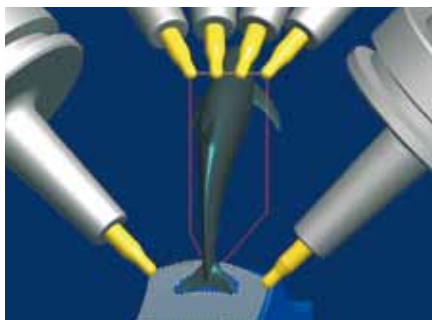# *hyper*MILL ®
5 AXIS

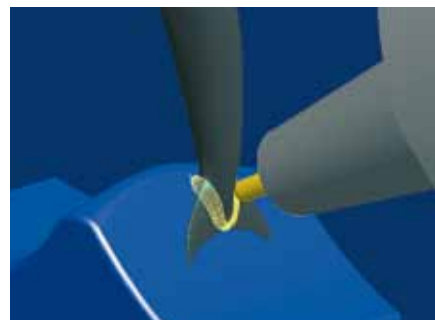## Dolphin: HSC milled on a HSC 75 *linear*

*hyper*MILL® is an extremely versatile CAM solution. Thanks to the broad spectrum of 2D, 3D and 5-axis strategies, including a range of optimisation functions, tool paths can be optimally adjusted to the contour to be machined. Thus, even unusual parts, such as this dolphin, can be milled efficiently with very high surface quality in one set-up.

With undercut optimisation The „arbritrary stock roughing" strategy with undercut optimisation automatically recognises the areas which have already been machined with different tilt angles. Redundant movements are avoided, tool paths are optimised and machining times are reduced.

5-axis rework This converts 3D programs into 5-axis simultaneous programs. *hyper*MILL® calculates collision-free tool paths, including the alteration of tilt angles. Fast travel movements are similarly reliably optimised with 5axis technology.

3D rest material machining 3D rest material machining takes place in a continuous spiral tool movement without displacement. This prevents different milling areas appearing on the surface.

Machine: HSC 75 *linear*

Main drive (motor spindle)	RPM range	28.000 (18.000; 42.000) min⁻¹
Workspace	Rapid feedrate X/Y/Z Traverse path X/Y/Z	90/90/90 m/min· 750(885)/600/560 mm(600)
NC rotary table	Clamping surface Tilt ares (B-Axis) NC-controlled C-Axis Max. workpiece weight	Ø 750 mm (option) -10° bis 110° (option) 360° (option) 800 kg
Workpiece	Controller Dimensions Material	Heidenhain ITNC 530 40 x 60 x 120 mm Steel, tempered, 52 HRC