

**Garant**
**GARANT Master Tap INOX machine tap HSS-E-PM, TiAlN, UNF: 5/8-18**

**Order data**

Order number	138007 5/8-18
GTIN	4062406210267
Item class	111

**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 chip flutes facilitates chip formation especially in ductile austenitic CrNi steels.

- **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**

**Application:**

**For UNF uniform fine threads ASME – B1.1.**

Thread type: UNF

Tool material: HSS E PM

Standard: DIN 374

Threads per inch: 18

Thread Ø: 15.88 mm

Overall length L: 100 mm

Shank Ø D<sub>s</sub>: 12 mm

Shank square □: 9 mm

Tapping hole Ø: 14.5 mm

**Technical description**

Shank square □	9 mm
Standard	DIN 374

Thread Ø	15.88 mm
Thread type	UNF
Number of clamping slots	4
Number of cutting edges Z	4
Tapping hole Ø	14.5 mm
Threads per inch	18
Overall length L	100 mm
Thread pitch	1.411 mm
Thread depth	39.7 mm
Tool material	HSS E PM
Shank Ø D <sub>s</sub>	12 mm
Thread size	5/8-18 UNF
Series	GARANT Master Tap
Coating	TiAlN
Flank angle	60°
Tolerance class	2BX
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
Type of product	Tap

## User data

	Suitability	V <sub>c</sub>	ISO code
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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		