## Garant

# Machine tap for synchronised spindles HSS-E-PM, TiAlN, M: M6

## Order data

| Order number | 132065 M6 |
|---|---|
| GTIN | 4045197445971 |
| Item class | 11H |

## Description

**Version:**
**Sturdy design with spiral point and shank to DIN 1835-B.**Special geometry for use on machines with **synchronised spindle drives.** The tap is controlled by the synchronising spindle of the machine.
Special **TiAlN coating** for optimum tool life. For use with **emulsion** (fat content minimum 8%).
**Recommendation:**
For **TOOLOX materials** we recommend **deviating from the DIN data** (see table) by drilling the tapping hole Ø **0.05** to **0.3 mm** larger.
**Note:**
**For use on synchronised spindles,** the **GARANT** quick-change tapping chuck **No. 338100 – 338121 with minimum length adjustment (MLA)** ensures very high process reliability.
Thread type: M
Tool material: HSS E PM
Standard: Manufacturer's standard
Tolerance class: ISO 2X 6HX
Thread pitch: 1 mm
Overall length L: 80 mm
Shank Ø $D_s$: 6 mm
Shank square □: 4.9 mm
Tapping hole Ø: 5 mm

## Technical description

| Tapping hole Ø | 5 mm |
|---|---|
| Number of clamping slots | 3 |
| Number of cutting edges Z | 3 |

| | |
|---|---|
| Thread pitch | 1 mm |
| Thread Ø | 6 mm |
| Standard | Manufacturer's standard |
| Shank Ø $D_s$ | 6 mm |
| Overall length L | 80 mm |
| Shank square □ | 4.9 mm |
| Tolerance class | ISO 2X 6HX |
| Tool material | HSS E PM |
| Thread depth | 15 mm |
| Thread type | M |
| Thread size | M6 |
| Coating | TiAlN |
| Flank angle | 60 ° |
| Thread standard | DIN 13 |
| Taper lead form | B |
| Shank | DIN 1835 B with h6 |
| Through-coolant | no |
| Application for type of drilling | up to 2.5×D for through holes |
| Cutting direction | right-hand |
| Shank tolerance | h6 |
| Type of threading tool | Machine tap for synchronous machining |
| Colour ring | red |
| Type of product | Tap |

## User data

| | Suitability | $V_c$ | ISO code |
|---|---|---|---|
| Steel < 500 N/mm² | suitable | 37 m/min | P |
| Steel < 750 N/mm² | suitable | 35 m/min | P |

| | | | |
|---|---|---|---|
| Steel < 900 N/mm$^2$ | suitable | 22 m/min | P |
| Steel < 1100 N/mm$^2$ | suitable | 12 m/min | P |
| Steel < 1400 N/mm$^2$ | suitable | 7 m/min | P |
| TOOLOX 33 | suitable | 7 m/min | H |
| TOOLOX 44 | suitable only under restricted conditions | 6 m/min | H |
| Oil | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable | | |