



## Solid carbide milling cutter with chip separators TPC, TiAlN, Ø f8 DC: 20mm



### Order data

Order number	203109 20
GTIN	4062406734985
Item class	12X

### Description

#### Version:

High-performance milling cutter with **irregular cutter spacing** and **irregular helical pitch**. Optimised bending strength due to the use of ultra-fine grain substrates. **Offset chip breakers for controlled chip breaking.**

#### Note:

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

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

### Technical description

Average chip thickness $h_{max}$ for TPC milling in INOX < 900 N/mm <sup>2</sup>	0.097 mm
Recess Ø $D_1$	19.8 mm
Corner chamfer width at 45°	0.4 mm
Direction of infeed	horizontal and oblique
Shank Ø $D_s$	20 mm
Overhang length $L_1$ incl. recess	70 mm
Balance quality with shank	G 2.5 with HB
Tolerance nominal Ø	e8
No. of teeth Z	5
Shank	DIN 6535 HB to h6

Corner chamfer angle	45 degrees
Cutting edge $\varnothing D_c$	20 mm
Helix angle	40 degrees
Flute length $L_c$	60 mm
Overall length $L$	126 mm
Number of chip separators	1
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	$0.07 \times D$
Through-coolant	no
Machining strategy	TPC
Colour ring	blue
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
INOX < 900 N/mm <sup>2</sup>	suitable	240 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	170 m/min	M
wet maximum	Suitable		
wet minimum	Suitable only under restricted conditions		

Air

suitable