

Garant

GARANT Master Tap SteelHT machine tap HSS-E-PM Form B 6GX, TiCN, M: M20



Order data

| | |
|--------------|---------------|
| Order number | 131946 M20 |
| GTIN | 4062406236342 |
| Item class | 111 |

Description

Version:

High-performance tap, specially developed for use in **steels with high tensile strength** and for **difficult-to-machine materials**. **Strong spiral point**, for process stability at high cutting forces.

- **HSS-E-PM tool material – for very high cutting edge stability.**
- **Optimised honed cutting edges.**
- **TiCN coating – for maximum wear protection.**

Tolerance class: ISO 3X/6GX.

Application:

For components which are galvanised or shrink slightly when hardened.

Recommendation:

For **TOOLOX** and **HARDOX** materials we recommend deviating from the **DIN data** (see table) by **selecting a larger tapping hole \varnothing** .

Thread type: M

Tool material: HSS E PM

Standard: DIN 376

Tolerance class: ISO 3X 6GX

Thread pitch: 2.5 mm

Overall length L: 140 mm

Shank \varnothing D_s: 16 mm

Shank square \square : 12 mm

Tapping hole \varnothing : 17.5 mm

Technical description

| | |
|----------|---------|
| Standard | DIN 376 |
|----------|---------|

| | |
|----------------------------------|-----------------------------------|
| Thread size | M20 |
| Number of clamping slots | 4 |
| Thread depth | 60 mm |
| Overall length L | 140 mm |
| Tapping hole Ø | 17.5 mm |
| Tool material | HSS E PM |
| Thread type | M |
| Number of cutting edges Z | 4 |
| Shank square □ | 12 mm |
| Thread pitch | 2.5 mm |
| Thread Ø | 20 mm |
| Tolerance class | ISO 3X 6GX |
| Shank Ø D _s | 16 mm |
| Coating | TiCN |
| Flank angle | 60° |
| Thread standard | DIN 13 |
| Taper lead form | B |
| Shank | Plain shank with h9 |
| Through-coolant | no |
| Application for type of drilling | up to 3×D for through holes |
| Cutting direction | right-hand |
| Type of threading tool | Machine tap for dynamic machining |
| Colour ring | red |
| Series | Master Tap |
| Type of product | Tap |

User data

| | Suitability | V _c | ISO code |
|--|-------------|----------------|----------|
|--|-------------|----------------|----------|

| | | | |
|-------------------------------------|---|----------|---|
| Steel < 750 N/mm ² | suitable only under restricted conditions | 30 m/min | P |
| Steel < 900 N/mm ² | suitable | 20 m/min | P |
| Steel < 1100 N/mm ² | suitable | 15 m/min | P |
| Steel < 1400 N/mm ² | suitable | | |
| Steel < 50 HRC | suitable only under restricted conditions | | |
| TOOLOX 33 | suitable | 15 m/min | H |
| TOOLOX 44 | suitable | | |
| HARDOX 500 < 1600 N/mm ² | suitable only under restricted conditions | | |
| INOX > 900 N/mm ² | suitable | | |
| Ti > 850 N/mm ² | suitable only under restricted conditions | | |
| Oil | suitable | | |
| wet maximum | suitable | | |