

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

**Order data**

Order number	135736 M20
GTIN	4062406081652
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**

Form E (lead chamfer: 1.5 - 2 turns).

Thread type: M

Tool material: HSS E PM

Standard: DIN 376

Tolerance class: ISO 2X 6HX

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**

Thread pitch	2.5 mm
Shank $\varnothing D_s$	16 mm
Shank square $\square$	12 mm
Thread $\varnothing$	20 mm

Number of clamping slots	4
Standard	DIN 376
Thread depth	50 mm
Tool material	HSS E PM
Tapping hole Ø	17.5 mm
Overall length L	140 mm
Number of cutting edges Z	4
Tolerance class	ISO 2X 6HX
Thread type	M
Thread size	M20
Coating	TiAlN
Flank angle	60°
Thread standard	DIN 13
Taper lead form	E
Helix angle	45°
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		