Garant

GARANT Master Steel solid carbide roughing end mill HPC, TiAlN, ∅ f8 DC: 20 mm



Order data

Order number	203039 20
GTIN	4062406230968
Item class	11X

Description

Version:
For **roughing and finishing.**
Up to 1.5×D into solid material **at very high feed rates** with smooth cutting action.
Advantage:
Optimised flute form, eccentric relief ground, generous chip spaces.
Tolerance nominal ∅: f8
No. of teeth Z: 4
Helix angle: 38 degrees
Direction of infeed: horizontal, oblique and vertical
Shank: DIN 6535 HB to h6
No. of teeth Z: 4
Flute length L_c: 41 mm
Overhang length L_1 incl. recess: 54 mm
Recess ∅ D_1: 19.8 mm
Overall length L: 104 mm
Shank ∅ D_s: 20 mm

Technical description

Helix angle	38 degrees
Overhang length L_1 incl. recess	54 mm
Feed f_z for side milling in steel < 900 N/mm^2	0.13 mm
Tolerance nominal ∅	f8
No. of teeth Z	4

Recess ∅ D_1	19.8 mm
Shank	DIN 6535 HB to h6
Feed f_z for slot milling in steel < 900 N/mm^2	0.1 mm
Direction of infeed	horizontal, oblique and vertical
Corner chamfer width at 45°	0.1 mm
Flute length L_c	41 mm
Overall length L	104 mm
Cutting edge ∅ D_C	20 mm
Shank ∅ D_s	20 mm
Corner chamfer angle	45 degrees
Series	GARANT Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	Full slot cutting depth 1×D
Cutting width a_e for milling operation	0.03×D for copy milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End mill

Services

Shank clamping flats for shrink-fit chucks, with retainer function Shank ∅ tool 20 mm	SZ2025 20