

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

Order data

Order number	202389 20
GTIN	4045197875365
Item class	11X

Description
Version:
For roughing and finishing

HPC milling cutters with **newly developed high-performance coating** for **outstanding service life** and **optimum metal removal rates** in a wide range of stainless steels.

Greater oxidation resistance and **high-temperature hardness**.

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

Technical description

Cutting edge Ø D _c	20 mm
No. of teeth Z	3
Flute length L _c	60 mm
Recess Ø D ₁	19.5 mm
Overhang length L ₁ incl. recess	74 mm
Corner chamfer width at 45°	0.2 mm
Shank Ø D _s	20 mm
Tolerance nominal Ø	h10
Overall length L	124 mm
Feed f _z for side milling in INOX > 900 N/mm ²	0.12 mm
Feed f _z for slot milling in stainless steel > 900 N/mm ²	0.1 mm

Shank	DIN 6535 HB to h6
Direction of infeed	horizontal, oblique and vertical
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	Full slot cutting depth $1 \times D$
Cutting width a_e for milling operation	$0.3 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	blue
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel < 500 N/mm ²	suitable	240 m/min	P
Steel < 750 N/mm ²	suitable	220 m/min	P
Steel < 900 N/mm ²	suitable	180 m/min	P
Steel < 1100 N/mm ²	suitable	150 m/min	P
Steel < 1400 N/mm ²	suitable only under restricted conditions	150 m/min	P
TOOLOX 33	suitable	115 m/min	H
TOOLOX 44	suitable	80 m/min	H
INOX < 900 N/mm ²	suitable	100 m/min	M

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