

GARANT Master INOX M SlotMachine solid carbide roughing end mill TPC, TiAlN, Ø d11 DC: 6mm



Order data

Order number	205453 6
GTIN	4062406380618
Item class	11X

Description

Version:

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

With a **new type of knuckle form 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.** Number of cutters selected for 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**.

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.

 $ae_{max} = 0.07 \times D$ for TPC machining.

Technical description

Helix angle	40 degrees
Overhang length L ₁ incl. recess	24 mm
Recess Ø D ₁	5.6 mm
Corner chamfer width at 45°	0.15 mm
Overall length L	62 mm

Flute length L _c	18 mm	
Shank	DIN 6535 HB to h6	
Direction of infeed	horizontal, oblique and vertical	
No. of teeth Z	4	
Corner chamfer angle	45 degrees	
Average chip thickness $h_{\mbox{\scriptsize max}}$ for TPC milling in INOX < 900 $\mbox{N/mm}^2$	0.032 mm	
Cutting edge Ø D _c	6 mm	
Tolerance nominal Ø	d11	
Shank Ø D _s	6 mm	
Series	Master INOX	
Coating	TiAIN	
Tool material	Solid carbide	
Standard	Manufacturer's standard	
Milling profile	NF	
Cutting width a _e for milling operation	0.07×D	
Through-coolant	no	
Machining strategy	TPC	
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	140 m/min	Р
Steel < 750 N/mm ²	suitable	130 m/min	Р
Steel < 900 N/mm ²	suitable	110 m/min	Р
Steel < 1100 N/mm ²	suitable only under restricted conditions	100 m/min	Р

Steel < 1400 N/mm ²	suitable only under restricted conditions	90 m/min	Р
INOX < 900 N/mm ²	suitable	80 m/min	M
INOX > 900 N/mm ²	suitable	75 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		