

**Garant**
**GARANT Master Tap INOX machine tap HSS-E-PM Form B 6GX, TiAlN, M: M5**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 132193 M5     |
| GTIN         | 4062406209308 |
| Item class   | 111           |

**Description**
**Version:**

High-performance tap, specially developed for **good process reliability in stainless and acid-resistant steels** and **duplex materials**.

- **HSS-E-PM tool material for maximum wear resistance**
- **The latest generation of TiAlN multi-layer coating**
- **Parameterised flute geometry for optimum chip formation and torsional rigidity**

**Tolerance class: ISO 3X/6GX.** For components which are **galvanised** or shrink slightly when hardened.

Thread type: M

Tool material: HSS E PM

Standard: DIN 371

Tolerance class: ISO 3X 6GX

Thread pitch: 0.8 mm

Overall length L: 70 mm

Shank  $\varnothing D_s$ : 6 mm

Shank square  $\square$ : 4.9 mm

Tapping hole  $\varnothing$ : 4.2 mm

**Technical description**

|                            |        |
|----------------------------|--------|
| Thread size                | M5     |
| Thread pitch               | 0.8 mm |
| Tapping hole $\varnothing$ | 4.2 mm |
| Thread depth               | 15 mm  |
| Thread type                | M      |

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Shank square □                   | 4.9 mm                            |
| Thread Ø                         | 5 mm                              |
| Standard                         | DIN 371                           |
| Shank Ø D <sub>s</sub>           | 6 mm                              |
| Overall length L                 | 70 mm                             |
| Tool material                    | HSS E PM                          |
| Number of cutting edges Z        | 3                                 |
| Tolerance class                  | ISO 3X 6GX                        |
| Number of clamping slots         | 3                                 |
| Coating                          | TiAlN                             |
| 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                      | blue                              |
| Series                           | Master Tap                        |
| Type of product                  | Tap                               |

## User data

|                               | Suitability                               | V <sub>c</sub> | ISO code |
|-------------------------------|---|----------------|----------|
| Aluminium (short chipping)    | suitable only under restricted conditions | 28 m/min       | N        |
| Steel < 750 N/mm <sup>2</sup> | suitable only under restricted conditions | 23 m/min       | P        |
| Steel < 900 N/mm <sup>2</sup> | suitable only under restricted conditions | 23 m/min       | P        |

|                                |          |          |   |
|--------------------------------|----------|----------|---|
| Steel < 1100 N/mm <sup>2</sup> | suitable | 12 m/min | P |
| INOX < 900 N/mm <sup>2</sup>   | suitable | 11 m/min | M |
| INOX > 900 N/mm <sup>2</sup>   | suitable | 9 m/min  | M |
| Oil                            | Suitable |          |   |
| wet maximum                    | suitable |          |   |