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Standard DLP Build Processor 1.1

User Guide

Rev. 001

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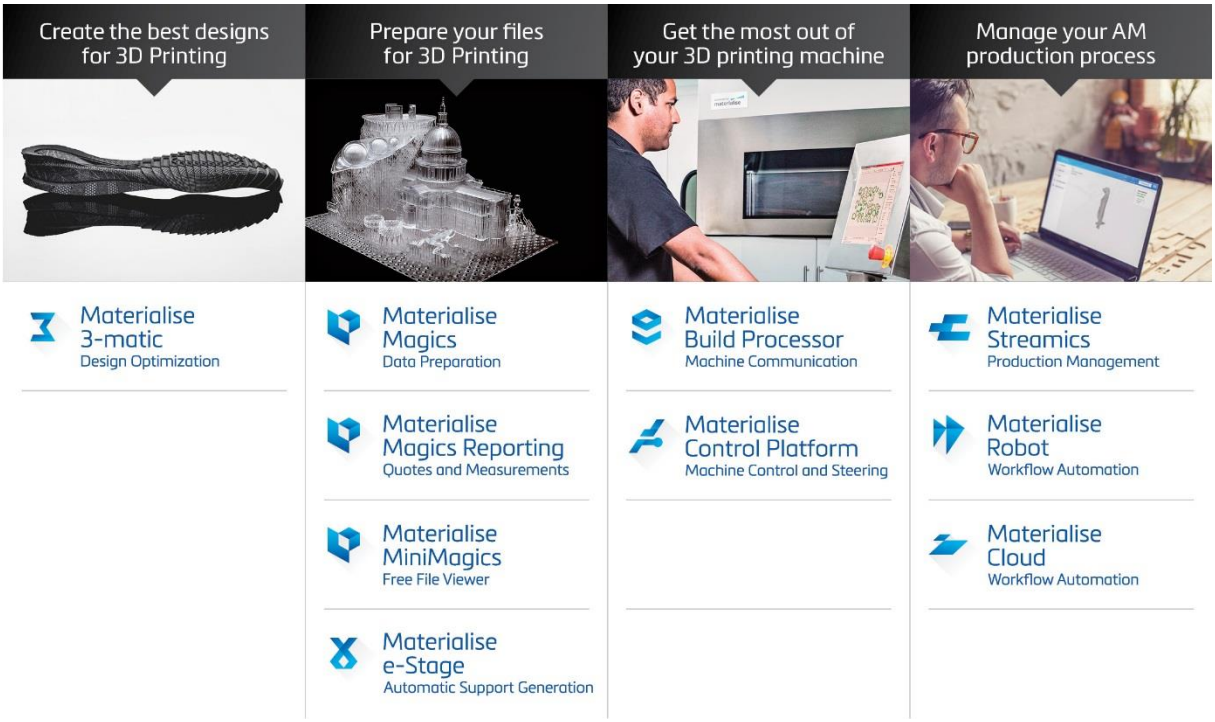
1 Introduction to Build Processors

Materialise works in close collaboration with DLP based 3D printer machine manufacturers to develop a customized and integrated solution, which allows you to get the most out of your DLP based machines and create parts with the highest quality possible. Our ***Build Processor Software*** can be considered as an advanced export function that bridges the gap between your digital build files and your DLP based 3D print machine, helping to ensure a smooth and trouble-free production of parts both in R&D and production environments.

How the Build Processor connects to a Machine to the Materialise 3D Print Suite, is visualized below:

The complete Materialise 3D Print Suite includes the following components:



2 This User Guide

Is valid for:

- The Standard DLP Build processor
- All OEM rebranded build processors derived from the Standard DLP Build processor (clones)

Will guide through all necessary steps in understanding:

- How to install and activate the Build Processor
- How to operate the Build Processor Manager
- How to handle the Build Processor from Magics
- How to set up the Build Processor processing profiles

And will also provide useful information on:

- How to setup parameters
- Frequently asked questions
- Typical error messages
- How and where to request for support

In the guide these message boxes will indicate:

Technical Requirement

These boxes appear throughout this guide and describe a technical requirement to ensure that the build processor works correctly. If you are not sure on how to attend to these, please contact your IT department.

Warnings / Notifications

These boxes appear throughout this guide and emphasize various warnings or important notifications. Many of these are linked to some of the more frequently asked questions regarding the workings of the build processor.

3 Setup

3.1. Prerequisites

Before installing the Build Processor

- Support

It would be a great help if you could contact us in case you experience any unexpected software behavior. For all problems, questions or suggestions regarding the Build Processor please contact your local Materialise office (see chapter 12: Support).

- Minimum System requirement

  - ✓ Windows® operating system version 7
  - ✓ Windows® operating system version 8
  - ✓ Windows® operating system version 10

- Software installation Packages

  - ✓ Materialise Magics software version 21/22
  - ✓ Standard DLP Build Processor 1.1

- We hope you will enjoy the Build processor in your DLP/LCD based 3D printing applications.

3.2. Installation

Warnings / Notifications

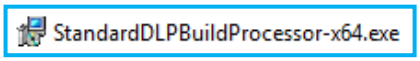
This chapter is only valid for customer who are installing the build processor as a separate product. When the build processor is bundled with other products into a single installer you should follow the installation guide of the bundled product.

Technical Requirement

Please note that administrative rights are required to install the software.

Build Processor

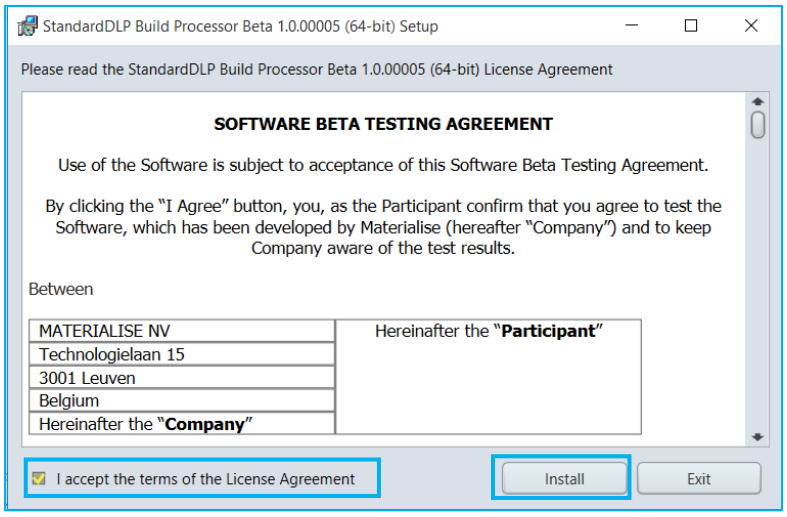
1. Double click the Build Processor bundled installer:



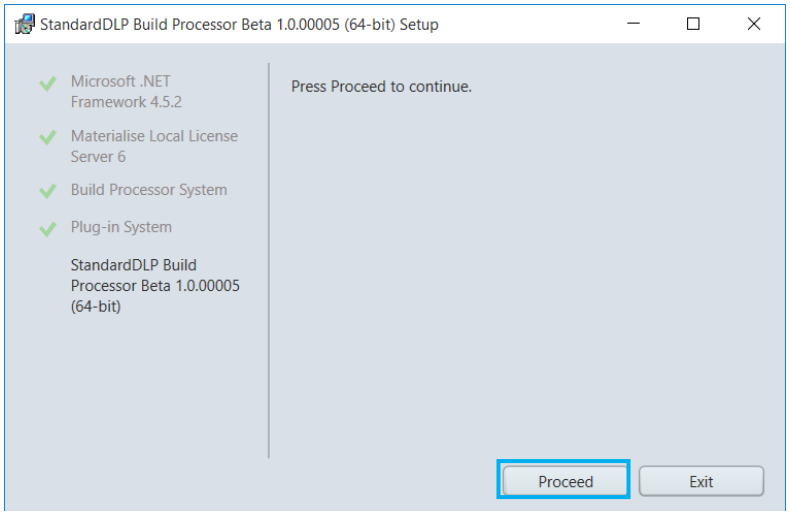
This is a 'bundled installer', meaning that it is responsible for installing all the different necessary components to run the BP. These include:

- Microsoft ®.Net Framework 4.6.2
- Materialise Local License Server 6.9
- Build Processor System 2.0
- Standard DLP Build Processor 1.1 or similar OEM rebranded DLP Build processor

2. Read the license agreement, accept it and hit "Install":



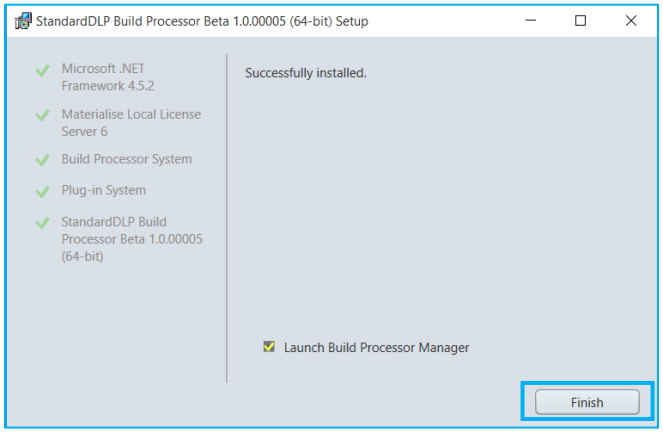
3. The following screen will appear, informing you about the components that are already installed on your system and those that will be installed during this installation. In the following dialog hit "Proceed":



indicates that the component is (already) installed on your system.

When no such icon preceeds the component name, it means that it will be installed upon clicking *Proceed*

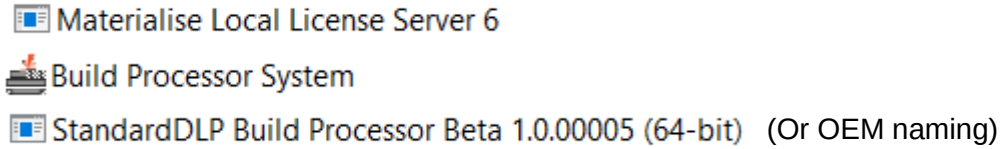
4. The Build Processor System, BP, and other components will be installed or updated. A final screen will appear showing you the overall result of the installation process. Pressing the "Finish" button will close the installation window.



Technical Requirement

If prompted to reboot your system after installation, please do as such.

5. Before using the BP, please verify that all components have been correctly installed by checking the Programs and Features list on your system:



(Or OEM naming)

Magics

Please refer to the Magics User guide for detailed installation instructions.

3.3. Licensing

For instructions on how to (re)active your Materialise software licenses, please consult:

http://software.materialise.com/frequently-asked-questions-materialise-software

Once the Materialise Magics software and the Build Processor have been successfully installed, you will need to license it. The BP performs a license check when:

- Processing and uploading a job
- Calling BP functions from within Materialise Magics or Streamics software

You can either license your software locally or use a floating license server to supply a license for you. This section will quickly describe these two different models of licensing.

Working with a Local License

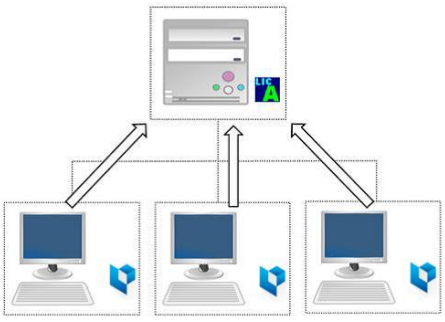
Local Licensing is the traditional system with the license stored locally on each computer (see figure below). The software can only be used on the computer for which the license is issued. However, more than one session of Materialise Magics software & Build Processor can be opened on a single computer.

Local PC(s)

Working with a Floating License

The licenses for Floating Licensing are stored on a central computer somewhere on the company network (Server PC). This computer has the Materialise Floating License Server installed to manage all the licenses available on the network.

When a session of Materialise Magics software and Build Processor is started on a computer, the software will contact the Floating License Server via the network. When there is a license available, the Floating License Server will assign a license to Materialise Magics software & Build Processor allowing it to open.



Server PC

Local PC(s)

However, if all licenses are in use, Materialise Magics software & Build Processor will not open. The user must wait until elsewhere on the network an open session closes, thus making a license available.

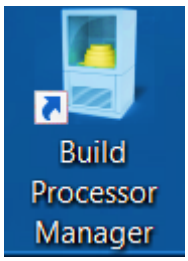
You can install Materialise Magics software & Build Processor on every PC connected to the company network, but the number of open sessions is limited by the number of floating licenses available.

4 Build Processor Management

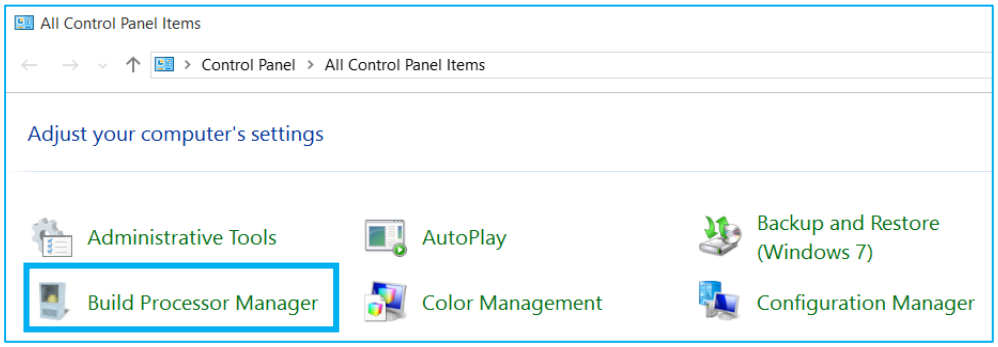
4.1. Access the Build Processor Manager

The Build Processor Manager is the main application for managing and configuring your 3D printers and their settings and profiles.

Therefore, you need to navigate to the **Build Processor Manager**, which you can find as a desktop shortcut icon:



by going to your Windows® operating system *Control Panel* and clicking on Build Processor Manager

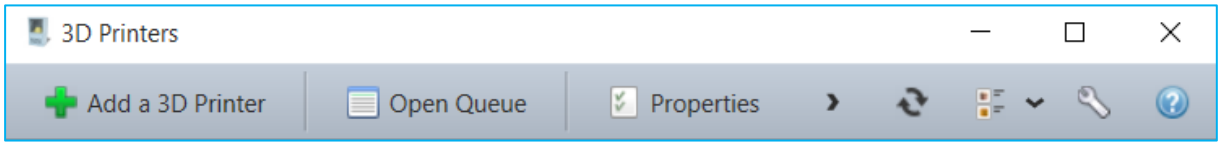


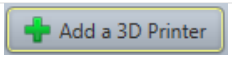
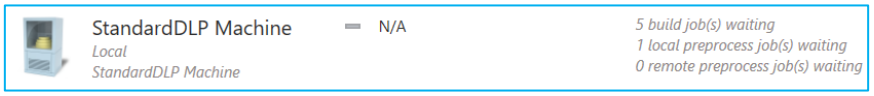
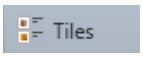
by double-clicking the tray icon to the right of your taskbar

Note

Depending on your Windows® operating system settings, this icon might not be permanently visible and hidden behind the arrow shown in the screenshot above.

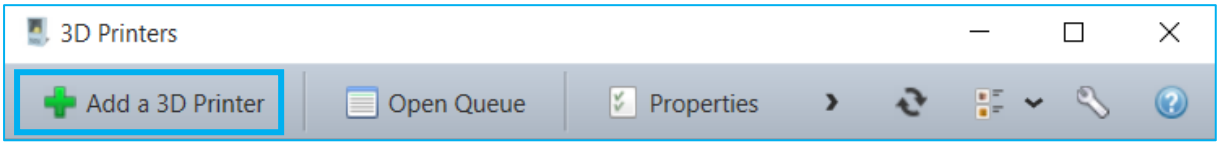
This BP Manager Toolbar contains the following control buttons:



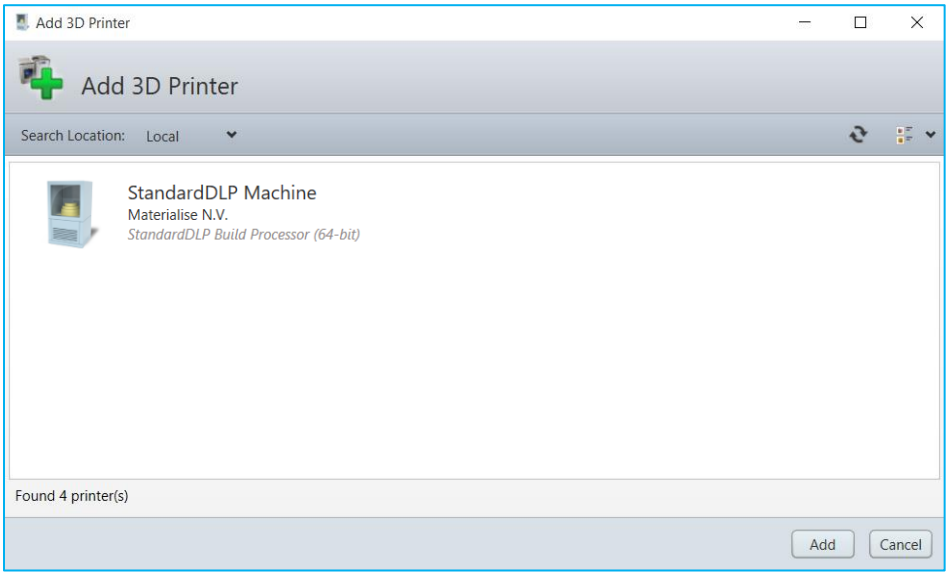
	This button is used to add a new 3D printer (local or network) to your system
	Refresh the list of installed printers.
	Change the way in which the printers are shown in the Build Processor Manager. Shows all added printers on a list. Printers can be sorted by *Name, Status, Queue Status, Build Jobs, Description, Printer Location, Manufacturer, Model and Network Location* by left-clicking the according to entry in the menu bar. Combination of *Details* and *Tiles* option:  StandardDLP Machine — N/A Local StandardDLP Machine 5 build job(s) waiting 1 local preprocess job(s) waiting 0 remote preprocess job(s) waiting An icon and information regarding the printer is shown but without sorting option.  Default alignment of all added printers. Printers are shown as separate big icons including their *Name*, *Printer Location,* and *Status*.
	Open the Build Processor System options window
	Opens a menu selection: Generate a report. This tool will assist you in collecting relevant information about the status of the BP System. No personal information is collected; you can verify the contents of the report by opening the generated Cabinet (.cab) file. Please see section 12.2: Create a Report File on page 55 for information on how to transfer the .cab file to Materialise. Provides access to the BP User Guide Opens new window containing information about the Build Processor system version and Copyright of Materialise.

4.2. Add a Local BP Machine

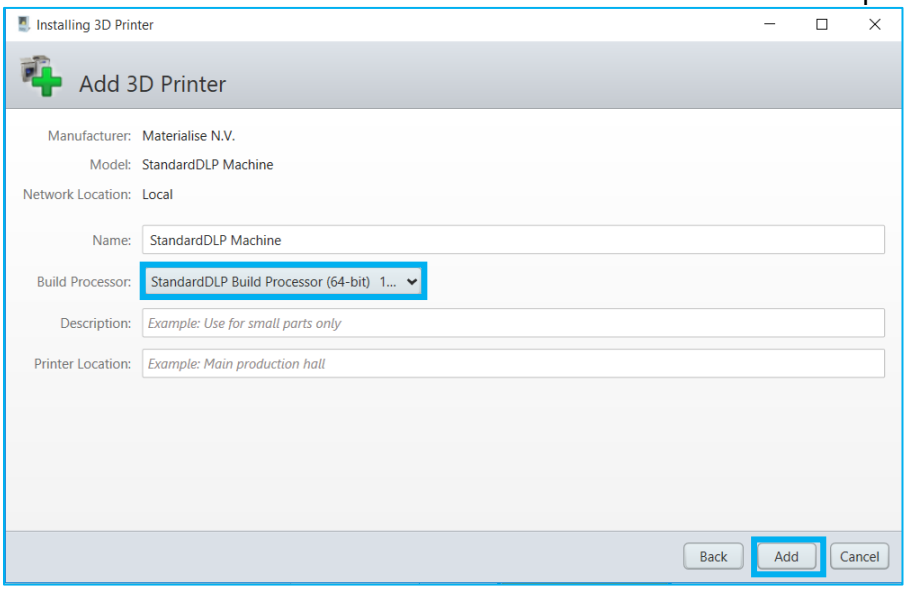
1. Open the Build Processor Manager. Click the “Add a 3D Printer” button in order to register a device in the System. When no machines have been installed yet, this button will also be visible in the center window region.



2. The following dialog will appear. Choose the machine type of which you want to register a new instance and hit the “Add”-Button:



3. A window will appear, allowing you to define your new printer properties. Please check if the correct version of the BP is selected in the Build Processor drop-down menu.



Note

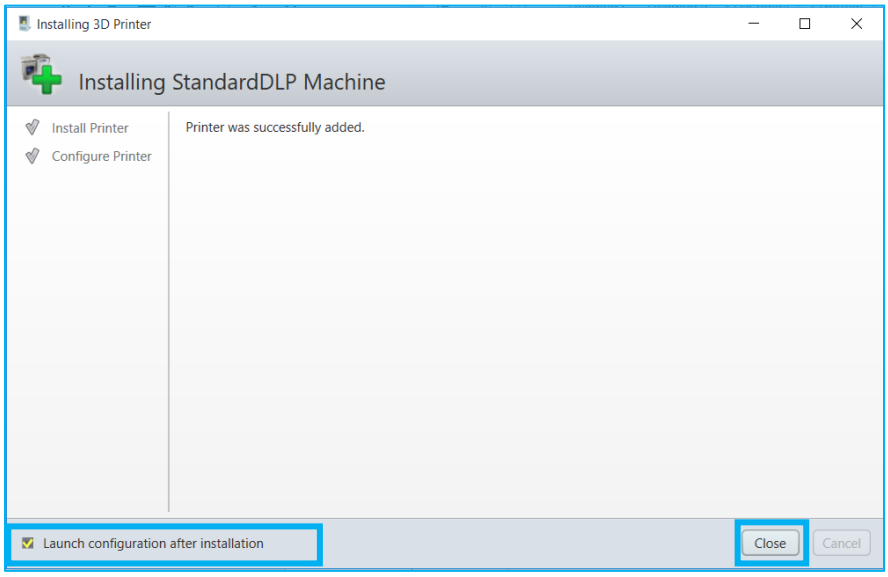
Most of the printer properties can always be changed afterwards, in the Printer Properties window.

The following printer properties can be set

Name	An appearance name for the printer
Build Processor	Select the appropriate BP driver version
Description	A description of the printer's main functionality (optional)
Printer Location	A description of the printer's physical location (optional)

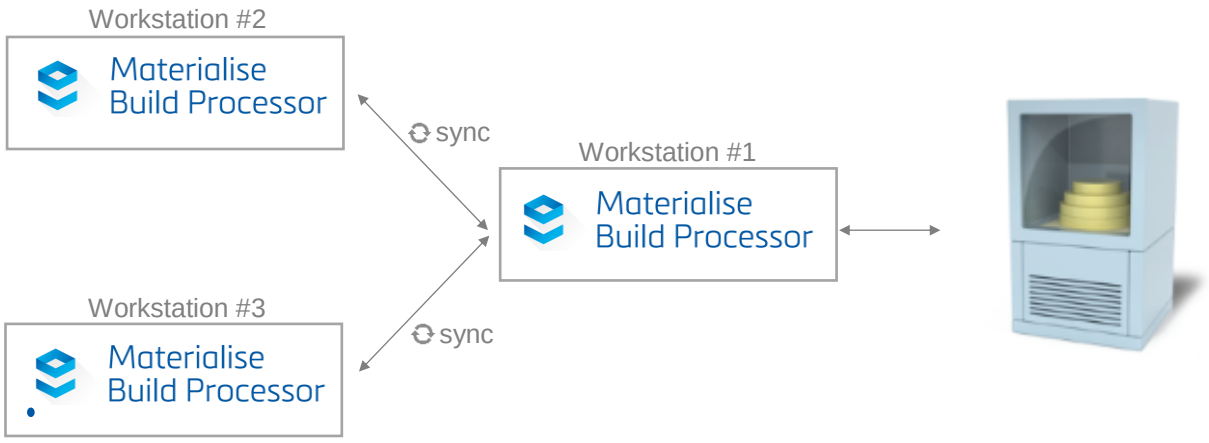
Click the "Add" button to proceed.

4. The "Launch configuration after install" option is enabled by default and will take you to Build Processor Configuration window after pressing the Close button.



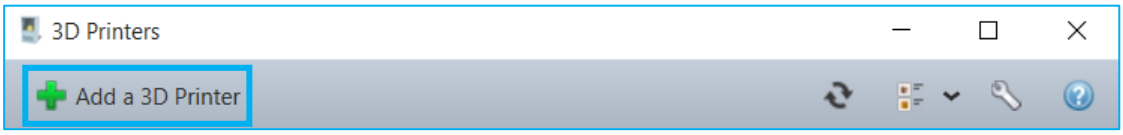
4.3. Add a Network BP Machine

With the Build Processor System, it is possible to work with network machines. This allows multiple users or workstations to connect to the same Build Processor machine, sharing and synchronizing its settings, profiles and job queues.



Adding a network BP printer is similar to adding a BP local printer. The only difference is the screen where you select your BP printer:

1. Open the Build Processor Manager (on Workstation #2 in the above diagram) and click the “Add a 3D Printer” button

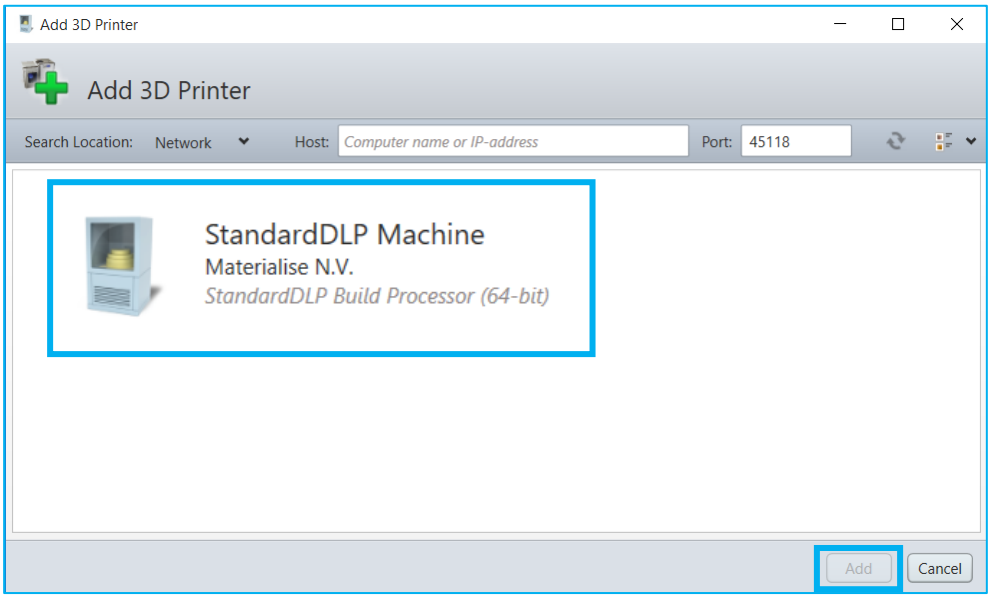


2. Pick Network from the search location drop-down list

3. In the Host entry field, enter the ‘Network Location’ of the system which has the local printer installed (Workstation #1 in the above diagram). The name of this ‘Network Location’ can be found in the Printer Properties (see also section 4.6: Access the BP Machine Properties on page 18) window of the network printer. Next, to this field, you can define the port to be used for communication with the specified ‘Network Location’ – this is 45118 by default.

4. Press the refresh button to search for printers in this network location

5. Select the desired network printer(s) and click the Add button to proceed. Multiple printers can be selected (using CTRL) and added simultaneously

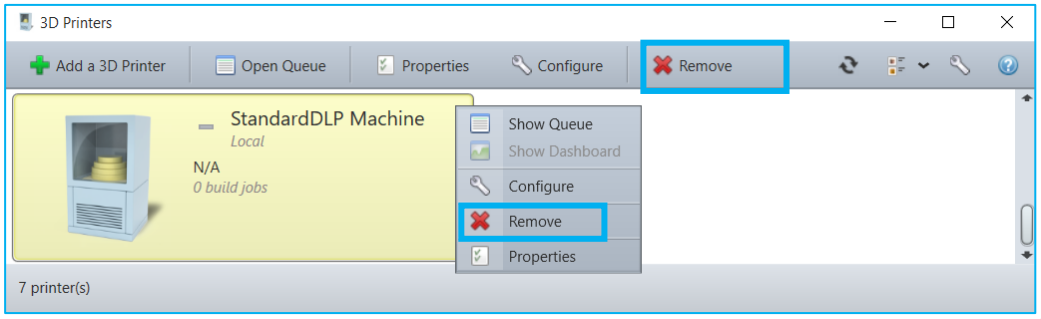


6. The following steps in the wizard are identical to step 3 onwards in section 4.2: Add a Local BP Machine on page 13.

4.4. Remove a BP Machine

In order to remove a machine, you can

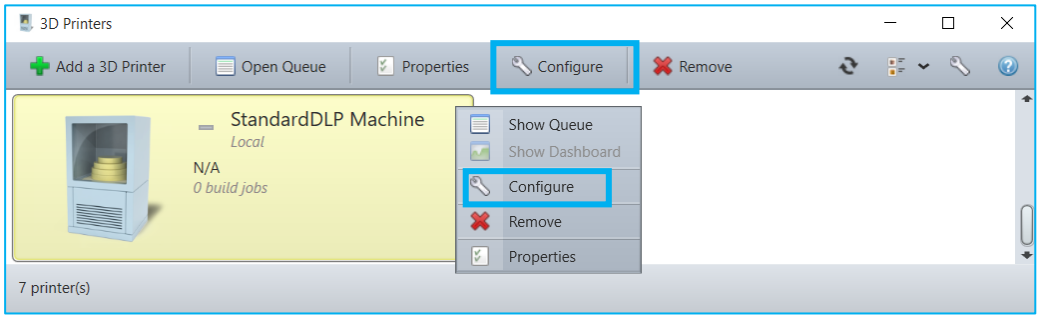
Select the printer you want to remove and click the “Remove” button in the BP Manager Toolbar
Right mouse click on the desired printer and select Remove



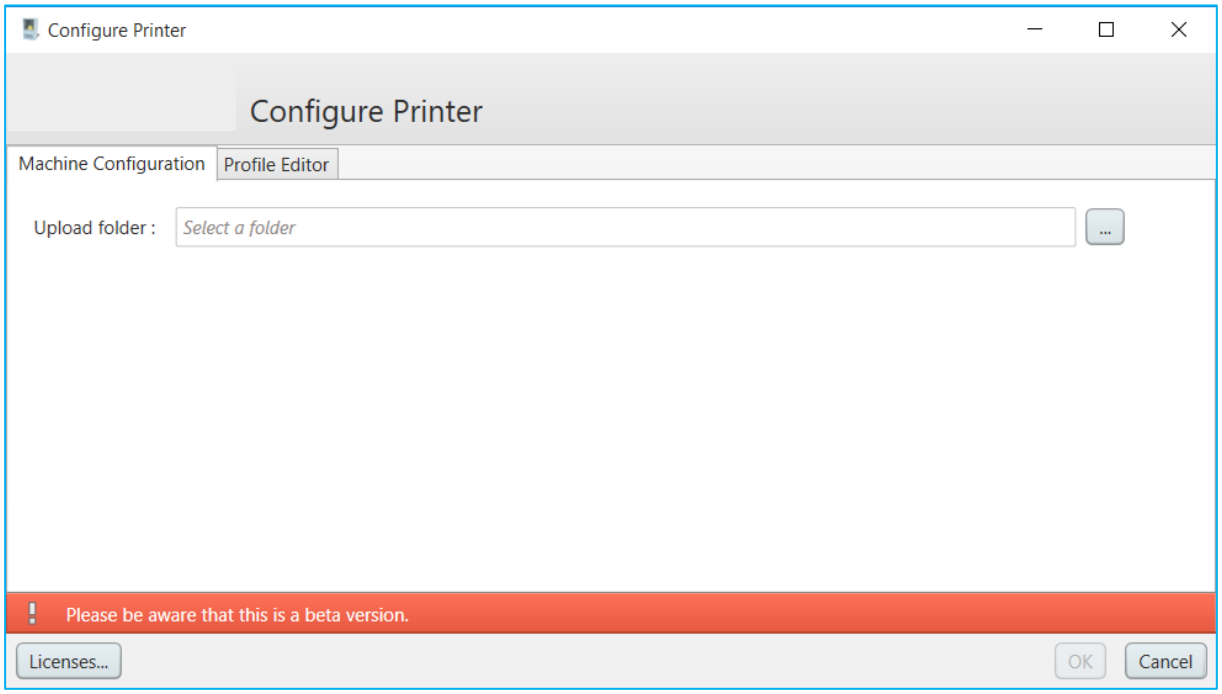
4.5. Configure a BP Machine

The Processor Configuration window can be accessed by either

Selecting the desired printer and clicking the Configure button
Right mouse click on the desired printer and selecting the Configure option



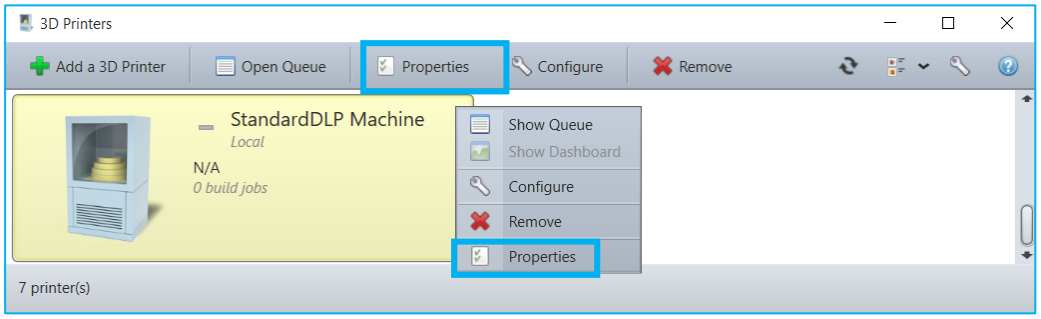
The Configure Printer window allows establishing a connection between the BP and the machine, as well as consulting the available profiles and parameters. More details can be found in chapter 5: Build Processor and Machine on page 23.



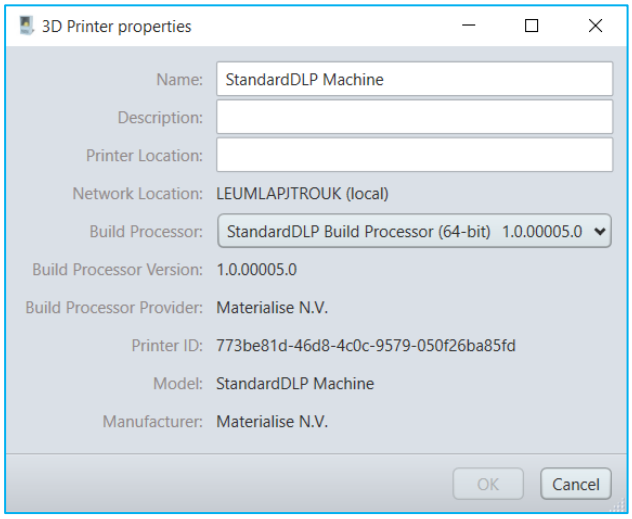
4.6. Access the BP Machine Properties

In order to enter the 3D Printer properties window, either

Select the desired printer and click the *Properties* button
Right mouse click on the desired printer and select the *Properties* option



The 3D Printer properties window contains all details of your BP printer. The *Name*, *Description,* and *Printer Location* field of the printer can be arbitrarily changed.

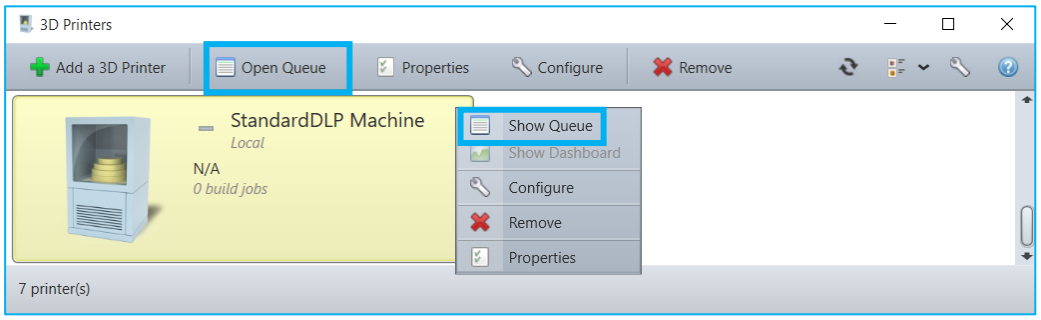


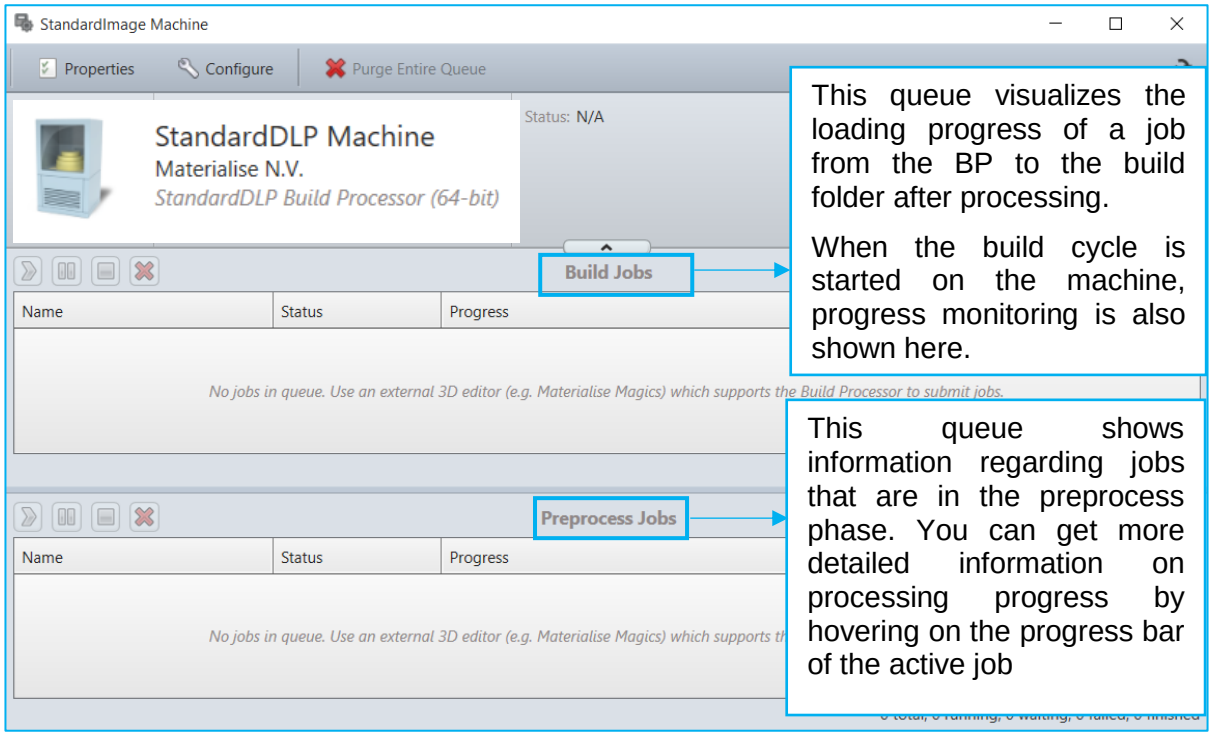
4.7. Access the BP Machine Job Queues

You can access the list of jobs associated with a given printer by either

Selecting the printer in the Build Processor Manager and then clicking **Open Queue** in the toolbar. The queue window will then show up
right mouse click on the desired printer and selecting the **Show Queue** option
double-click on the desired printer

The 'Printer Queue' window gives an overview of all the jobs processed by the Build Processor. There are two job queues: 'Preprocess Jobs' and 'Build Jobs'.





The columns of these job queues are customizable (with a right mouse click on the column headings) and can display different information for each job.

The right click options for each job are the following:

	Start job	(Re)start the job (after pausing)
	Pause job	Pause the job's current progress

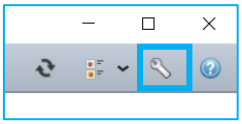
	Cancel job	Cancel the job's current progress
	Remove job	Delete the job from the job queue, any relevant data from machine software side will remain intact.
	Remove job…	If a job hangs in *Cancelling* or *Deleting* state after asked to be removed (e.g. job owner is a remote client that is not available), this option removes the job regardless.
	Open Upload Folder	Open the folder where the processed job is sent to

Note that the Standard DLP Build Processor has a 'passive role' once the job has been sent to the machine. In other words: it does not have any influence on an active build cycle. After uploading to the Machine, only the corresponding BP job *entries* can be manipulated (not the actual job or build cycle on the Machine).

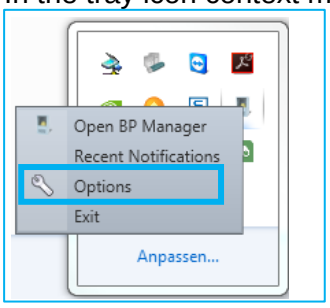
4.8. Change the BP System Storage Location

By default, the Build Processor System stores its configuration and temporary processing data in a specific directory located in the Windows® operating system partition. You may choose a different directory if you wish to. To do that, you need to bring up the options dialog first:

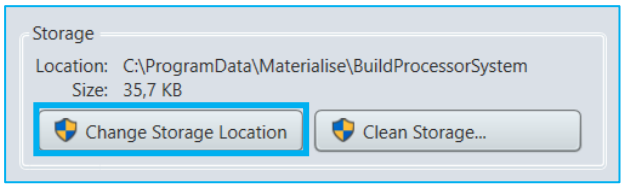
In the Build Processor Manager, click the tool icon:



In the tray icon context menu, select the entry *Options*:



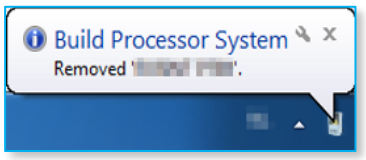
This will bring up the Options dialog. In that window, click *Change Storage Location*. A dialog will pop up, allowing you to change the Build Processor System storage location.

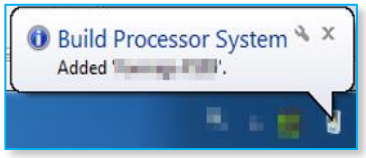


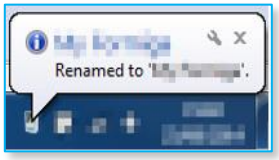
4.9. Configure Tray Notifications

Whenever the status of a build job or printer changes, you will be notified via tray callouts as shown below:

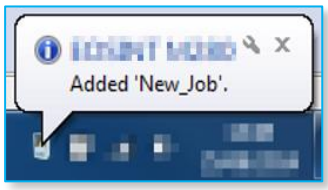
The Tray Icon is able to provide printer notifications:

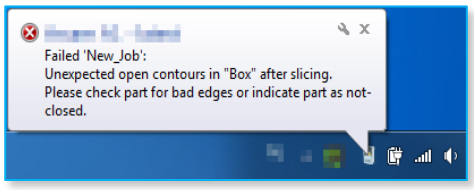


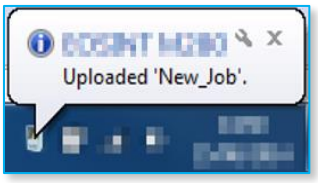




And job notifications:

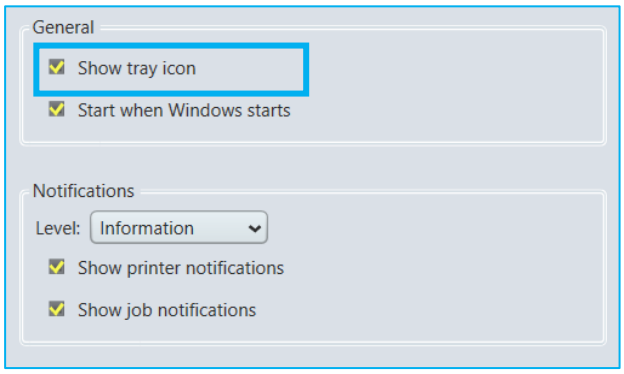






Clicking on a pop-up message will display the corresponding Build Processor window.

To configure the Tray Icon and its properties, go to the Build Processor System Options which is accessible via the BP Manager Toolbar via the right-click menu of the Tray Icon itself. See also section 0 on page 21 on how to enter the BP Options menu.



5 Build Processor and Machine

The Build Processor is the component that bridges the gap between the Materialise Magics 3D print suite (including Magics and Streamics) and the machine. The architecture of this connection is illustrated below:

In the Build processor framework the machine representation is in most cases virtual and does not represent a real link with the machine however in some cases a real machine link can be present. In such a case the machine representation corresponds to a real machine and the build queue will represent the real progress on the machine.

Note

No uploading to a physical machine is envisioned in the Build processor. Uploading a job to the machine/printer in the build processor means moving the job from the preprocess to the build queue and copying the job folder/file to the upload directory specified in the Configure Printer dialog.

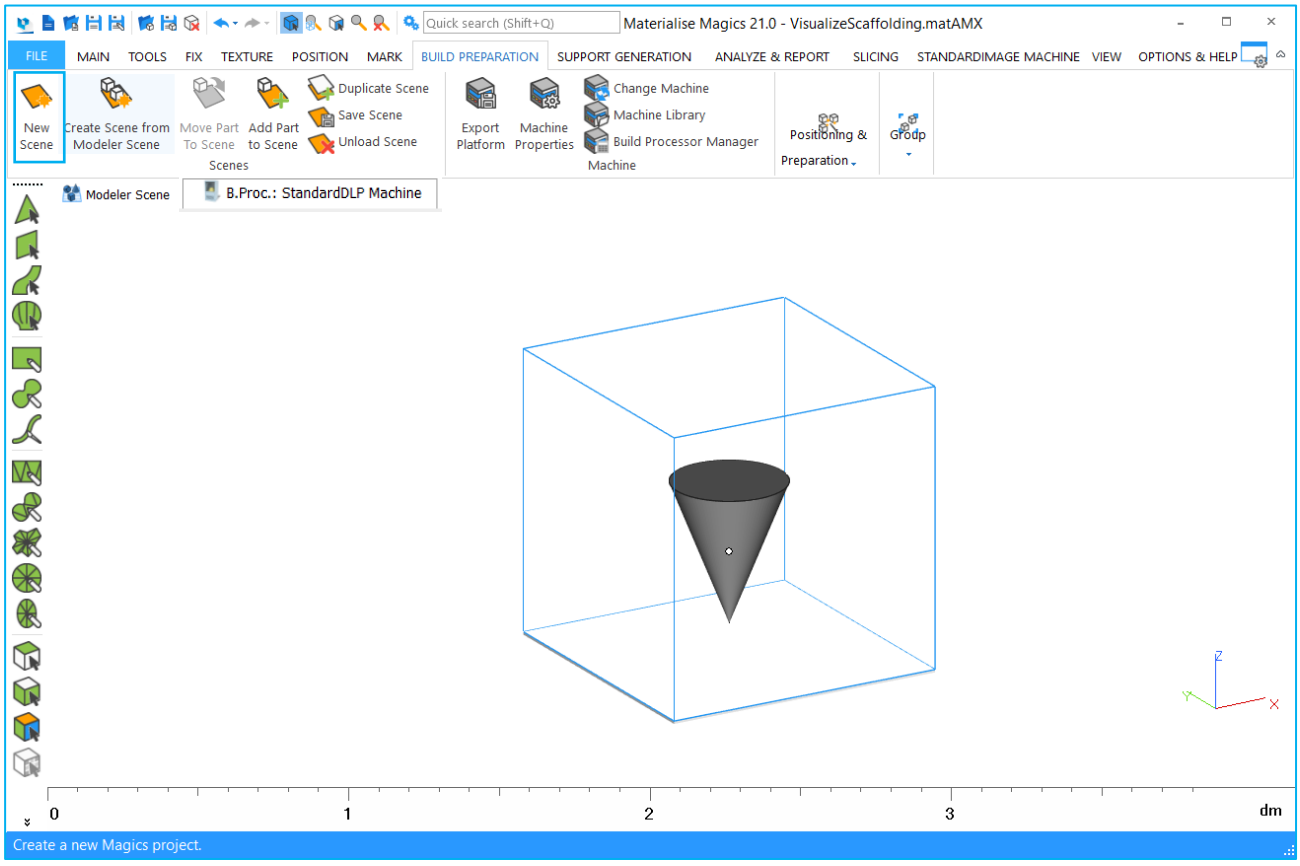
6 Build Processor and Magics / Magics Print

This section will guide you through a typical workflow, using the Materialise Magics software.

Note that it is required to have a Build Processor Machine added (see Chapter 4 on page 11) and connected to the Machine (see Chapter 5 on page 23) before proceeding.

6.1. Create a machine scene

In Materialise Magics software, go to the Build Preparation toolbar (Magics) or Basic flow toolbar (Magics Print) and click New Scene. (Screenshot is from Magics)



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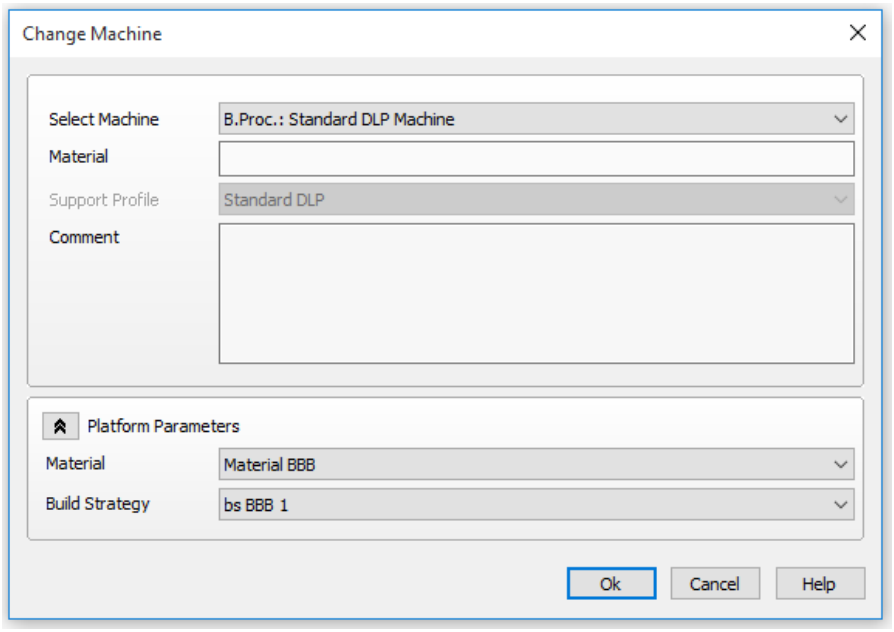
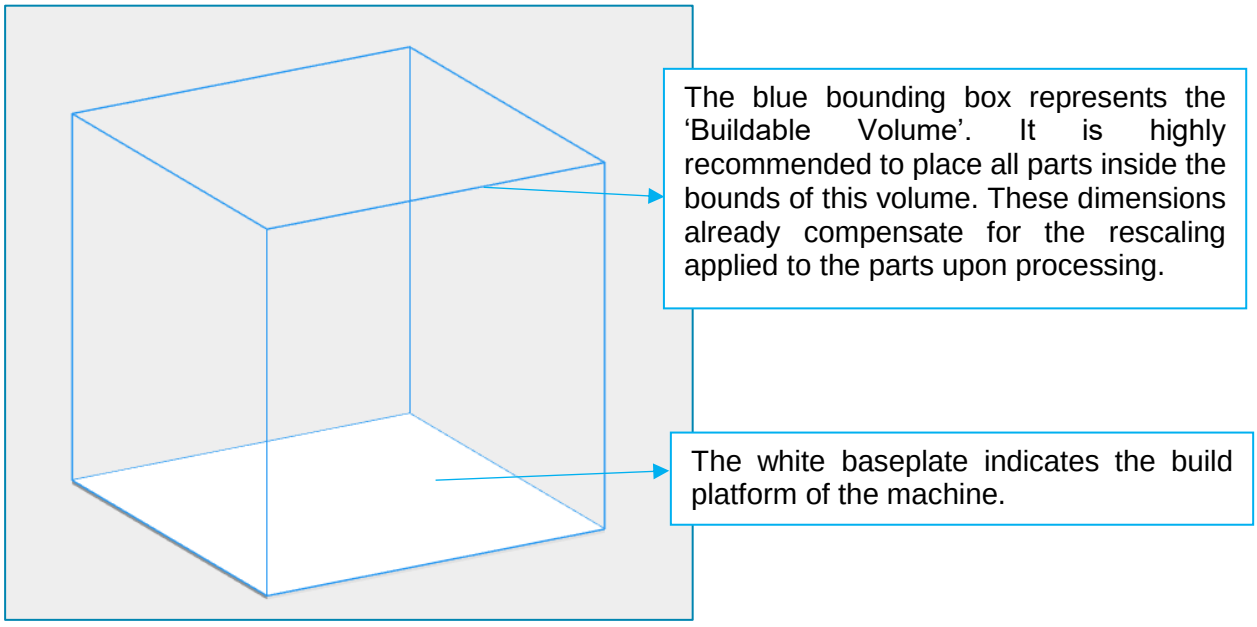
A Change Machine dialog box will appear, where you can choose *B.Proc: Standard DLP Machine Printer** to load a platform using your printer's BP.

Based on loaded geometries, a Build Strategy can be selected during machine selection.

Selection of a material is not available during machine selection.



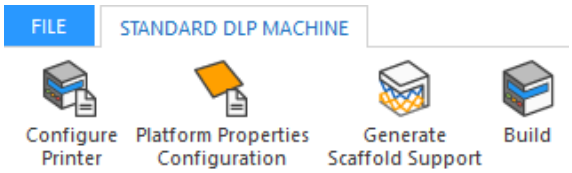
The platform will now appear in your Materialise Magics software workspace. Note that all platform sizes are automatically retrieved from the Machine, and visualized as shown below:



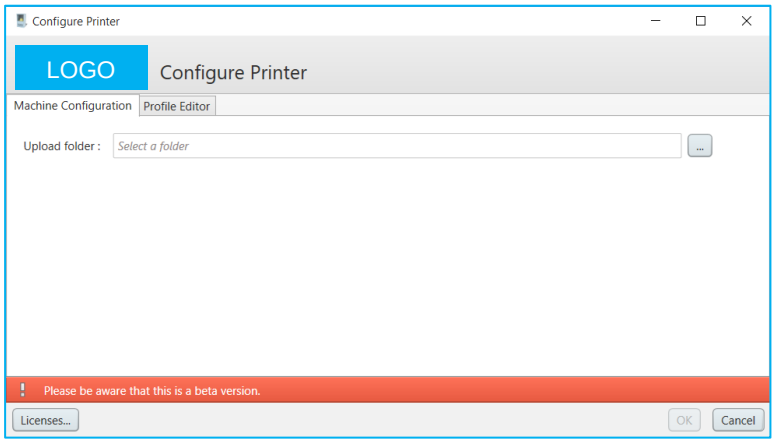
You can import, fix and orientate all necessary parts as you normally would, followed by the usual nesting operations.

6.2. The Machine Toolbar

When working in a BP scene in Magics, the toolbar shown below is made available:

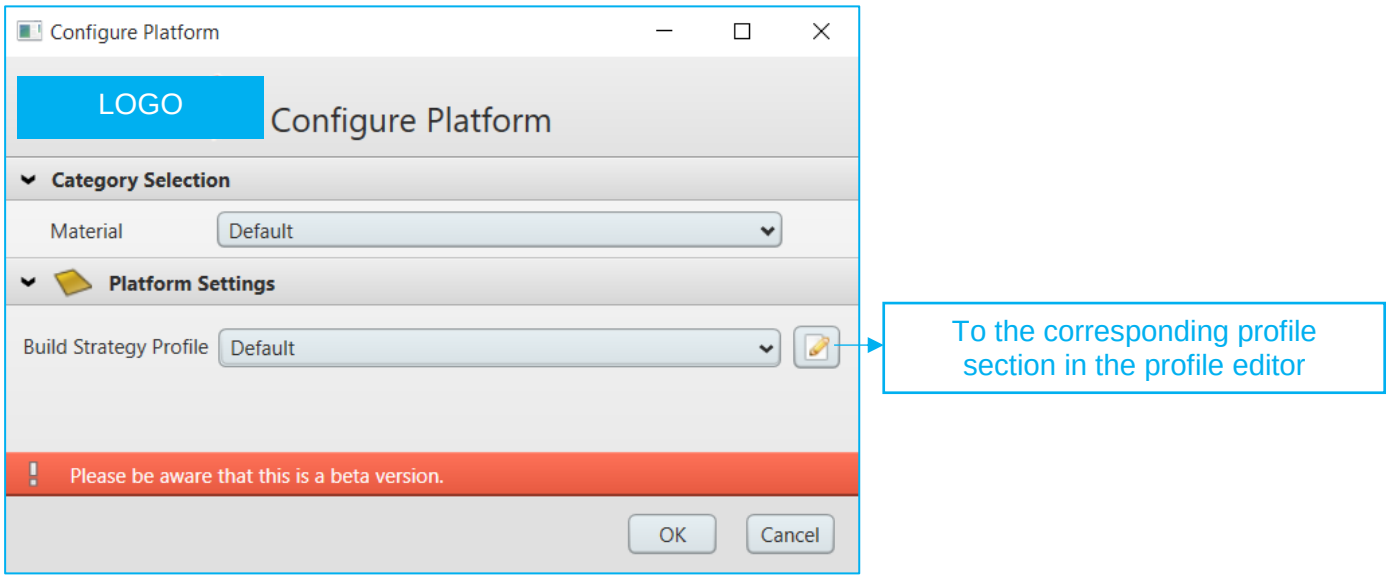


Configure Printer



With the configure printer dialog you can navigate to the profile editor and the local license server. You can also assign an upload folder that will be used to store your build folder/file when a job is processed in 3D build mode

Configure Platform

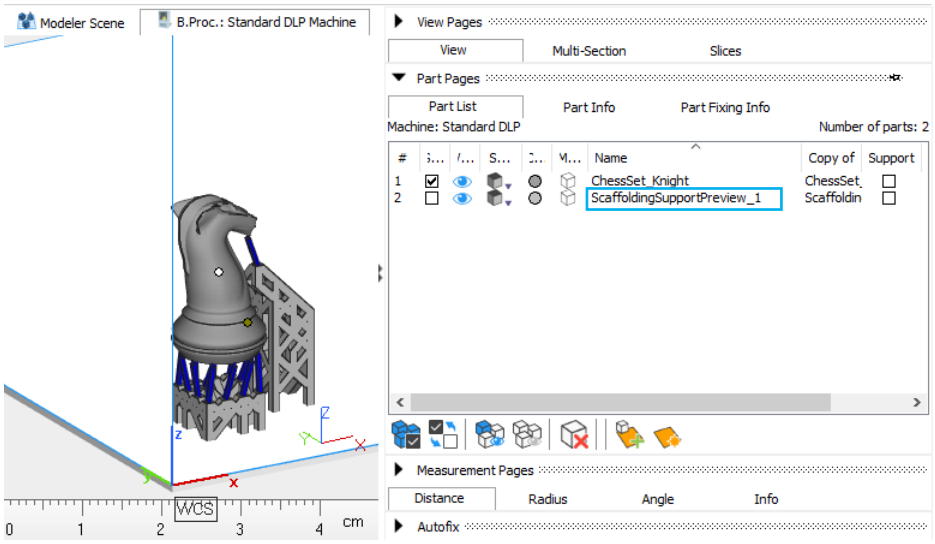


Using the Configure Platform button, you can assign the Preslicing, Slicing and Build strategy profile to your current build platform. Note the available profiles and corresponding parameters are defined by the Machine.

Generate Scaffold Support

Use “Generate Scaffold Support” button to generate scaffold support preview stl.

The generated preview stl will appear in an active Magics scene.

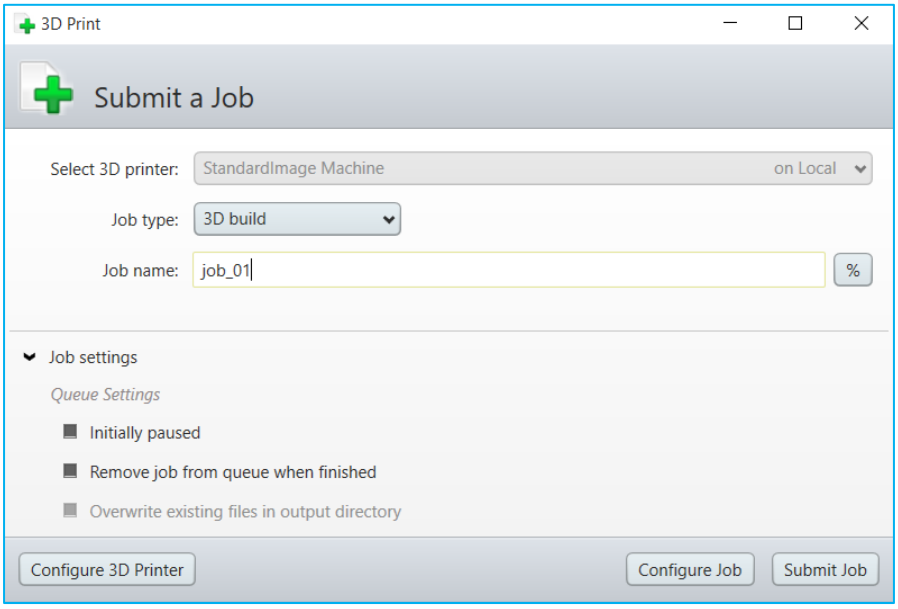


Notification

Scaffold support preview stl is not a printable stl, and cannot be used with another platform.

Build

Use the ‘Build’ Button to launch the user interface for submitting a job from Magics to the Build Processor (and subsequently the Standard DLP Machine). You will be shown the following dialog:



This window allows you to set some general build settings, specific job settings and eventually submit your build job for further processing. The dialog consists of three different sections:

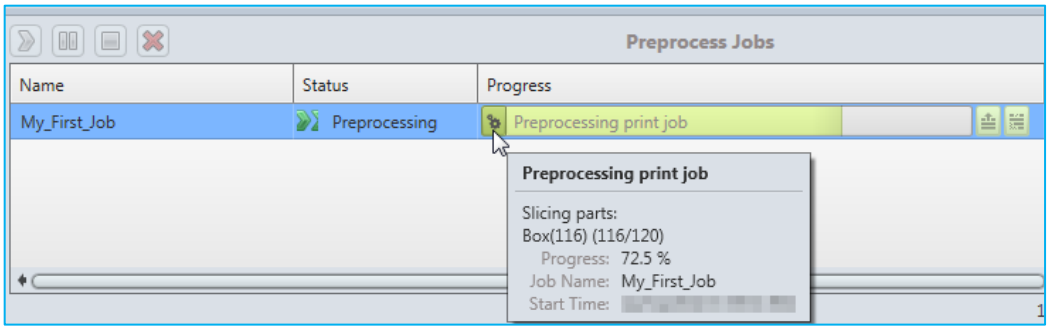
General build settings
Job settings
Control buttons

6.2.1.1 General build settings

Select 3D printer:		Shows the selected printer (typically limited to the one that was chosen when loading the platform)
Job type:	3D build	The build will be processed by the BP, followed by a job loading action directly to the Machine.
	Preprocess Only	Allows you to perform processing only and sending the output to a custom output folder rather than immediately to the Machine.
Job name:		This name will be associated with this particular job throughout the rest of the workflow:
	%	This button allows adding tags to the job name (such as current date) which will be resolved upon job generation

6.2.1.2 Preprocess Mode

In preprocess mode the job will be processed and stored in the location defined in the submit job dialog. The progress of translating the input build platform to a job folder/file is shown in the 'Preprocess Jobs' queue of the corresponding Build Processor machine:

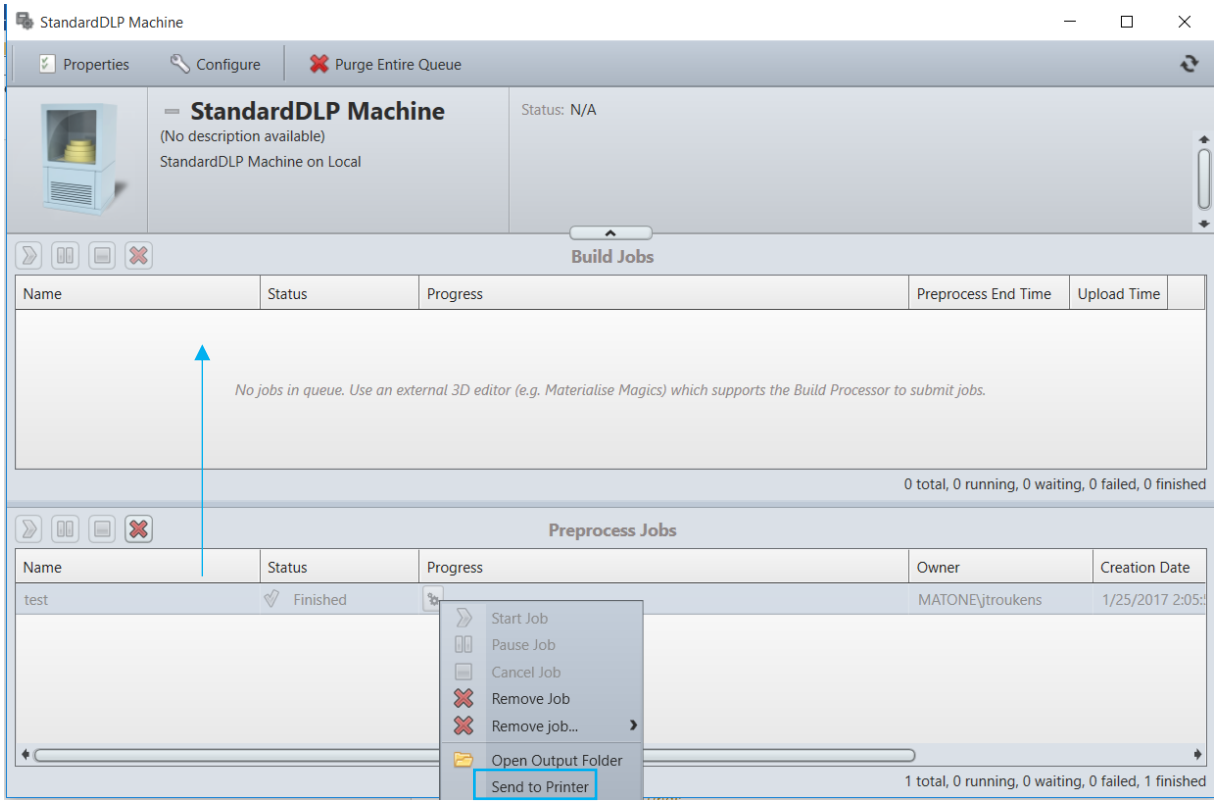


6.2.1.3 Build mode - Load to Machine

Once the job file has been calculated, it can be sent from the BP directly to the Machine. This can be done via:

- The 'Send to Printer' option in the right-click context menu of the 'Preprocess Job' entry
- Automatically, in case the default '3D Print' job type has been chosen in the Submit Job window – job settings

This will promote the job entry from the 'Preprocess Jobs' queue to the 'Build Jobs' queue, where the Load and Monitor interaction with the Machine is initiated



6.2.1.4 Job settings

The visibility of this menu can be toggled by clicking the ⌄ arrow button. It is hidden by default. These advanced settings allow adjusting the way in which the BP starts or ends the processing operation of the job (eg: pause initially or remove after completion).

Control buttons

Configure 3D Printer — Open the *Configure Printer* Window for the currently selected printer

Configure Job — Open a window that provides an overview of the current job configuration. It is still possible at this point to change these settings if necessary.

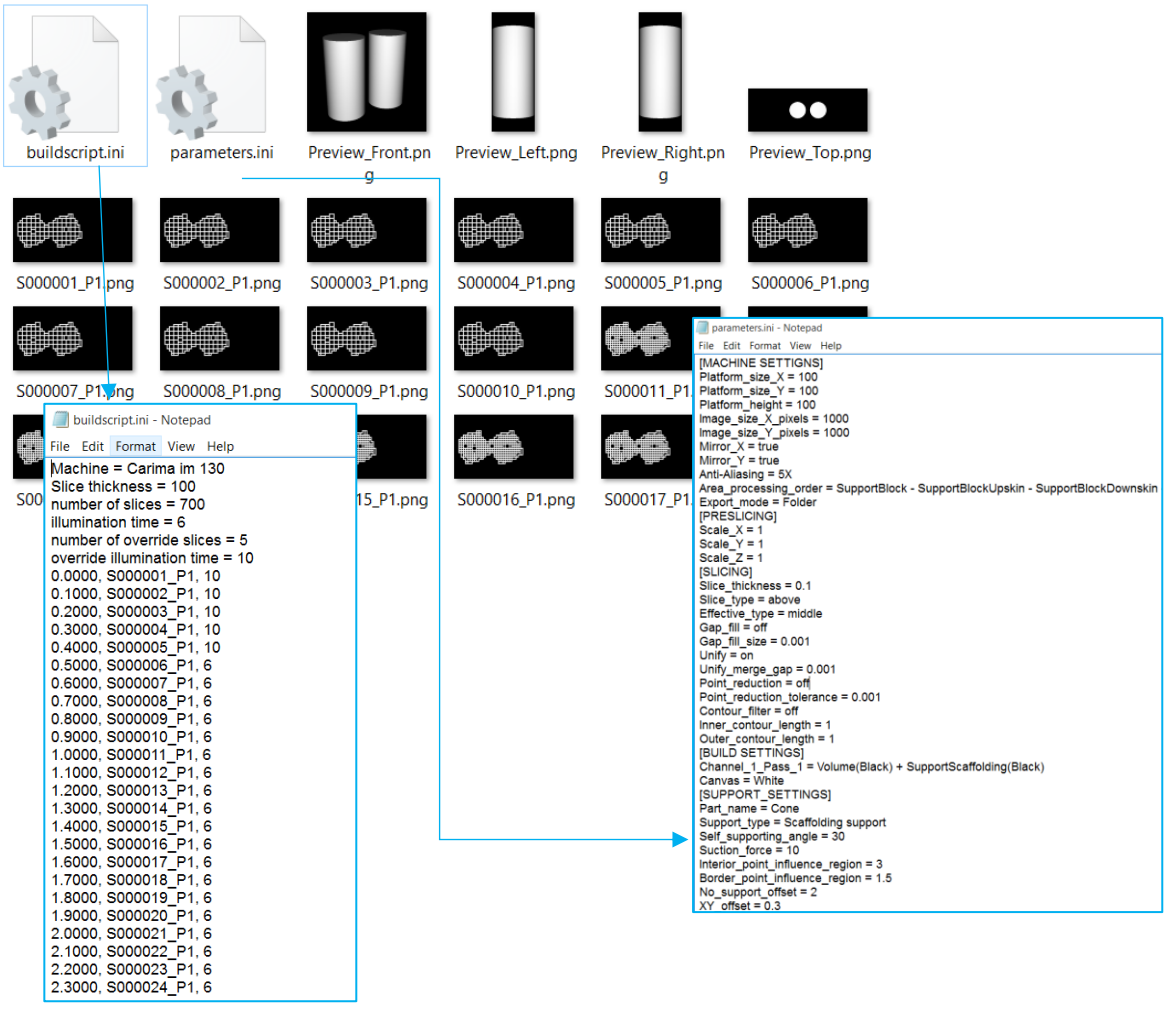
> **Note**
>
> Any changes made at this point will be taken into account when submitting the job, but will not be saved back to the Materialise Magics software session.

Submit Job — Submit the job to the Build Processor for processing and loading to the machine. A message will appear informing whether the job was successfully sent

6.2.1.5 The Build Output

The following folders and files can be generated by the BP after successfully pre-processing the job.

Job file	A zip file that holds all necessary files to build a part on a DLP/LCD based machine.
Parameters.ini	Summary of all settings used to process the input platform
Buildscript.ini	A file describing which images need to be processed on which layer height and which pass.
Preview Images	Set of png's images showing the build platform from different angles (left, right, front, top)
Slices Images	Set of slices as png images
Slices	Slice *.slc files for parts and supports



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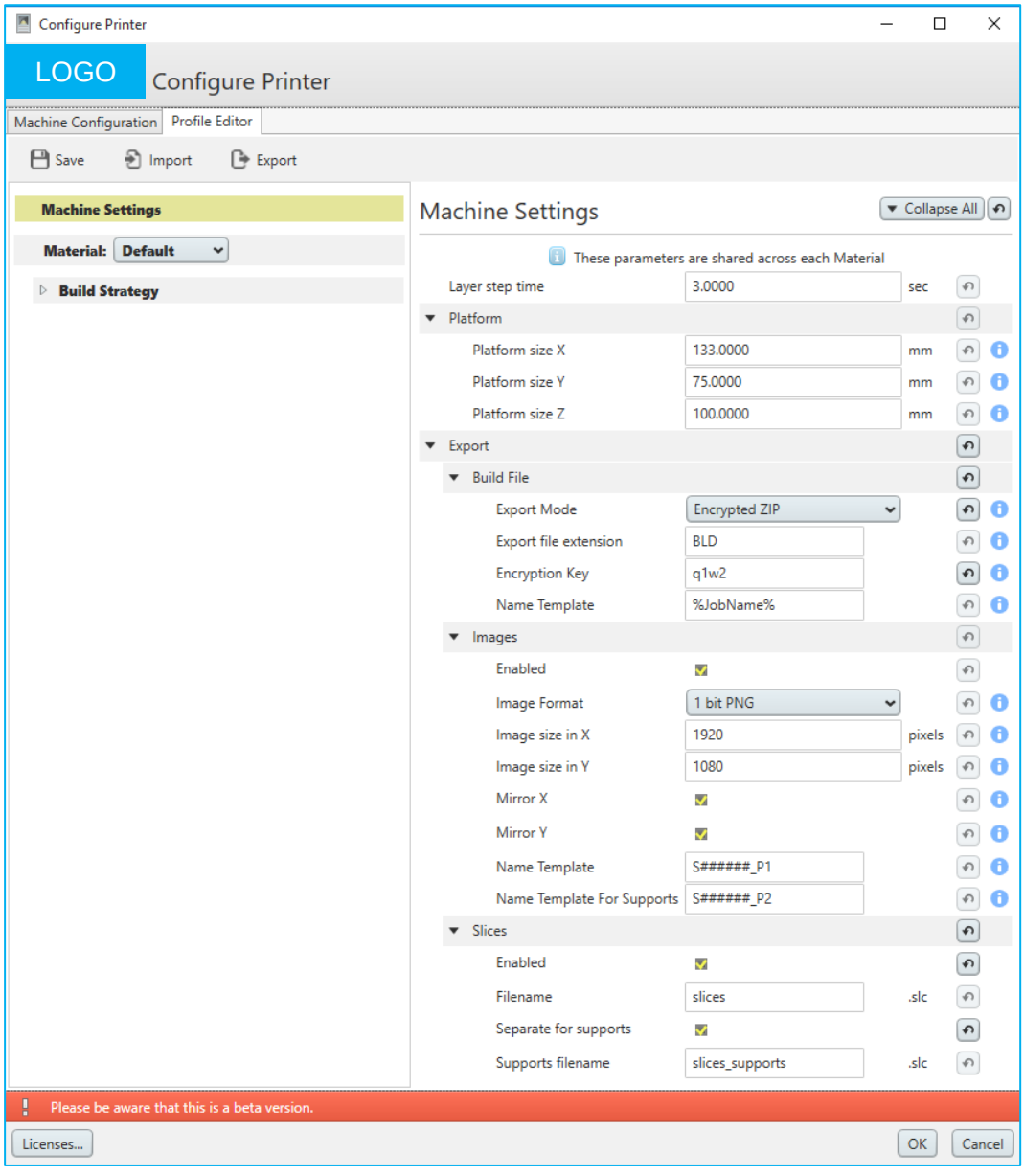
7 Build Processor Setup - Profile Editor

7.1. Machine Settings

Notification

The machine settings section is only available in the Standard DLP Build processor. For all rebranded DLP build processors the machine settings section is being replaced by predefined machines in the build processor manager with specific platform and image settings suited for that specific machine.

The machine options section groups all settings that are specific to a specific 3D printing machine. This section does not have profiles.

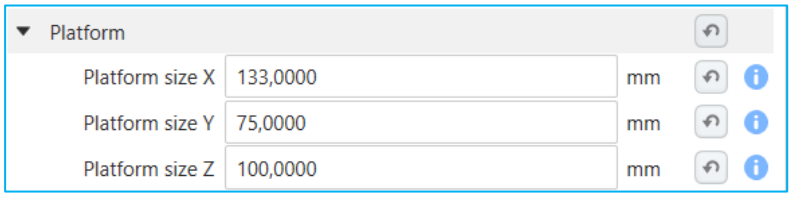


Layer Step Time

Indicates the step time between two layers, used for build time estimation.

Platform

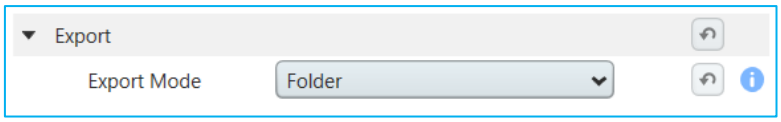
Under the platform section in the parameter list, you can define the size of the build platform that you want to use the machine you want to set up. When loading the machine scene in Magics a platform with the defined size will be visualized. The range in X, Y & Z is between 1-1000 mm.



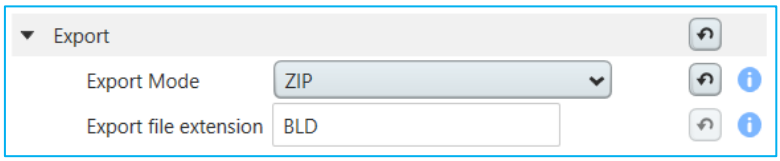
Export

Under the export section of the parameter list, you can define in which form you want to export images together with the buildscript.ini and parameter.ini files. There are 3 options:

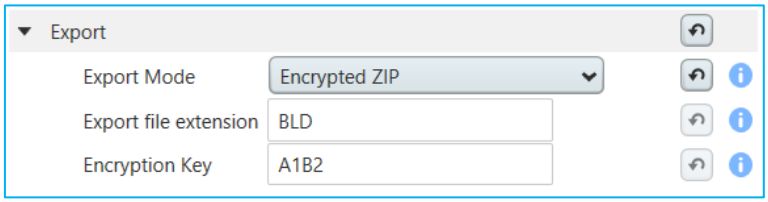
To Folder Export the DLP to a build folder *jobname_date_time*



To Zip Export to a build folder and compress it into a ZIP file *jobname_date_time* with a definable extension

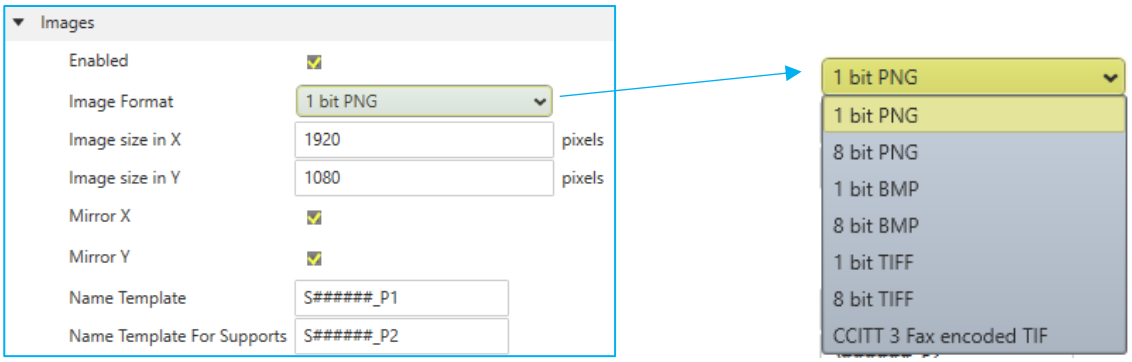


To Encrypted ZIP Export to a build folder and compress it into an encrypted ZIP *jobname_date_time* with a definable encryption key and definable extension.



Image

Under Image section in the parameter list, you can define all image related settings.



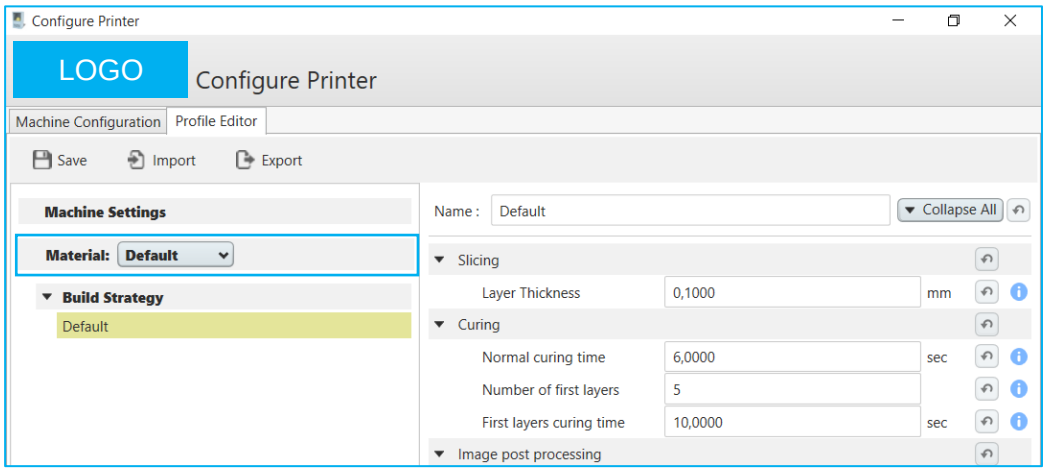
Enabled	Checkbox to enable/disable images generation
Image Format	Dropdown that defines the image format of the exported images. Following image formats are supported: 1 & 8 PNG 1 & 8 bit BMP 1 & 8 bit TIFF CCITT 3 Fax encoded TIF
Image Size	Defines the DLP size in X & Y of the export images in pixels.
Mirror image around X & Y axis	Checkbox to select if the export images need to be mirrored over the X centerline and/or Y centerline
Name Template (For Supports)	Defines the generated images naming.

Slices

Under Slices section in the parameter list, you can enable/disable *.slc slice files generation and names of output files.

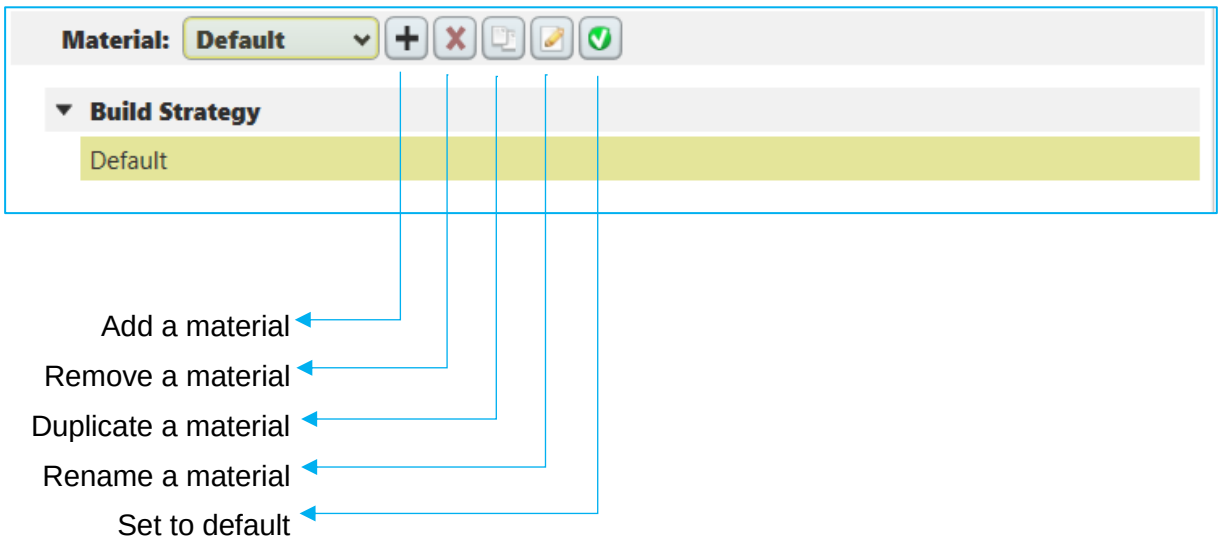
7.2. Material

The material section groups all sections that are valid for a certain material. In this case, we only have a build strategy section under the material section. Only build profiles valid for a certain material will be shown under the build strategy section.



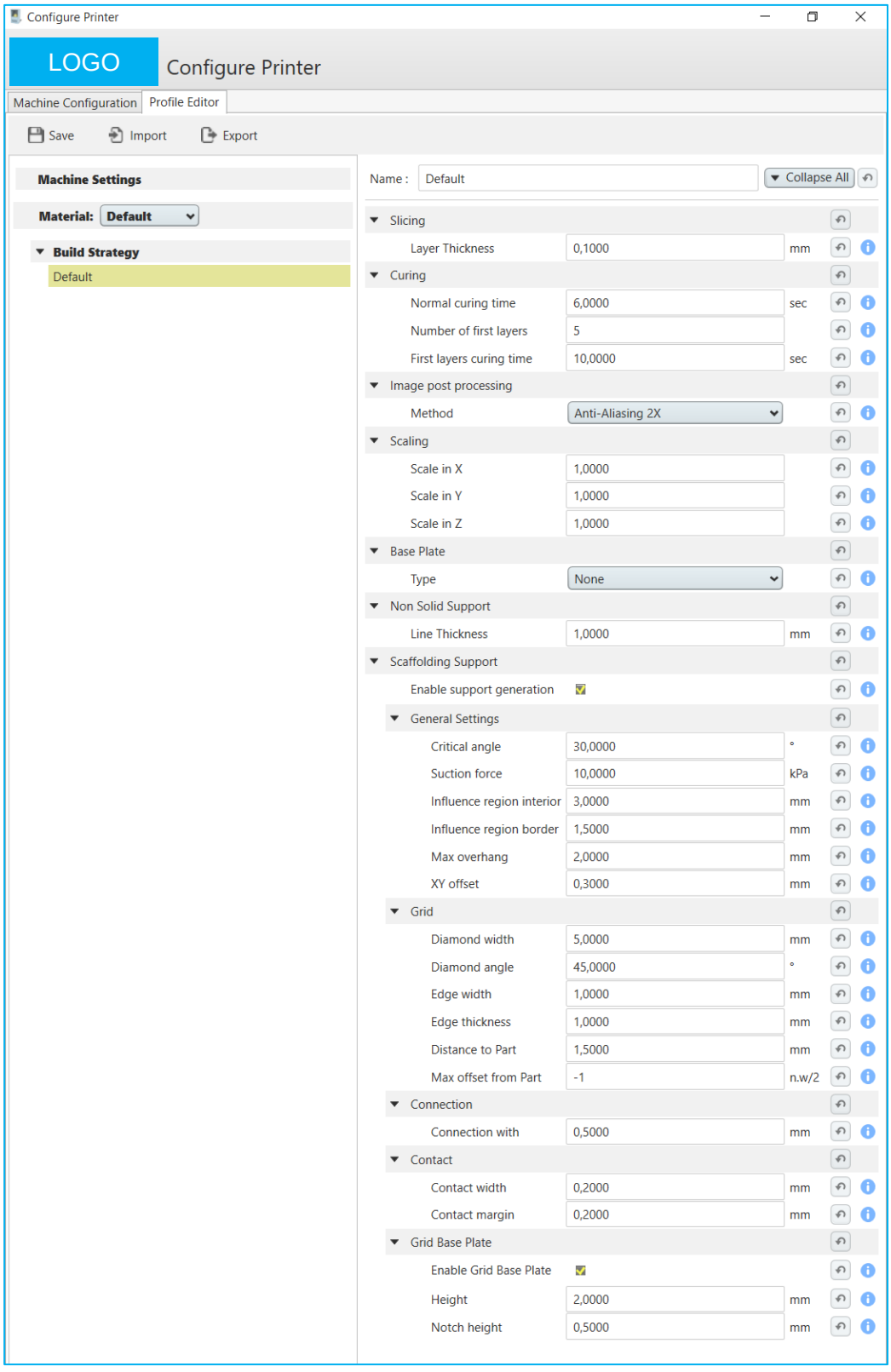
Material controls

The material section consists of a drop-down box to select a material a group of functions to manage materials & material naming



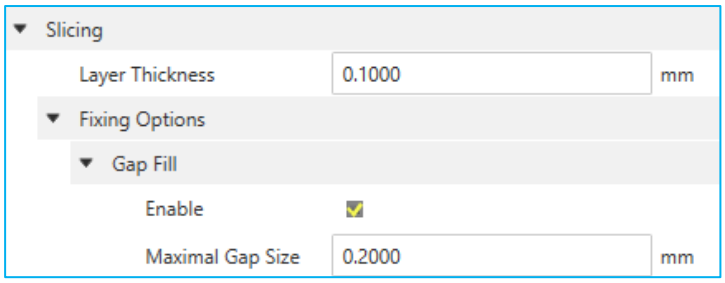
7.3. Build strategy

The build strategy section groups all profiles related to how parts will be built. Each profile defines a list of build-specific parameters



Slicing

Under the slicing section of the parameter list, you can define the parameter that controls the slice/layer thickness during slicing in mm.



The Gap Fill algorithm will check for each point of an open contour if whether there is another point of an open contour within a 'Maximal Gap Size' radius. If this is the case, the edges are stitched together. The user can enable or disable the feature and, in case it is enabled, define a maximal gap size in mm.

Curing

Under the curing section of the parameter list, you can define the curing time.

Curing time of one layer, first layers curing time and support structures extra curing time can be defined in this section.

When cure supports longer is enabled, an additional set of images with supports will be generated.

A new set of images is supposed to be cured additionally with *Supports Extra Time* after the whole layer is cured with normal curing time.

Supports Extra Time will make the support structures thicker.

Baseplates won't receive supports extra time.

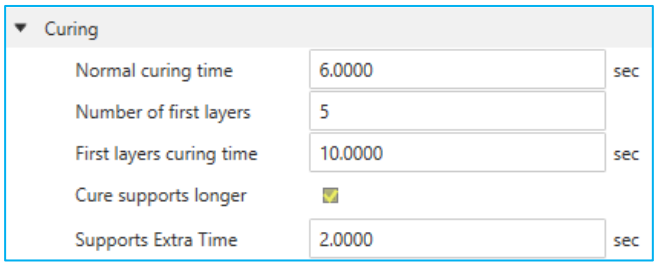
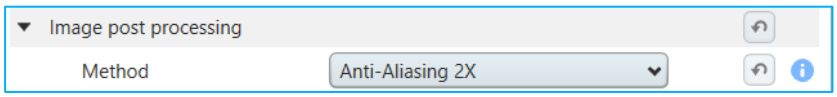


Image post-processing

Under the Image post-processing section of the parameter list, you can define some post-processing routines that need to be executed on the slice images with a predefined drop-down box. For DLP applications we provide anti-aliasing from 2x to 5x as post-processing method.

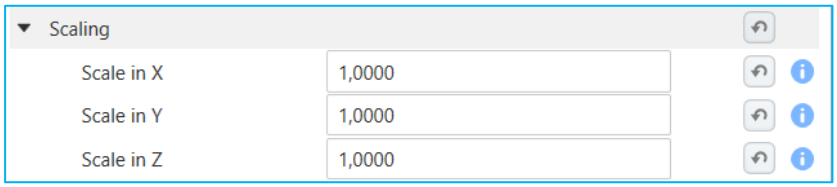


Notification

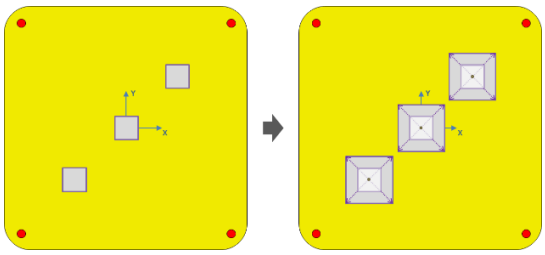
The image post processing requires additional processing time. Please take into account that when using this feature the processing time of the build processor will be longer.

Scaling

Under the scaling section of the parameter list you can define the scaling factors in X, Y & Z for the part(s) that will be built.



Independent scaling in X, Y from the center part



Notification

Scaling in X&Y from center part can make a part bigger in the XY plane and by doing so there is a possibility that the part collides with neighboring parts after scaling. This can result in unwanted or negative build results.

Independent scaling in Z from the bottom part

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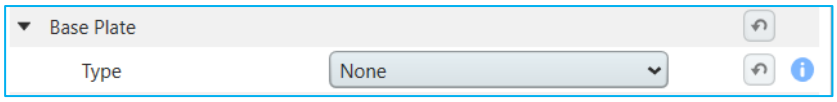
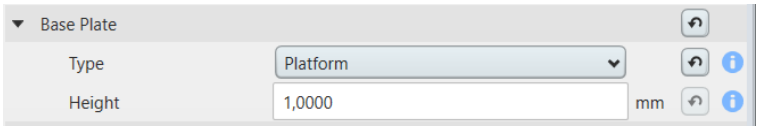
Baseplate

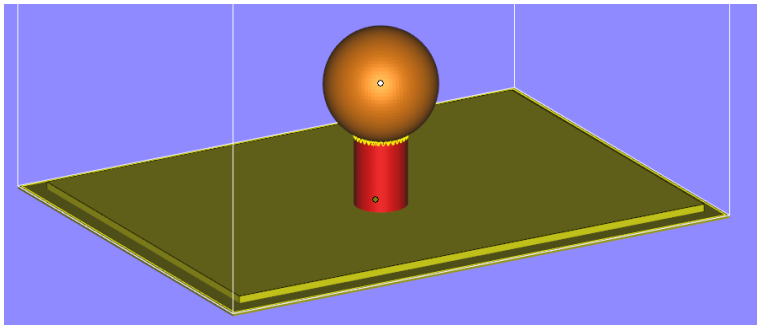
Under the Baseplate section of the parameter list, you can define with a predefined drop-down box which baseplate will be generated by the Build Processor to ensure a good adhesion of parts and supports to the build platform of the printing device.



None No base plate will be generated

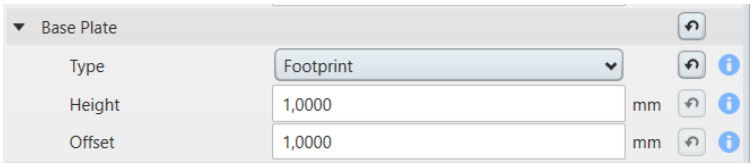
Platform A baseplate with the size of the platform and a certain height will be generated.

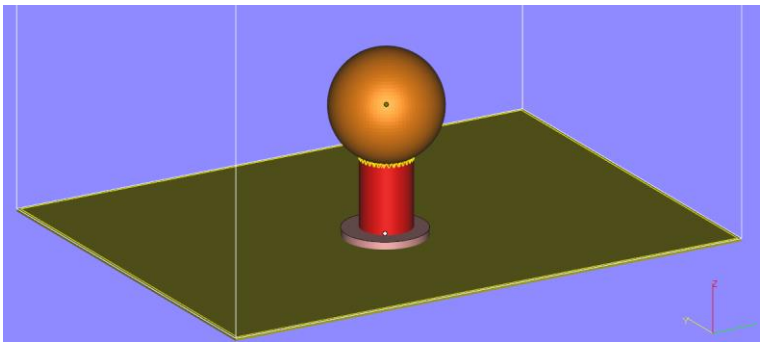




Height Defines the height van the baseplate and calculates the corresponding number of layers to reach that height

Footprint A baseplate which corresponds part and support footprint with a certain offset and height will be generated.

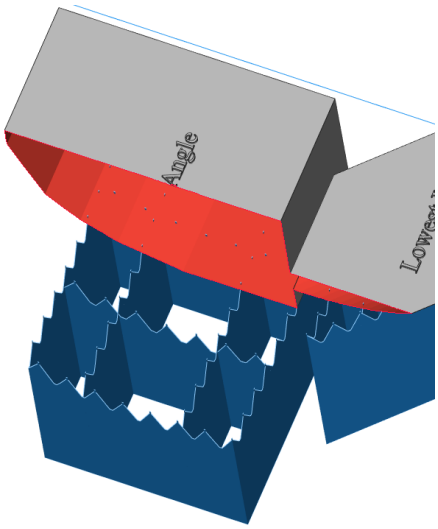


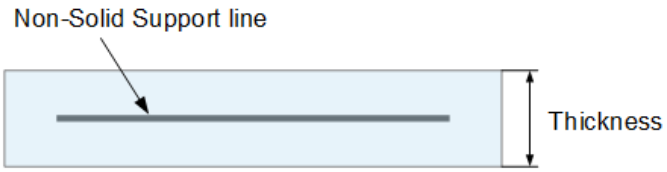


Height	Defines the height of the baseplate and the corresponding number of layers needed to reach that height
Offset	Defines the outward offset of the footprint contour

Non-Solid supports

Under the Non-Solid support section of the parameter list, you can define how much thickness the build processor will give to non-solid supports coming from Magics when generating images for your printing device.



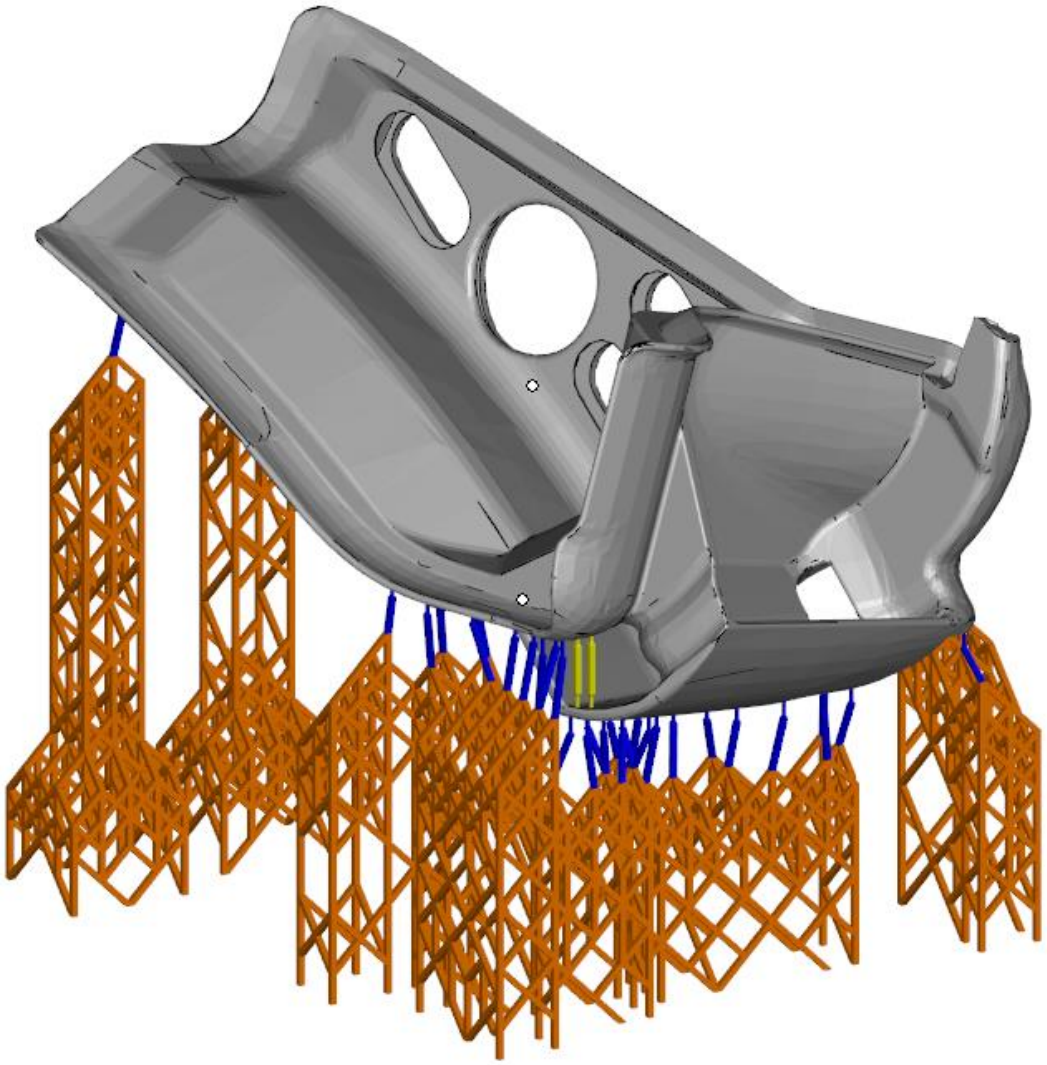


Scaffolding Supports

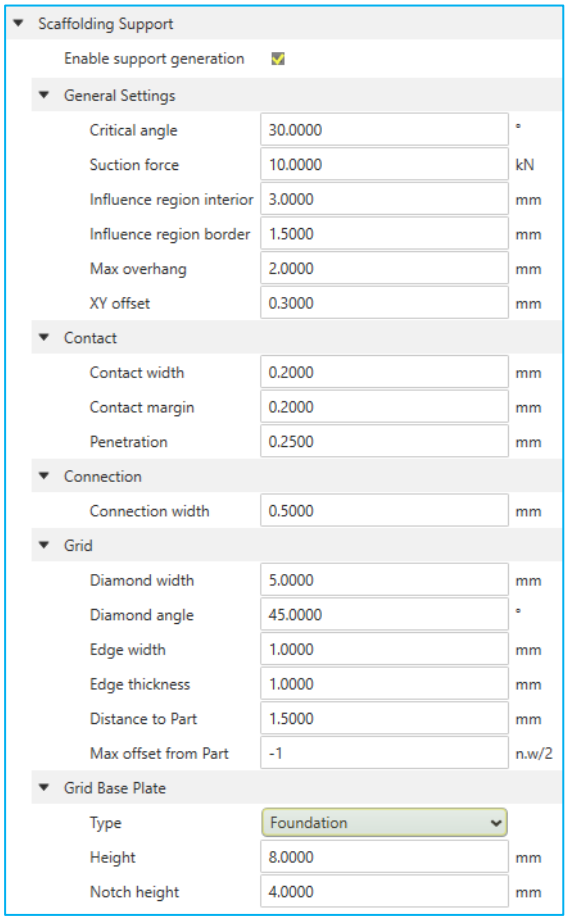
Notification

Scaffold supports is an optional feature that is activated by a separate license. Without this license the scaffold support section is not visible in the profile editor.

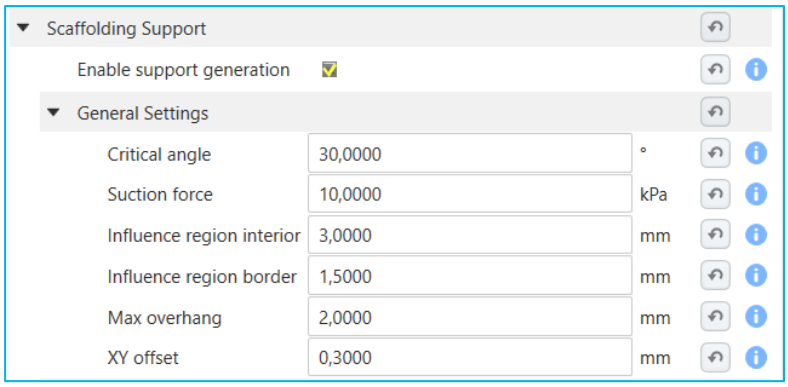
Under the Scaffolding support section of the parameter list, you can define how the scaffold support generator will generate support structures to support non-self-supporting areas of your parts. Support structures are needed for every DLP/LCD printing device as it is not possible to print structures floating in resin.



Following parameters define the automatic generation of a scaffolding support



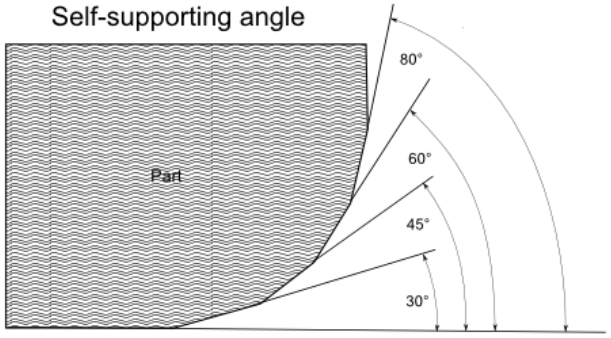
General settings



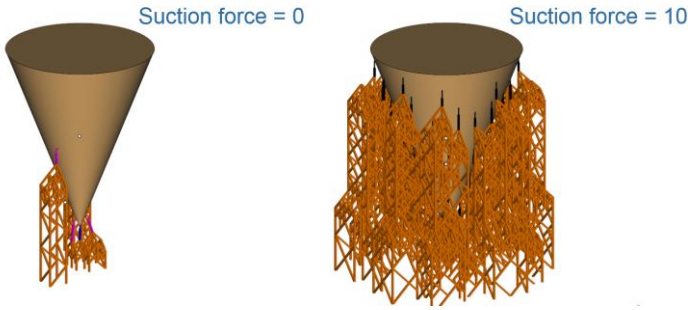
materialise
innovators you can count on

Enable support gen. Enables the support generator

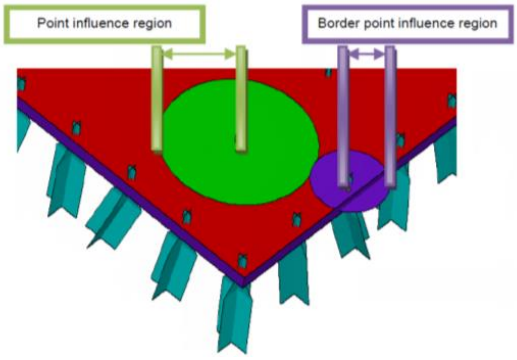
Critical Angle The critical angle will set the scaffolding support generator to support every surface of the model with an angle lower than the critical angle.



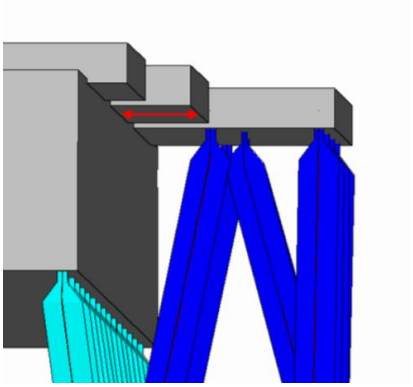
Suction force This is the suction force exerted on the part for which the support generator will generate enough support to avoid breaking away of the part from the platform and/or supports



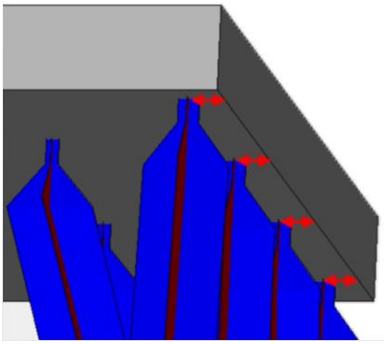
Influence region interior/border The radius of the circle around the point that will be supported by the point in the interior part of the support surface.



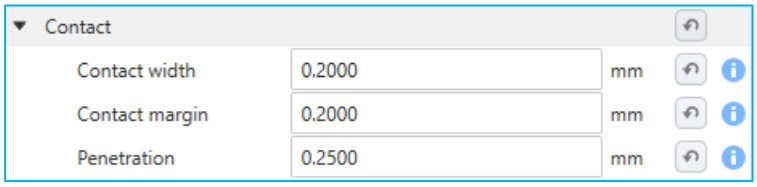
Max. overhang the overhang distance for which no support is needed



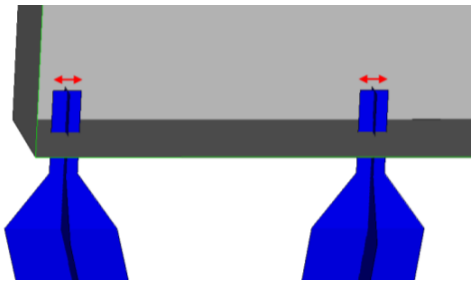
XY offset The distance between border points and the border



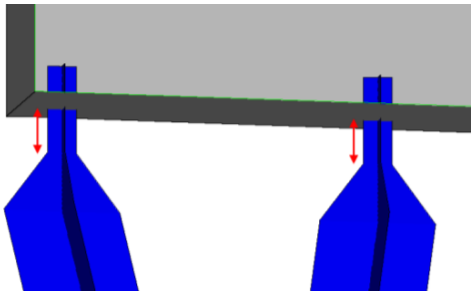
Contact



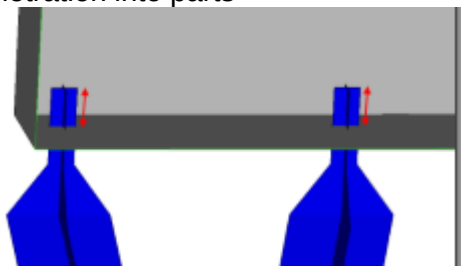
Contact width the width of the connection beam when it touches the part



Contact margin the length of the contact point

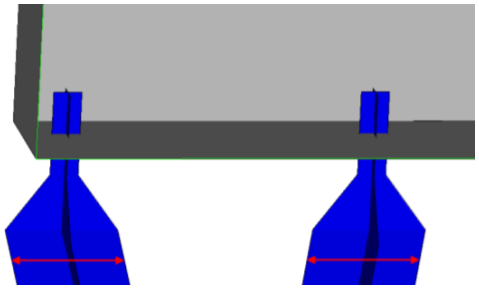


Penetration Penetration into parts

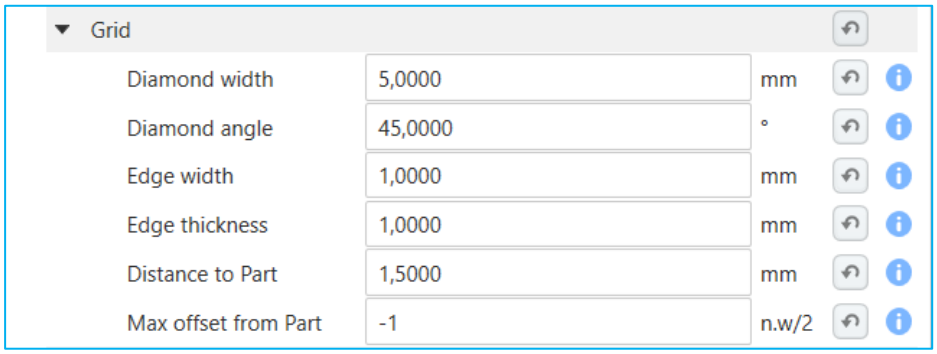


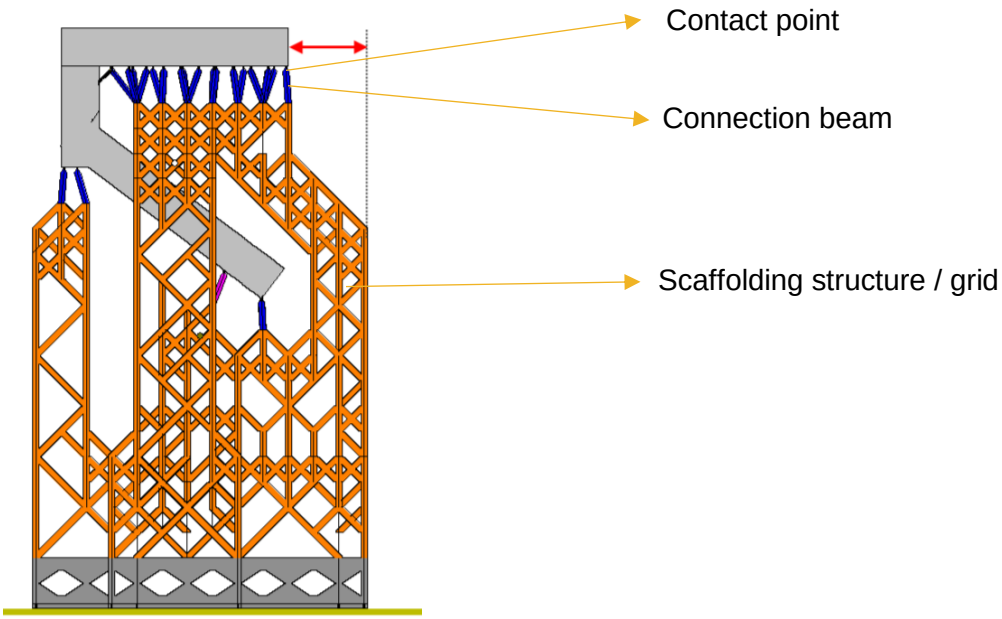
Connection

Connection width The critical angle will set the scaffolding support generator to support every surface of the model with an angle lower than the critical angle.

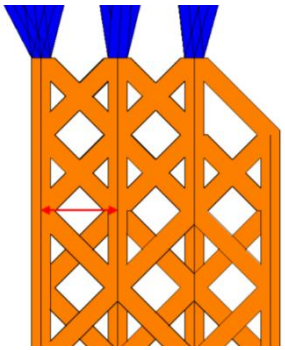


Grid



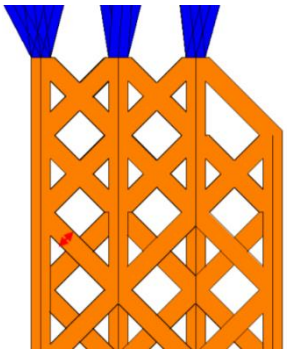


Diamond width will define the size of the diamond-shaped scaffolding structure



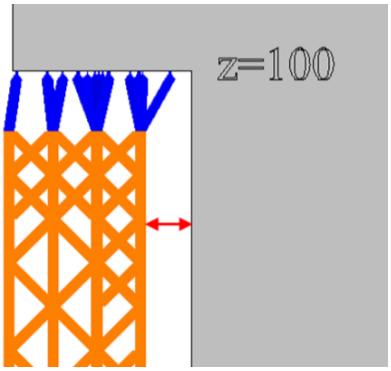
Diamond Angle Will define the angle of the diamond shape

Edge width will define the width of the beams in the scaffolding structure



Edge thickness will define the thickness of the beams in the scaffolding structure

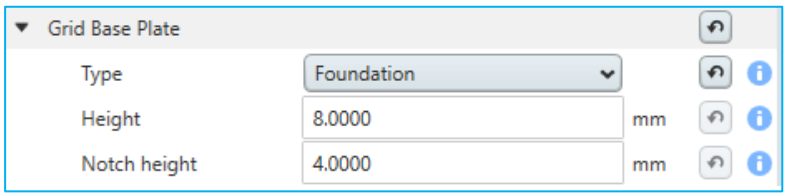
Margin to Part Will define the hold off distance of the scaffolding towards the part

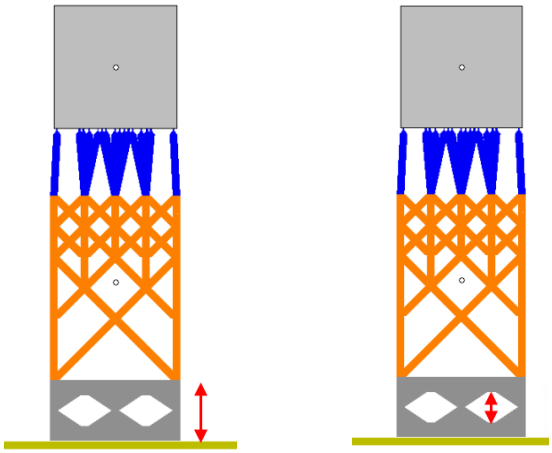


Max offset from Part How far outside the contours of your part the support structure can be

Grid Base Plate

Besides the regular baseplate options, the scaffold support generator has a separate baseplate option that is generated together with the scaffold support structure. This option minimizes the resin consumption of your printing device.





height	The height of the grid base plate
Notch height	The height of the notch

Additionally, scaffold footprint baseplate option is available, which works similar to general part footprint baseplate.

8 Slice-Based Operations

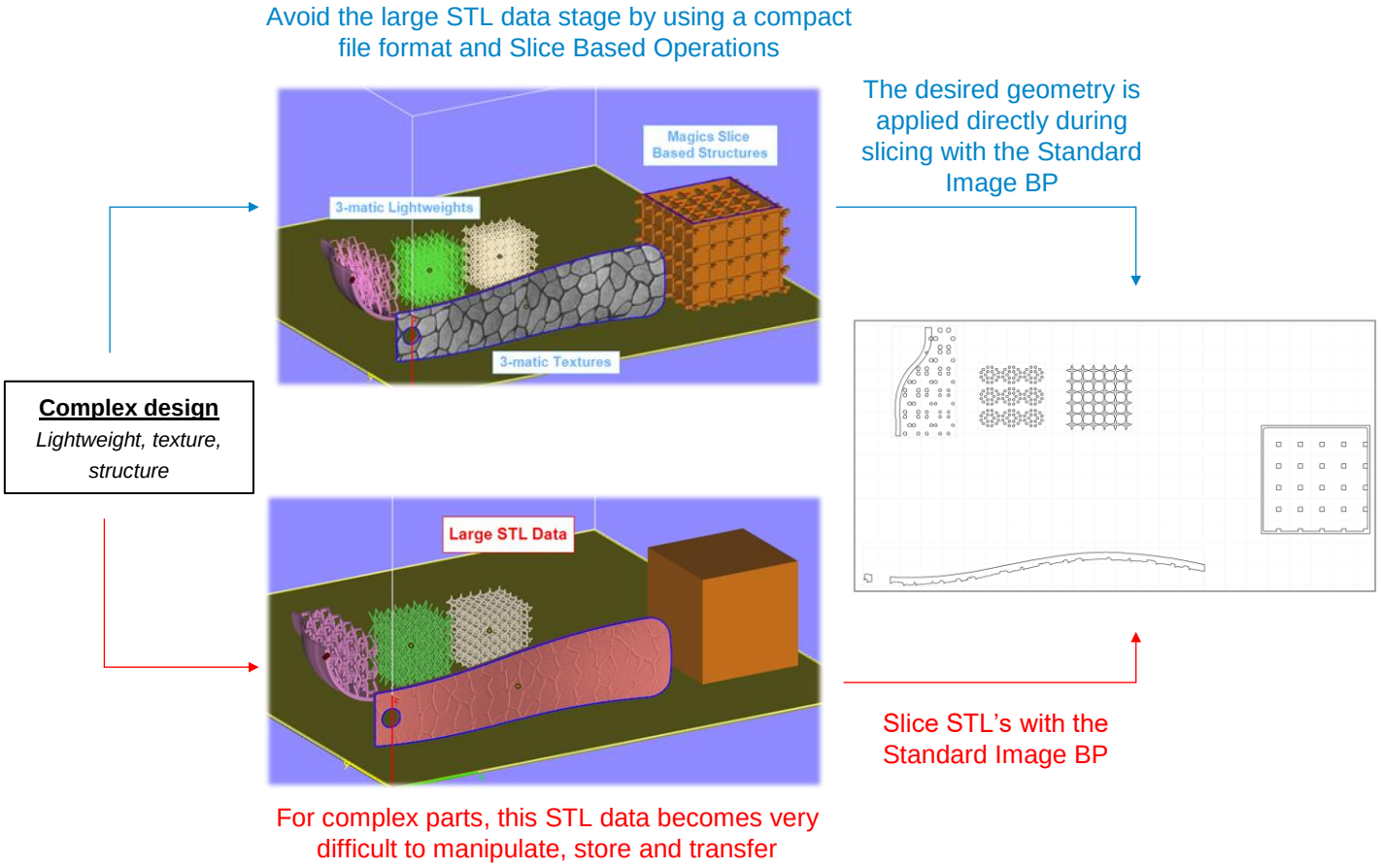
8.1. Why

Applying textures or structures to a model can easily result in very large STL files which become difficult to manipulate, store and transfer. Materialise has developed a technique to **skip the intermediate STL file stage** by generating the desired geometry directly into the slices using the BP.

8.2. How

Materialise 3-matic^{STL} software models containing metadata about textures (texture bitmap, location, and size of the texture, white and black offsets) or structures (area, graphs, the thickness of graphs) can be loaded into Materialise Magics software and placed on the build platform. The BP will then automatically apply the textures or structures directly into the generated slices.

Materialise Magics software version offers a module to generate Slice-Based Structures straight from within Materialise Magics software.



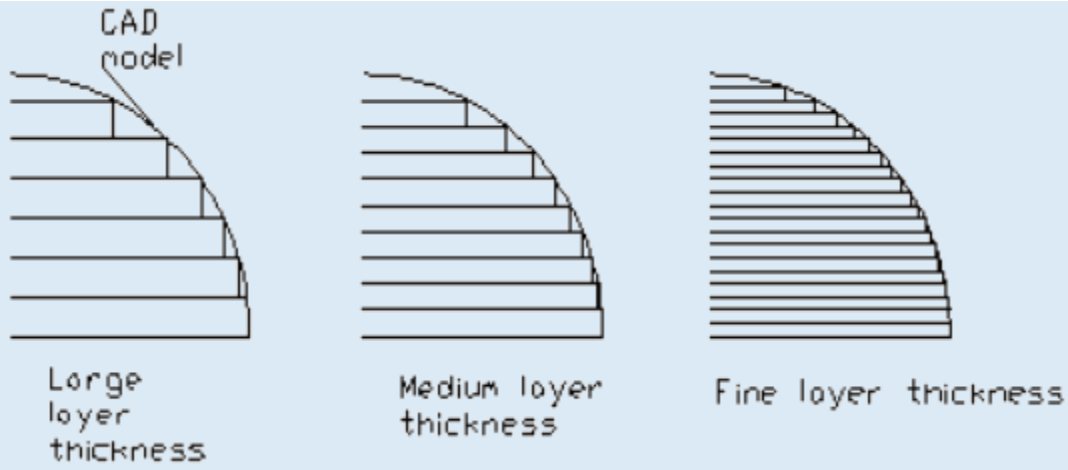
For more information on how to access slice based operations please visit
http://software.materialise.com/making-complex-designs-printable

9 How To

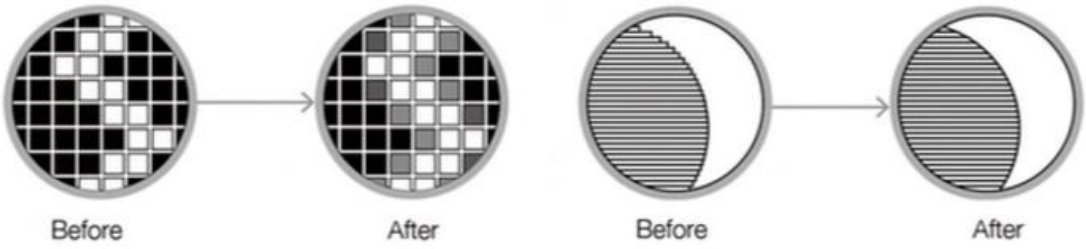
9.1. How to improve the surface quality of your parts

The surface quality of your part can be improved by 2 settings:

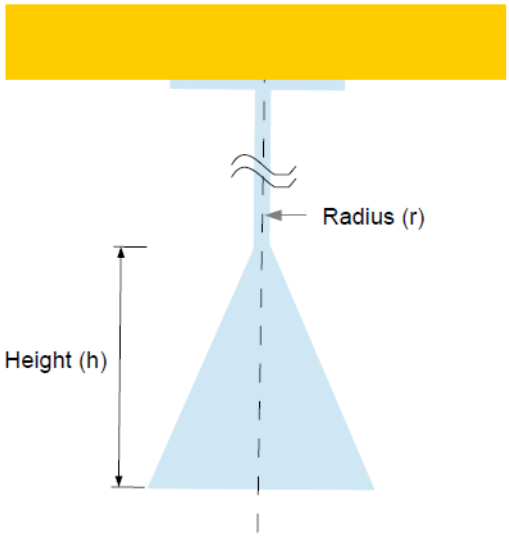
1) Layer thickness:
   The thinner the layers are that you print the smoother your outer surface will be.



2) Anti-Aliasing:
   The higher your AA setting the less staircase effect you will see in your parts.



9.2. How to define the suction force

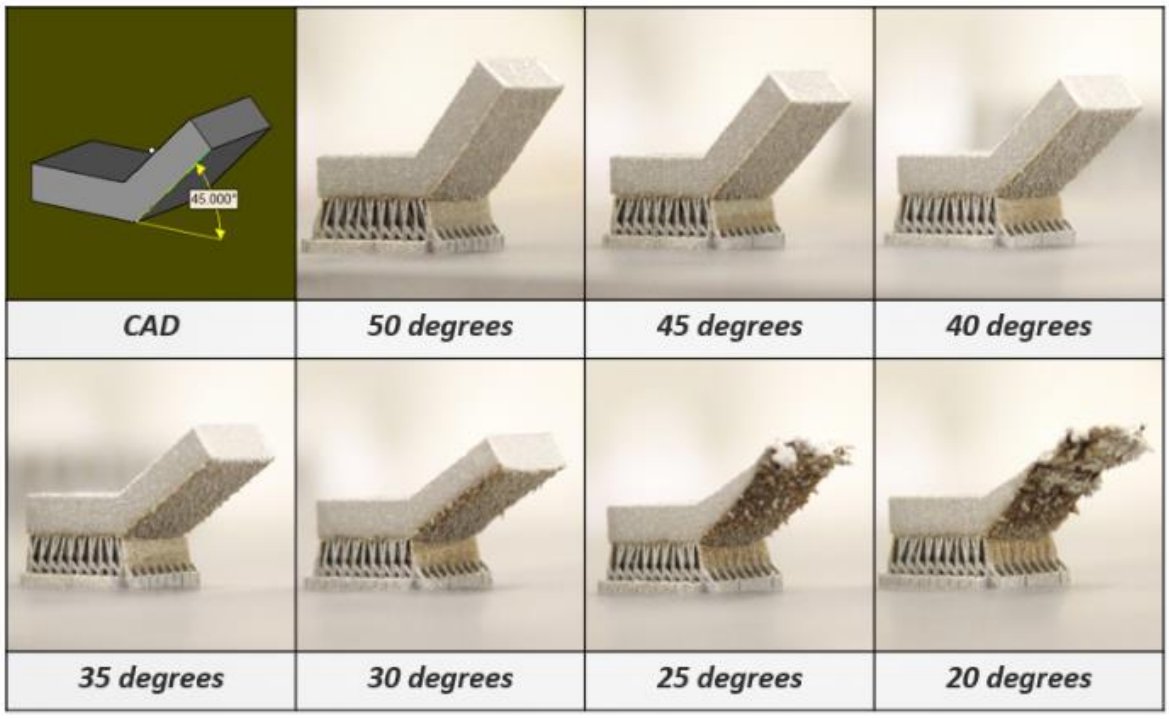


Build the calibration cone untill the rod breaks. Measure the height of the cone and calculate the suction force

$$T_{suction} = \frac{T_{tensile} \times r}{0{,}58 \times h/r - 1}$$

9.3. How to define the critical angle

Print parts with different angled slopes and monitor at which angles a good quality is reached or the build is still successful.



10 Frequently Asked Questions

10.1. How do I activate my Materialise Software?

Please refer to section 3.3 Licensing for more information.

10.2. How do I access the Build Processor in Magics?

The Build Processor toolbar is available in Magics when working on a Build Processor scene. Please refer to Chapter 6: Build Processor and Magics for step-by-step instructions.

10.3. How do I access the profile editor?

The profile editor can be accessed by:

- Configure printer button in the BP toolbar in Magics
- Edit profile button beside each profile selection box in the configure platform dialog. Only the corresponding profile section is editable at that time.

10.4. Can I view the generated Build Processor output?

Notification

Only valid for the Standard DLP Build processor. The rebranded DLP Build processors all have encrypted output files and can only be decrypted by the machine.

Yes, the generated image files in the build folder can be viewed in the Windows file explorer as thumbnails and in Windows photo viewer as the complete image. The generated buildscript.ini and parameters.ini file can be viewed by any text editor on your computer. If you selected output to ZIP or Encrypted ZIP you first have to unzip the export file before being able to view the slice images and ini files.

10.5. Can I see what settings were applied to my processed job?

Yes, in your build folder you will find the parameters.ini file that gives a summary of all parameters applied when the job was processed. If you selected output to ZIP or Encrypted ZIP you first have to unzip the export file before being able to view the slice images and ini files

11 Typical Error message

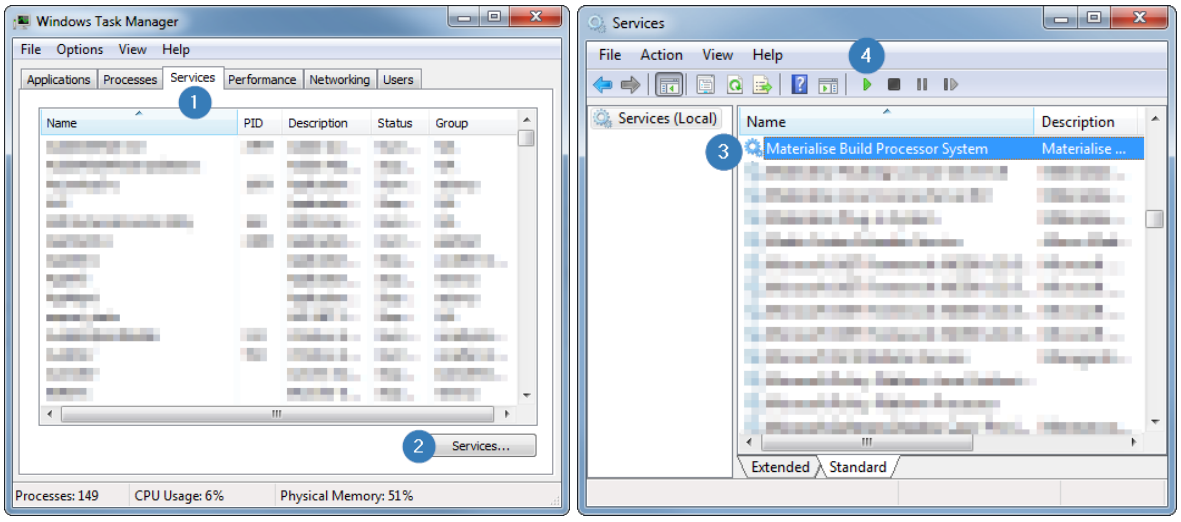
11.1. Error message: ‘Failed to generate scaffolding support’

This error indicates in most cases that the clearance between the part(s) and the platform is too small for generating a scaffolding support structure. Increase the space between the part(s) and the platform and try again.

11.2. Error message: ‘Check if the BPS service is running’

This error indicates that the Build Processor System service has stopped running. To start it again, go to Windows Task Manager and:

(1) locate the Services Tab
(2) Click Services button to open the Services dialog,
(3) Locate the ‘Materialise Build Processor System’ service
(4) Press the play icon to start it again



11.3. Error message: ‘Incorrect xxx profile for "Platform". Please check profiles assignment.’

This error message means that one or more of the profiles that are assigned to this job on platform level do not exist anymore in the profile editor. Please (re)assign the profiles on the platform level and submit the job again.

11.4. Error message: ‘Unexpected open contours in xxx during slicing’

This error message means that the indicated input part contains errors that result in open contours during slicing. Such errors indicate that there are errors present in the original digital model. It is highly recommended to fix these in Materialise Magics software, where you have a large set of dedicated fixing functions and visual feedback available.

11.5. Error message: ‘The part exceeds the build envelope's bounds after rescaling.’

This error message means that one or more parts on the build platform are placed completely or partially outside of the build platform before and after scaling. Reposition your parts so that they will fit the build platform taking into account rescaling.

12 Support

12.1. Contacts

We want you to have a smooth user experience when working with Materialise Magics software and the Build Processor. If you do encounter any issues, please always try to save your work and restart your system first. Should the problem persist, you may contact Materialise Support. The technical support will be able to help you with technical problems you have when working with Materialise Magics software and the Build Processor.

For more information on how to reach us, please consult:

http://software.materialise.com/customer-service

12.2. Create a Report File

In case of unknown errors, the technical support of Materialise needs more detailed information of what has happened with the Build Processor or Build Processor System.

This information can be provided by the Build Processor System by creating a report file collecting data which might be useful to detect the error.

Notification

Please do the actions described below as soon as possible after the error appears.

1. Op the 'Build Processor Manager'
2. Click on the 'Help' button in the top right corner and click on 'Troubleshooter'
3. Press 'Generate Report' to collect all data
4. Save report.cab to a temporary folder

More details on the above can be found in section 4.1: Access the Build Processor Manager on page 11.

Notification

No personal data will be collected. The collected data are logs of the Build Processor, information on the system environment and parameter files.

Before sending the report file to Materialise it is advised to open the report.cab to check the collected data. Make sure no data are enclosed which might be in conflict to the security policies of your company.

5. In order to send the report file successfully to Materialise the file must be zipped and password protected in order to pass the Materialise firewall.

6. Send the zipped file together with the password and a good error description to the technical support of Materialise.