

### **GARANT Master Tap machine tap HSS-E-PM Form C 6GX, AITIX, M: M5**



### **Order data**

| Order number | 136158 M5     |  |
|--------------|---------------|--|
| GTIN         | 4045197900111 |  |
| Item class   | 111           |  |

## **Description**

#### **Version:**

**Universal taps**, designed for use in a wide spectrum of materials with high process reliability.

- · HSS-E-PM tool material for a high degree of wear resistance.
- · Reduced coefficient of friction due to the new high-performance coating.
- · Special geometry for optimum swarf evacuation.

**Tolerance class: ISO 3X/6GX** 

#### **Application:**

For components which are galvanised or shrink slightly when hardened.

#### **Recommendation:**

We recommend increasing the size of the tapping hole  $\emptyset$  by the tolerance allowance.

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 Ø D<sub>s</sub>: 6 mm

Shank square  $\square$ : 4.9 mm Tapping hole  $\varnothing$ : 4.2 mm

# **Technical description**

| Tapping hole Ø  | 4.2 mm     |
|-----------------|------------|
| Tolerance class | ISO 3X 6GX |
| Thread depth    | 12.5 mm    |
| Thread Ø        | 5 mm       |

| Number of cutting edges Z        | 3                                 |  |  |
|----------------------------------|-----------------------------------|--|--|
| Thread pitch                     | 0.8 mm                            |  |  |
| Shank square □                   | 4.9 mm                            |  |  |
| Tool material                    | HSS E PM                          |  |  |
| Number of clamping slots         | 3                                 |  |  |
| Shank Ø D <sub>s</sub>           | 6 mm                              |  |  |
| Overall length L                 | 70 mm                             |  |  |
| Standard                         | DIN 371                           |  |  |
| Thread type                      | M                                 |  |  |
| Thread size                      | M5                                |  |  |
| Coating                          | AlTiX                             |  |  |
| Flank angle                      | 60 °                              |  |  |
| Thread standard                  | DIN 13                            |  |  |
| Taper lead form                  | С                                 |  |  |
| Helix angle                      | 40 °                              |  |  |
| Shank                            | Plain shank with h9               |  |  |
| Through-coolant                  | no                                |  |  |
| Application for type of drilling | up to 2.5×D for blind holes       |  |  |
| Cutting direction                | right-hand                        |  |  |
| Type of threading tool           | Machine tap for dynamic machining |  |  |
| Colour ring                      | green                             |  |  |
| Series                           | Master Tap                        |  |  |
| Type of product                  | Тар                               |  |  |

## **User data**

|                            | Suitability | <b>V</b> <sub>c</sub> | ISO code |
|----------------------------|-------------|-----------------------|----------|
| Alu plastics               | suitable    | 30 m/min              | N        |
| Aluminium (short chipping) | suitable    | 35 m/min              | N        |

| Alu > 10% Si                   | suitable | 20 m/min | N |
|--------------------------------|----------|----------|---|
| Steel < 500 N/mm <sup>2</sup>  | suitable | 30 m/min | Р |
| Steel < 750 N/mm <sup>2</sup>  | suitable | 30 m/min | Р |
| Steel < 900 N/mm <sup>2</sup>  | suitable | 25 m/min | Р |
| Steel < 1100 N/mm <sup>2</sup> | suitable | 12 m/min | Р |
| Steel < 1400 N/mm <sup>2</sup> | suitable | 8 m/min  | Р |
| INOX < 900 N/mm <sup>2</sup>   | suitable | 10 m/min | M |
| INOX > 900 N/mm <sup>2</sup>   | suitable | 8 m/min  | M |
| GG(G)                          | suitable | 20 m/min | K |
| CuZn                           | suitable | 20 m/min | N |
| Uni                            | suitable |          |   |
| Oil                            | suitable |          |   |
| wet maximum                    | suitable |          |   |