

Garant
GARANT Master Alu PickPocket solid carbide roughing end mill with through-coolant HPC, DLC, Ø e6 DC: 12mm

Order data

Order number	202019 12
GTIN	4062406381110
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° .

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

Cutting edge Ø D_c	12 mm
Overall length L	120 mm
Helix angle	42 degrees
Feed f_z for side milling in short-chipping aluminium	0.08 mm
Flute length L_c	19 mm
Balance quality with shank	G 2.5 with HA
Direction of infeed	horizontal, oblique and vertical

Tolerance nominal \varnothing	e8
Recess $\varnothing D_1$	11 mm
Shank $\varnothing D_s$	12 mm
Shank	DIN 6535 HA to h6
No. of teeth Z	3
Feed f_z for slot milling in short-chipping aluminium	0.06 mm
Corner rounding r_v	0.2 mm
Overhang length L_1 incl. recess	73 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×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		
Air	Suitable		

Services

Shank grinding Type HB

129100 HB