Garant

GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, ∅ d11 DC: 4mm

Order data

Order number	205550 4
GTIN	4045197813237
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.
Feed rate per tooth up to 0.1 mm up to a depth of 2×D (in the slot milled from solid).
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, particularly suitable for full-slot machining.
Tolerance nominal ∅: d11
No. of teeth Z: 5
Helix angle: 42 °
Direction of infeed: horizontal, oblique and vertical
Shank: DIN 6535 HB to h6
No. of teeth Z: 5
Flute length L_c: 11 mm
Overhang length L_1 incl. recess: 19 mm
Recess ∅ D_1: 3.7 mm
Overall length L: 57 mm
Shank ∅ D_s: 6 mm

Technical description

Recess ∅ D_1	3.7 mm

Corner chamfer width at 45°	0.2 mm
Shank ∅ D_s	6 mm
Feed f_z for side milling in steel < 900 N/mm^2	0.03 mm
Overall length L	57 mm
Tolerance nominal ∅	d11
Direction of infeed	horizontal, oblique and vertical
Feed f_z for slot milling in steel < 900 N/mm^2	0.02 mm
Shank	DIN 6535 HB to h6
Overhang length L_1 incl. recess	19 mm
Cutting edge ∅ D_C	4 mm
No. of teeth Z	5
Flute length L_c	11 mm
Helix angle	42 °
Corner chamfer angle	45 °
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	NR
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	0.5×D for side milling
Cutting width a_e for milling operation	Full slot cutting depth 1×D
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	200 m/min	P
Steel < 750 N/mm²	suitable	180 m/min	P
Steel < 900 N/mm²	suitable	160 m/min	P
Steel < 1100 N/mm²	suitable	140 m/min	P
Steel < 1400 N/mm²	suitable	110 m/min	P
INOX < 900 N/mm²	suitable	50 m/min	M
INOX > 900 N/mm²	suitable	35 m/min	M
GG(G)	suitable	200 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		