

GARANT Master Tap INOX machine tap HSS-E-PM, TiAIN, UNF: 1/2-20



Order data

| Order number | 133406 1/2-20 |
|--------------|---------------|
| GTIN | 4062406209742 |
| 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 TiAIN multi-layer coating
- · Parameterised flute geometry for optimum chip formation and torsional rigidity.

Application:

For UNF uniform fine threads ASME – B1.1.

Thread type: UNF

Tool material: HSS E PM Standard: DIN 374 Threads per inch: 20 Thread Ø: 12.7 mm Overall length L: 100 mm

Shank Ø D₅: 9 mm Shank square □: 7 mm Tapping hole Ø: 11.5 mm

Technical description

| Thread size | 1/2-20 UNF |
|---------------------------|------------|
| Overall length L | 100 mm |
| Number of cutting edges Z | 4 |
| Thread type | UNF |

| Tapping hole Ø Standard Thread depth Tool material Thread Ø Shank Ø D₅ Number of clamping slots Shank square □ Threads per inch Thread pitch | 11.5 mm DIN 374 38.1 mm HSS E PM 12.7 mm 9 mm 4 7 mm 20 | |
|---|---|--|
| Thread depth Tool material Thread Ø Shank Ø D _s Number of clamping slots Shank square □ Threads per inch | 38.1 mm HSS E PM 12.7 mm 9 mm 4 7 mm | |
| Tool material Thread Ø Shank Ø D₅ Number of clamping slots Shank square □ Threads per inch | HSS E PM 12.7 mm 9 mm 4 7 mm | |
| Thread \varnothing Shank \varnothing D _s Number of clamping slots Shank square \square Threads per inch | 12.7 mm 9 mm 4 7 mm | |
| Shank \varnothing D _s Number of clamping slots Shank square \square Threads per inch | 9 mm 4 7 mm | |
| Number of clamping slots Shank square □ Threads per inch | 4 7 mm | |
| Shank square □ Threads per inch | 7 mm | |
| Threads per inch | | |
| | 20 | |
| Thread pitch | | |
| | 1.95 mm | |
| Series | Master Tap | |
| Coating | TiAlN | |
| Flank angle | 60 ° | |
| Tolerance class | 2BX | |
| Taper lead form | В | |
| Shank | Plain shank with h9 | |
| Through-coolant | no | |
| Application for type of drilling up to | up to 3×D for through holes | |
| Cutting direction | right-hand | |
| Type of threading tool Machine | Machine tap for dynamic machining | |
| Colour ring | blue | |
| Type of product | Тар | |

User data

| | Suitability | \mathbf{V}_{c} | ISO code |
|----------------------------|---|------------------|----------|
| Aluminium (short chipping) | suitable only under restricted conditions | 28 m/min | N |
| Steel < 750 N/mm² | suitable only under restricted conditions | 23 m/min | Р |

| Steel < 900 N/mm ² | suitable only under restricted conditions | 23 m/min | Р |
|--------------------------------|---|----------|---|
| Steel < 1100 N/mm ² | suitable | 12 m/min | Р |
| INOX < 900 N/mm ² | suitable | 11 m/min | M |
| INOX > 900 N/mm ² | suitable | 9 m/min | M |
| Oil | suitable | | |
| wet maximum | suitable | | |