

materialise
innovators you can count on



Materialise Robot 5.1

What's new

Topics

1. Extension of module “Quoting Tools”
2. New module “3D Nesting”
3. Other improvements

Extension of Module “Quoting Tools”

1/ Sub Nester

Materialise Robot can subnest a bunch of parts and extract their properties.

You can then use these properties to generate a quote based on the volume of a set of parts.

Volume quoting is possible

Operation Parameters

General options		
Nesting mode	Box	+
Freedom restriction	Fix bottom	+
Parts interval [mm]	5.0	+
Custom box size		
Size X [mm]	1.0	+
Size Y [mm]	1.0	+
Size Z [mm]	1.0	+

2/ Auto Placement

- ▶ Materialise Robot automatically places your parts on 1 or multiple platforms.
- ▶ The parameters available are similar to the ones in Magics.

Operation Parameters		
Part interval [mm]	<input type="text" value="10.0"/>	+
Platform margin [mm]	<input type="text" value="10.0"/>	+
Placement solution	<input type="text" value="First Possible Solution"/>	▼ +
Part placement	<input type="text" value="Translate and Rotate"/>	▼ +
Enable multi-platform placement	<input type="checkbox"/>	+
Only process added parts	<input type="checkbox"/>	+

New module “3D Nesting”

1/ Nest & Extract Build Properties

- ▶ Robot can nest your parts up to a specific density and extract its properties: build height, density and number of parts.
- ▶ The nester can nest parts on multiple platforms.

Multi-platform nesting is now available

Operation Parameters

Stopping criteria

Criteria type	Stop at first solution	▼	+
Target of nesting density [%]	8.0		+
Maximum nesting duration [min]	0		+

Placement options

Margin to sides [mm]	5.0		+
Part interval [mm]	5.0		+
Freedom of parts	Rotate 90° and translate	▼	+

Placement of big parts

Enable specific interval for big parts	<input type="checkbox"/>		+
Big part criteria [mm ³]	125000		+
Part interval [mm]	20.0		+

Extra options

Maximal used height [mm]	0		+
Avoid interlocking	<input checked="" type="checkbox"/>		+
Enable multi-platform placement	<input type="checkbox"/>		+
Only process added parts	<input type="checkbox"/>		+

Other improvements

Improvements 1/2

- ▶ The Folder Monitoring functionality can treat all the files in one subfolder as one group of files.
- ▶ You can process a file or a group of files using the context menu (right click)
- ▶ The quoting accuracy can be improved with estimation of the support based on the machine properties
- ▶ Materialise Robot can filter parts based on the percentage of thin surfaces
- ▶ Defects can be highlighted in the JPEG preview

Improvements 2/2

- ▶ The files that cannot be processed by Folder Monitoring are not deleted anymore
- ▶ The files that should not be processed by Folder Monitoring are automatically moved to the output folder
- ▶ The labeling is faster (for Streamics users)
- ▶ You can call e-Stage from a Robot workflow