

Garant
GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 12mm

Order data

Order number	205556 12
GTIN	4062406112141
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

Overhang length L_1 incl. recess	73 mm
Shank	DIN 6535 HB to h6
No. of teeth Z	5
Direction of infeed	horizontal, oblique and vertical
Flute length L_c	26 mm
Overall length L	120 mm
Feed f_z for side milling in steel < 900 N/mm ²	0.08 mm

maximum shank recess dia. D_6	11.6 mm
Cutting edge $\varnothing D_c$	12 mm
Shank $\varnothing D_s$	12 mm
Helix angle	42 degrees
Tolerance nominal \varnothing	d11
Corner chamfer width at 45°	0.6 mm
minimum shank recess dia. D_5	10.8 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/mm ²	suitable	180 m/min	P
Steel < 750 N/mm ²	suitable	170 m/min	P
Steel < 900 N/mm ²	suitable	150 m/min	P
Steel < 1100 N/mm ²	suitable	130 m/min	P
Steel < 1400 N/mm ²	suitable	100 m/min	P
INOX < 900 N/mm ²	suitable	45 m/min	M
INOX > 900 N/mm ²	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		