

Garant**GARANT Master Alu SlotMachine solid carbide roughing end mill HPC, DLC, Ø e8 DC: 20mm****Order data**

Order number	205265 20
GTIN	4062406122607
Item class	11X

Description**Version:**

For roughing.

Special profile for machining non-ferrous metals.

Advantage:

Optimised flute form, eccentric relief ground, generous chip spaces.

Up to $2 \times D$ into solid material at very high feed rates and smooth cutting action.

Ramping capability up to 45° .

Very high feed rates when plunging vertically, thanks to **special plunging geometry**.

Technical description

Shank Ø D_s	20 mm
Overhang length L_1 incl. recess	74 mm
Recess Ø D_1	19 mm
Feed f_z for slot milling in short-chipping aluminium	0.25 mm
Overall length L	126 mm
Shank	DIN 6535 HB to h6
Tolerance nominal Ø	e8
Cutting edge Ø D_c	20 mm
Direction of infeed	horizontal, oblique and vertical
Flute length L_c	60 mm

Helix angle	35 degrees
Balance quality with shank	G 2.5 with HB
No. of teeth Z	4
Feed f_z for side milling in short-chipping aluminium	0.28 mm
Corner rounding r_v	0.5 mm
Series	Master Alu
Coating	DLC
Tool material	Solid carbide
Standard	Manufacturer's standard
Milling profile	WR
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	$0.5 \times D$ for side milling
Cutting width a_e for milling operation	Full slot cutting depth $1 \times D$
Through-coolant	no
Machining strategy	HPC
Colour ring	yellow
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Aluminium	Suitable	450 m/min	N
Aluminium (short chipping)	suitable	400 m/min	N
Alu > 10% Si	suitable	380 m/min	N
PA 66	suitable only under restricted conditions	120 m/min	N
PEEK	suitable only under restricted conditions	100 m/min	N
Cu	Suitable	160 m/min	N

CuZn	Suitable	200 m/min	N
wet maximum	suitable		
wet minimum	Suitable only under restricted conditions		
dry	Suitable only under restricted conditions		
Air	suitable		
Services			
Shank grinding Type HB		129100 HB	