## Garant

# GARANT Master INOX M SlotMachine solid carbide roughing end mill HPC, TiAIN, Ø d11 DC: 8mm



#### Order data

Order number	205454 8		
GTIN	4062406380687		
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.

**Problem-solver** for **TPC machining.** Ideal for automated production as the risk of chip accumulations in the machine is largely prevented.

#### 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.** 

#### **Recommendation:**

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

#### Note:

 $h_{max}$ : The values stated in the table are maximum values.  $ae_{max} = 0.05 \times D$  for TPC machining. Machining strategy: HPC Tolerance nominal  $\emptyset$ : d11 No. of teeth Z: 4 Helix angle: 40 ° Direction of infeed: horizontal, oblique and vertical Shank: DIN 6535 HB to h6 No. of teeth Z: 4 Flute length L<sub>2</sub>: 33 mm Overhang length L<sub>1</sub> incl. recess: 40 mm Recess  $\emptyset$  D<sub>1</sub>: 7.4 mm Overall length L: 79 mm Shank  $\emptyset$  D<sub>s</sub>: 8 mm

# **Technical description**

Corner chamfer angle	45 °		
Tolerance nominal $\varnothing$	d11		
Overall length L	79 mm		
Corner chamfer width at 45°	0.2 mm		
Overhang length L <sub>1</sub> incl. recess	40 mm		
Shank	DIN 6535 HB to h6		
Direction of infeed	horizontal, oblique and vertical		
Helix angle	40 °		
Average chip thickness $h_{\rm max}$ for TPC milling in INOX < 900 $\rm N/mm^2$	0.038 mm		
No. of teeth Z	4		
Shank Ø D <sub>s</sub>	8 mm		
Recess Ø D <sub>1</sub>	7.4 mm		
Cutting edge Ø $D_c$	8 mm		
Flute length L <sub>c</sub>	33 mm		
Series	Master Inox		
Coating	TiAIN		
Tool material	Solid carbide		
Standard	Manufacturer's standard		
Milling profile	NF		
Cutting width $a_e$ for milling operation	0.05×D		
Through-coolant	no		
Machining strategy	HPC		
Colour ring	blue		
Type of product	End / face mill		

## User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	130 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	120 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	100 m/min	Р
Steel < 1100 N/mm²	suitable only under restricted conditions	95 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	85 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	75 m/min	М
INOX > 900 N/mm <sup>2</sup>	suitable	70 m/min	М
Uni	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
Air	Suitable only under restricted conditions		