Garant

# Machine tap for synchronised spindles HSS-E-PM Form E, TiAlN, M: M2,5

## Order data

| | |
|---|---|
| Order number | 136173 M2,5 |
| GTIN | 4045197705242 |
| Item class | 11H |

## Description

**Version:**
**Sturdy design with right-hand chip flutes and shank to DIN 1835-B.**
Special geometry for **universal applications** on machines with **synchronised spindle drive.**
The tap is guided by the synchronised spindle on the machine. Special **TiAlN-S coating** for optimum tool life.
For use with **emulsion** (fat content minimum 8%).
**Form E** (lead chamfer: 1.5 - 2 turns) for the deepest possible thread depths.
**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: 0.45 mm
Overall length L: 70 mm
Shank ⌀ $D_s$: 6 mm
Shank square ☐: 4.9 mm
Tapping hole ⌀: 2.05 mm

## Technical description

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|---|---|
| Thread pitch | 0.45 mm |
| Number of cutting edges Z | 3 |
| Tapping hole ⌀ | 2.05 mm |
| Thread ⌀ | 2.5 mm |

| | |
|---|---|
| Number of clamping slots | 3 |
| Standard | Manufacturer's standard |
| Shank ⌀ $D_s$ | 6 mm |
| Overall length L | 70 mm |
| Shank square ☐ | 4.9 mm |
| Tolerance class | ISO 2X 6HX |
| Tool material | HSS E PM |
| Thread depth | 7.5 mm |
| Thread type | M |
| Thread size | M2.5 |
| Coating | TiAlN |
| Flank angle | 60 ° |
| Thread standard | DIN 13 |
| Taper lead form | E |
| Helix angle | 40 ° |
| Shank | DIN 1835 B to h6 |
| Through-coolant | no |
| Application for type of drilling | up to 3×D for blind holes |
| Cutting direction | right-hand |
| Shank tolerance | h6 |
| Type of threading tool | Machine tap for synchronous machining |
| Colour ring | green |
| Type of product | Tap |

## User data

| | Suitability | $V_c$ | ISO code |
|---|---|---|---|
| Alu plastics | suitable only under restricted conditions | 32 m/min | N |

| | | | |
|---|---|---|---|
| Aluminium (short chipping) | suitable | 32 m/min | N |
| Steel < 500 N/mm² | suitable | 33 m/min | P |
| Steel < 750 N/mm² | suitable | 32 m/min | P |
| Steel < 900 N/mm² | suitable | 20 m/min | P |
| Steel < 1100 N/mm² | suitable | 12 m/min | P |
| Steel < 1400 N/mm² | suitable | 7 m/min | P |
| INOX < 900 N/mm² | suitable | 11 m/min | M |
| INOX > 900 N/mm² | suitable | 9 m/min | M |
| CuZn | suitable only under restricted conditions | 30 m/min | N |
| Uni | suitable | | |
| Oil | suitable | | |
| wet maximum | suitable | | |
| wet minimum | suitable | | |