

Materialise Magics 28

Magics Essentials

What's new

Materialise Magics Essentials 28 feature highlights



The additive manufacturing industry recognizes Magics as the ideal software for part and build preparation. In this release of Magics Essentials, we're providing the following updates:

Usability

- ▶ Work comfortably during all working hours with the *dark theme*.
- ▶ Use Magics Essentials at any time *offline*.
- ▶ Enhance your experience with the *Import windows*, as well as with the *tool sheet minimization*.

Productivity

- ▶ *Preserve your label planning* when performing other operations.
- ▶ Gain more control over your *cut* parts.
- ▶ Get more out of *your measurements* with the additional freedom

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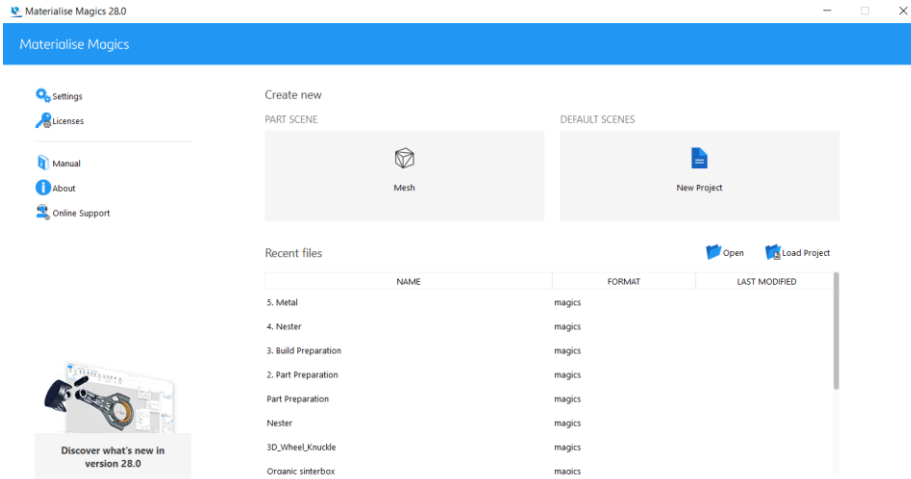
▶ Added and removed functionality

- ▶ Added functionality

- ▶ Removed functionality

Part Scenes and Home Screen

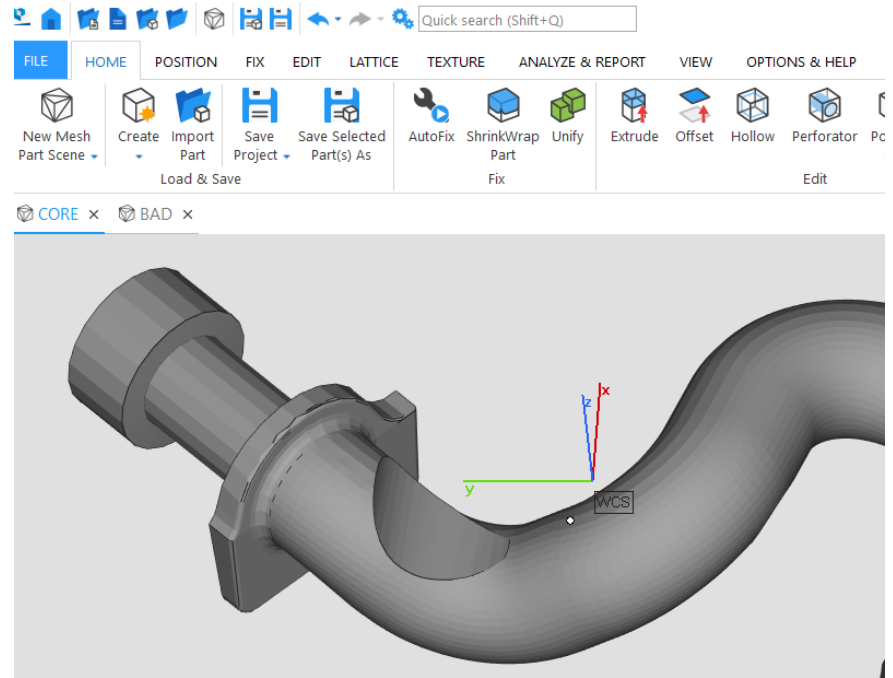
Home Screen



- ▶ Use the home screen to
 - ▶ **Create an empty part scene**
 - ▶ **Load Project files**, allowing you to store your work and easily come back to it later
 - ▶ **Open files** in new part scenes
 - ▶ Click on a **recently opened file** or **drag and drop a file on the home screen** to open it as a part or load the project.

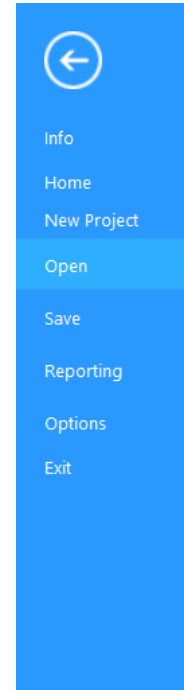
Part Scenes

- ▶ The Modeler Scene has been replaced with Part Scenes.
- ▶ With the new Part Scenes you can create separate scenes for different parts you are working on.
- ▶ Easily **close a scene** by clicking an **X** on the scene tab.
- ▶ **Keep an overview** of your project by **renaming part scenes**.



Project loading

- ▶ **Load Magics files as projects** through the **Load Project** command on the home screen or in Magics scenes.
- ▶ Loading Magics files with platform scenes will let you import those platform scenes.
- ▶ To move to the Part Scene from a Platform Scene, you can use the Edit in Part Scene function

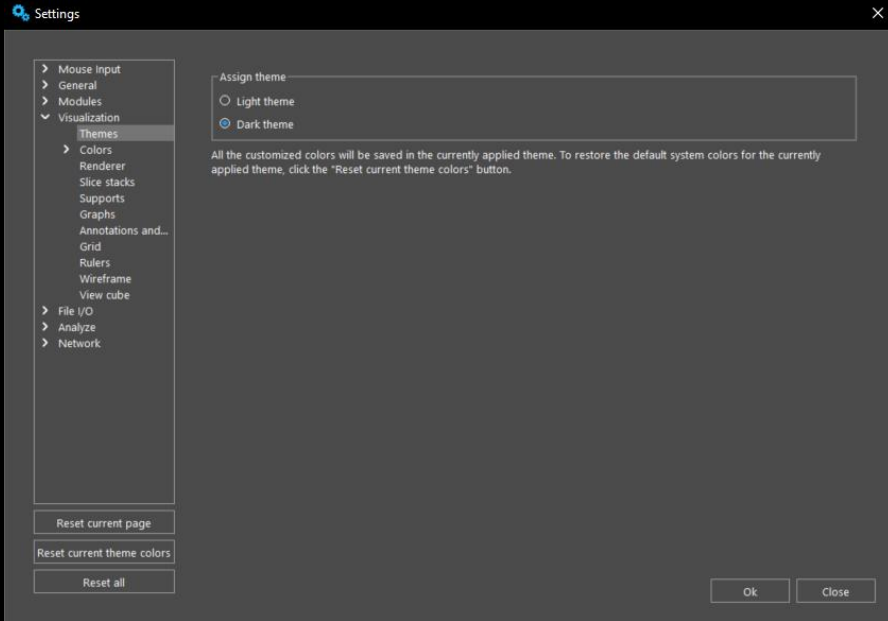


Open



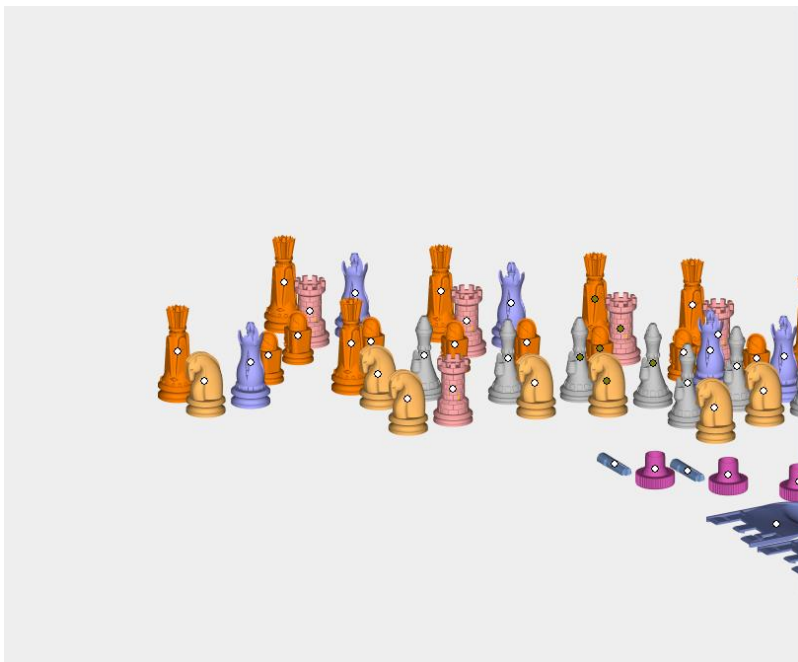
UI/UX

Dark theme



- ▶ Introducing the heavily requested dark theme, giving you Magics with a darker background.
- ▶ Improve visibility in darker working places.
- ▶ Provide more comfort to your eyes when using Magics for a prolonged period.

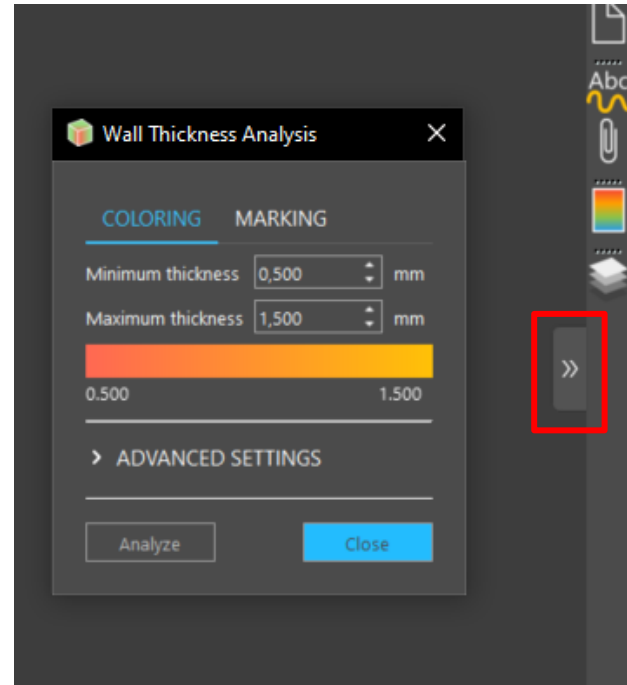
UX improvements



- ▶ **Access frequently used commands** through the **Home Ribbon**.
- ▶ **Customize your UI** for optimal usage.
- ▶ Quickly **deselect** parts in the 3D view with **CTRL + left click** on selected parts.
- ▶ **Keep** the **part selection unchanged** when only **a single part** exists in the scene.

UI optimization

- Get a better overview of your import parameters with our **updated import windows**.
- Use a wider workspace by easily **minimizing your tool sheets**.
- Get a clearer input and feedback with the new **Wall Thickness Analysis**, **Mirror** and **Label** dialogs.



Removed limitations

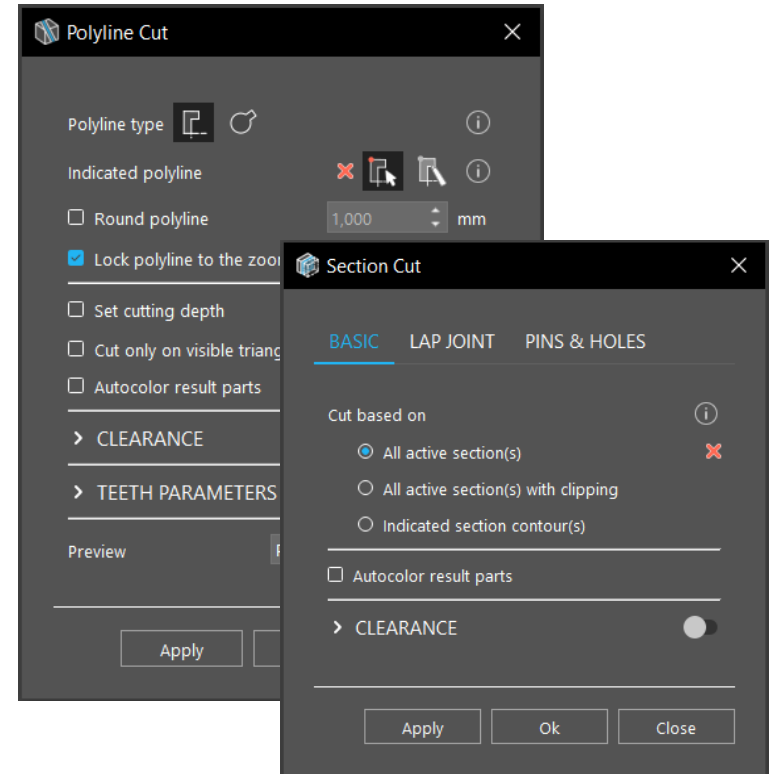
- ▶ For the **optimal experience** of our users two limitations were removed:
 - ▶ **You can work offline.** It is no longer required to have a working internet connection to use Magics Essentials.
 - ▶ You can now **use multiple instances** of Magics Essentials in parallel.

Editing

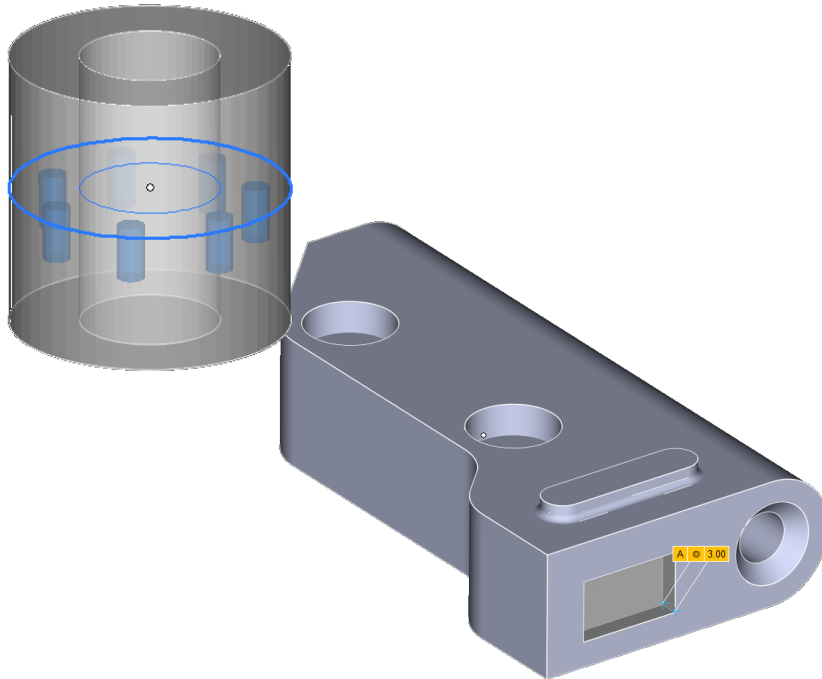
Cutting improvements (1)

UI/UX

- Modernized dialogs for Polyline and Section Cut with elaborate tooltips replace the Cut or Punch dialog.
- Constrain polyline direction and snap to mesh points for even more accurate cutting result
- Explore enhanced mouse modes for quick and easy polyline creation, editing, and deleting.



Cutting improvements (2)



▶ Functionality

- ▶ Minimize the chance of cutting errors by previewing results for pins and holes.
- ▶ Have complete control over cutting depth parameters for the polyline cut type.

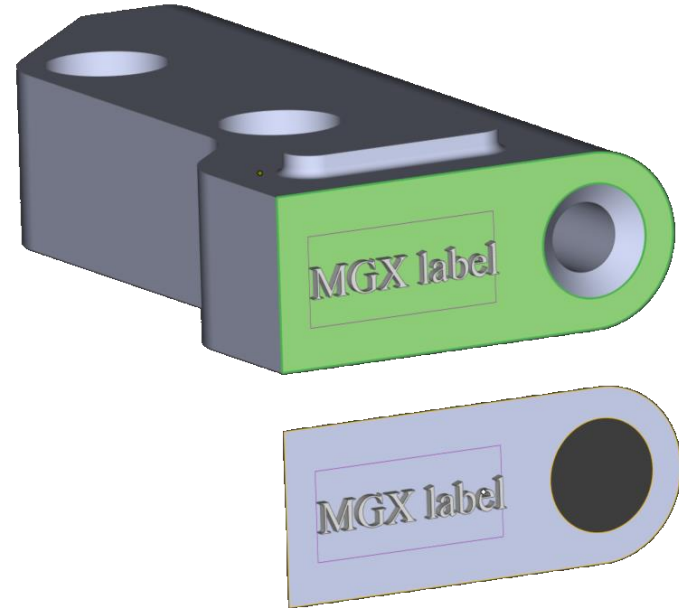
Label planning improvements (1)

- ▶ Performance improvements*
 - ▶ Reduced execution time of up to 90%
 - ▶ Reduced peak memory usage of up to 45%
 - ▶ More responsive rendering after label planning generation
- ▶ Improved operations:
 - ▶ Adding and resizing Magics' text label planning
 - ▶ Magics Data Matrix label preview

* The observable improvements on large mesh parts >10 million triangles

Label planning improvements (2)

- ▶ Preserve label planning on the part to save time after:
 - ▶ Deleting triangles not directly related to label planning
 - ▶ Copying or separating marked triangles from a part with label planning



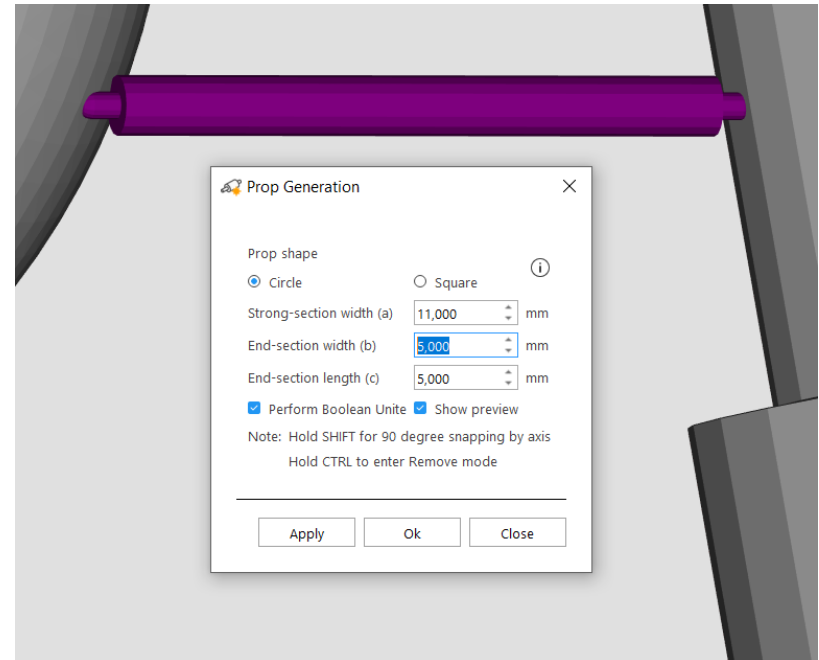
Added & removed functionality

Added functionality (1)

- Easily change the orientation your parts with the **Bottom/Top Plane** function
- Benefit from the **added measurement functionalities**
 - **Increased options** for measuring distances, e.g. line, plane, circle.
 - Compare your measurements in Magics to the measurements on your physical parts with the **Real Measurements**
- **Group your parts** to keep them together while working on them

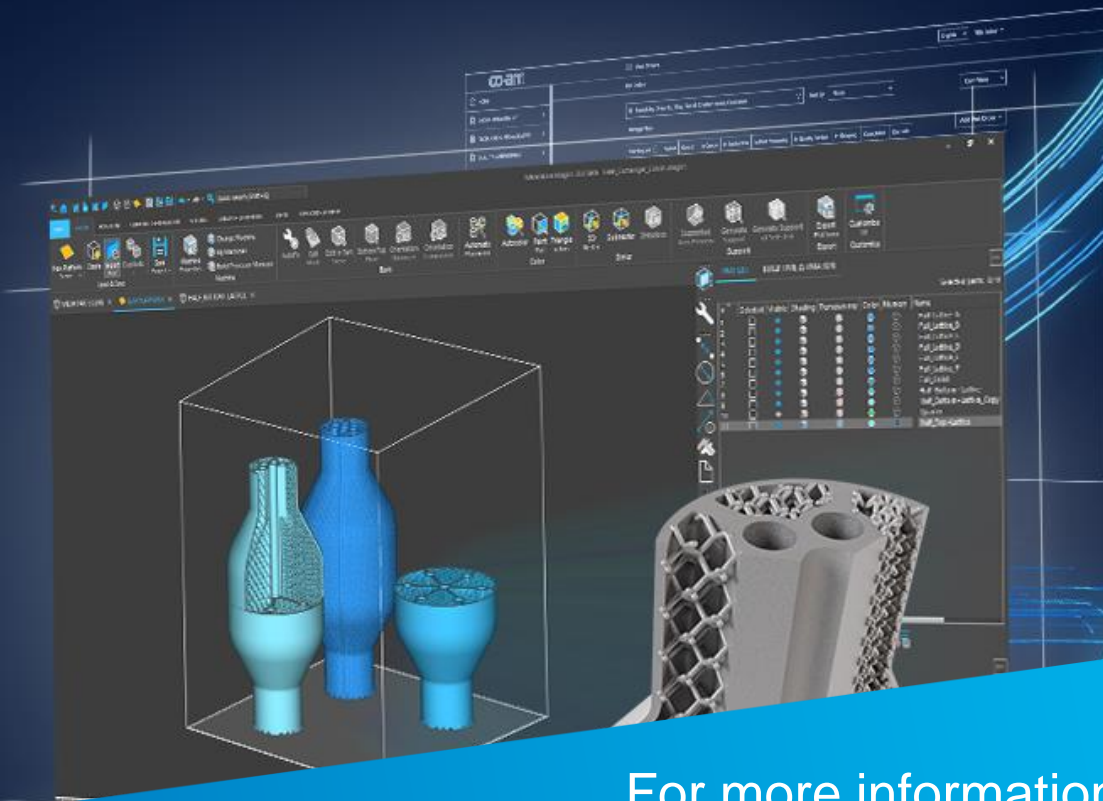
Added functionality (2)

- ▶ Use **FormFit** to create custom packaging for your parts.
- ▶ Use **Prop Generation** to avoid warping while printing.
- ▶ Use the **Translate to Default (Z) Position** functions to instantly move parts to a central location or the same height.



Removed functionality

- ▶ A few functions were **removed** to align Magics Essentials more with its intended use.
 - ▶ **Batch Duplicate**
 - ▶ **Save Part(s) as 3DPdf**
 - ▶ **Gravity Center**



For more information,
contact your local Materialise office.

mils.me/magics-contact