⚡ Hoffmann Group

Garant

Solid carbide milling cutter with chip separators TPC, TiAlN, Ø f8 DC: 16mm

Order data

Order number	203092 16
GTIN	4045197953896
Item class	11X

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.
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.
Successor product to No. 203089.

Technical description

No. of teeth Z	5
Direction of infeed	horizontal and oblique
Helix angle	40 degrees
Flute length L_c	48 mm
Shank Ø D_s	16 mm
Corner chamfer width at 45°	0.32 mm
Average chip thickness h_{max} for TPC milling in Toolox 44 HRC	0.078 mm
Overall length L	108 mm

Overhang length L_1 incl. recess	55 mm
Shank	DIN 6535 HB to h6
Tolerance nominal Ø	f8
Balance quality with shank	G 2.5 with HB
Cutting edge Ø D_c	16 mm
Recess Ø D_1	15.8 mm
Corner chamfer angle	45 degrees
Number of chip separators	2
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×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/mm²	suitable	380 m/min	P
Steel < 750 N/mm²	suitable	340 m/min	P
Steel < 900 N/mm²	suitable	300 m/min	P
Steel < 1100 N/mm²	suitable	230 m/min	P
Steel < 1400 N/mm²	suitable	150 m/min	P
TOOLOX 33	suitable	60 m/min	H
TOOLOX 44	suitable	40 m/min	H

HARDOX 500 < 1600 N/mm²	suitable	25 m/min	H
INOX < 900 N/mm²	suitable	220 m/min	M
INOX > 900 N/mm²	suitable only under restricted conditions	150 m/min	M
Uni	suitable		
wet maximum	Suitable		
dry	Suitable only under restricted conditions		
Air	suitable		