



## Solid carbide milling cutter with chip separators TPC, TiSiN, Ø e8 DC: 20mm



### Order data

Order number	203086 20
GTIN	4062406569426
Item class	12X

### Description

#### Version:

High-performance end mill for general-purpose applications, **specially designed for TPC applications.**

#### Strengthened core.

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

**Chip breaker** for controlled chip breaking.

#### Note:

$h_{max}$ : The values stated in the table are maximum values.

$a_{e,max} = 0.07 \times D$  for TPC machining.

### Technical description

Corner chamfer angle	45 degrees
Flute length $L_c$	80 mm
Shank $\varnothing D_s$	20 mm
Cutting edge $\varnothing D_c$	20 mm
Shank	DIN 6535 HB to h6
Recess $\varnothing D_1$	19.8 mm
No. of teeth Z	4
Balance quality with shank	G 2.5 with HB
Overhang length $L_1$ incl. recess	100 mm
Overall length L	150 mm

Corner chamfer width at 45°	0.4 mm
Helix angle	40 degrees
Tolerance nominal Ø	e8
Direction of infeed	horizontal and oblique
Average chip thickness $h_{\max}$ for TPC milling in steel < 900 N/mm <sup>2</sup>	0.134 mm
Coating	TiSiN
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	0.07×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	350 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	320 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	280 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	210 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	135 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	170 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	145 m/min	M
Uni	suitable		

dry	Suitable only under restricted conditions
Air	suitable