

**Garant**
**GARANT Master Tap INOX machine tap HSS-E-PM Form C 6HX, TiAlN, M: M12**

**Order data**

Order number	135732 M12
GTIN	4062406081447
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**

Thread type: M

Tool material: HSS E PM

Standard: DIN 376

Tolerance class: ISO 2X 6HX

Thread pitch: 1.75 mm

Overall length L: 110 mm

Shank  $\varnothing D_s$ : 9 mm

Shank square  $\square$ : 7 mm

Tapping hole  $\varnothing$ : 10.2 mm

**Technical description**

Number of clamping slots	4
Shank square $\square$	7 mm
Shank $\varnothing D_s$	9 mm
Tolerance class	ISO 2X 6HX
Overall length L	110 mm

Standard	DIN 376
Thread Ø	12 mm
Tapping hole Ø	10.2 mm
Thread pitch	1.75 mm
Number of cutting edges Z	4
Thread type	M
Tool material	HSS E PM
Thread depth	30 mm
Thread size	M12
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		