

**Garant**
**Solid carbide milling cutter TPC, TiAlN, Ø f8 DC: 5mm**

**Order data**

Order number	203088 5
GTIN	4045197814258
Item class	11X

**Description**
**Version:**

**High-performance milling cutter** specially designed for general-purpose TPC applications. Strengthened core.

**Optimised bending strength** due to the use of ultra-fine grain substrates.

**Note:**

$a_{e\max} = 0.1 \times D$  for TPC machining.

$h_{\max}$ : The values stated in the table are maximum values. For finishing operations we recommend items No. 204012, 204014 and 204015.

**Technical description**

No. of teeth Z	5
Direction of infeed	horizontal and oblique
Cutting edge Ø D <sub>c</sub>	5 mm
Shank	DIN 6535 HB to h6
Balance quality with shank	G 2.5 with HB
Tolerance nominal Ø	f8
Corner chamfer width at 45°	0.1 mm
Flute length L <sub>c</sub>	13 mm
Average chip thickness h <sub>max</sub> for TPC milling in Toolox 44 HRC	0.025 mm
Overall length L	57 mm

Shank $\varnothing D_s$	6 mm
Helix angle	40 degrees
Corner chamfer angle	45 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	$0.1 \times D$
Through-coolant	no
Machining strategy	TPC
Colour ring	green
Type of product	End / face mill

### User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	380 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	340 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	300 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	230 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	150 m/min	P
TOOLOX 33	suitable	60 m/min	H
TOOLOX 44	suitable	40 m/min	H
HARDOX 500 < 1600 N/mm <sup>2</sup>	suitable	25 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	220 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	150 m/min	M

Uni	suitable
wet maximum	Suitable
dry	Suitable only under restricted conditions
Air	suitable