

## GARANT Master Alu solid carbide finishing cutter HPC, uncoated, Ø h6 DC: 20mm



### Order data

Order number	203213 20
GTIN	4067263100355
Item class	11X

### Description

#### Version:

**For fine finishing operations.** Cutter geometry optimised for low infeeds and excellent surfaces. Unequal spacing gives high intrinsic stability and smooth cutting action.

#### Application:

For profile milling as a finishing operation.

#### Note:

Optimal production results in conjunction with the GARANT HiRunER precision ER collet chuck, GARANT Master Chuck hydraulic chuck and heavy-duty chuck.

### Technical description

Corner chamfer angle	90 degrees
Shank Ø D <sub>s</sub>	20 mm
Feed f <sub>z</sub> for side milling in short-chipping aluminium	0.04 mm
Recess Ø D <sub>1</sub>	19.5 mm
Cutting edge Ø D <sub>c</sub>	20 mm
Direction of infeed	horizontal
Helix angle	40 degrees
Tolerance nominal Ø	h6
Overall length L	125 mm
Flute length L <sub>c</sub>	64 mm

Overhang length $L_1$ incl. recess	72 mm
No. of teeth Z	7
Balance quality with shank	G 2.5 with HA
Shank	DIN 6535 HA to h6
Series	Master Alu
Coating	uncoated
Tool material	Solid carbide
Standard	Works standard
Type	W
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Milling application	Mono milling tools high-precision 90°
Cutting width $a_e$ for milling operation	0.025×D for side milling
Through-coolant	no
Machining strategy	HPC
Colour ring	yellow
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable	380 m/min	N
Aluminium (short chipping)	suitable	360 m/min	N
Alu > 10% Si	suitable only under restricted conditions	320 m/min	N
PMMA acrylic	suitable	260 m/min	N
PE-HD	suitable	220 m/min	N
PA 66	suitable	250 m/min	N
PEEK	suitable	220 m/min	N

PF 31	suitable	200 m/min	N
Cu	suitable only under restricted conditions	160 m/min	N
CuZn	suitable	220 m/min	N
wet maximum	suitable		
wet minimum	suitable		
Air	suitable		

**Services**

Shank grinding Type HB	129100 HB
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