

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

**Order data**

Order number	205555 12
GTIN	4062406275655
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.

**Application:**

For roughing machining.

**Problem-solver for TPC machining.**
**Technical description**

Cutting edge Ø D <sub>c</sub>	12 mm
Overall length L	100 mm
Shank	DIN 6535 HB to h6
Direction of infeed	horizontal, oblique and vertical
Helix angle	42 degrees
Shank Ø D <sub>s</sub>	12 mm
No. of teeth Z	5
Corner chamfer angle	45 degrees
Flute length L <sub>c</sub>	48 mm

Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.06 mm
Corner chamfer width at 45°	0.6 mm
Tolerance nominal $\varnothing$	d11
Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.08 mm
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	0.2×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	180 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	130 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	100 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	45 m/min	M
INOX > 900 N/mm <sup>2</sup>	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