

## Solid carbide milling cutter with chip separators TPC, TiAIN, Ø f8 DC: 12mm



### **Order data**

Order number	203101 12		
GTIN	4062406252557		
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. **Chip breakers for controlled chip breaking.** 

#### Note:

h<sub>max</sub>: The values stated in the table are maximum values.

 $a_{e max}$ = 0.07×D for TPC machining.

# **Technical description**

Cutting edge $\emptyset$ $D_c$	12 mm		
No. of teeth Z	5		
Overall length L	93 mm		
Shank	DIN 6535 HB to h6		
Helix angle	40 degrees		
Flute length L <sub>c</sub>	36 mm		
Direction of infeed	horizontal and oblique		
Overhang length L <sub>1</sub> incl. recess	45 mm		
Shank Ø D <sub>s</sub>	12 mm		
Corner chamfer width at 45°	0.24 mm		
Average chip thickness $h_{\mbox{\scriptsize max}}$ for TPC milling in INOX $<900$ $\mbox{N/mm}^2$	0.06 mm		

# Data sheet

Balance quality with shank	G 2.5 with HB		
Recess Ø D <sub>1</sub>	11.8 mm		
Tolerance nominal Ø	f8		
Corner chamfer angle	45 degrees		
Coating	TiAlN		
Tool material	Solid carbide		
Standard	Manufacturer's standard		
Туре	N		
Helix angle characteristic	unequal spacing		
Spacing of the cutters	unequal spacing		
Cutting width a <sub>e</sub> for milling operation	0.07×D		
Through-coolant	no		
Machining strategy	TPC		
Colour ring	blue		
Type of product	End / face mill		

# **User data**

	Suitability	$\mathbf{V}_{c}$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	380 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	340 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	300 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	230 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	240 m/min	M
$INOX > 900 \text{ N/mm}^2$	suitable	170 m/min	M
wet maximum	Suitable		
wet minimum	Suitable only under restricted conditions		
Air	suitable		