

Garant
GARANT Master Steel solid carbide finishing cutter HPC, TiAlN, Ø f8 DC: 20mm

Order data

Order number	204016 20
GTIN	4045197886842
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 $\varnothing D_c = 6 \text{ mm}$.

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

Technical description

Flute length L_c	80 mm
Overall length L	140 mm
Feed f_z for side milling in steel $< 900 \text{ N/mm}^2$	0.122 mm
Direction of infeed	horizontal
No. of teeth Z	7
Balance quality with shank	G 2.5 with HA
Shank	DIN 6535 HA to h6
Tolerance nominal \varnothing	f8
Corner chamfer width at 45°	0.2 mm

Shank $\varnothing D_s$	20 mm
Cutting edge $\varnothing D_c$	20 mm
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	$0.05 \times D$ 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 ²	suitable	240 m/min	P
Steel < 750 N/mm ²	suitable	220 m/min	P
Steel < 900 N/mm ²	suitable	200 m/min	P
Steel < 1100 N/mm ²	suitable	180 m/min	P
Steel < 1400 N/mm ²	suitable	150 m/min	P
INOX < 900 N/mm ²	suitable	90 m/min	M
INOX > 900 N/mm ²	suitable	80 m/min	M
Ti > 850 N/mm ²	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
Air Services	suitable
Shank grinding Type HB	129100 HB