Garant

GARANT Master INOX solid carbide milling cutter with chip separators TPC, TiAlN, ∅ f8 DC: 5mm

Order data

Order number	203116 5
GTIN	4062406783457
Item class	11Z

Description

Version:
High-performance milling cutter with **irregular cutter spacing** and **irregular helical pitch. High process reliability** and **better chip evacuation** due to **increased flutes. Optimised carbide substrate** for **higher bending strength** and **extreme tool life**, even in stainless steels in the high-performance field, especially duplex. **Chip separator** positioned offset **at cutting edges.**
Advantage:
Lower pull-out forces due to reduced helix angle.
Note:
h_{max} : The values stated in the table are maximum values. For finishing operations we recommend items No. 204012, 204014, 204015, 204016, 204018 and 204019.
$a_{e\,max}$ = 0.12×D for TPC machining.
Tolerance nominal ∅: e8
No. of teeth Z: 6
Helix angle: 36 °
Direction of infeed: horizontal, oblique and vertical
Shank: DIN 6535 HB to h6
Balance quality with shank: G 2.5 with HB
No. of teeth Z: 6
Flute length L_c: 13 mm
Recess ∅ D_1: 4.8 mm
Overall length L: 57 mm
Shank ∅ D_s: 6 mm
Corner chamfer width at 45°: 0.1 mm

Technical description

Helix angle	36 °
Recess ∅ D_1	4.8 mm
No. of teeth Z	6
Balance quality with shank	G 2.5 with HB
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HB to h6
Cutting edge ∅ D_C	5 mm
Corner chamfer width at 45°	0.1 mm
Flute length L_c	13 mm
Corner chamfer angle	45 °
Average chip thickness h_{max} for TPC milling in INOX < 900 N/mm²	0.032 mm
Tolerance nominal ∅	e8
Overall length L	57 mm
Shank ∅ D_s	6 mm
Series	Master Inox
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	0.12×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/mm²	Suitable only under restricted conditions	380 m/min	P
Steel < 750 N/mm²	Suitable only under restricted conditions	340 m/min	P
Steel < 900 N/mm²	Suitable only under restricted conditions	300 m/min	P
Steel < 1100 N/mm²	Suitable only under restricted conditions	230 m/min	P
INOX < 900 N/mm²	suitable	240 m/min	M
INOX > 900 N/mm²	suitable	170 m/min	M
Ti > 850 N/mm²	Suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	Suitable only under restricted conditions		
Air	suitable		