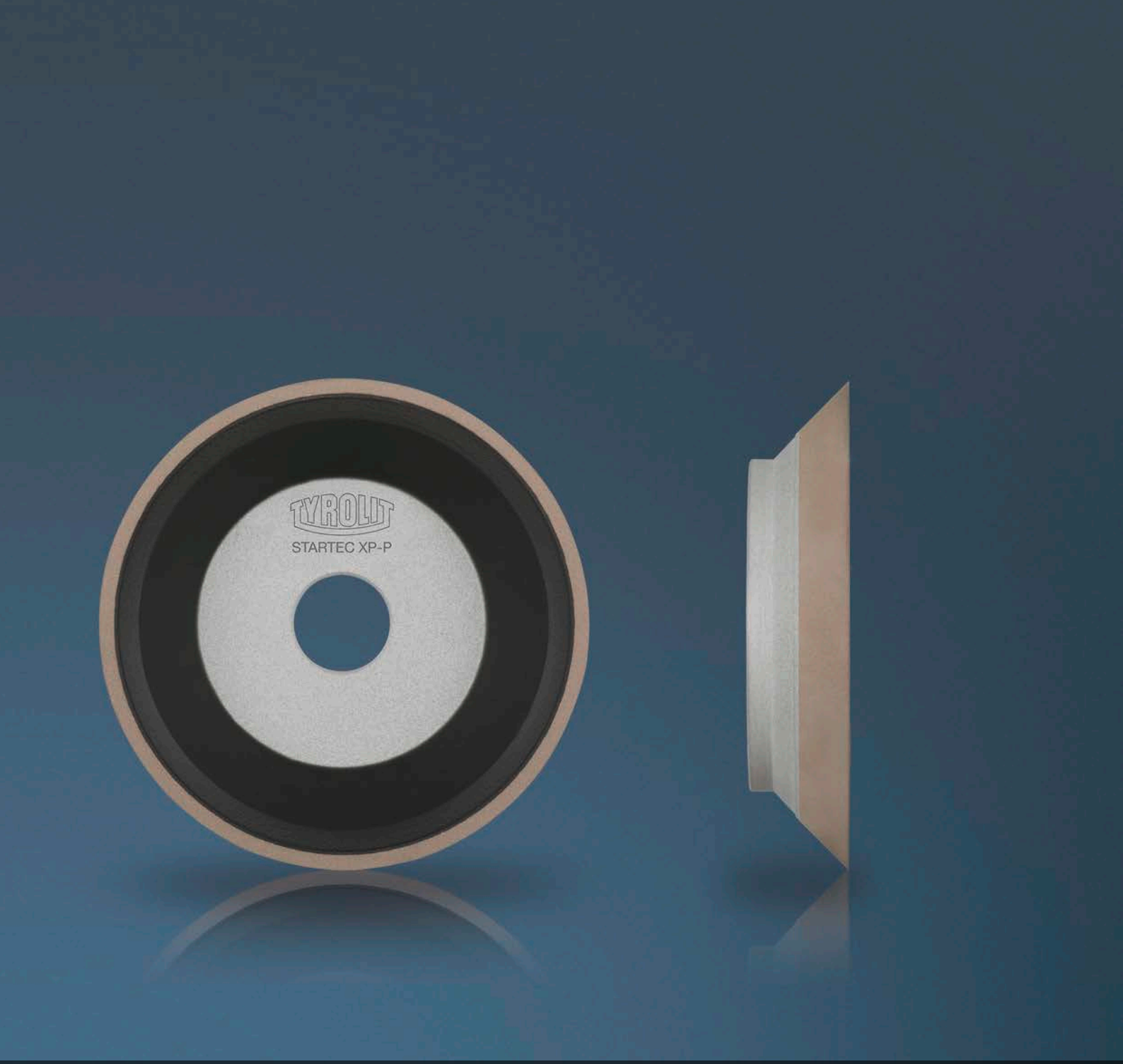

STARTEC XP-P

Cup wheels for universal tool manufacturing applications

Premium grinding tools since 1919
www.tyrolit.com

TYROLIT

STARTEC XP-P CUP WHEELS

STARTEC XP-P from TYROLIT is a byword for maximum efficiency and optimum tool quality in flute grinding. The product range will be expanded in future to include new shapes and specifications for machining clearance surfaces and face geometries on cutting tools made of tungsten carbide. An innovative bond system, tailored diamond qualities and new manufacturing technologies guarantee extremely high edge stability, low cutting forces and the best surface finish on the ground tool.

Application
Grinding of clearance surfaces and face geometries on milling tools

+ **Maximum edge stability:**
The special combination of bond, diamond quality and grit size extends the dressing interval and guarantees consistently high tool quality, even with large batches.

+ **Low grinding forces:**
The reduction of grinding forces enables an increased feedrate and simultaneously guards against tool breakage due to overloading during the grinding process.

+ **System solution:**
The STARTEC XP-P product line makes it possible to equip the grinding spindle with a complete set of cup and flute grinding wheels.

+ **Rapid availability:**
Selected STARTEC XP-P cup wheels are kept in stock and can therefore be supplied quickly.

Example of application

Workpiece: Milling cutter d = 16 mm / Length of cutting edges l = 25 mm
Machine: Walter Helitronic Vision / Cooling system: oil
Grinding task: Machining peripheral bevels 1 and 2
Cutting speed: vc = 28 m/s

Infeed bevel 1: ae1 = 0.5 mm / Feed: vt1 = 200 mm/min
Infeed bevel 2: ae2 = 0.1 mm / Feed: vt2 = 250 mm/min
Grinding wheel: STARTEC XP-P / 11V9 100 x 35 x 20 / 3-10 D64BXP-P

Edge radius after dressing [mm]

STARTEC XP-P	**0.14**
COMPETITION	0.14

Edge radius after 280 workpieces [mm]

STARTEC XP-P	**0.19**
COMPETITION	0.28

Result:
Using the STARTEC XP-P cup wheel, it was possible to produce an entire production lot of 280 pieces without re-dressing the grinding tool. At the same time, the total machining time was reduced by 10 %. No micro chipping on the cutting edge. Optimum surface finish.

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20048448-EN-0819