

**Garant****GARANT Master Alu PickPocket solid carbide roughing end mill with through-coolant HPC, DLC, Ø e6 DC: 6mm****Order data**

Order number	202019 6
GTIN	4062406381080
Item class	11X

**Description****Version:**

For roughing and finishing.

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

Very high feed rates when plunging vertically.

Ramping capability up to  $45^\circ$ .

Improved chip evacuation due to central through-coolant.

Very long overhang for safe machining of deep cavities.

With the latest generation of DLC coating  $sp^2$ .

**Advantage:**

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

**Note:**

A minimum oversize of  $0.1 \times D$  must be maintained for subsequent finishing operations.

**Technical description**

Helix angle	42 degrees
Shank	DIN 6535 HA to h6
Direction of infeed	horizontal, oblique and vertical
Feed $f_z$ for side milling in short-chipping aluminium	0.06 mm
Overhang length $L_1$ incl. recess	42 mm
Feed $f_z$ for slot milling in short-chipping aluminium	0.04 mm
Balance quality with shank	G 2.5 with HA

Tolerance nominal $\varnothing$	e8
Recess $\varnothing D_1$	5.7 mm
Overall length L	80 mm
Shank $\varnothing D_s$	6 mm
Flute length $L_c$	10 mm
Cutting edge $\varnothing D_c$	6 mm
No. of teeth Z	3
Corner rounding $r_v$	0.2 mm
Series	Master Alu
Coating	DLC
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	$0.3 \times D$ 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	380 m/min	N
Aluminium (short chipping)	Suitable	300 m/min	N
Alu > 10% Si	suitable	270 m/min	N
PMMA acrylic	suitable	180 m/min	N
PE-HD	Suitable	130 m/min	N

PA 66	Suitable	150 m/min	N
PEEK	suitable	130 m/min	N
PF 31	Suitable	110 m/min	N
PVDF GF20	Suitable	160 m/min	N
POM GF25	Suitable	150 m/min	N
PA 66 GF30	Suitable	140 m/min	N
PEEK GF30	suitable	120 m/min	N
PTFE CF25	suitable	150 m/min	N
Honeycomb sandwich	suitable only under restricted conditions	220 m/min	N
Cu	Suitable	140 m/min	N
CuZn	Suitable	160 m/min	N
wet maximum	suitable		
<del>Air</del>	<del>Suitable</del>		

## Services

Shank grinding Type HB

129100 HB