

**Garant**
**GARANT Master Steel SlotMachine solid carbide roughing end mill HPC / TPC, TiAlN, Ø d11 DC: 5mm**

**Order data**

Order number	205554 5
GTIN	4045197959928
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.

**Problem-solver for TPC machining.**

**Technical description**

Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.03 mm
Shank Ø $D_s$	6 mm
Overall length L	62 mm
Corner chamfer width at 45°	0.25 mm
Recess Ø $D_1$	4.6 mm
Flute length $L_c$	17 mm
Overhang length $L_1$ incl. recess	24 mm
Helix angle	42 degrees

No. of teeth Z	5
Cutting edge $\varnothing D_c$	5 mm
Shank	DIN 6535 HB to h6
Direction of infeed	horizontal, oblique and vertical
Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.02 mm
Tolerance nominal $\varnothing$	d11
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	Full slot cutting depth 1×D
Cutting width $a_e$ for milling operation	0.4×D for side milling
Through-coolant	no
Machining strategy	HPC
Machining strategy	TPC
Colour ring	green
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	200 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	160 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	110 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	50 m/min	M

INOX > 900 N/mm <sup>2</sup>	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		