

**Garant**
**GARANT Master Steel solid carbide finishing cutter HPC, TiAlN, Ø f8 DC: 16mm**

**Order data**

Order number	204016 16
GTIN	4045197886828
Item class	11X

**Description**
**Version:**

Suitable for machining titanium and titanium alloys.

For **finishing operations**.

Special geometry for optimum chip evacuation.

Unequal spacing gives high **intrinsic stability and smooth cutting action**.

For **profile milling as a finishing operation**.

Particularly long cutting edges for efficient finishing.

**Note:**

Can be reground from  $\varnothing D_c = 6$  mm.

$a_{e\max} = 0.05 \times D$

**Technical description**

No. of teeth Z	7
Shank $\varnothing D_s$	16 mm
Shank	DIN 6535 HA to h6
Corner chamfer width at 45°	0.16 mm
Flute length $L_c$	64 mm
Balance quality with shank	G 2.5 with HA
Cutting edge $\varnothing D_c$	16 mm
Tolerance nominal $\varnothing$	f8
Overall length L	123 mm

Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup>	0.105 mm
Direction of infeed	horizontal
Helix angle	45 degrees
Corner chamfer angle	45 degrees
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	0.05×D for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	green
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	200 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	150 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	80 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	100 m/min	S
GG(G)	suitable	200 m/min	K

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