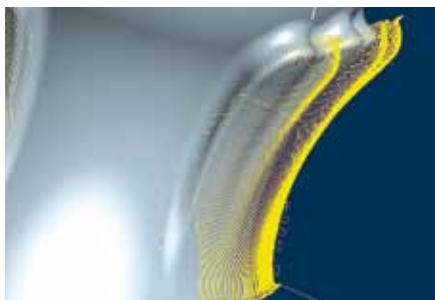


hyperMILL®

5AXIS

Trophy: Milled on a Makino V33

The trophy, which is given to visitors of the Makino Exhibition Centre, demonstrates the flexibility *hyperMILL*® brings to modern 5axis machining. The methods employed include 3+2 fixed-axis milling, machining cycles from the cavity package and contour machining.



3+2 fixed-axis milling Simple machining tasks with undercuts can be milled collision free using fixed tool positions and short tools.



5axis cavity cycles The cavities package expands the 3D cycles to include simultaneous multi-axis machining. In comparison with the 3+2 strategy, it enables continuous machining and yields a better surface quality.



5axis contour machining When engraving, the tool must follow the surface with extreme precision. *hyperMILL*® is equipped with a fast and easy collision checking and prevention feature that guarantees reliable milling results.



Machine: Makino V33

Main drive (motor spindle)	Maximum spindle speed	200 – 30.000 min ⁻¹ , 15kW
Machining area	Rapid travel X/Y/Z Traverse path X/Y/Z	20.000 mm/min 600/400/350 mm
NC swivelling rotary table	Worktable area Max. feedrate Max. torque Max. workpiece weight	750 x 400 mm 20.000 mm/min 21 Nm 300 kg
Automation	Controller	Microprocessor-CNC-controller Pro3 (FANUC 16iM)
Workpiece	Dimensions Material	25x25x50 mm Aluminium



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