

## Garant

### GARANT Master Alu SlotMachine solid carbide roughing end mill HPC, DLC, Ø e8 DC: 20mm



#### Order data

Order number	205251 20
GTIN	4067263130444
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  $45^\circ$ .

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

#### Technical description

Direction of infeed	horizontal, oblique and vertical
Balance quality with shank	G 2.5 with HB
Tolerance nominal Ø	e8
Cutting edge Ø $D_c$	20 mm
No. of teeth Z	4
Helix angle	35 degrees
Feed $f_z$ for slot milling in short-chipping aluminium	0.25 mm
Overhang length $L_1$ incl. recess	52 mm
Feed $f_z$ for side milling in short-chipping aluminium	0.28 mm
Overall length L	104 mm

Corner rounding $r_v$	0.5 mm
Shank $\varnothing D_s$	20 mm
Flute length $L_c$	41 mm
Shank	DIN 6535 HB to h6
Recess $\varnothing D_1$	19 mm
Series	Master Alu
Coating	DLC
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	WR
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
Cutting width $a_e$ for milling operation	$0.5 \times D$ 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
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		