Garant

GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, ⌀ d11 DC: 20mm

Order data

Order number	205556 20
GTIN	4062406112165
Item class	11X

Description

Version:
With a new-type knurled profile, optimised for higher feed rates. Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultra-fine grain substrate.
Advantage:
The tool geometry produces particularly tightly rolled swarf that is discharged via flat chip breaker recesses. As a result, the tool maintains an extremely stable core.
Plunge angle of up to 10° possible thanks to generous recess on the front face.
Application:
For roughing machining.
Note:
Particularly long neck recess for avoiding interference contours.
With conically increasing recess to guarantee stability at long overhangs.

Technical description

Shank ⌀ D_s	20 mm
maximum shank recess dia. D_6	19.4 mm
Feed f_z for side milling in steel < 900 N/mm^2	0.09 mm
Corner chamfer width at 45°	1 mm
Tolerance nominal ⌀	d11
Flute length L_c	41 mm
Overhang length L_1 incl. recess	98 mm

Overall length L	150 mm
Cutting edge ⌀ D_C	20 mm
Helix angle	42 degrees
Shank	DIN 6535 HB to h6
No. of teeth Z	5
Direction of infeed	horizontal, oblique and vertical
minimum shank recess dia. D_5	18 mm
Corner chamfer angle	45 degrees
Series	Master Steel
Coating	TiAlN
Tool material	solid carbide
Standard	Manufacturer's standard
Milling profile	NR
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	0.3×D for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel < 500 N/mm²	suitable	180 m/min	P
Steel < 750 N/mm²	suitable	170 m/min	P
Steel < 900 N/mm²	suitable	150 m/min	P
Steel < 1100 N/mm²	suitable	130 m/min	P
Steel < 1400 N/mm²	suitable	100 m/min	P
INOX < 900 N/mm²	suitable	45 m/min	M
INOX > 900 N/mm²	suitable	30 m/min	M

GG(G)	suitable	180 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		