

## Garant

### GARANT Master INOX M SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 12mm



#### Order data

Order number	205448 12
GTIN	4062406276027
Item class	11X

#### Description

##### Version:

With a **new-type knuckle form profile**, optimised for higher feed rates in INOX. Improved cutting edge protection thanks to slight edge honing. **Tremendous bending strength** due to the use of **ultra-fine grain substrate**. Number of teeth tailored to performance and process reliability.

##### 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, particularly suitable for full-slot machining.

##### Recommendation:

To ensure reliable working, particularly for full slot milling, use arbors with **4 cooling channel bores**.

Tolerance nominal Ø: d11

No. of teeth Z: 5

Helix angle: 40°

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 5

Flute length  $L_c$ : 16 mm

Overall length L: 73 mm

Shank Ø  $D_s$ : 12 mm

Corner chamfer width at 45°: 0.25 mm

Feed  $f_z$  for slot milling in stainless steel > 900 N/mm<sup>2</sup>: 0.04 mm

## Technical description

No. of teeth Z	5
Feed $f_z$ for slot milling in stainless steel > 900 N/mm <sup>2</sup>	0.04 mm
Direction of infeed	horizontal, oblique and vertical
Helix angle	40 °
Corner chamfer width at 45°	0.25 mm
Flute length $L_c$	16 mm
Overall length L	73 mm
Tolerance nominal $\varnothing$	d11
Corner chamfer angle	45 °
Cutting edge $\varnothing D_c$	12 mm
Shank $\varnothing D_s$	12 mm
Feed $f_z$ for side milling in INOX > 900 N/mm <sup>2</sup>	0.05 mm
Shank	DIN 6535 HB to h6
Series	Master Inox
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	NR
Cutting width $a_e$ for milling operation	Full slot cutting depth 1×D
Cutting width $a_e$ for milling operation	0.5×D for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	blue
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
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Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	150 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	120 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable only under restricted conditions	110 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	100 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	80 m/min	M
Uni	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
Air	Suitable only under restricted conditions		