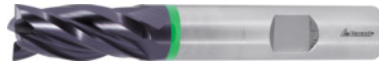


Garant
End mill HSS-E-SPM HPC, TiAlN, Ø DC: 4mm

Order data

| | |
|--------------|---------------|
| Order number | 191635 4 |
| GTIN | 4045197546296 |
| Item class | 11W |

Description
Version:

Special **SPM** substrate with very high cobalt content.

Combines the **hardness of solid carbide** and the **toughness of PM steel**.

Multi-flute end mill with universal geometry.

Can be used as a finishing end mill, semi-roughing or roughing end mill.

Technical description

| | |
|--|----------------------------------|
| Cutting edge Ø D _c | 4 mm |
| No. of teeth Z | 4 |
| Feed f _z for side milling in steel < 1100 N/mm ² | 0.012 mm |
| Shank Ø D _s | 6 mm |
| Overall length L | 55 mm |
| Flute length L _c | 11 mm |
| Direction of infeed | horizontal, oblique and vertical |
| Shank | DIN 1835 B to h6 |
| Tolerance nominal Ø | k12 |
| Helix angle | 30 degrees |
| Corner chamfer angle | 90 degrees |
| Coating | TiAlN |
| Tool material | HSS E SPM |

| | |
|---|---------------------------------|
| Standard | DIN 844 B |
| Type | N |
| Helix angle characteristic | unequal spacing |
| Cutting width a_e for milling operation | $0.5 \times D$ for side milling |
| Through-coolant | no |
| Machining strategy | HPC |
| Colour ring | green |
| Type of product | End / face mill |

User data

| | Suitability | V_c | ISO code |
|--------------------------------|---|-----------|----------|
| Aluminium (short chipping) | suitable only under restricted conditions | 159 m/min | N |
| Alu > 10% Si | suitable only under restricted conditions | 125 m/min | N |
| Steel < 500 N/mm ² | suitable | 95 m/min | P |
| Steel < 750 N/mm ² | suitable | 74 m/min | P |
| Steel < 900 N/mm ² | suitable | 74 m/min | P |
| Steel < 1100 N/mm ² | suitable | 42 m/min | P |
| Steel < 1400 N/mm ² | suitable | 32 m/min | P |
| INOX < 900 N/mm ² | suitable | 26 m/min | M |
| INOX > 900 N/mm ² | suitable | 21 m/min | M |
| GG(G) | suitable only under restricted conditions | 63 m/min | K |
| CuZn | suitable only under restricted conditions | 125 m/min | N |
| Uni | suitable | | |
| wet maximum | suitable | | |
| dry | suitable | | |
| Air | suitable | | |

