



HAIMER MILL end mill, AlTiN, Ø f9 DC: 20mm



Order data

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| Order number | 220292 20 |
| GTIN | 4034221164070 |
| Item class | 26X |

Description

Version:

For **general-purpose use** in steel materials and high-alloy steels, especially stainless steel. With **cylindrical core** for optimised tool stiffness when milling slots. Reliable processes guaranteed when ramping and during circular interpolation milling thanks to **special end face geometry**.

Note:

For **HB** use order **No. 220293**.

Tool holders with the SAFE-LOCK pull-out protection can be found under clamping technology.

Technical description

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|--|----------------------------------|
| Cutting edge $\varnothing D_c$ | 20 mm |
| No. of teeth Z | 4 |
| Corner chamfer angle | 45 degrees |
| Shank | DIN 6535 HA to h6 |
| Feed f_z for side milling in steel < 900 N/mm ² | 0.13 mm |
| Overall length L | 133 mm |
| Direction of infeed | horizontal, oblique and vertical |
| Tolerance nominal \varnothing | f8 |
| Helix angle | 38 degrees |
| Corner chamfer width at 45° | 0.4 mm |
| Shank $\varnothing D_s$ | 20 mm |

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|--|-----------------------------|
| Recess $\varnothing D_1$ | 19 mm |
| Flute length L_c | 60 mm |
| Overhang length L_1 incl. recess | 80 mm |
| Feed f_z for slot milling in steel < 900 N/mm ² | 0.11 mm |
| Coating | AlTiN |
| Tool material | Solid carbide |
| Standard | DIN 6527 |
| Type | N |
| Helix angle characteristic | unequal spacing |
| Spacing of the cutters | unequal spacing |
| Cutting width a_e for milling operation | 0.05×D for side milling |
| Cutting width a_e for milling operation | Full slot cutting depth 1×D |
| Through-coolant | no |
| Machining strategy | HPC |
| Colour ring | without |
| Type of product | End / face mill |

User data

| | Suitability | V_c | ISO code |
|--------------------------------|---|-----------|----------|
| Alu plastics | suitable only under restricted conditions | 480 m/min | N |
| Aluminium (short chipping) | suitable only under restricted conditions | 480 m/min | N |
| Alu > 10% Si | suitable only under restricted conditions | 350 m/min | N |
| Steel < 500 N/mm ² | suitable | 275 m/min | P |
| Steel < 750 N/mm ² | suitable | 255 m/min | P |
| Steel < 900 N/mm ² | suitable | 210 m/min | P |
| Steel < 1100 N/mm ² | suitable | 190 m/min | P |
| INOX < 900 N/mm ² | suitable | 95 m/min | M |

| | | | |
|------------------------------|---|-----------|---|
| INOX > 900 N/mm ² | suitable | 75 m/min | M |
| Ti > 850 N/mm ² | suitable only under restricted conditions | 35 m/min | S |
| GG(G) | suitable only under restricted conditions | 155 m/min | K |
| Uni | suitable | | |
| Oil | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable | | |
| dry | suitable | | |
| Air | suitable | | |