

Garant
Solid carbide milling cutter with chip separators TPC, TiAlN, Ø f8 DC: 20mm

Order data

Order number	203106 20
GTIN	4045197954084
Item class	11X

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. Offset chip breakers for controlled chip breaking.

Note:

NEW GENERATION AVAILABLE! Recommended successor product is No. 203117. 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.

Technical description

Shank Ø D_s	20 mm
Shank	DIN 6535 HB to h6
Overall length L	126 mm
No. of teeth Z	7
Direction of infeed	horizontal and oblique
Balance quality with shank	G 2.5 with HB
Average chip thickness h_{max} for TPC milling in INOX < 900 N/mm ²	0.097 mm
Corner chamfer width at 45°	0.4 mm
Helix angle	40 degrees
Cutting edge Ø D_c	20 mm

Tolerance nominal \varnothing	f8
Recess $\varnothing D_1$	19.8 mm
Overhang length L_1 incl. recess	70 mm
Flute length L_c	60 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	$0.07 \times D$
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/mm ²	suitable	380 m/min	P
Steel < 750 N/mm ²	suitable	340 m/min	P
Steel < 900 N/mm ²	suitable	300 m/min	P
Steel < 1100 N/mm ²	suitable	230 m/min	P
INOX < 900 N/mm ²	suitable	240 m/min	M
INOX > 900 N/mm ²	suitable	170 m/min	M
wet maximum	Suitable		
wet minimum	Suitable only under restricted conditions		

Air

suitable