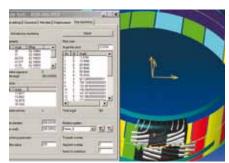
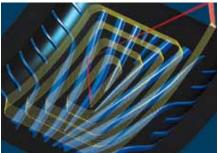


Tyre mold: milled on a DMU 8oP duoBLOCK®

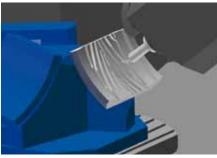
The *hyper*MILL® Tyre Package is the CAD/CAM solution for the automated manufacture of tyre moulds. It offers an efficient method for time-saving programming based on feature technology. In addition, the input masks of all 2D, 3D and 5axis strategies have been extended with special parameters and intelligent functions.



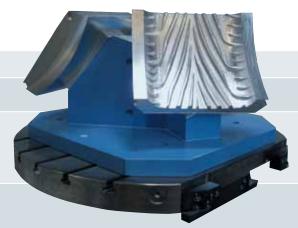
The Tyre Clock: The tire module in hyperMILL® enables to user to focus on single tyre pitches with his programming efforts and expand the resulting programs automatically to the according tire mould segments.



Automated updates: hyperCAD® parametric sketching and hyperMILL® 5axis Contour Machining form a template, which is automatically updated by changing the segment angle in the parameter sheet.



Simulation and Postprocessing: *hyper*VIEW® simulates and posts the segments to the predefined fixture positions. The tool path is automatically trimmed to the extension of every segment, in order to avoid air cut.



Machine: DMU 8oP duoBLOCK®

Main drive (motor spindle) RPM range up to 18.000 min-1 Rapid traverse/feedrate X/Y/Z Workspace 800/800/800 mm Traverse path X/Y/Z Clamping surface 785 x 630 mm Rapid traverse/feedrate A-/C-Axis 20/35 min⁻¹ BC Head (45° Notator) Max. workpiece weight 1.200 kg **Table** Traverse path B-Axis -30°/+180° 360° Traverse path C-Axis Controller Heidenhain ITNC 530 Workpiece **Dimensions** 300 X 270 X 100 mm Material Aluminium (AlMg 4,5)



OPEN MIND Technologies AG

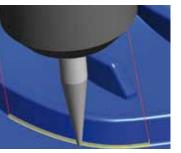
Argelsrieder Feld 5 • 82234 Wessling • Germany Phone: +49-81 53-93 35 00 • Fax: +49-81 53-93 35 01 E-Mail: Info.Europe@openmind-tech.com Internet: www.openmind-tech.com



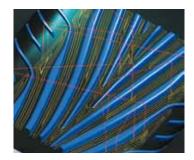
DECKEL MAHO Pfronten GmbH

DECKEL MAHO-Straße 1 • 87459 Pfronten • Germany Phone: +49-83 63-89 0 • Fax: +49-83 63-89 222 E-Mail: info@gildemeister.com Internet: www.gildemeister.com

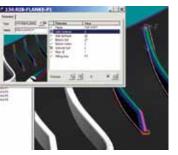
Used hyperMILL® Cycle Strategies



5axis Rest Material with conical tools *hyper*MILL® enables the save use of conical tools and guarantees high performance cutting with a minimum on programming efforts.



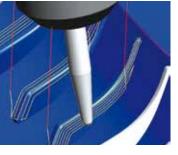
5axis Top Milling 5axis Top Milling with multi step down is generating an extremely high performing 5axis pocket roughing with little efforts on the programming side.



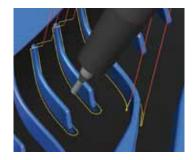
User Defined Features User Defined Features give the user the possibility, to automate and document the programming of similar shapes. The *hyper*MILL® macro technology keeps complex projects transparent and enables the user to perform changes in a fast and safe way.



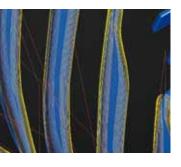
5axis Top Milling With pocket options generates a super fast finishing tool path normal to segment bottom.



5axis Rework with automatic indexing 5axis Rework with Automatic indexing turns 3D equidistant tool path into multi fixed tool path. A sequence of two jobs produces an arbitrary number of indexing steps in one flow. *hyper*MILL® 5AXIS technology determines all tool inclinations automatically with collision check and avoidance.



5axis Swarf Machining 5axis swarf machining with global selection finishes side walls of ribs and according sharp bottom edges. Very high quality can be achieved in minimum machining time. The programming can be done globally on an unlimited number of walls. Side detection and contact to bottom are calculated automatically. The collision check is performs with tool, holder and spindle nose against the entire 3D Model.



3D ISO Machining 3D ISO Machining finishes 3D Fillets in Equidistant mode. The user interaction is very fast and easy. Non trimmed surface patches are connected automatically to be machined in one flow. Superior surface quality as result is produced in much optimized machining time.