# *hyperMILL*®
5AXIS

# Impeller: Milled on a KERN Triton

Impellers for passenger car turbochargers are manufactured in large quantities. Every second counts in serial production. The Multiblade package is synonymous with automated programming. And software allows operators to intervene as required, thereby optimising the tool orientation and feedrate so that the machining time is reduced to a minimum. Reliable collision checking and avoidance ensure maximum process reliability.
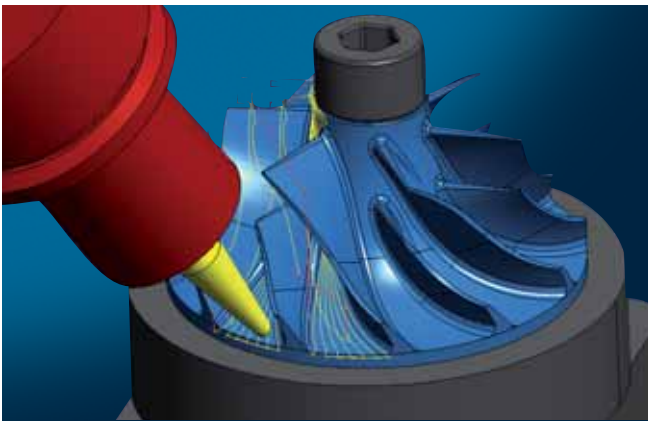
Multiblade roughing: With this strategy, the blades of a pre-turned stock are machined in a continual process using path distribution that matches the flow, various infeed options and local optimisation features.
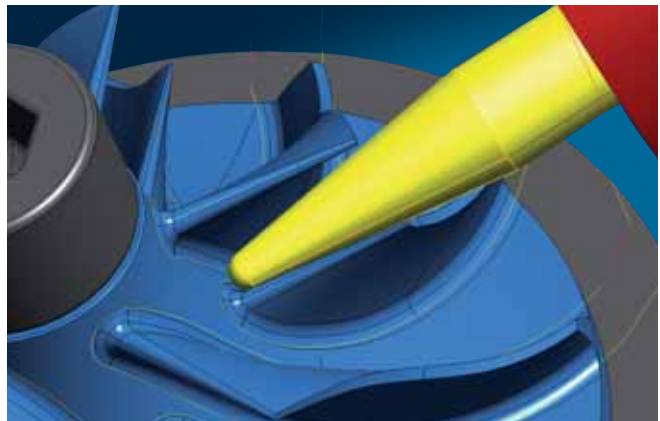
Multiblade swarf cutting: Swarf cutting reduces machining times. The Multiblade Flank Milling strategy automatically calculates the best fit between the cutter and the blade surfaces.
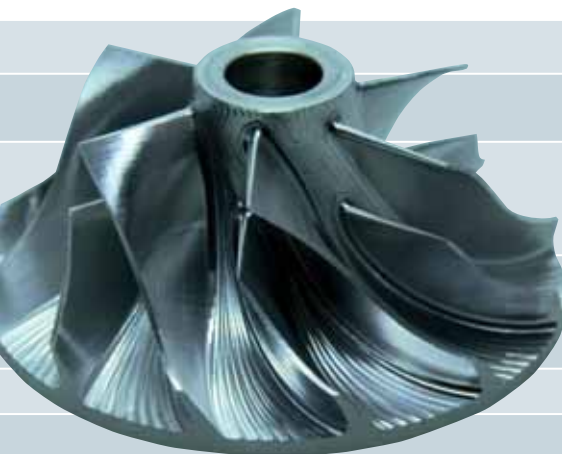
Machine: KERN Triton with hydrostatic axes

Main drive	Spindle	40.000 RPM^{-1}
Workspace	Rapid traverse/feedrate Traverse path X/Y/Z	30 m/min 500/500/400 mm
NC swivelling rotary table	Clamping surface Tilt Range (A) Turning Range (C) Max. workpiece weight	Ø max. 250 mm +5/−95° 360° (infinite) 60 kg
Tool	Tool magazine Max. tool length Max. tool diameter Tool adapter	75 positions 140 mm 50 mm HSK-E40
Automation	Controller	Heidenhain iTNC 530 smarT.NC
Workpiece	Measurements Material	Ø 49 x 22,5 mm Aluminium

OPEN MIND
THE CAM COMPANY

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

KERN

KERN Micro- und Feinwerktechnik GmbH & Co. KG
Olympiastraße 2 • 82438 Eschenlohe • Germany
Phone: +49-88 24-91 01 0 • Fax: +49-88 24 / 91 01-1 24
E-mail: mtsales@kern-microtechnic.com
Internet: www.kern-microtechnic.com