## Garant

GARANT Master Alu SlotMachine solid carbide roughing end mill HPC, DLC, $\varnothing$ e8 DC: 14 mm


## Order data

| Order number | 20525114 |
| :--- | :---: |
| GTIN | 4067263130413 |
| Item class | $11 X$ |

## 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

| Balance quality with shank | G 2.5 with HB |
| :--- | :---: |
| Tolerance nominal $\varnothing$ | e8 |
| Feed $f_{z}$ for side milling in short-chipping aluminium | 0.2 mm |
| Overall length L | 83 mm |
| Shank | DIN 6535 HB to h6 |
| Feed $\mathrm{f}_{\mathrm{z}}$ for slot milling in short-chipping aluminium | 0.18 mm |
| Recess $\varnothing \mathrm{D}_{1}$ | 13 mm |
| Flute length $\mathrm{L}_{\mathrm{c}}$ | 26 mm |
| No. of teeth $Z$ | 4 |
| Corner rounding $\mathrm{r}_{v}$ | 0.32 mm |


| Direction of infeed | horizontal, oblique and vertical |
| :--- | :---: |
| Overhang length $L_{1}$ incl. recess | 36 mm |
| Shank $\varnothing \mathrm{D}_{\mathrm{s}}$ | 14 mm |
| Helix angle | 35 degrees |
| Cutting edge $\varnothing \mathrm{D}_{\mathrm{c}}$ | 14 mm |
| Series | Master Alu |
| Coating | DLC |
| Tool material | Solid carbide |
| Standard | DIN 6527 |
| Milling profile | WR |
| Helix angle characteristic | Full slot cutting depth $1 \times \mathrm{D}$ |
| Spacing of the cutters | $0.5 \times \mathrm{D}$ for side milling |
| Cutting width $\mathrm{a}_{\mathrm{e}}$ for milling operation | no |
| Cutting width $\mathrm{a}_{\mathrm{e}}$ for milling operation | HPC |
| Through-coolant | yellow |
| Machining strategy | End / face mill |
| Colour ring |  |
| Type of product |  |

## User data

|  | Suitability | $\mathbf{V}_{c}$ | ISO code |
| :--- | :---: | :---: | :---: |
| Aluminium | suitable | $450 \mathrm{~m} / \mathrm{min}$ | N |
| Aluminium (short <br> chipping) | suitable | $400 \mathrm{~m} / \mathrm{min}$ | N |
| Alu $>10 \% \mathrm{Si}$ | suitable | $380 \mathrm{~m} / \mathrm{min}$ | N |
| PA 66 | suitable only under <br> restricted conditions | $120 \mathrm{~m} / \mathrm{min}$ | N |
| PEEK | suitable only under <br> restricted conditions | $100 \mathrm{~m} / \mathrm{min}$ | N |
| Cu | suitable | $160 \mathrm{~m} / \mathrm{min}$ | N |


| CuZn | suitable | N |
| :--- | :---: | :---: |
| wet maximum | suitable |  |
| wet minimum | suitable only under <br> restricted conditions |  |
| dry | suitable only under <br> restricted conditions |  |
| Air | suitable |  |

