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J
9	Demo_mno_2	10	0	3	2	10	5	5000	0	7850
10	Demo_mno_2	20	0	3.5	2	10	5	4000	0	7850
11	Demo_mno_2	50	0	5.5	2	10	5	2500	0	7850
12	Demo_mno_2	100	0	6	2	10	5	1250	0	7850
13	Demo_mno_2	200	0	8	2	10	5	1100	0	7850
14	Demo_mno_3	10	0	2.5	10	10	5	5002	0	2700
15	Demo_mno_3	20	0	3	10	10	5	4002	0	2700
16	Demo_mno_3	30	0	4	10	10	5	2802	0	2700
17	Demo_mno_3	40	0	4.5	10	10	5	2602	0	2700
18	Demo_mno_3	50	0	5	10	10	5	2502	0	2700
19	MS	12	0	5	10	10	5	2502	0	2700
20										

- 1) Type the material name in column A. Make sure it is short and does not contain **COMA**.
- 2) Type thickness in column B. (Unit: MM)
- 3) Make sure that the combination of column A & B is not repeated anywhere else in the file.

# Specify Nesting & Cutting Parameters

The screenshot shows the Microsoft Excel interface with a spreadsheet titled 'materials'. The spreadsheet has columns labeled A through J and rows 9 through 20. The data in the spreadsheet is as follows:

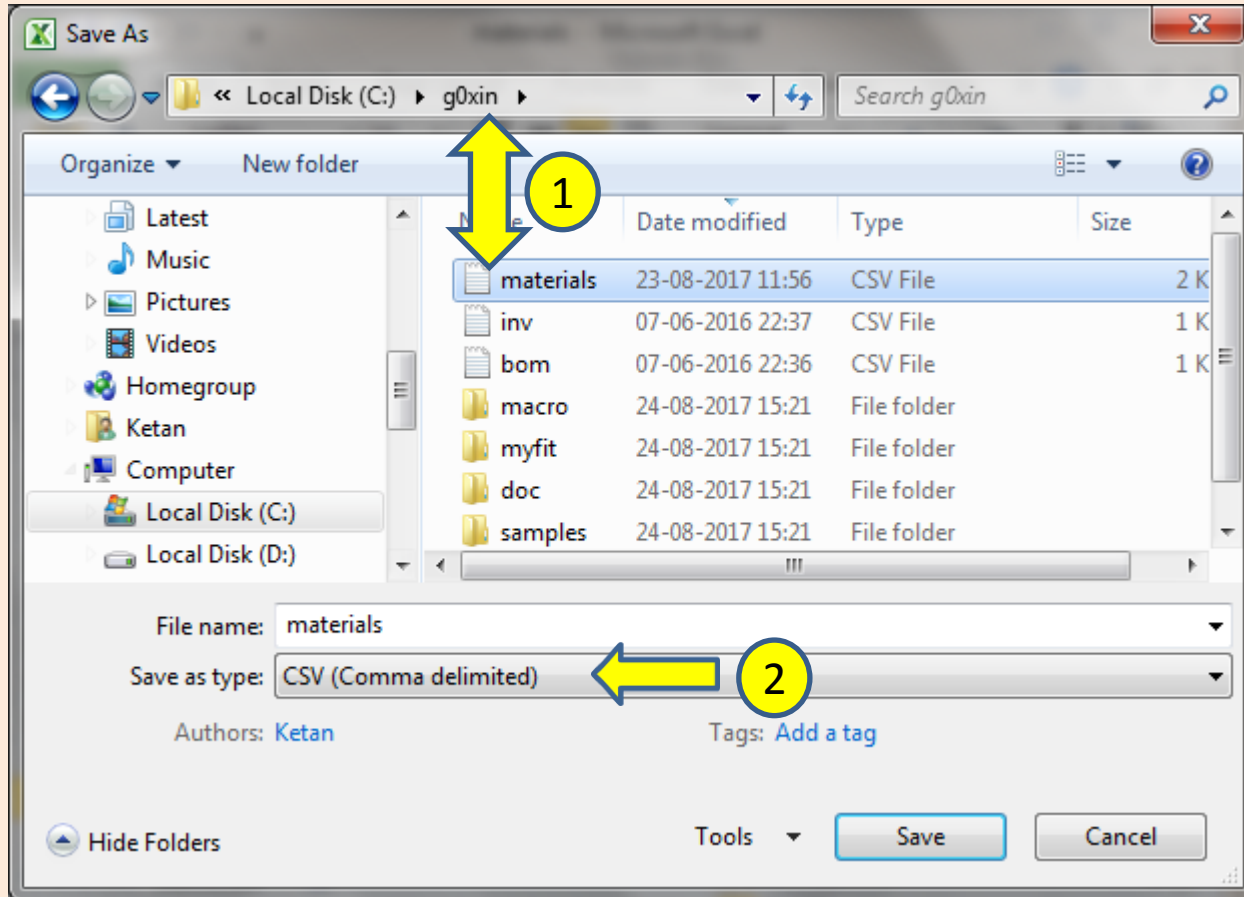
	A	B	C	D	E	F	G	H	I	J
9	Demo_mno_2	10	0	3	2	10	5	5000	0	7850
10	Demo_mno_2	20	0	3.5	2	10	5	4000	0	7850
11	Demo_mno_2	50	0	5.5	2	10	5	2500	0	7850
12	Demo_mno_2	100	0	6	2	10	5	1250	0	7850
13	Demo_mno_2	200	0	8	2	10	5	1100	0	7850
14	Demo_mno_3	10	0	2.5	10	10	5	5002	0	2700
15	Demo_mno_3	20	0	3	10	10	5	4002	0	2700
16	Demo_mno_3	30	0	4	10	10	5	2802	0	2700
17	Demo_mno_3	40	0	4.5	10	10	5	2602	0	2700
18	Demo_mno_3	50	0	5	10	10	5	2502	0	2700
19	MS	12	0	3	8	10	5	3500	0	7850
20										

A yellow arrow labeled '1' points to cell A18. A blue arrow labeled '2' points to the status bar at the bottom of the window, which shows 'Average: 1422 Count: 8 Sum: 11376'.

- 1) Next, type all the other parameters (eg. toolsize, clearance, speed, etc.) in different columns.
- 2) If required, scroll to the right side and modify all those parameters which were not visible.
- 3) If you do not know the correct value of any parameter, leave it unchanged.



# Save As



- 1) Save the data in the same file, using the command **File > Save As**.
- 2) Make sure that the file type is **CSV**.

## Tips

- G0xin reads nesting & cutting parameters from `C:\g0xin\materials.csv`.
- You can specify your own **[material & thickness]** by adding a new row at the end of the this file.
- Use numbers and simple alphabets [A-Z] only for specifying data in this file.
- Do not use **COMA** while specifying any data in this file.
- You can repeat a material name. You can also repeat thickness. But, **you can not repeat both** together.
- The spreadsheet software may ask you to confirm some details while saving a CSV file. That is normal.
- You can also edit this file in a simple word-processor, if you do not have a spreadsheet software.
- Once you use a material type row, do not change its parameters later. In such cases, add a completely new row in the file and modify the name of the material slightly.