



## Solid carbide milling cutter with chip separators TPC, TiSiN, Ø e8 DC: 12mm



### Order data

Order number	203085 12
GTIN	4062406569341
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.

$a_{e max} = 0.18 \times D$  for TPC machining.

### Technical description

Cutting edge Ø $D_c$	12 mm
No. of teeth Z	4
Corner chamfer angle	45 degrees
Helix angle	40 degrees
Shank	DIN 6535 HB to h6
Recess Ø $D_1$	11.8 mm
Overhang length $L_1$ incl. recess	45 mm
Overall length L	93 mm
Flute length $L_c$	36 mm
Balance quality with shank	G 2.5 with HB

Shank $\varnothing D_s$	12 mm
Direction of infeed	horizontal and oblique
Tolerance nominal $\varnothing$	e8
Corner chamfer width at 45°	0.24 mm
Average chip thickness $h_{max}$ for TPC milling in steel < 900 N/mm <sup>2</sup>	0.092 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	0.18×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	360 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	330 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	290 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	220 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	140 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	180 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	150 m/min	M
Uni	suitable		
dry	suitable		

Air

suitable