

**Garant**
**GARANT Master Tap INOX machine tap HSS-E-PM Form B 6GX, TiAlN, M: M20**

**Order data**

Order number	132193 M20
GTIN	4062406209377
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 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**

Tolerance class	ISO 3X 6GX
Number of cutting edges Z	3
Overall length L	140 mm
Thread type	M
Shank $\varnothing D_s$	16 mm

Tool material	HSS E PM
Shank square <input type="checkbox"/>	12 mm
Thread depth	60 mm
Thread pitch	2.5 mm
Number of clamping slots	3
Standard	DIN 376
Thread size	M20
Tapping hole Ø	17.5 mm
Thread Ø	20 mm
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		