

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

**Order data**

Order number	205274 20
GTIN	4062406381301
Item class	11X

**Description**
**Version:**

For roughing.

Special profile for machining non-ferrous metals. Significant reduction in the chip volume due to targeted chip fragmentation using the **special cutter geometry**.

**Problem-solver for TPC machining.** Ideal for automated production as the risk of chip accumulations in the machine is largely prevented.

**Note:**

For **HB shanks** use order **no. 205276**.

HB shanks are available at the same price as HA.

$h_{max}$ : The values stated in the table are maximum values.

$ae_{max}$  is  $0.15 \times D$  for TPC machining.

**Technical description**

Corner rounding $r_v$	0.5 mm
Shank	DIN 6535 HA to h6
Helix angle	35 degrees
Direction of infeed	horizontal, oblique and vertical
Recess $\varnothing D_1$	19 mm
Average chip thickness $h_{max}$ for TPC milling in short-chipping aluminium	0.143 mm
Overhang length $L_1$ incl. recess	100 mm

Balance quality with shank	G 2.5 with HA
Flute length $L_c$	82 mm
Tolerance nominal $\varnothing$	e8
No. of teeth Z	4
Shank $\varnothing D_s$	20 mm
Overall length L	150 mm
Cutting edge $\varnothing D_c$	20 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	$0.15 \times D$
Through-coolant	no
Machining strategy	HPC
Colour ring	yellow
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium	Suitable	400 m/min	N
Aluminium (short chipping)	Suitable	360 m/min	N
Alu > 10% Si	suitable	340 m/min	N
PA 66	suitable only under restricted conditions	110 m/min	N
PEEK	suitable only under restricted conditions	90 m/min	N

Cu	Suitable	140 m/min	N
CuZn	Suitable	180 m/min	N
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable only under restricted conditions		
Air	Suitable		