

## Garant

### GARANT Master Alu solid carbide milling cutter with more chip separators TPC, DLC, Ø h6 DC: 5 mm



#### Order data

Order number	203113 5
GTIN	4062406245740
Item class	11X

#### Description

##### Version:

**Specially designed for** TPC high-performance milling. **Optimised bending strength** due to the use of ultra-fine grain substrates. **1xD** chip separator for controlled chip breaking.

**Balanced** for very high process reliability and protecting the machine at high speeds.

##### Application:

Especially for milling **aluminium and non-ferrous metals.**

##### Note:

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

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

Tolerance nominal  $\varnothing$ : h6

No. of teeth Z: 4

Helix angle: 38 degrees

Direction of infeed: horizontal and oblique

Shank: DIN 6535 HA to h6

Balance quality with shank: G 2.5 with HA

No. of teeth Z: 4

Flute length  $L_c$ : 17 mm

Overhang length  $L_1$  incl. recess: 24 mm

Recess  $\varnothing D_1$ : 4.5 mm

Overall length L: 65 mm

Shank  $\varnothing D_s$ : 6 mm

#### Technical description

Shank form	HA
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Shank	DIN 6535 HA to h6
Average chip thickness $h_{\max}$ for TPC milling in short-chipping aluminium	0.036 mm
Overhang length $L_1$ incl. recess	24 mm
Direction of infeed	horizontal and oblique
Recess $\varnothing D_1$	4.5 mm
No. of teeth Z	4
Helix angle	38 degrees
Balance quality with shank	G 2.5 with HA
Overall length L	65 mm
Tolerance nominal $\varnothing$	h6
Flute length $L_c$	17 mm
Shank $\varnothing D_s$	6 mm
Cutting edge $\varnothing D_c$	5 mm
Corner rounding $r_v$	0.05 mm
Series	GARANT Master Alu
Coating	DLC
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	$0.15 \times D$
Through-coolant	no
Machining strategy	TPC
Colour ring	yellow
Type of product	End mill