

**Garant**
**GARANT Master Alu SlotMachine solid carbide roughing end mill HPC, DLC, Ø e8 DC: 18mm**

**Order data**

Order number	205266 18
GTIN	4067263130512
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**

Cutting edge $\varnothing D_c$	18 mm
Recess $\varnothing D_1$	17 mm
Shank $\varnothing D_s$	18 mm
Direction of infeed	horizontal, oblique and vertical
No. of teeth Z	4
Flute length $L_c$	54 mm
Shank	DIN 6535 HB to h6
Corner rounding $r_v$	0.32 mm
Balance quality with shank	G 2.5 with HB
Overhang length $L_1$ incl. recess	67 mm

Overall length L	117 mm
Tolerance nominal $\varnothing$	e8
Helix angle	35 degrees
Feed $f_z$ for side milling in short-chipping aluminium	0.25 mm
Feed $f_z$ for slot milling in short-chipping aluminium	0.22 mm
Series	Master Alu
Coating	DLC
Tool material	Solid carbide
Standard	Works standard
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		