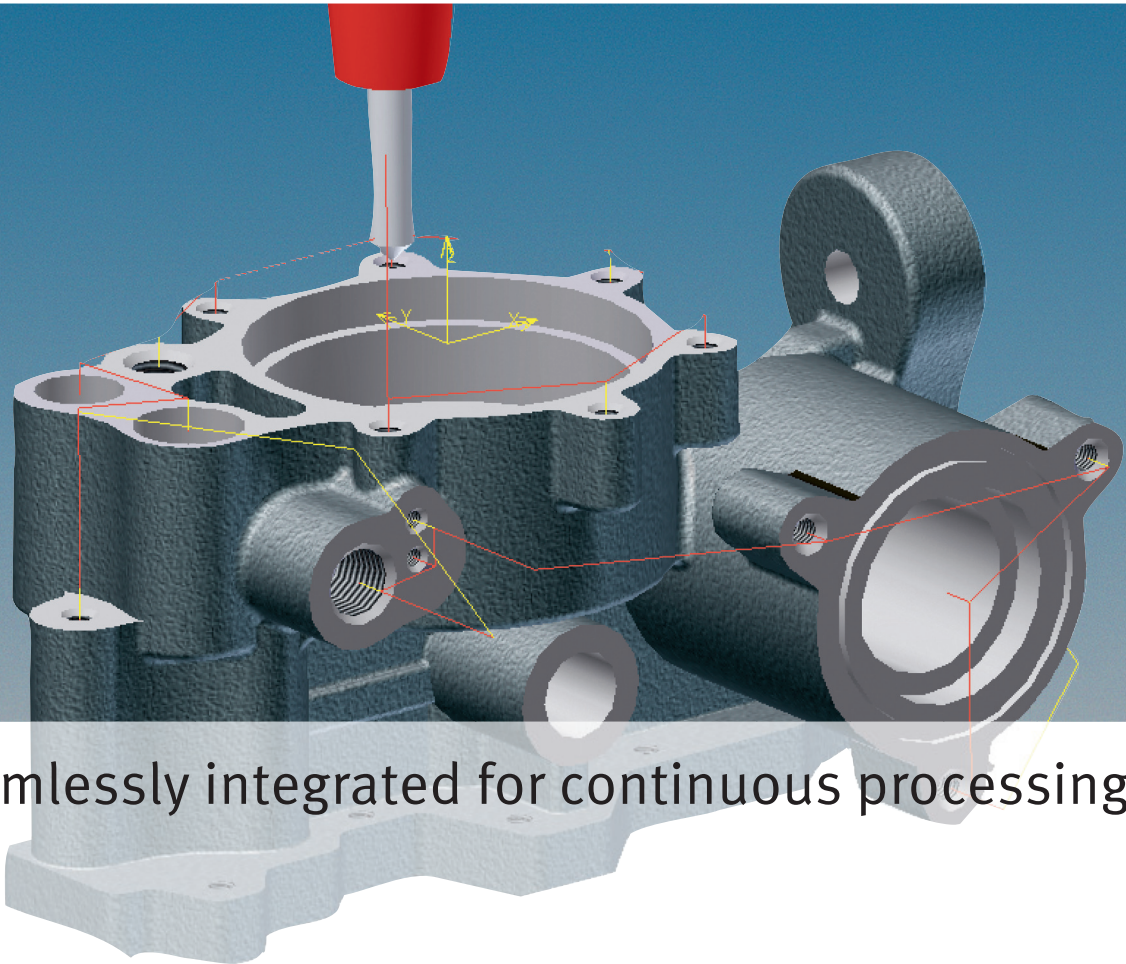


hyperMILL®

Autodesk® Inventor®

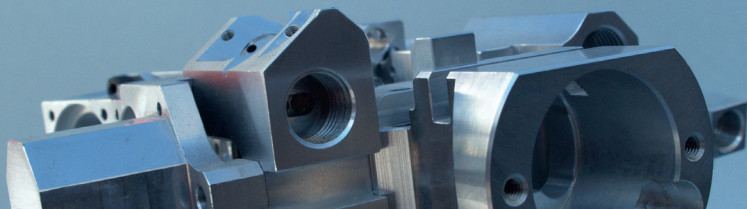


Seamlessly integrated for continuous processing

CAD INTEGRATION



OPEN MIND THE CAM COMPANY

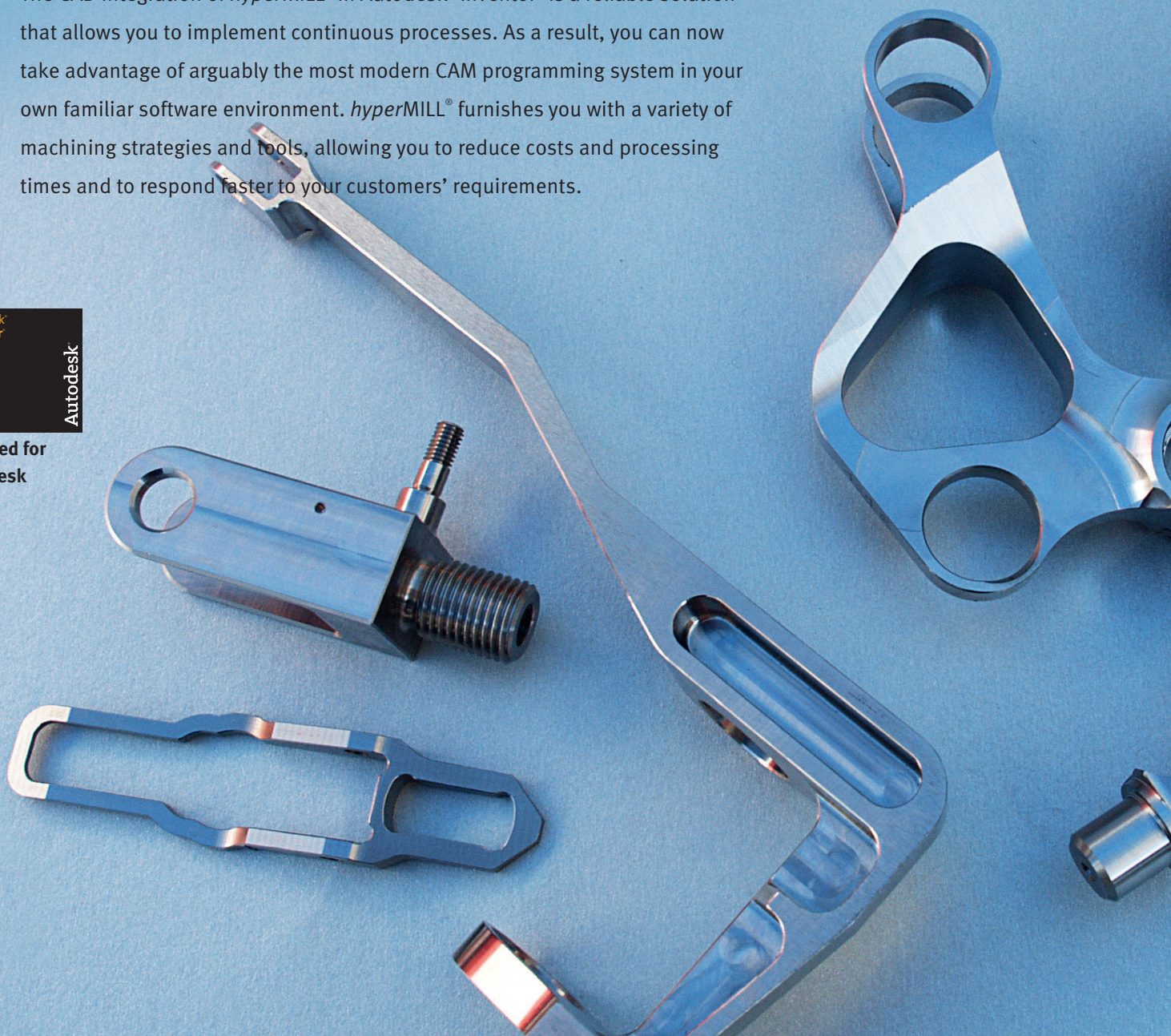


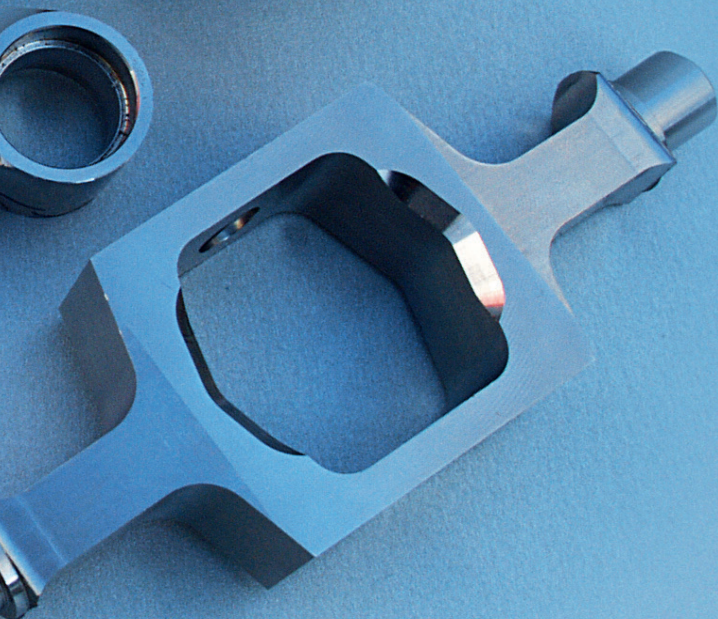
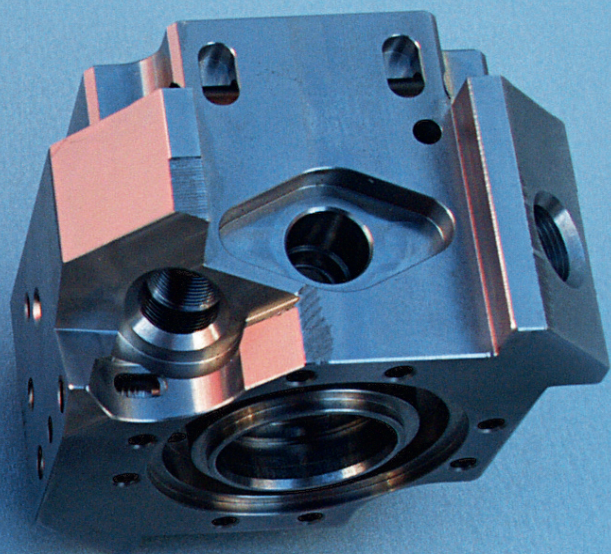
hyperMILL® in Autodesk® Inventor®

The CAD integration of *hyperMILL*® in Autodesk® Inventor® is a reliable solution that allows you to implement continuous processes. As a result, you can now take advantage of arguably the most modern CAM programming system in your own familiar software environment. *hyperMILL*® furnishes you with a variety of machining strategies and tools, allowing you to reduce costs and processing times and to respond faster to your customers' requirements.



Certified for
Autodesk

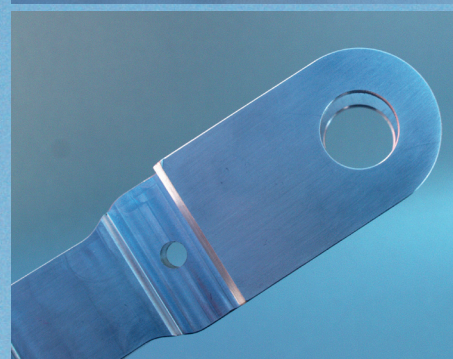
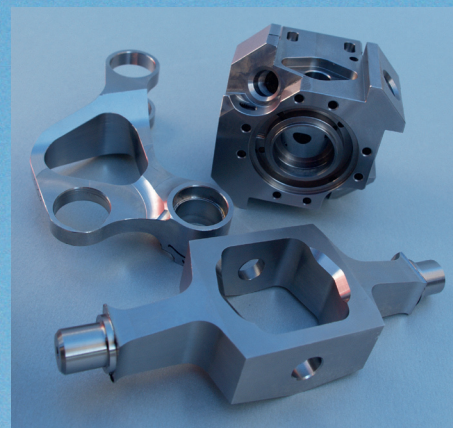
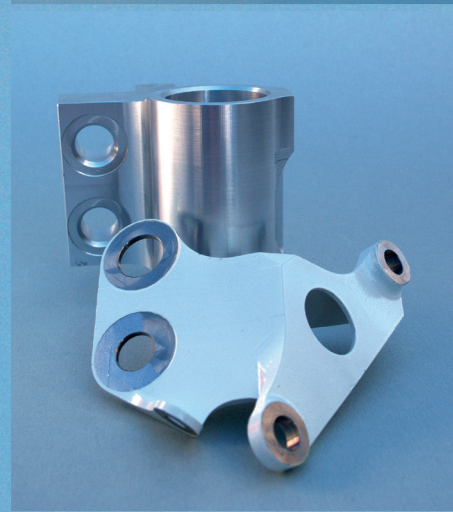
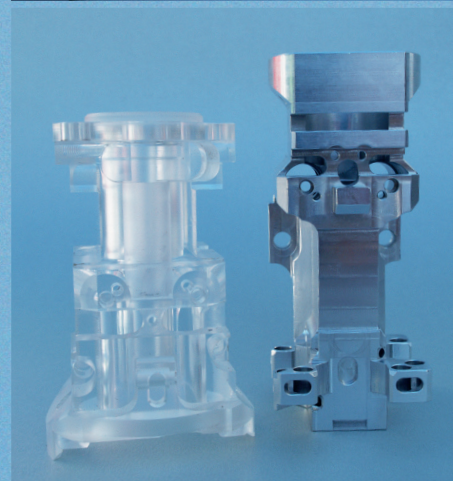
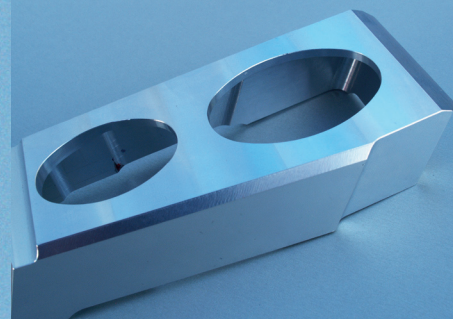


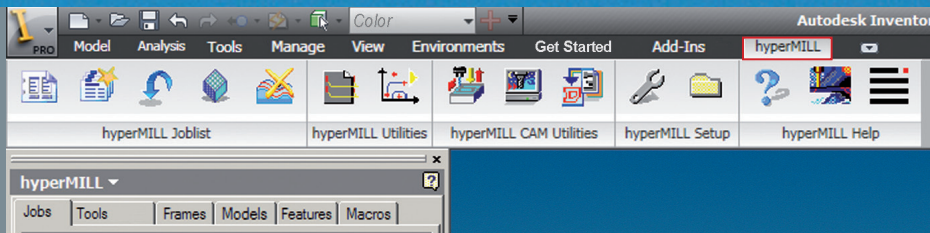


From mill-turn to 5axis milling Starting with 2D, 3D, HSC and 5axis milling and going right through to mill-turn, the CAM software *hyperMILL*® has an extensive range of CAM strategies at its disposal. Users appreciate the versatile programming options, the intuitive graphical user interface, as well as the ease of programming. Feature technology, a technology database and integrated automatic functions such as collision avoidance ensure efficient, fast programming. Thanks to a multitude of add-on functions, machining operations can be easily adapted to individual requirements and paths and machine running times can be optimised.

Excellent postprocessors *hyperMILL*®'s advanced CAM concept is further complemented by machining and material removal simulations that include workspace monitoring and OPEN MIND's postprocessor technology. All of these advantages are available directly within Autodesk Inventor.

In use all over the world OPEN MIND Technologies AG's *hyperMILL*® CAM software is used worldwide by companies from the mechanical engineering, automotive and aerospace industries as well as by tool and mould manufacturers.





Efficient machining in continuous processes

Continuous processes with standardised data models guarantee security and transparency throughout the entire manufacturing process. Familiar user interfaces reduce the potential for human error and increase user acceptance. This is why *hyperMILL*® in Autodesk® Inventor® offers significant advantages.

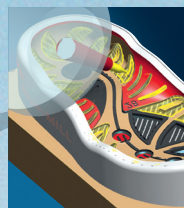
Single database: Users work with just one single data model throughout the entire process, from design and programming right through to the simulation stage. It is therefore possible to carry out design and calculation tasks in parallel.

Familiar interface: Thanks to the CAD integration, the CAM product takes on the familiar 'look and feel' of the Inventor interface. The full-scale integration provides all mill-turn, 2D, 3D, HSC and 5axis machining strategies within this software environment. The user never has to exit the main programming interface, which leads to a faster learning curve and simplifies daily operations.

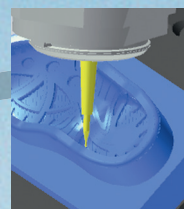
Take advantage of geometric features: The feature technology provided by *hyperMILL*® allows geometric data from



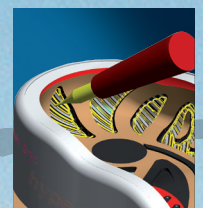
Autodesk® Inventor®: Both the CAD and CAM systems use the same data model. This eliminates data import issues as well as read/write errors.



Simple start-up: *hyperMILL*® is launched directly within Inventor® via the *hyperMILL*® button. Users can switch freely between the CAD and CAM systems at all times.



Safe on all sides: *hyperMILL*® incorporates the world's leading 5axis technology. Thanks to fully-automated collision avoidance, programming 5axis machining operations is no more difficult than 3D jobs.



Machine and material removal simulation: The workspace monitoring feature includes a unique 'best fit' function that allows you to optimise the setup position of a workpiece.

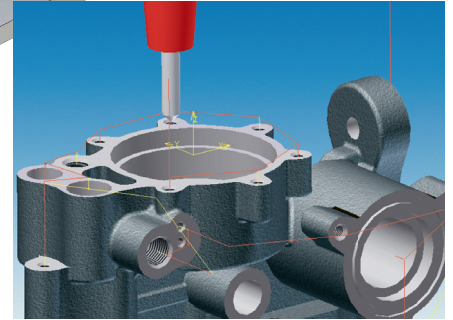
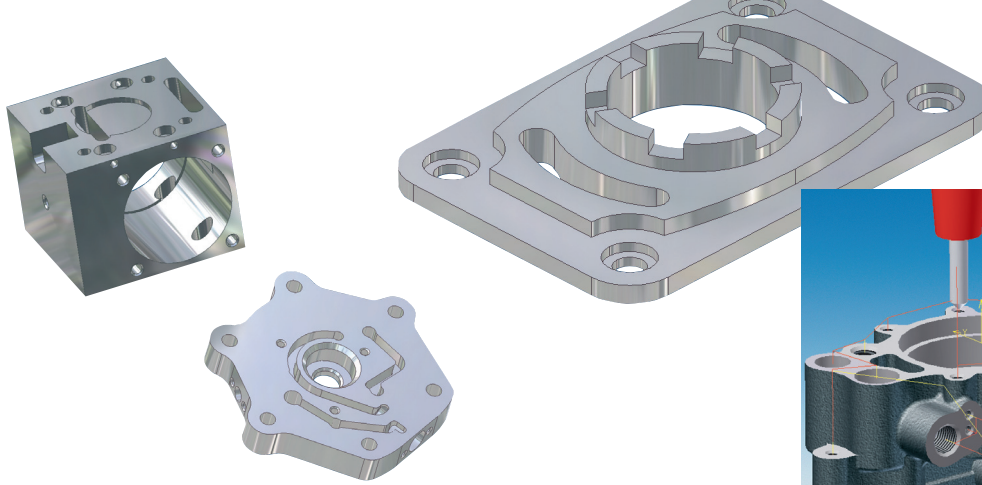
the CAD system to be used for CAM programming. For example, automatic feature recognition can be used to detect drill holes and pockets on solids and surface models. Furthermore, machining strategies and tools can be linked with features to create technology macros. These macros are stored in a dedicated technology database.



Complete machining: *hyperMILL*® makes all-in-one machining possible in one setup. This reduces setup times and increases machining precision.



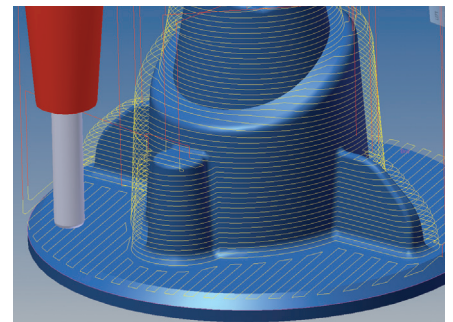
***hyperMILL*® in Autodesk® Inventor®:** represents continuous processing with smooth job steps, including a postprocessor tailored to specific machines, controllers and manufacturing processes.



The 5axis drilling function is used to simply and automatically program drilling jobs with different tool angles in a single operation.

Innovative CAM strategies for flexible manufacturing

Thanks to the wide range of machining strategies provided, even highly specialised parts can be machined quickly and efficiently. Functions like tool path optimisation and job linking considerably reduce machine running times.



Complete finishing combines Z-level finishing and profile finishing, which allows machining to be automatically adapted to suit the requirements of individual model areas.

2D machining

2D machining offers the potential for even greater manufacturing efficiency. This includes functions such as contour milling with optimised traverse path and the fully integrated mill-turn module.

3D machining

hyperMILL® integrates proven strategies to a new standard of quality. This is due to the fact that these strategies are supplemented by intelligent add-on functions that improve manufacturing results.

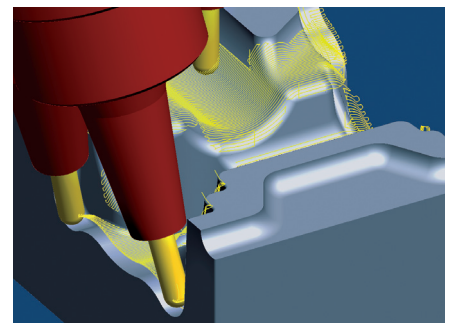
5axis milling

The 5axis technology in *hyperMILL*® often achieves

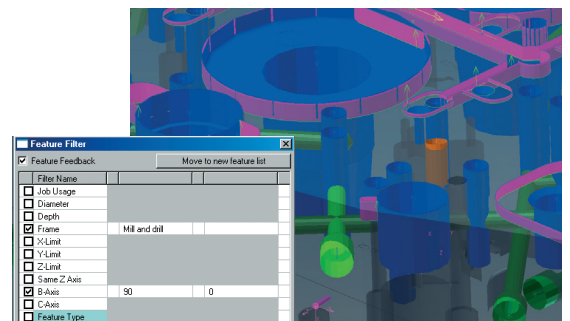
time savings of more than 25 per cent, while at the same time reducing tool wear and increasing contour accuracy. Thanks to easy programming with automatic collision checking and avoidance, 5axis technology represents a reliable alternative for many standard milling tasks today.

Save time with intelligent functions

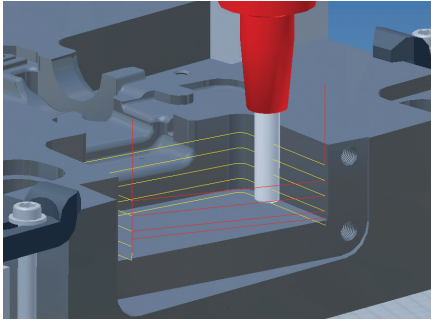
Functions that apply to all strategies, such as stock tracking, milling and stop surface concepts, automatic collision avoidance, the new job linking function or transformation, all ensure an effective, user-friendly workflow.



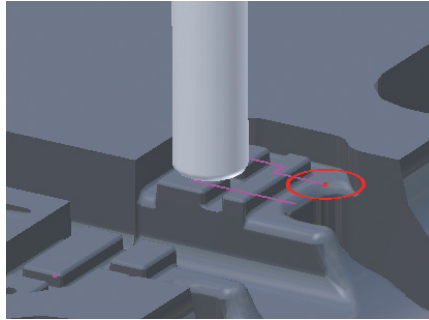
The automatic indexing function is an alternative to 5axis simultaneous machining and seeks a fixed tool angle for continuous tool paths.



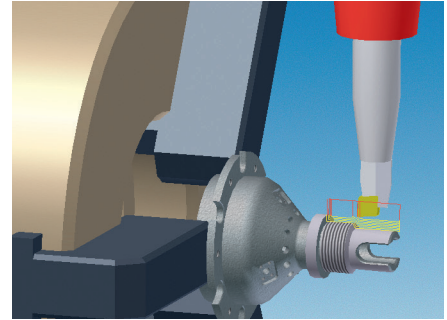
Automatic feature recognition detects geometries, such as holes, stepped holes with and without threads and open and closed pockets.



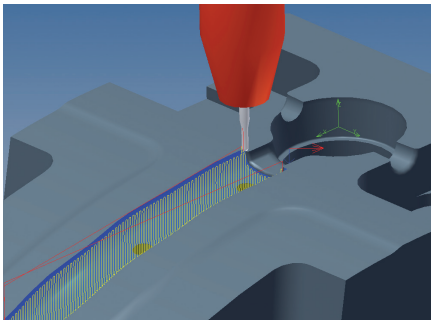
The new 2D contour milling cycle offers superb optimisation possibilities to reduce both programming and machining times.



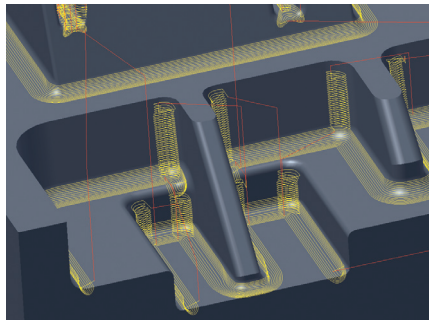
Playback milling allows you to flexibly define basic milling steps simply by rolling the mouse pointer over the relevant areas.



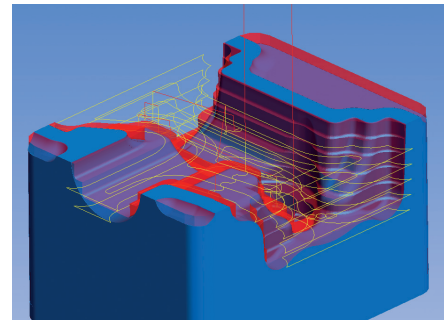
The *millTURN* module, including turn roughing, turn finishing, grooving and thread turning, has been fully integrated.



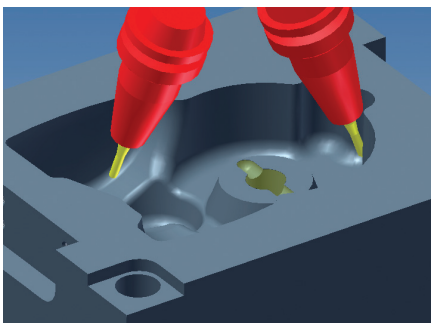
Profile finishing enables collision-free machining close to the contour across entire surfaces and surface formations.



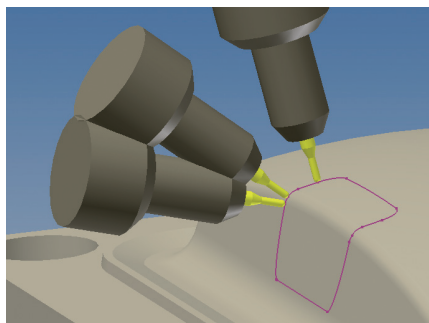
By referencing previous machining steps, rest material areas can be efficiently cleared.



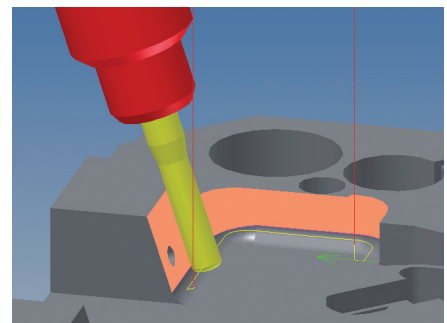
Stock tracking actively avoids collisions with the stock during roughing. If the tool shank or holder is on track to collide with the stock, tool paths are moved laterally.



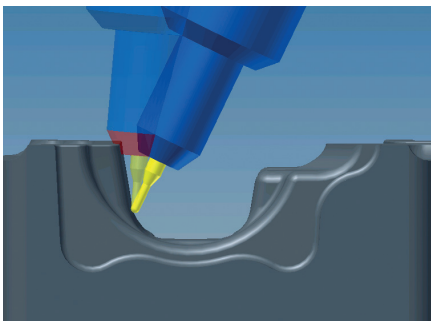
Thanks to *hyperMILL*® 5AXIS, 3D strategies such as Z-level finishing, profile finishing or equidistant finishing have been extended to include 5axis tool positions.



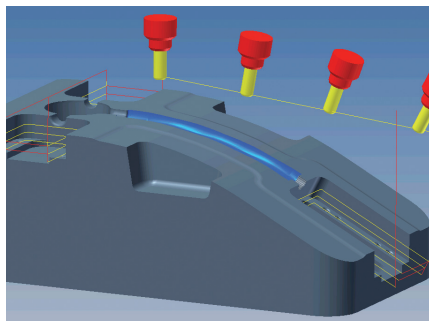
5axis contour machining allows for milling grooves, scribing, engraving, deburring and chamfering.



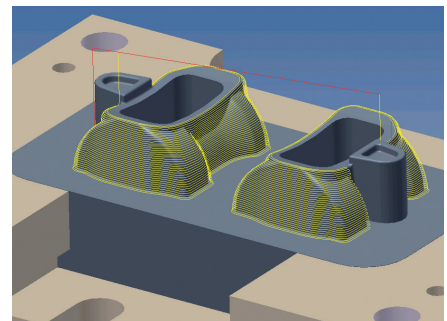
When using 5axis swarf cutting, the workpiece surface is machined with the tool flank. Wide spaces between paths reduce milling times.



hyperMILL® detects possible collisions and provides solutions to avoid collisions, for example, by calculating the required set-up length.



Several work steps that are performed by the same tool can be combined and performed in one operation using job linking.



Using mirroring, symmetrical parts or elements can be programmed quickly and without collisions. Climb milling movements remain intact.

Headquarters	OPEN MIND Technologies AG Argelsrieder Feld 5 • 82234 Wessling • Germany Phone: +49 8153 933-500 E-mail: Info.Europe@openmind-tech.com Support.Europe@openmind-tech.com
UK	OPEN MIND Technologies UK Ltd. Units 1 and 2 • Bicester Business Centre Telford Road • Bicester • Oxfordshire OX26 4LD • UK Phone: +44 1869 290003 E-mail: Info.UK@openmind-tech.com
USA	OPEN MIND Technologies USA, Inc. 1492 Highland Avenue, Unit 3 • Needham MA 02492 • USA Phone: +1 888 516-1232 E-mail: Info.Americas@openmind-tech.com
Asia Pacific	OPEN MIND Technologies Asia Pacific Pte. Ltd. 33 Ubi Avenue 3 • #06-32 Vertex (Tower B) Singapore 408868 • Singapore Phone: +65 6742 95-56 E-mail: Info.Asia@openmind-tech.com
China	OPEN MIND Technologies China Co. Ltd. Suite 1608 • Zhong Rong International Plaza No. 1088 South Pudong Road Shanghai 200120 • China Phone: +86 21 588765-72 E-mail: Info.China@openmind-tech.com
India	OPEN MIND CAD/CAM Technologies India Pvt. Ltd. 3C-201, 2 nd Floor • 2 nd Main Road • Kasturi Nagar Bangalore 560 043 • Karnataka • India Phone: +91 80 3232 4647 E-mail: Info.India@openmind-tech.com
Japan	OPEN MIND Technologies Japan K.K. Misumi Bldg. 3F • 1-17-18, Kichijojihigashicho Musashino-shi • Tokyo 180-0002 • Japan Phone: +81 422 23-5305 E-mail: info.jp@openmind-tech.co.jp
Taiwan	OPEN MIND Technologies Taiwan Inc. 3F, No. 153, Hwan-Pei Road • Chungli City 320 Taiwan, R.O.C. Phone: +886 3 46131-25 E-mail: Info.Taiwan@openmind-tech.com

www.openmind-tech.com

OPEN MIND Technologies AG is represented worldwide with own subsidiaries and through competent partners and is a member of the Mensch und Maschine technology group, www.mum.de



OPEN MIND THE CAM COMPANY