Materialise Magics

28.01 – Release Notes
September 2024

Contents

This document lists the new functionality, changes and fixes of Magics 28.01, compared to the Magics 28.0 release.

For the latest information and updates on Magics 28, please visit our help pages: https://help.materialise.com/en_US/magics-28.

NOTE: While Magics 28.01 in can use the same license as Magics 28.0, it is recommended to reactivate your license anyway, as some of the new functionality might otherwise not be available.

1   What's new in Magics 28.01

1.1   New and Updated Cad Imports

Magics 28.01 is bundled with MatConvert 11.0, bringing the latest version of our CAD import formats to Magics. Also one new format is now available, the **Catia Grahics Representation (*.cgr)**. Details can be found under '4.3.3 Compatibility with other CAD packages'.

NOTE: A license reactivation might be needed to be able to run MatConvert 11.0

1.2   Build preparation

Machine library

Added new machines in the default machine library:

- CMET CSLA-9000
- D-MEC DARAM3

Nesting

In Settings per part dialog **Save parameters per part** checkbox is checked ON by default

Support generation

No-support zones are preserved when beam lattice and part are merged.

1.3   Ansys Simulation

A basic simulation feature was added for all Magics RP users, allowing for a voxelized and uncalibrated visualization of the total part displacement caused by the metal L-PBF printing process. This will allow users to validate supports and recognize part risks.

In order to use this new functionality, the Ansys Simulation 4.0.1 plug-in must be downloaded, installed and activated (via a new Magics keyfile).

NOTE: A license reactivation might be needed to activate basic simulation.

1.4   New beam lattice unit cells

Several new unit cells have been included in the default Beam Lattice unit cell library. These were added in collaboration with HP.

Types of unit cells:

- High stiffness to mass ratio: Torpedo
- High damping ratio: Twisted Box, Sine-wave & Kelvin

2 Bugfixes

- Localization improvements

- CTools now correctly runs without restarting Magics after initial installation.

- Implemented a safeguard to avoid registering the same floating license server multiple times when registering through the command line

- Export parts with Concept Laser fixed for all target folder titles with UNICODE characters.

- The last used nesting profile is remembered.

- Sliced support is exported into correct position when Z-compensation is enabled.

- Opening multiple parts on a platform from CO-AM production planner is fixed.

- Fixed an issue with **Shells toolpage** and **Part fixing info toolpage** not being automatically refreshed when opening files with double click.

- Paragraph settings in the Text Label dialog are now remembered.

- Simulation color map is correctly updated when switching between multiple platforms with Simulation results open.

- e-Stage is generated correctly on a mesh part containing beam lattice during generation flow in Magics and Export platform.

- No-support zones are correctly added from the marked lattice beams on virtual copies.

- Value for added thickness in 2D edit dialog can have "0" as the first digit.

- An issue with Tree changing its position after profile change was fixed.

- Toolbar and toolsheet docking areas positions are remembered after relaunching Magics.

- Fixed an issue on **Reset current page** button not always working properly in Settings dialog.

- Fixed the issue where sometimes the import parameter dialog is never shown anymore if "Apply to all" was selected during a previous import.

- **File units** parameter is remembered on Import dialog reopening (e.g. 3dm or VRML).

- Loading some specific platforms (created in older versions of Magics) from Streamics does not crash Magics anymore.

- "Export support as slices" function is available again to support generation users.

- **Invert Triangle Visibility** command is added to the platform scene layout.

NOTE: A license reactivation might be needed to be able to slice supports upon export.

3 Known Issues

All the known issues of Magics 28.0 remain valid for Magics 28.01 besides the ones related to above changes. An overview of these known issues can be found here:
https://help.materialise.com/en_US/known-issues-magics.

4 Compatibility

4.1 Bundled components

Product	Versions
Magics	28.0.1.41
Solidware	28.0.1.27
CTools	28.0.1.27
MatConvert	11.0.0.48
Build Processor System	3.3.1 (**)
MatLicensing	7.4.4.0

4.2 Compatibility with other Materialise product releases (***)

Product	Versions
Streamics	9.0
Robot	9.0
3-matic	18.0
Simulation module	3.0.3
Ansys Simulation module	4.0.1
e-Stage	7.4
MatConvert	10.9 and higher
Build Processor System	1.7.16 (**)
CO-AM	release 1.0.100
CO-AM Machine Manager	1.13

For compatibility with specific Build Processors, please refer to the release notes of BPS and/or the specific Build Processor.

** The bundled BPS will only be installed/upgraded in case there is no installation yet of BPS, or in case the installed BPS is not compatible with Magics 28 (BPS version lower than 1.7.16).

*** Compatibility with newer versions of these products is expected unless explicitly mentioned in the respective release notes and is nevertheless limited to existing functionality only. Any new functionality in these products cannot be guaranteed to be compatible with Magics 28.

4.3 Compatibility with other CAD packages

Magics 28.01 comes with MatConvert 11.0, which supports the below CAD formats.

MatConvert is being released on a quarterly base, to ensure compatibility with the latest CAD formats, and can be downloaded and installed separately. More information can be found here: https://help.materialise.com/en_US/matconvert

Please note that the 'all imports' license is needed for all these CAD formats, except for importing STEP files.

Via 'Magics RP' base license		
STEP	*.stp, *.step	AP203 (E1, E2), AP214 (up to E3), AP242 (E1, E2, E3)
VRML	*.wrl, *.vrml, *.x3dv	1.0 and VRML 97, X3D 3.3
Via 'all imports' module		
IGES	*.igs, *.iges	Version 5.3
ACIS SAT	*.sat	Up to 2023 1.0
JT	*.jt	6.4 to 10.7
Rhino	*.3dm	Rhino 7.11
CATIA 5	*.CATPart, *.CATProduct	R10 to V5-6R2024
CATIA 6	*.3dxml	R2010x to R2024x
CATIA Graphics Representation	*.cgr	R10 to V5-6R2024
Pro/Engineer	*.prt, *.asm	2000i to Creo 10.0
Siemens NX	*.prt	15 to NX 2312 Series (until 2312.7000)
Parasolid	*.x_t, *.x_b	V7 to V36.1
SketchUp	*.skp	SketchUp 2023
Autodesk Inventor	*.ipt	9 to 2025
Revit	*.rvt	2011 to 2025
Solidworks	*.sldprt, *.sldasm	2006 to 2024
Solid Edge	*.par	10 to 2024

5   System Requirements

Hardware*	Software

CPU

- o   Intel Core i7
- o   AMD Phenom II X4/ X6 at 3.0 GHz or higher with SSE2 technology

Memory

- o   16 GB RAM or higher

Free Disk Space

- o   Win 64-bit system
- o   2GB of free disk space

Display

- o   1920 x 1080 resolution or higher
- o   32-bit color depth (True color)

4K monitors work most optimal with scaling set to 125%

Video Card

- o   NVIDIA GeForce GTX 1060' or AMD Radeon RX 480 or better
- o   DirectX 11 compatible video card
- o   At least 4 GB of memory
- o   At least a memory interface width of 192-bit (256-bit is recommended)

Materialise Magics 28 **is only supported on** Windows 64-bit**:

- o   Windows 11
- o   Windows 10 version 21H2 or later

Materialise Magics 28 **is recommended on**:

- o   Windows Pro edition
- o   Windows Enterprise edition

Materialise Magics 28 **is not supported on**:

- o   Windows 8.1 or earlier
- o   Windows Server Editions
- o   Virtualization systems such as VMWare

Materialise Magics **does not run** natively on **Mac OS X**, **Linux**, or **any other operating system** not listed above.

.NET 4.6 or later or a working internet connection during the installation is required.

* These hardware requirements are considered minimal for professional usage, but depending on the expected use cases (mainly influenced by project size, amount of triangles and number of parts) it is recommended to invest in appropriate hardware (more memory, larger disk size, ...). More info can also be found on: https://help.materialise.com/en_US/how-to-optimize-magics-performance

** Materialise Software will discontinue supporting an operating system, or a specific version of an operating system, from the moment that the OS vendor discontinues support.

6   Contact Information

For more information, check out our website: materialise.com/software/magics/

For technical support, click the **Online Support** button in Magics and check the local help pages (https://help.materialise.com/en_US/category-magics) or contact one of our Customer Support teams:

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