

**Garant****GARANT Master Tap INOX machine tap HSS-E-PM, TiAlN, MF: 12X1****Order data**

Order number	137053 12X1
GTIN	4062406081744
Item class	11I

**Description****Version:****GARANT Master Tap INOX:**

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: MF

Tool material: HSS E PM

Standard: DIN 374

Tolerance class: ISO 2X 6HX

Thread pitch: 1 mm

Overall length L: 100 mm

Shank Ø D<sub>s</sub>: 9 mm

Shank square □: 7 mm

Tapping hole Ø: 11 mm

**Technical description**

Number of clamping slots	4
Thread depth	30 mm
Thread pitch	1 mm
Overall length L	100 mm

Tolerance class	ISO 2X 6HX
Tool material	HSS E PM
Number of cutting edges Z	4
Thread type	MF
Thread Ø	12 mm
Shank Ø D <sub>s</sub>	9 mm
Standard	DIN 374
Shank square □	7 mm
Tapping hole Ø	11 mm
Thread size	M12×1
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 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		