

## Garant

### GARANT Master Tap INOX machine tap HSS-E-PM Form C 6GX, TiAlN, M: M20



#### Order data

Order number	135737 M20
GTIN	4062406209889
Item class	111

#### Description

##### Version:

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

**The 45° helix angle** of the flutes facilitates chip formation especially in ductile austenitic CrNi steels.

- **HSS-E-PM tool material for a high degree of 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 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

Shank square $\square$	12 mm
Tapping hole $\varnothing$	17.5 mm
Standard	DIN 376

Thread Ø	20 mm
Shank Ø D <sub>s</sub>	16 mm
Thread depth	50 mm
Number of cutting edges Z	4
Number of clamping slots	4
Overall length L	140 mm
Thread pitch	2.5 mm
Thread type	M
Thread size	M20
Tool material	HSS E PM
Tolerance class	ISO 3X 6GX
Coating	TiAlN
Flank angle	60 °
Thread standard	DIN 13
Taper lead form	C
Helix angle	45 °
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	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		