Materialise Magics 25

What’s new

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Materialise Magics 25 feature highlights

Magics is the pre-print software component that helps you 3D print in a profitable way. It is recognized as the standard for 3D printing data and build preparation by the majority of industry professionals.

Usability

- *Updated fixing pages* enhance your access to various tools
- The license wizard's *new, clearer interface* and *automatic renewal option* reduce the hassle of reactivating your license
- Read our *release notes* for an in-depth look into the new features

Control

- Mark faster and more precisely with *updated marking tools*
- Customize Magics in new ways thanks to *new toolpages*
- Easily *add local honeycomb structures* where you need them

Quality

- *Stabilization walls* strengthen parts against extruders' vibrations
- Ensure parts are printed correctly with the Simulation Module's new *results summary* and the *probe and graph tool*

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Magics RP

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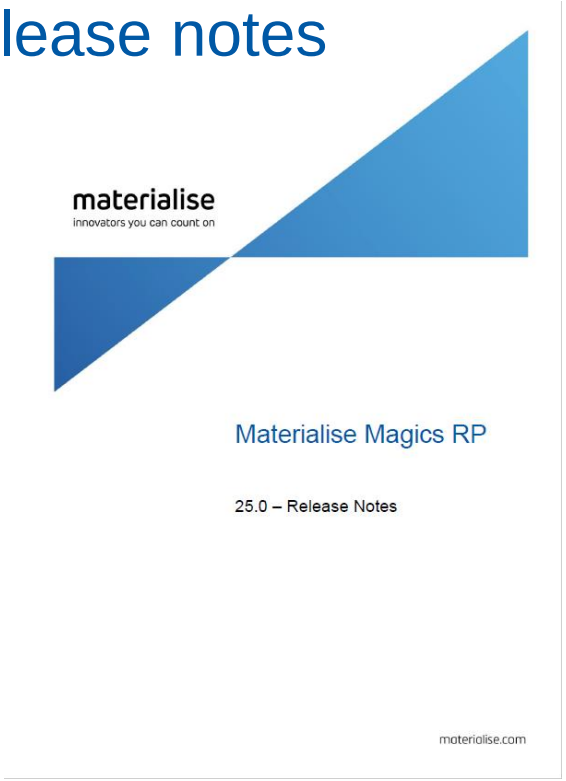
Release notes



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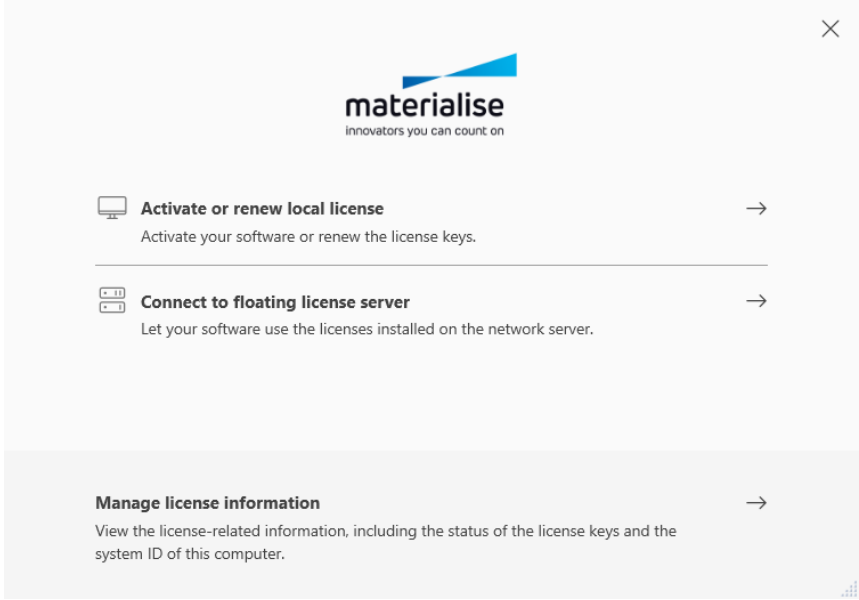
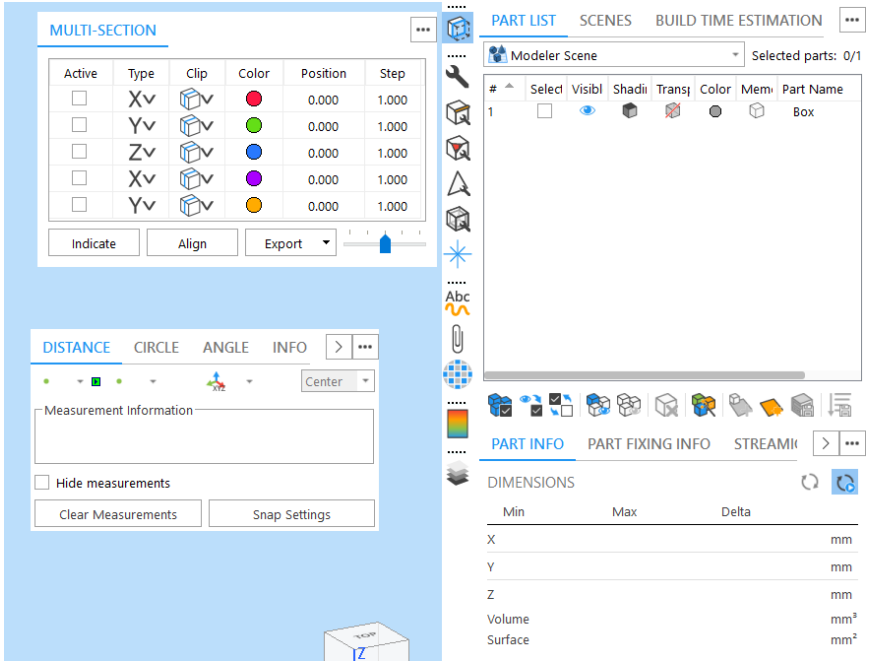
- Access the new, extended release notes to find all the new features, fixed bugs, compatibility information, and known issues.
- They provide you with in-depth explanations on how to use the new features.
- This What's New presentation is a summary of the new major items from the release notes.
- You can find the release notes in the Help Center, via help.materialise.com

New license wizard

- The new license wizard, added in Magics 24.1, provides an easier and more intuitive activation.
- In Magics 25.0, we added an automatic renewal option when activating Magics, so you'll never have to worry about reactivating your license.



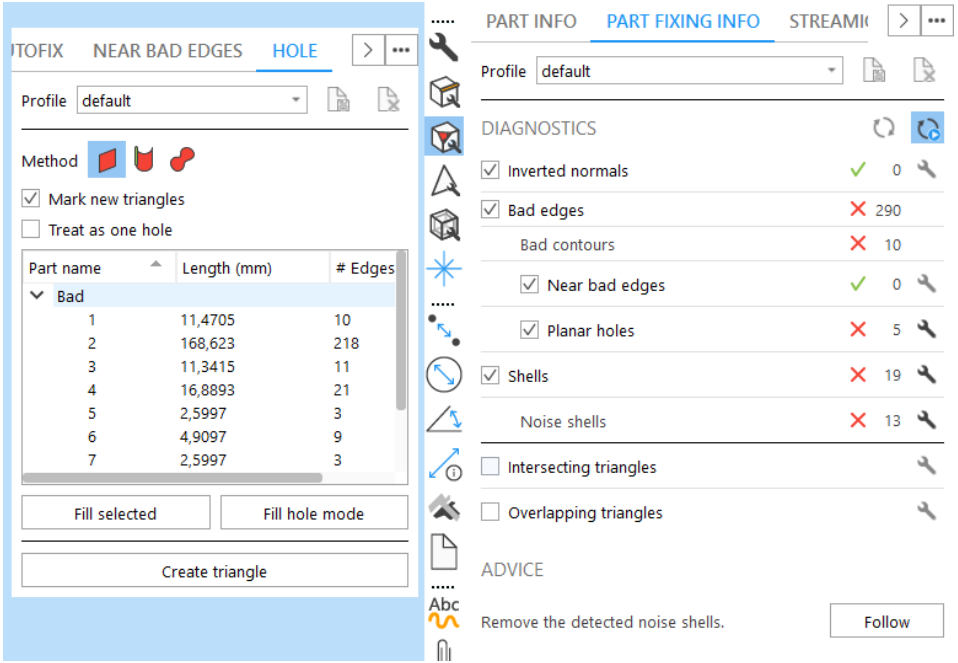
Renewed toolpages



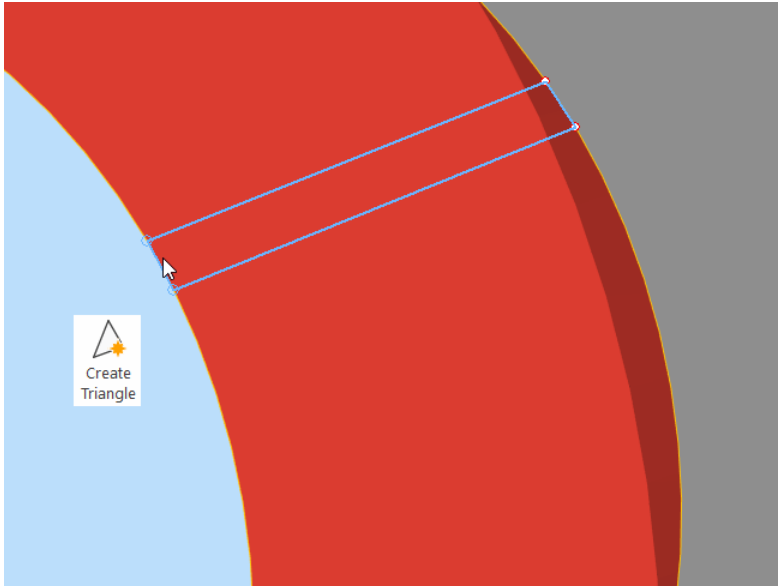
- Toolpages can now be added to a special toolbar, so the most important pages will always be visible.
- You have full freedom over the positioning of your toolpages: on the side, in a toolbar, or anywhere else on the screen. With the default profile, the focus is on the information pages.
- Each toolpage has a small menu at the top right for pinning, closing, or collapsing the toolpage.
- In the Customize UI window, you have full control over the position and visibility of the pages.

Fixing toolpages

- The FixWizard has been fully integrated into the toolpages. This gives you faster access to any fixing functionality.
- In the Part Fixing Info page, the advice is now shown with a more convenient Follow option, which fixes your parts with fewer clicks. Additionally, you can automatically fix per error type.



Fixing improvements



- The Create Bridge function has now been incorporated into the Create Triangle function, allowing both edges and points to be selected.
- The new Invert Normals function in the Fixing ribbon inverts either any marked triangles if something is marked or the entire part if nothing is marked.
- The AutoFix function is 40% faster on average.

Marking improvements

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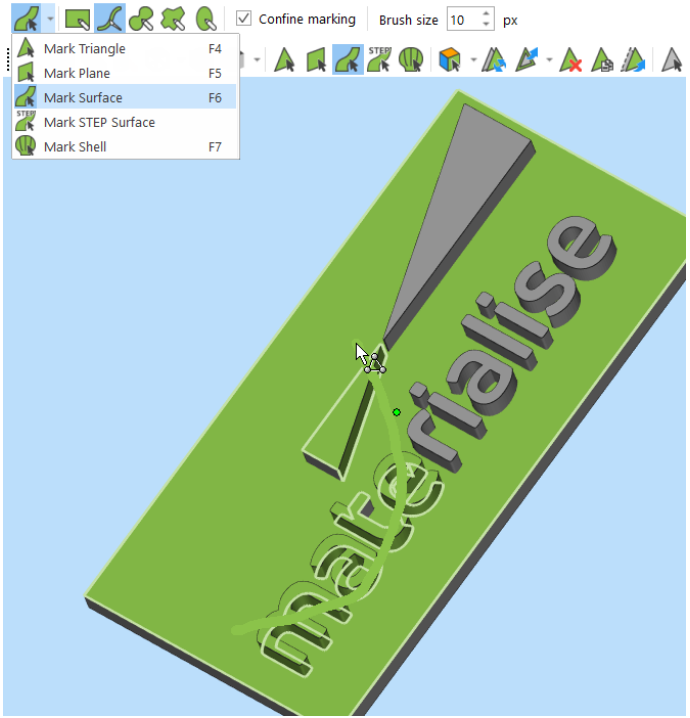
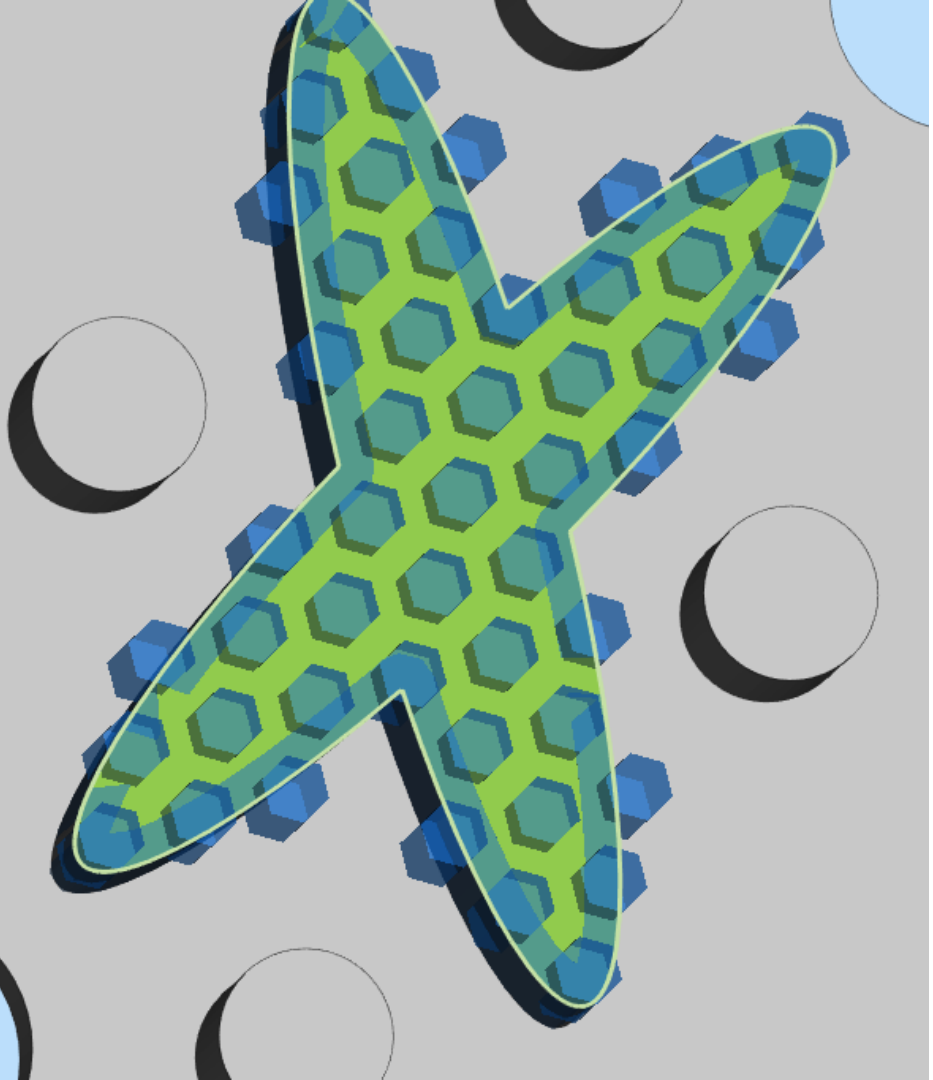
- The marking functions have been improved to allow users to work faster and have more control while marking.
- Marking functions like Brush Selection or Rectangle Selection have been extended beyond marking single triangles to mark entire shells, surfaces, or planes.
- A specific marking toolbar pops up when a marking function has been activated, allowing you to choose what and how you mark. It also provides additional control over brush size as well as remesh options.





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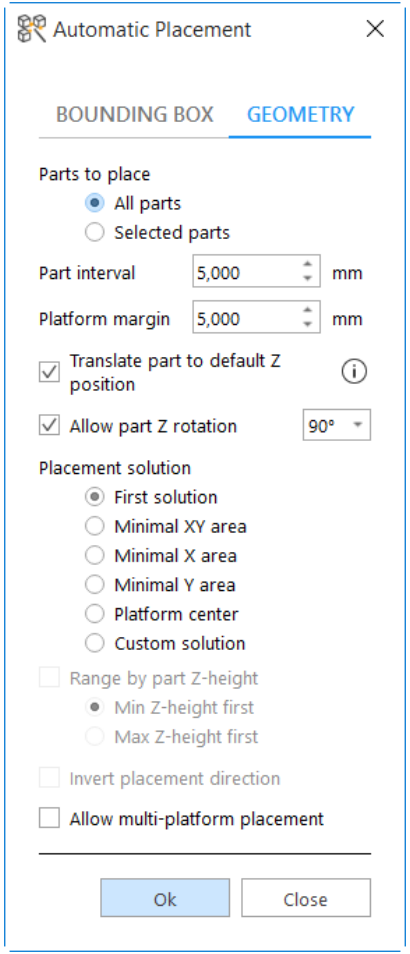
Local honeycomb

- Get more control over your honeycomb structures by creating them locally on a marked region.

Automatic placement

- The Automatic Placement bounding box option has now been sped up, from seconds to milliseconds.
- Additionally, Automatic Placement has a new interface that makes it easier to use.



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Support Generation (SG)

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Support parameters page restructuring

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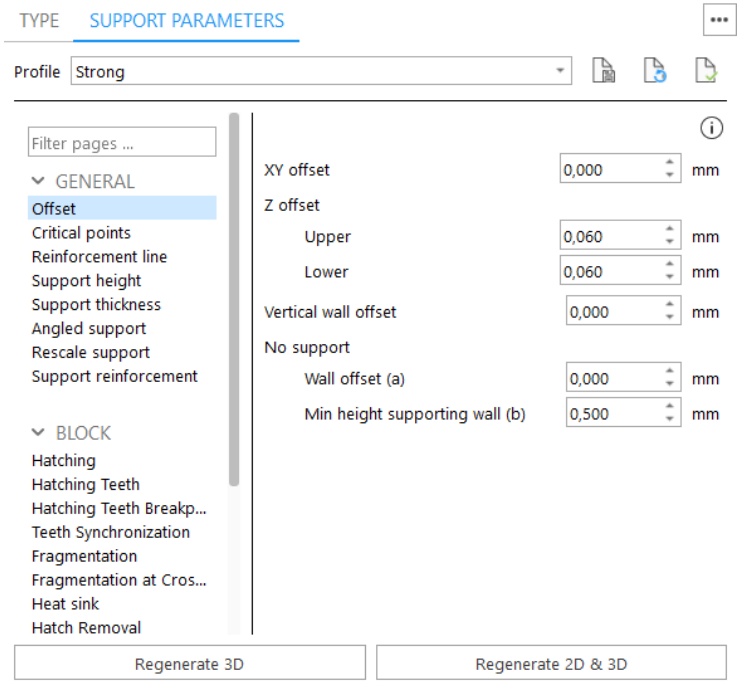
- All support parameters toolpages have been combined into a single page to provide you with a clear overview.
- To make it even more intuitive, the common and advanced parameters have been given a more logical structure in this toolpage, allowing you to work faster.



Volume SG*

* Volume SG is fit for metal binder jetting and extrusion technologies.

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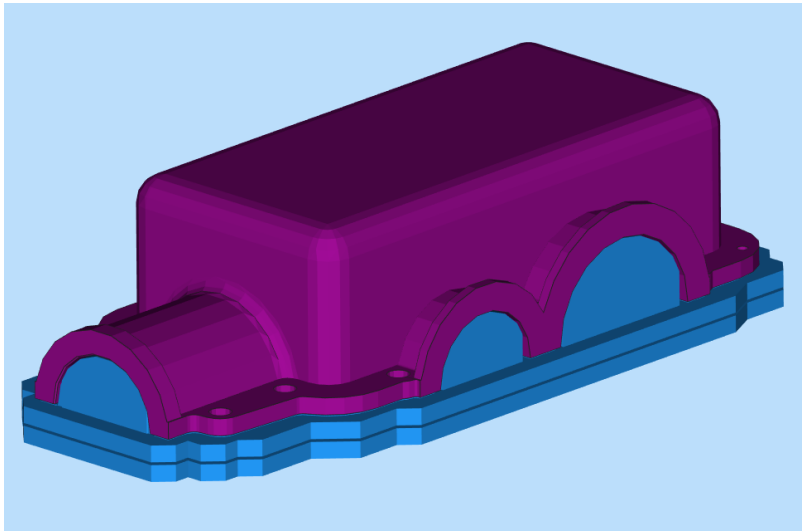
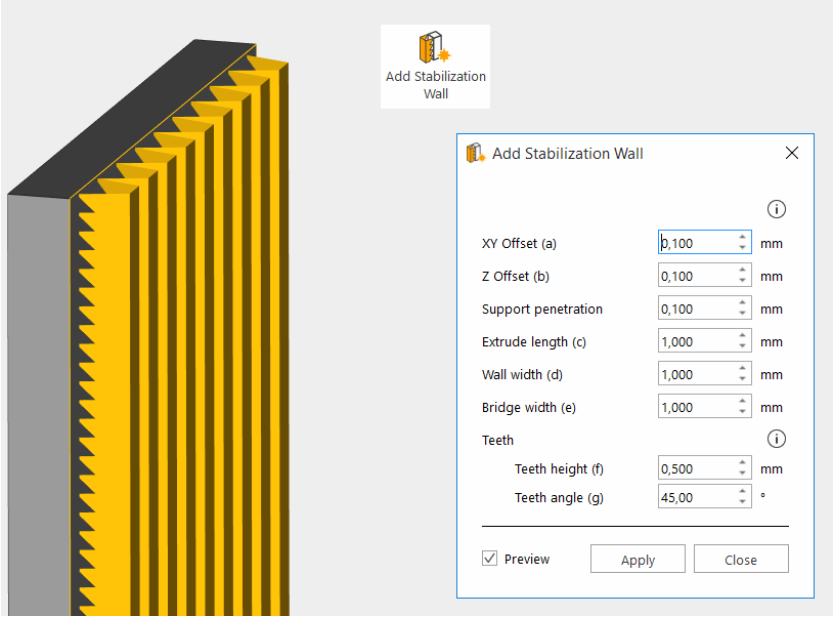
Raft for metal binder jetting



- We added rafts for binder jetting technologies to our support functionality.
- The raft fits neatly around the chosen part.
- Rafts improve part quality by keeping the powder in its place.

Stabilization wall

- Stabilization walls are a new kind of support aimed at extrusion technologies like FDM and HSE.
- For long, thin parts, this feature decreases the effect of vibrations due to the movements of the extruder, improving the quality of the part.



Metal Support Generation (SG+)*

* Includes all features from SG and Volume SG

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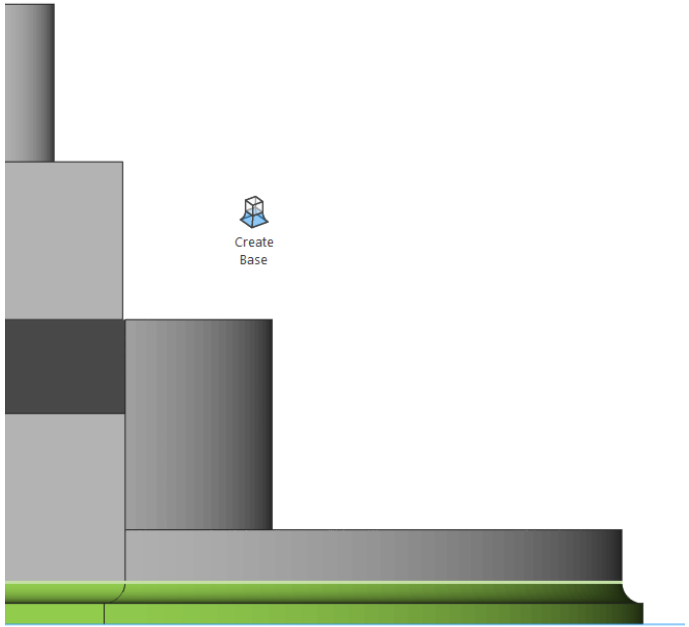
Create base

- As the former Base Rounder was valued by our users, we have included the feature for all SG+ users under the name Create Base.
- This function promotes heat to flow away from the part.
- Thanks to the rounded offset, a stronger connection to the baseplate is achieved and cracks can be prevented. These result in fewer build crashes, saving time and money.



Simulation Module

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Full-build simulation

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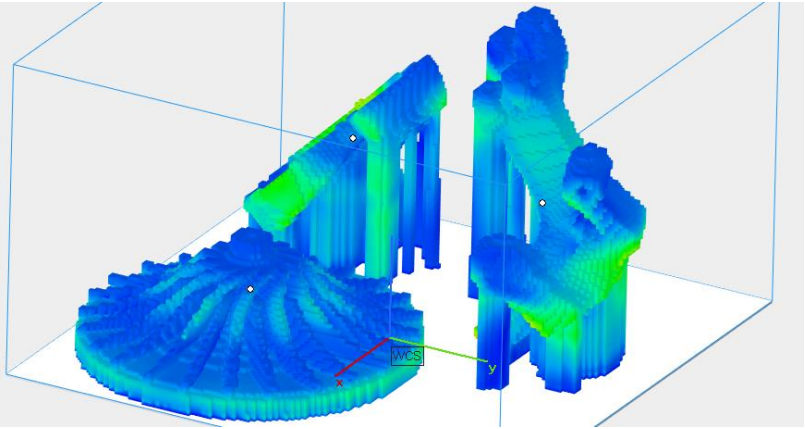
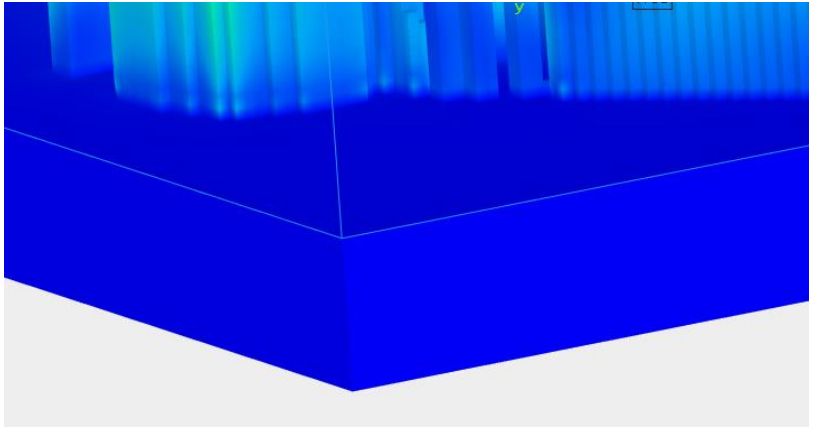
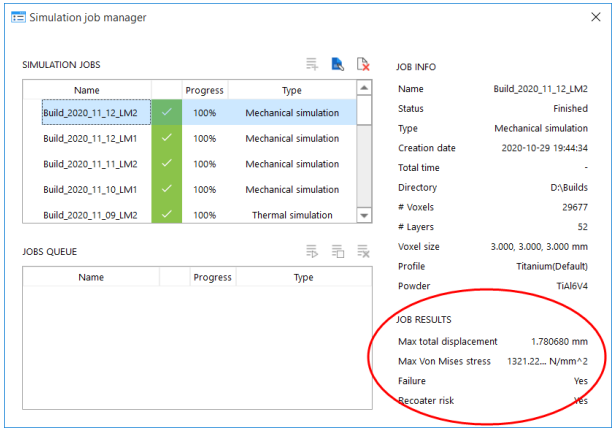


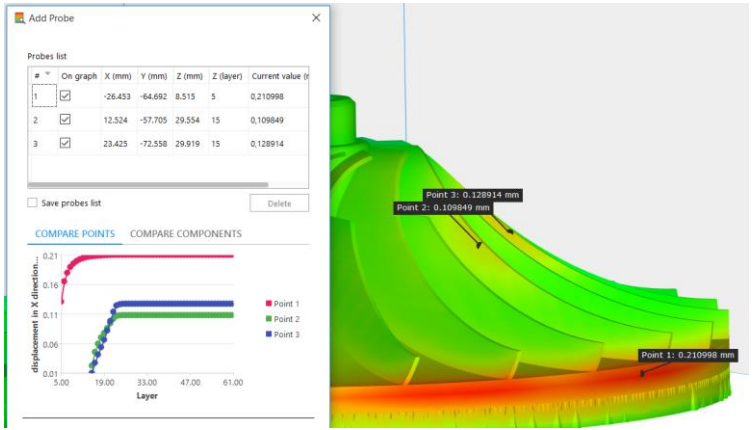
- Simulate multiple parts or even an entire build at once.
- Improve quality by simulating the effects neighboring parts have on each other.



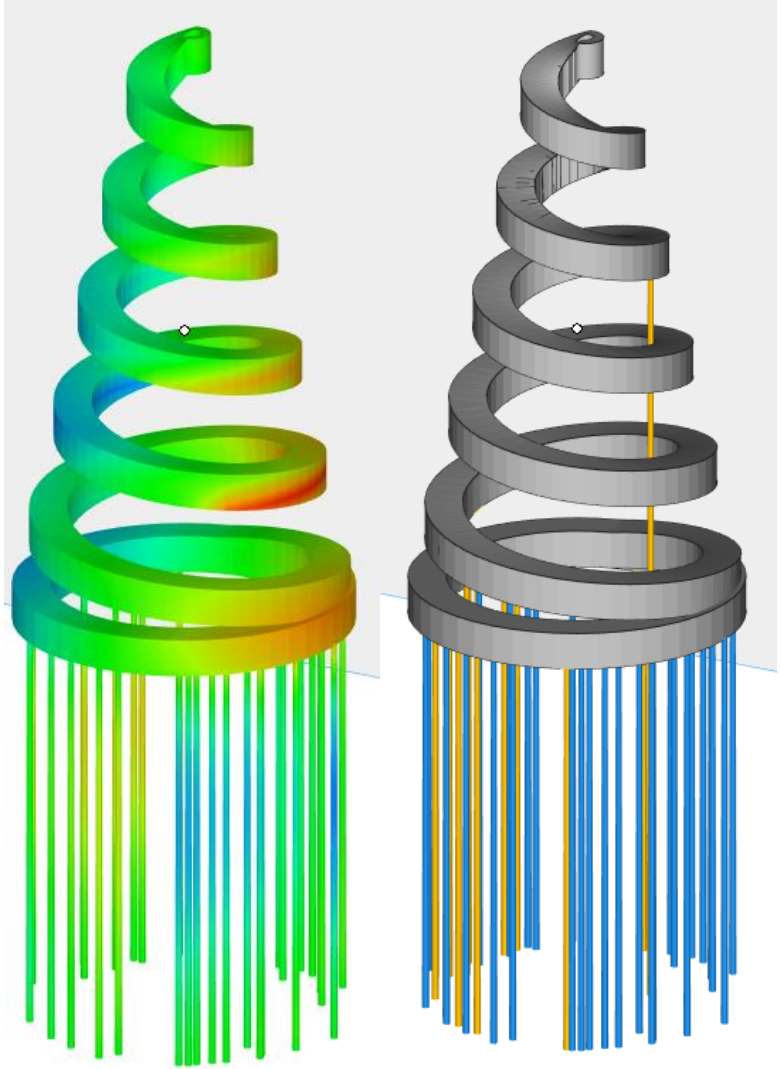
- Simulate your base plate to predict deformation.
- Avoid rebuilding a part due to base plate overheating.

Simulation results





- Get a summary of your Simulation results before entering Magics
- Find out faster whether your part or build will print well
- Locally inspect your parts with the new probe and graph dialog
- Gain more control over the quality of your parts



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Physics-based support*

- Automatically improve the support of your part based on simulation.
- Support will be added where needed, based on mechanical/ thermal problems, to result in an optimal print.

* Still undergoing validation as beta feature

Sinter Module

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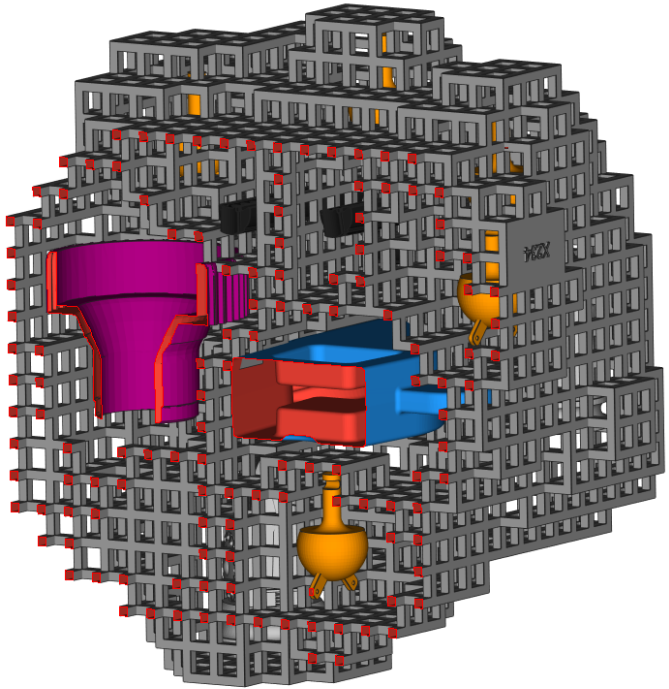
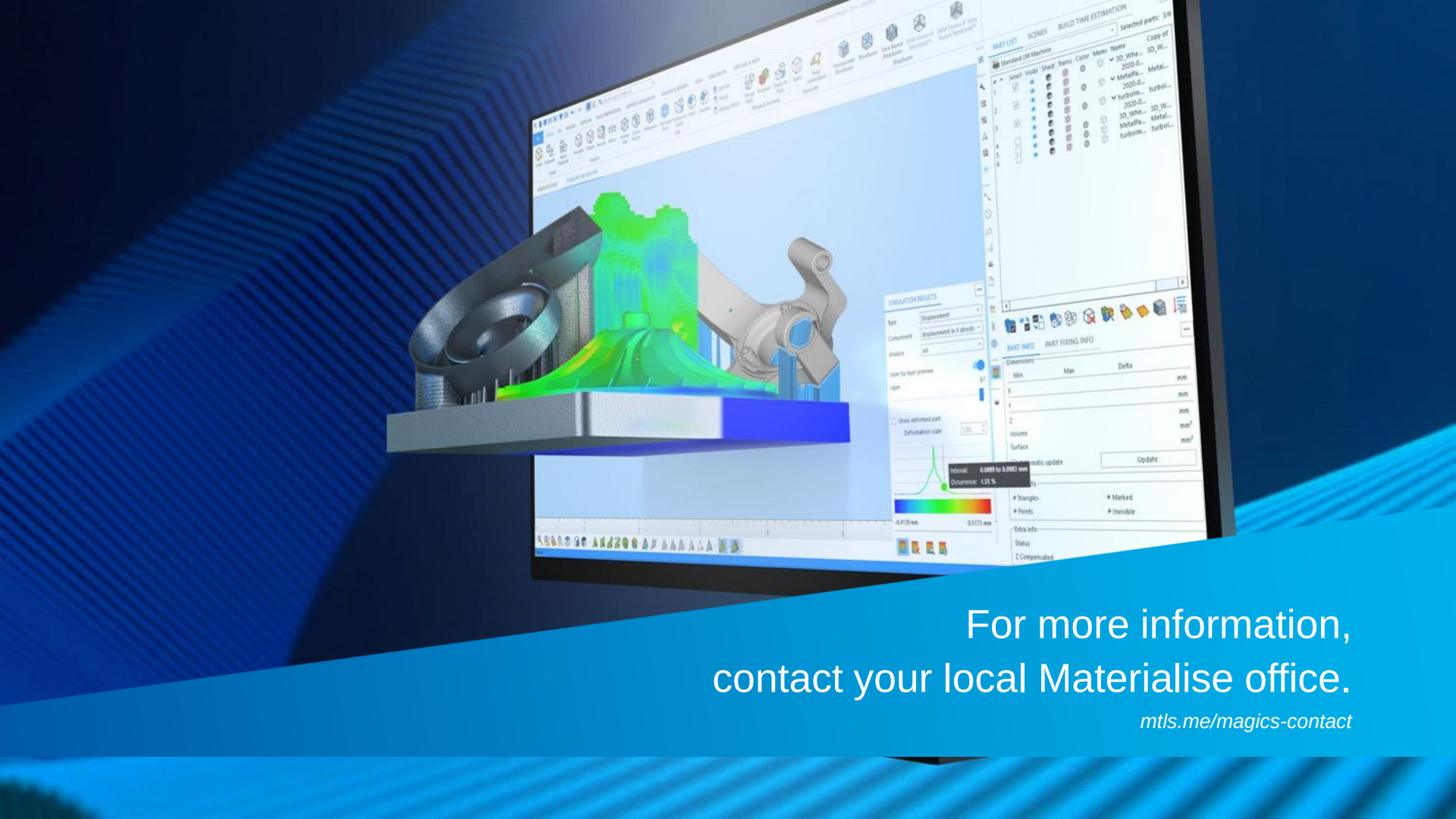
Sinterbox

- The sinterbox window has received a unified operation window, making it easier to use.
- A new freeform sinterbox has been introduced, which enables denser packing thanks to its close fit around the part(s).
- Internal walls are now possible within the sinterbox to keep parts away from each other, allowing a clearer distinction between the parts as well as more specific post-processing per part.





For more information,
contact your local Materialise office.

mtls.me/magics-contact