

**Garant**
**GARANT Master INOX solid carbide ball nose milling cutter HPC, TiAlN, Ø f8  
DC / DS: 20mm**

**Order data**

Order number	207474 20
GTIN	4062406130527
Item class	11X

**Description**
**Version:**

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®.

Tolerance: Radius contour = **±0.005 mm**.

**Technical description**

Cutting edge Ø D <sub>c</sub>	20 mm
No. of teeth Z	4
Feed f <sub>z</sub> for side milling in INOX < 900 N/mm <sup>2</sup>	0.075 mm
Feed f <sub>z</sub> for copy milling in stainless steel < 900 N/mm <sup>2</sup>	0.084 mm
Helix angle	45 degrees
Shank Ø D <sub>s</sub>	20 mm
Flute length L <sub>c</sub>	26 mm
Overall length L	120 mm
Radius R	10 mm
Series	Master INOX
Coating	TiAlN

Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal $\varnothing$	f8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	0.5xD for side milling
Cutting width $a_e$ for milling operation	Full slot cutting depth 1xD
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	HPC
Colour ring	blue
Type of product	Ball-nosed slot drill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	250 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	230 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	200 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	170 m/min	P
TOOLOX 33	suitable	115 m/min	H
TOOLOX 44	suitable	80 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	110 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	90 m/min	M
Uni	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	suitable		

dry	suitable only under restricted conditions
<del>Air</del> <b>Services</b>	suitable
Shank grinding Type HB	129100 HB