

Tebis 4.1 Release 10 – Everything in a single CAD/CAM software solution

The focus of the new release is the revolutionary Tebis SmartOps Technology that supports end-to-end automation of CAD/CAM processes in Tebis software. Users can now master many design and manufacturing tasks significantly faster and more easily or reproduce them at any time. Tebis announced 4.1 Release 10 will be available this autumn.

Tebis SmartOps Technology

Your shortcut to success.

Whether it's about manufacturing simple or highly complex parts, every manufacturing process involves many reoccurring tasks.

With Tebis SmartOps Technology, the user can rely on intelligent, sophisticated CAD/CAM operations that provide full automation thanks to powerful templates.

Benefit from: Ease of use, greater efficiency, and maximum safety – all with consistently high quality and maximum flexibility.

SmartOps Technology can be used with the complete set of Tebis function modules. You can tailor SmartOps to the specific tasks in your company; all your collected manufacturing know-how is managed in powerful libraries. The production will become smarter, faster, and future-proof.

This new technology has already been used by several project partners.

As Automation Product Manager Torsten Fiedler shares:

“Our project partners are especially excited that Tebis SmartOps can be set up entirely within the familiar CAD/CAM environment without the need for special scripting or programming knowledge. This is where Tebis SmartOps Technology clearly stands out from our competitors’ products.

They are also enthusiastic about the ability to flexibly adapt the CAD/CAM process at any time. Users are guided through individual process steps by a wizard and can intervene as necessary. The user can quickly and easily update the entire manufacturing process using parametric functions.”

Automation with Tebis SmartOps makes the difference!

CAM milling

Easier CAM programming and optimised retract movements in 5-axis simultaneous milling.

Once again, Tebus has made toolpath programming for 5-axis simultaneous machining even easier: Users can now select a curve to calculate the tool orientation. They can also specify an angle to further improve cutting conditions.

In addition, the machine retract movements can now be accurately controlled in Tebis for all 5-axis simultaneous milling functions: Retracts can be processed at rapid traverse or normal feed rate, optimally matching the retract movements to the machine type and control.

Your benefits:

Optimised machining of undercut areas

Precise control of machine movements in 5-axis simultaneous milling

20 percent faster roughing

The roughing options have been further improved: Thanks to optimised infeed movements, high feed-rate cutters that enable very high metal removal rates, especially for large parts, can now be used even more efficiently and with less tool wear.

New options for combined roughing operations also ensure longer tool life and up to 20 percent faster processing on the machine: If specific areas are excluded from machining during roughing, additional filtering options can be used for even more targeted control of subsequent machining.

Your benefits:

- Shorter machine run times
- Longer tool life

Optimised connecting paths for 3-axis machining centres

Tebis also supports full control of machine control systems in which the linear axes are not synchronised. When potential for collision exists, the connecting path is automatically generated at a safe height. This lets you exploit the full potential of older 3-axis machining centres: The positioning is done at maximum speed.

Your benefits:

- Optimal utilisation of 3-axis machining centres

CAD/CAM automation

Use free-form features efficiently and automatically

Tebis customers now also benefit from even greater automation when machining free-form features. As when machining using ruled features, you can now specify in the tool search whether the tool should be automatically replaced with a longer one in the event of possible collisions. Alternatively, users still have the option of controlling the collision check manually like before.

Free-form features are also even easier to prepare for automated CAM programming: They can be disconnected, linked, or broken interactively.

Your benefits:

More automation for greater simplicity

High degree of flexibility

Even easier machining of free-form features

CAD – 3D design

Quick and easy tangential surface extension

In some cases, to avoid residual material at the edges and protect cutting edges, free-form surfaces have to be extended tangentially for optimum milling results. In Tebis, this is fast and automatic.

The Tebis parametric solution is extremely close to the actual practice of manufacturing: You can interactively adjust the result and update it globally with a click of the mouse.

Your benefits:

More automation for greater ease of use

Perfect match for Tebis SmartOps Technology

CAD reverse engineering

Highly automated generation of wire-frame models on scanned CAD models

Wire-frame models are the basis for reverse engineering.

Tebis now offers efficient, highly automated generation of wire-frame models from scanned data sets.

The generated wire frame can then be optimised in a flexible manual process.

Your benefits:

Finish faster even when CAD data is lacking

Very flexible use

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