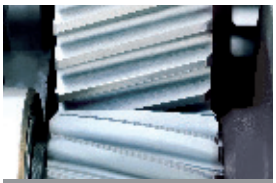

VEHICLES


AEROSPACE


GEARS & BEARINGS

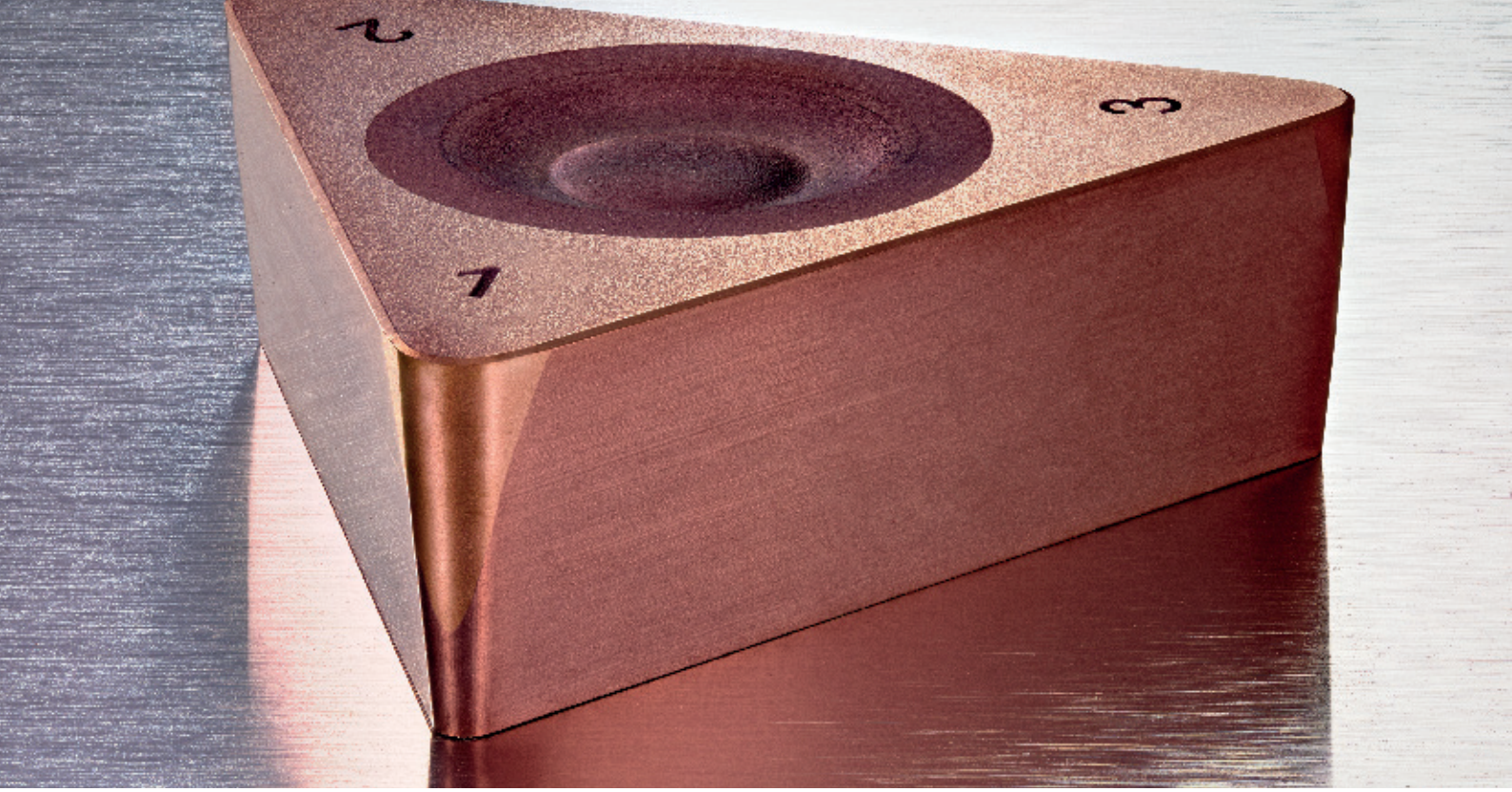

ENGINEERING


WIND ENERGY

REDUCED CUTTING FORCES WHEN HARD TURNING

Thanks to the new cutting insert geometry

CeramTec
THE CERAMIC EXPERTS



The new cutting insert geometry in solid PCBN reduces cutting and passive forces when hard turning and provides numerous advantages. Gear and crown wheels, drive shafts and bearings can be machined much easier and faster using the newly developed insert geometry in combination with the cutting material WXM 355 for hard turning.

ALL ADVANTAGES AT A GLANCE

- Reduced cutting and passive forces.
- High process reliability when machining less stable workpieces and workpieces with poorer mechanical stability at highest cutting data.
- Reduced deflection of the tool.
- For workpieces up to 64 HRC.
- Higher surface quality achievable.
- Less vibration of the tool enhances extended tool life.

CUTTING INSERT

TAGX 16 04 08 S - S - SDO 95Z050

CUTTING MATERIAL

WXM 355

COMPONENTS

Gear wheels	Bearings
Shafts	Crown wheels

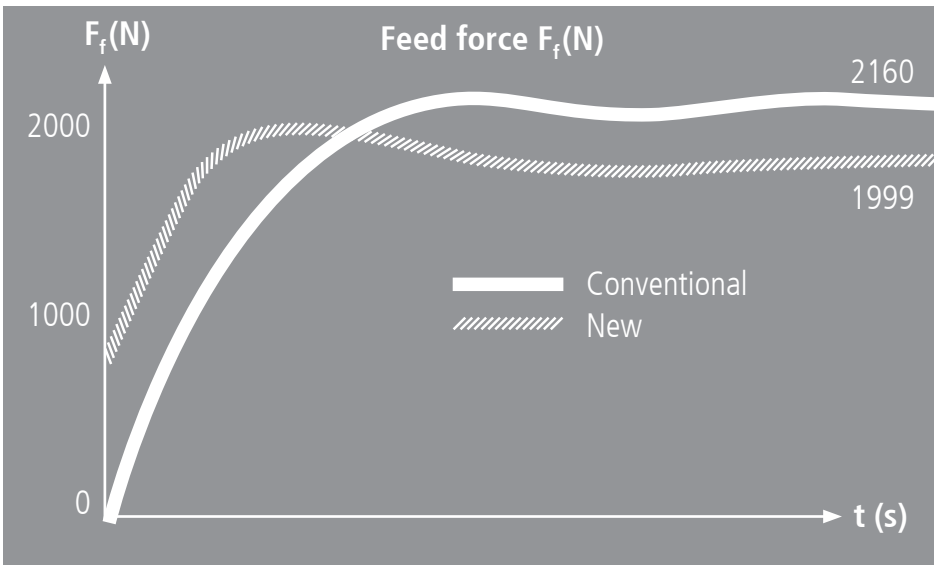
APPLICATION RANGE

Finishing with ZZ wiper technology	
Plunging	Pull cut

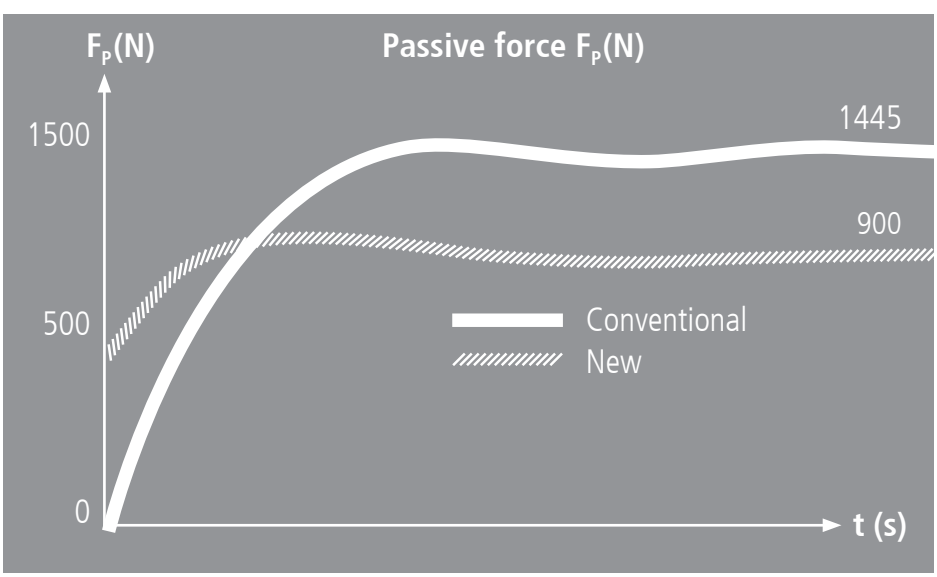
INDUSTRIES

Automotive	Drive Technology
Mechanical Engineering	Bearing Industry

CUTTING DATA IN COMPARISON



7,5 %
DECREASE OF
FEED FORCE



37 %
DECREASE OF
PASSIVE FORCE

	Conventional	New
	TNGN 16 04 08	TAGX 16 04 08
Approach angle	95°	95°
Rake angle / Edge inclination	-4° / -6°	0° / 0°
Design of cutting edge	S01525	S01015
Cutting material	Solid PCBN WXM 355	Solid PCBN WXM 355

Cutting data	
v_c	150 m/min.
f	0.14 mm/rev.
Width of cut	6 mm
Material	16MnCr5S (SAE-5120)
Machining	Plunging

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THE CERAMIC EXPERTS

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