

Garant
GARANT Master Steel solid carbide mini milling cutter HPC, TiAlN, Ø e8 DC: 4,5mm

Order data

Order number	202289 4,5
GTIN	4062406271176
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. 202291**.

Technical description

Flute length L_c	8 mm
Direction of infeed	horizontal, oblique and vertical
No. of teeth Z	3
Feed f_z for slot milling in steel < 900 N/mm ²	0.025 mm
Shank $\varnothing D_s$	6 mm
Cutting edge $\varnothing D_c$	4.5 mm
Feed f_z for side milling in steel < 900 N/mm ²	0.028 mm
Helix angle	30 degrees
Overall length L	50 mm

Shank	DIN 6535 HA to h6
Tolerance nominal \varnothing	e8
Corner chamfer angle	90 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 $1 \times D$
Cutting width a_e for milling operation	Full slot cutting depth $1 \times D$
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 ²	suitable	140 m/min	P
Steel < 750 N/mm ²	suitable	120 m/min	P
Steel < 900 N/mm ²	suitable	100 m/min	P
Steel < 1100 N/mm ²	suitable	70 m/min	P
Steel < 1400 N/mm ²	suitable	50 m/min	P
INOX < 900 N/mm ²	suitable	90 m/min	M
INOX > 900 N/mm ²	suitable	70 m/min	M
Ti > 850 N/mm ²	suitable	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		