

GARANT Master INOX M SlotMachine solid carbide roughing end mill HPC, TiAlN, 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.

Technical description

Corner chamfer angle	45 degrees	
Tolerance nominal Ø	d11	
Overall length L	79 mm	
Corner chamfer width at 45°	0.2 mm	

Overhang length L_1 incl. recess	40 mm		
Shank	DIN 6535 HB to h6		
Direction of infeed	horizontal, oblique and vertical		
Helix angle	40 degrees		
Average chip thickness h_{max} for TPC milling in INOX <900 N/mm^2	0.038 mm		
No. of teeth Z	4		
Shank Ø D _s	8 mm		
Recess Ø D ₁	7.4 mm		
Cutting edge \emptyset D_{c}	8 mm		
Flute length L _c	33 mm		
Series	Master INOX		
Coating	TiAlN		
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	\mathbf{V}_{c}	ISO code
Steel < 500 N/mm ²	suitable only under restricted conditions	130 m/min	Р
Steel < 750 N/mm ²	suitable	120 m/min	Р
Steel < 900 N/mm ²	suitable	100 m/min	Р
Steel < 1100 N/mm ²	suitable only under restricted conditions	95 m/min	Р

Steel < 1400 N/mm ²	suitable only under restricted conditions	85 m/min	Р
INOX < 900 N/mm ²	suitable	75 m/min	М
INOX > 900 N/mm ²	suitable	70 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		