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# Materialise Streamics 8

## What's new

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# Connectivity

*Allowing your AM production to be fully connected into your business  
and manufacturing flows*

# Platform Export

Better connectivity with all 3D printers

▶ **End-to-end workflow**, exporting platform directly from Streamics without launching Magics and load it on the machine.

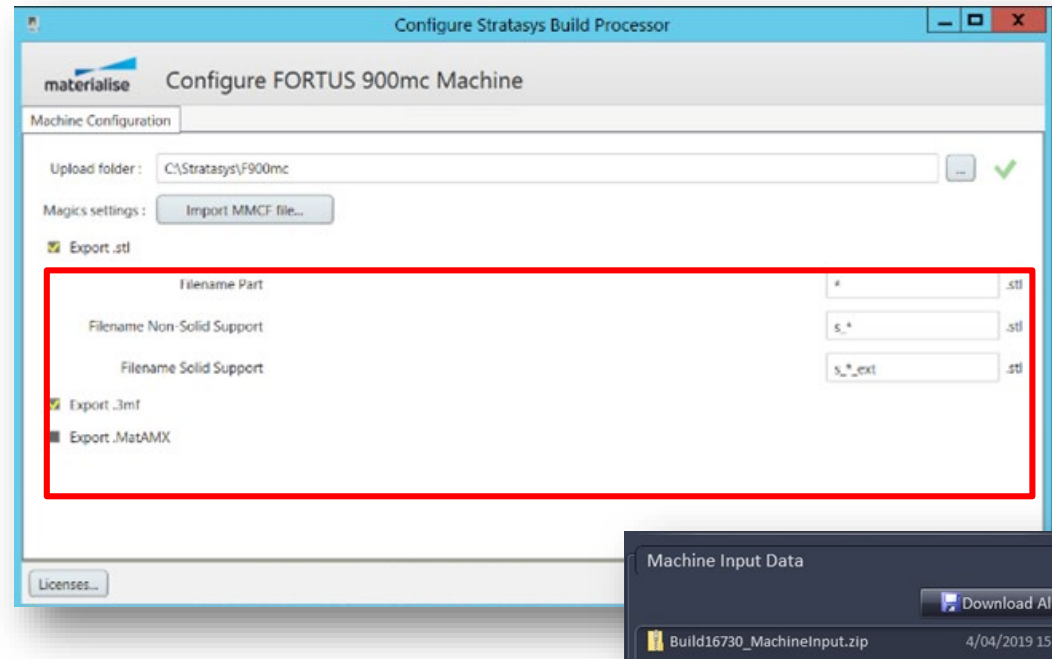
▶ STL, 3mf and MatAMX file formats

## Easy workflow:

▶ Select build, press Prepare & Send

▶ The platform is exported using pre-selected format and folder

▶ Streamics adds platform file (zipped) to the build in the tab attachments-Machine input data.



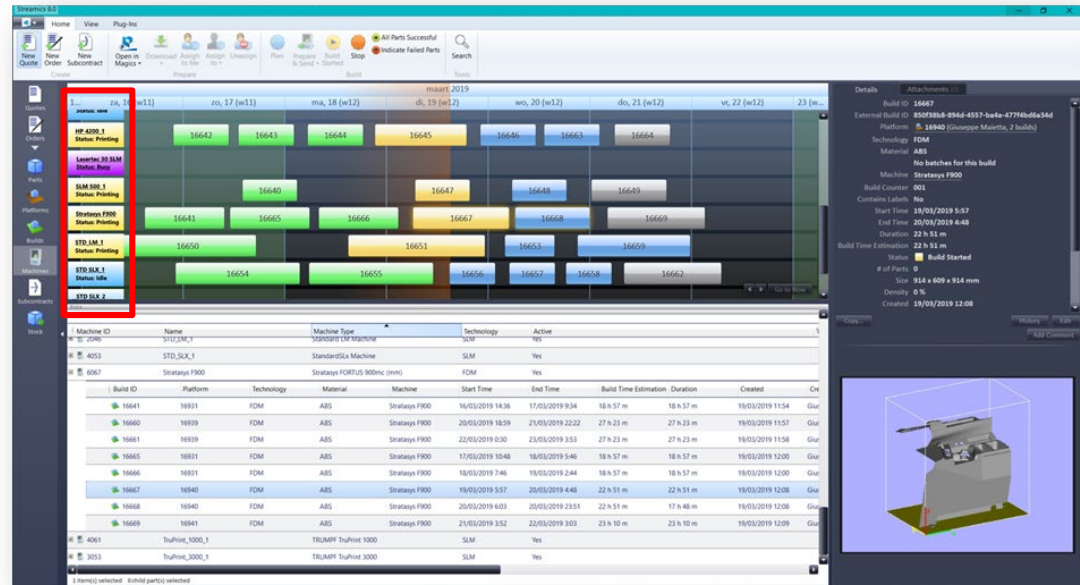
# Visualization of machine status

Real time machine status

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## Main functionalities:

- ▶ Real-time visualization of each connected machine
- ▶ MT Connect protocol support

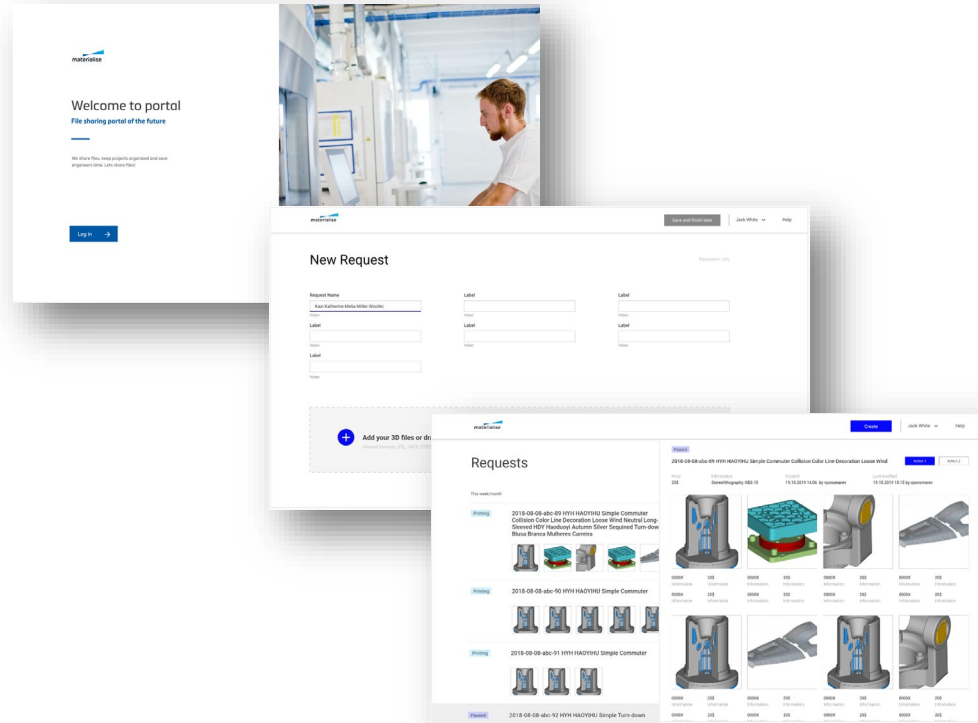


# Configurable WEB portal

Better connectivity of AM design department with production shop floor

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- Create new look & feels according to your company guidelines
- Configure all elements on each page
- Links to external pages
- Log off possibility to enhance security
- Easily add new languages
- Configurable notification service
- Reduced time2market thanks to the configuration possibilities
- Streamics portal can be updated with every new Streamics update (compatibility assured)



# ReST API enhancements

Better connectivity with other business systems



## New added functionalities:

- Reliable message delivery
- Items traceability: Show Ext Build ID
- Handling the absence of network connection
- Handling errors from a 3<sup>rd</sup> party software
- Identify Builds with an External Build ID received from a 3<sup>rd</sup> party SW
- Identify Physical Part with Serial Number ID received from a 3<sup>rd</sup> party SW

The screenshot shows the Materialise eRP system navigation menu at the top, with the 'API' link highlighted in a red box. Below the menu is the Swagger API interface for 'Materialise.eRP.Server.Web'. The interface includes a search bar with the URL 'http://software.materialise/STREAMICS/swagger/docs/v1' and an 'api\_key' field. A red arrow points from the 'API' link in the navigation menu to the 'Explore' button in the Swagger interface. The Swagger interface lists various API endpoints with their respective actions:

Endpoint	Show/Hide	List Operations	Expand Operations
Builds	Show/Hide	List Operations	Expand Operations
Files	Show/Hide	List Operations	Expand Operations
Notifications	Show/Hide	List Operations	Expand Operations
Notification Templates	Show/Hide	List Operations	Expand Operations
Orders	Show/Hide	List Operations	Expand Operations
Parts	Show/Hide	List Operations	Expand Operations
Platforms	Show/Hide	List Operations	Expand Operations
Subscriptions	Show/Hide	List Operations	Expand Operations

[ BASE URL: /STREAMICS , API VERSION: v1 ]

# Productivity

*Getting most out of your AM production to increase the AM business case*



# Automatic multi-platform placement & nesting

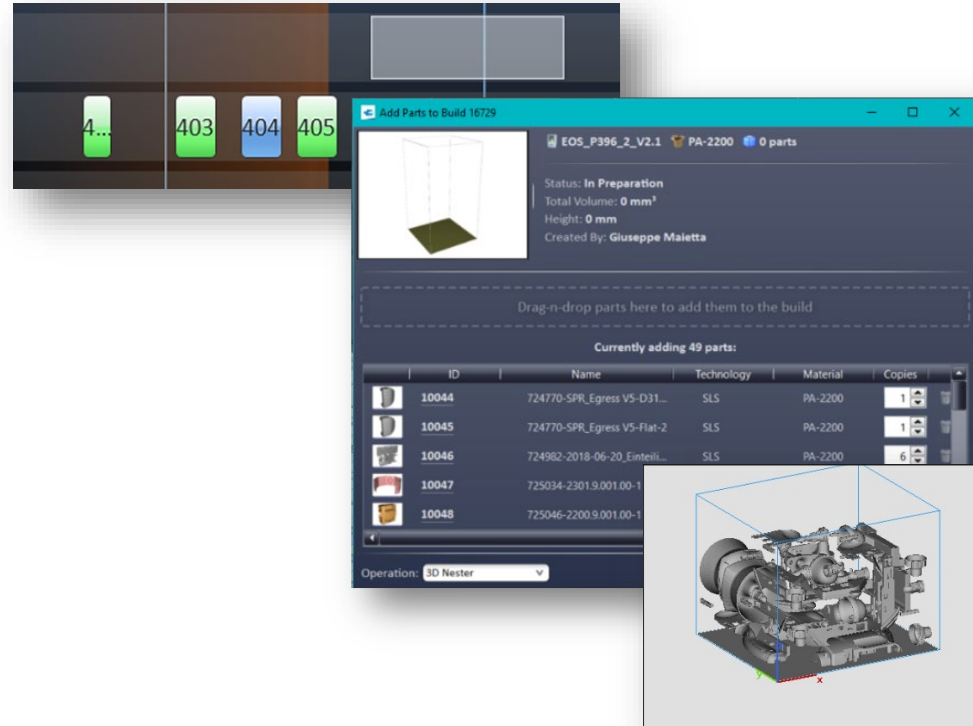
Faster workflow and build preparation

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- Create several platforms directly from Streamics, without having to pass from Magics
- Automatically create Sinterboxes for small SLS parts
- Drastically reduce labor cost

## Workflow

- Manually create a build and drag and drop multiple parts on it
- Start the nester from the Streamics menu
- Streamics will automatically import parts, nest them and produce as many builds as needed to print all the parts you've chosen.

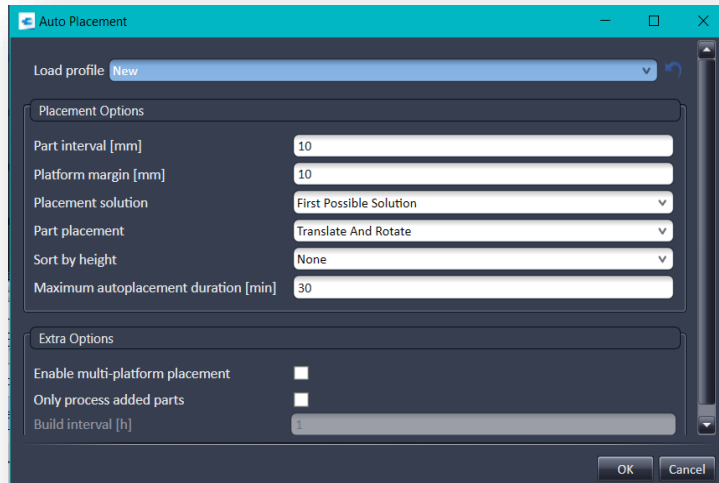


# Automatic multi-platform placement & nesting

## Settings

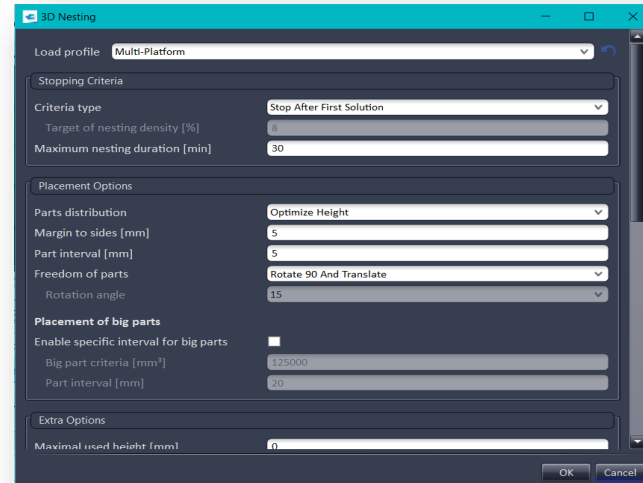
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### Automatic placement settings



The 'Auto Placement' dialog box features a 'Load profile' dropdown set to 'New'. It is divided into 'Placement Options' and 'Extra Options' sections. The 'Placement Options' section includes: 'Part interval [mm]' (10), 'Platform margin [mm]' (10), 'Placement solution' (First Possible Solution), 'Part placement' (Translate And Rotate), 'Sort by height' (None), and 'Maximum autoplacement duration [min]' (30). The 'Extra Options' section includes: 'Enable multi-platform placement' (checkbox), 'Only process added parts' (checkbox), and 'Build interval [h]' (1). 'OK' and 'Cancel' buttons are at the bottom.

### Automatic 3D nester setting



The '3D Nesting' dialog box features a 'Load profile' dropdown set to 'Multi-Platform'. It is divided into 'Stopping Criteria', 'Placement Options', 'Placement of big parts', and 'Extra Options' sections. The 'Stopping Criteria' section includes: 'Criteria type' (Stop After First Solution), 'Target of nesting density [%]' (8), and 'Maximum nesting duration [min]' (30). The 'Placement Options' section includes: 'Parts distribution' (Optimize Height), 'Margin to sides [mm]' (5), 'Part interval [mm]' (5), 'Freedom of parts' (Rotate 90 And Translate), and 'Rotation angle' (15). The 'Placement of big parts' section includes: 'Enable specific interval for big parts' (checkbox), 'Big part criteria [mm²]' (125000), and 'Part interval [mm]' (20). The 'Extra Options' section includes: 'Maximal used height [mm]' (0). 'OK' and 'Cancel' buttons are at the bottom.

Parameters are configurable

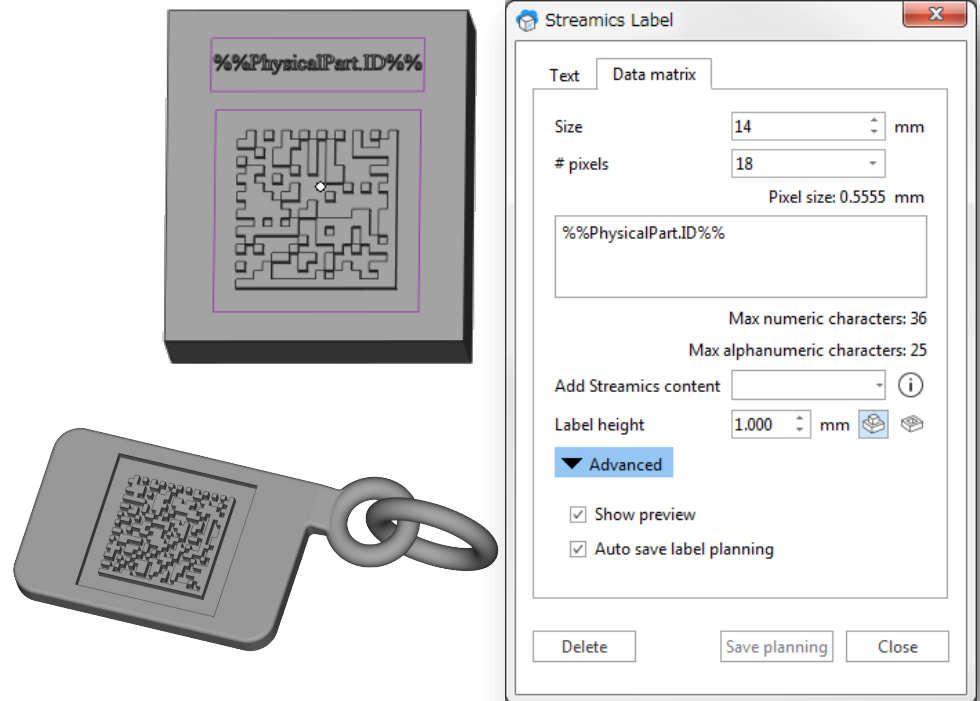
- On server site (for default settings and to create different profiles)
- When calling the operation (for choosing profiles and change parameters on the spot)

# Data Matrix labelling

Better connectivity with other business systems

**Streamics can handle Data Matrix Label as well as Text Label.**

- ▶ Plan Data Matrix Label on Magics.
- ▶ Streamics will generate correct STL data automatically



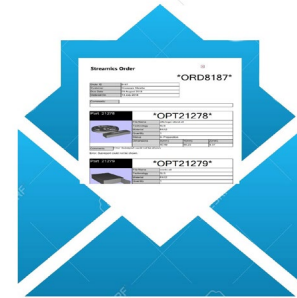
# Configurable notification system in portal

More efficient workflow



## Set up automatic mail notifications

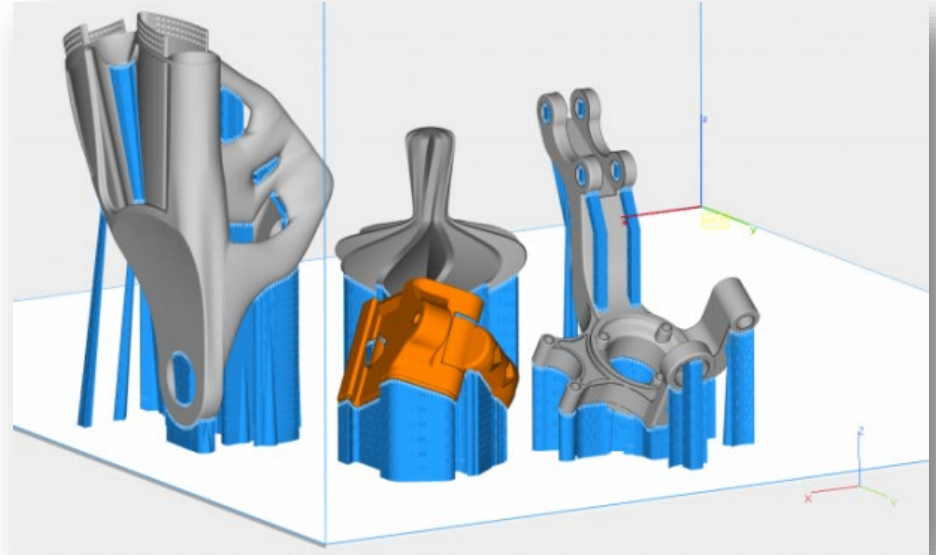
- ▶ Selecting the trigger (status of a request)
- ▶ Editing the content of the notification
- ▶ Adding attachments (from the templates of Reporting service) as PDF
- ▶ Specify the addresses (To and CC)



# Include support volume in price calculation

Estimate more accurately the material cost

- ▶ Estimation of supported volume is calculated during the part analyses
- ▶ Output can be used in the price calculation sheet to estimate a total cost for producing the part (part + support)



# Other improvements

## Other improvements

- ▶ New supported environment (MS Server 2016, MS SQL 2016 SP2 & 2017)
  - ▶ Support for the most recent environments
- ▶ Performance improvements and Database optimization
  - ▶ Performance has been improved for several features resulting in a smoother user experience
  - ▶ Database structure has been reviewed and optimized to guarantee faster transactions
- ▶ Several bugs fixing

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For more information,  
contact your local Materialise office.

[materialise.com/contact-locations](https://www.materialise.com/contact-locations)