

**Garant**
**GARANT Master Steel solid carbide mini milling cutter HPC, TiAlN, Ø e8 DC: 1,8mm**

**Order data**

Order number	202295 1,8
GTIN	4062406271336
Item class	11X

**Description**
**Version:**

**Extra short cutter** for maximum stability. **Shank length to DIN** for improved support of the tool in the holder. This significantly increases the tool life.

**Save the regrinding costs:** It is cheaper to use a carbide mini slot drill to the limit of wear and throw it away, than to regrind it.

Tool for **general-purpose machining**.

**Note:**

HB shanks are available at the same price as HA.

For **HB shanks** use order **no. 202297**.

**Technical description**

Shank Ø D <sub>s</sub>	3 mm
Tolerance nominal Ø	e8
Feed f <sub>z</sub> for side milling in steel < 900 N/mm <sup>2</sup>	0.006 mm
Helix angle	45 degrees
Corner chamfer width at 45°	0.02 mm
Overall length L	38 mm
No. of teeth Z	3
Feed f <sub>z</sub> for slot milling in steel < 900 N/mm <sup>2</sup>	0.005 mm
Cutting edge Ø D <sub>c</sub>	1.8 mm

Flute length $L_c$	3 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HA to h6
Corner chamfer angle	45 degrees
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
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Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	290 m/min	N
Alu > 10% Si	suitable only under restricted conditions	240 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	120 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	100 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	70 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	50 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	70 m/min	M

Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	40 m/min	S
GG(G)	suitable	85 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		