Garant

GARANT Master INOX solid carbide milling cutter with chip separators TPC, TiAlN, ⌀ f8 DC: 14mm

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Order data

Order number	203117 14
GTIN	4062406783686
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.
$a_{e\,max} = 0.1{\times}D$ for TPC machining.

Technical description

Direction of infeed	horizontal, oblique and vertical
Corner chamfer angle	45 degrees
Helix angle	36 degrees
Shank	DIN 6535 HB to h6
Overall length L	99 mm
Flute length L_c	42 mm
Cutting edge ⌀ D_c	14 mm

Tolerance nominal $\varnothing$	e8
Average chip thickness h_{max} for TPC milling in INOX < 900 N/mm^2	0.084 mm
Corner chamfer width at 45°	0.28 mm
No. of teeth Z	6
Recess $\varnothing$ D_1	13.8 mm
Shank $\varnothing$ D_s	14 mm
Overhang length L_1 incl. recess	50 mm
Balance quality with shank	G 2.5 with HB
Number of chip separators	2
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	0.1×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	140 m/min	S
wet maximum	suitable		
wet minimum	Suitable only under restricted conditions		
Air	suitable		