

**Garant**
**GARANT Master INOX solid carbide milling cutter HPC / TPC, TiAlN, Ø h10 DC: 20mm**

**Order data**

Order number	203011 20
GTIN	4045197851901
Item class	11X

**Description**
**Version:**

For **roughing and finishing**.

HPC milling cutter with **newly developed high-performance coating** for **outstanding tool life** and **optimum metal removal rate** in a very wide range of stainless steels. **Greater oxidation resistance** and **high-temperature hardness**.

Can be used at **high cutting speeds**, particularly suitable even for TOOLOX®.

**Advantage:**

Particularly low vibration running.

**Technical description**

Overhang length $L_1$ incl. recess	70 mm
Shank	DIN 6535 HB to h6
Cutting edge $\varnothing D_c$	20 mm
Shank $\varnothing D_s$	20 mm
Direction of infeed	horizontal, oblique and vertical
Overall length L	126 mm
No. of teeth Z	4
Tolerance nominal $\varnothing$	h10
Feed $f_z$ for slot milling in stainless steel $> 900 \text{ N/mm}^2$	0.07 mm
Feed $f_z$ for side milling in INOX $> 900 \text{ N/mm}^2$	0.08 mm

Recess $\varnothing D_1$	19.5 mm
Flute length $L_c$	60 mm
Corner chamfer width at 45°	0.35 mm
Helix angle	40 degrees
Corner chamfer angle	45 degrees
Series	Master INOX
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	0.08xD
Cutting width $a_e$ for milling operation	Full slot cutting depth 1xD
Through-coolant	no
Machining strategy	HPC
Machining strategy	TPC
Colour ring	blue
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	240 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	220 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	115 m/min	P
Steel < 50 HRC	suitable	80 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	100 m/min	M

INOX > 900 N/mm <sup>2</sup>	suitable	85 m/min	M
wet maximum	suitable		
wet minimum	suitable		
dry	Suitable only under restricted conditions		
Air	suitable		