

# GARANT Master INOX M SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 20mm



#### **Order data**

Order number	205448 20
GTIN	4062406276041
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**.

### **Technical description**

Shank Ø D <sub>s</sub>	20 mm
Helix angle	40 degrees
Overall length L	92 mm
Corner chamfer angle	45 degrees
Corner chamfer width at 45°	0.4 mm
No. of teeth Z	5

Shank	DIN 6535 HB to h6		
Flute length L <sub>c</sub>	26 mm		
Cutting edge $\emptyset$ $D_{c}$	20 mm		
Feed $f_z$ for side milling in INOX > 900 N/mm <sup>2</sup>	0.07 mm		
Feed $f_z$ for slot milling in stainless steel > 900 N/mm <sup>2</sup>	0.06 mm		
Tolerance nominal Ø	d11		
Direction of infeed	horizontal, oblique and vertical		
Series	Master INOX		
Coating	TiAlN		
Tool material	Solid carbide		
Standard	DIN 6527		
Milling profile	NR		
Cutting width a <sub>e</sub> for milling operation	Full slot cutting depth 1×D		
Cutting width a <sub>e</sub> for milling operation	0.5×D for side milling		
Through-coolant	no		
Machining strategy	HPC		
Colour ring	blue		
ype of product End / face mill			

## **User data**

	Suitability	$\mathbf{V}_{c}$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable only under restricted conditions	150 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	140 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	120 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable only under restricted conditions	110 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	100 m/min	Р
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	М

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		