**Automated multi-axis deburring with Tebis**

*Tebis Version 4.0 Release 7 showcases functions for multi-axis deburring*

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**Automated multi-axis deburring with Tebis**

**4.0 Release 7**

**Martinsried, Germany, March 12, 2019 – Tebis, the specialist for CAD/CAM and MES process solutions in model, die and mold manufacturing, introduces new functions including automated multi-axis deburring in Release 7 of its CAD/CAM software. This new function is fully integrated in Tebis' template technology; preparation and milling functions are optimally harmonized.**

**Tebis 4.0 Release 7\* is expected to be available in late March.**

A plus when it comes to performance

The new Tebis solution for automated multi-axis deburring enables users to greatly reduce manual reworking on the part. This enables them to tap into the capabilities of their machines significantly better. Fabian Jud, Tebis product manager, explains: "Today, many CAD/CAM users still deburr manually. With our solution, which is suitable for machining with ball cutters or tapered cutters, the NC programmer automatically generates the toolpaths in the CAD/CAM software. Deburring is performed by the machine."

Quick and easy part preparation

Thanks to this new function, absolutely no design knowledge is required for preparing the part. The user simply selects the part; all sharp edges are automatically detected and are stored in a structure when the process is complete. This detection can be restricted with filters if desired. For example, bores that are countersunk and should therefore not be deburred until during boring can initially be excluded from processing.

Completely integrated in Tebis template technology

With the new milling function for deburring, the user no longer has to select individual curves or interactively angle the tool. The structured data as well as automatic element selection take care of this. The tool automatically finds the best tilt direction. 5-axis simultaneous avoidance milling is also integrated when using ball cutters.

Broad range of applications

The new solution is suitable for 5-axis simultaneous machining as well as for 3-axis machining with positionable axes. Of course, a fixed tilt direction can also be specified, enabling trouble-free use of machines with multiple heads. The user can perform deburring with either a 3-axis, 5-axis or angle head – only those toolpaths that can be traversed without collisions using the selected head and the selected tilt direction are calculated. 3-axis and 5-axis simultaneous machining operations can therefore be combined to reduce tool movements and traverse paths to a minimum.

This new function can be implemented in a wide range of applications. It is suitable for both deburring prismatic parts from mechanical engineering and the production of mold frames as well as for fast manufacturing of complex parts.

\* Note for editors:

*\*A complete overview of all the new key functions in Release 7 – including features like improved NC accuracy or surface quality – is provided in the press release "Tebis launches Version 4.0 Release 7" dated 3/12/2019 as well as on the Tebis website.*

The recording of the Tebis webinar "Automated multi-axis deburring" can be downloaded at [**https://www.tebis.com/en/news-events/webinar-recordings/**](https://www.tebis.com/en/news-events/webinar-recordings/). The contents address the new milling functionality provided in Tebis Software 4.0 Release 7.

**Images**



**Image 1**

*Fabian Jud, product manager at Tebis Technische Informationssysteme AG in Martinsried, Germany*

(Image: Tebis AG)

**P:\marketing\INTERN\PRESSE\Pressemitteilungen\2019_5-Achsen-Entgraten_R7\CAD Entgraten mit Tebis_Bauteilkanten automatisch erkennen und Bohrungen auf Wunsch ausschließen.tif**

**Image 2 CAD deburring with Tebis**

*Automatically detect part edges and optionally exclude bores*

(Image: Tebis AG)

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**Image 3 CAD deburring with Tebis**

*Edge analysis in Tebis is also suitable for complex parts*

(Image: Tebis AG)

**P:\marketing\INTERN\PRESSE\Pressemitteilungen\2019_5-Achsen-Entgraten_R7\CAM Entgraten mit Tebis_Geeignet für alle Branchen und Einsatzbereiche _Beispiel Maschinenbau.tif**

**Image 4 CAM deburring with Tebis**

*Suitable for all industries and applications;   
example: Deburring with tapered cutter in mechanical engineering*

(Image: Tebis AG)

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**Image 5 CAM deburring with Tebis**

*Suitable for all industries and applications;   
example: Deburring with ball cutter and automatic avoidance in mechanical engineering*

(Image: Tebis AG)

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**Image 6 CAM deburring with Tebis**

*Suitable for all industries and applications;   
example: Deburring with tapered cutter and automatic tilt direction calculation in mold manufacturing*

(Image: Tebis AG)

**P:\marketing\INTERN\PRESSE\Pressemitteilungen\2019_5-Achsen-Entgraten_R7\CAM Entgraten mit Tebis_Geeignet für alle Branchen und Einsatzbereiche _Beispiel Werkzeugbau.tif**

**Image 7 CAM deburring with Tebis**

*Suitable for all industries and applications;   
example: Deburring with tapered cutter in die manufacturing*

(Image: Tebis AG)

**About Tebis**

Companies use Tebis software to organize and optimize

their CAD/CAM process chains in manufacturing-intensive areas. They use

Tebis systems throughout, from design and engineering to equipment and part manufacturing. They benefit from the unique strengths of Tebis to deliver high-quality products in the shortest time for the automotive, aerospace, machinery and equipment industries and appliance and medical equipment manufacturers.

**About Tebis**

Tebis AG is a global market and technology leader in the CAD/CAM and MES sector. With Tebis, customers can design, plan and manufacture models, molds and components efficiently, reliably and in the highest quality. Teams of experienced consulting and implementation specialists develop strategies for efficient and reliable CAD/CAM processes and implement them at customers’ facilities, ensuring a sustainable technological and competitive advantage.

Tebis software has an intuitive user interface that guarantees a high level of quality and reliability in manufacturing, even for highly complex parts. Thanks to the Tebis service offerings, customers can easily introduce new technologies and fully harness the power of Tebis process solutions.

The company is headquartered in Martinsried near Munich, Germany, and has nine subsidiary offices around the world as well as distributors in eight other countries. 350 employees worldwide support the company's customers, most of whom are from the automotive, aerospace and mechanical engineering sectors.

Automation has been a key factor in the Tebis formula for success for more than 30 years. Tebis views itself as an innovator for its customers on their path towards Industry 4.0.

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