

**Garant**
**GARANT Master Tap INOX machine tap HSS-E-PM, TiAlN, UNF: 4-48**

**Order data**

Order number	138007 4-48
GTIN	4062406210151
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 371

Threads per inch: 48

Thread Ø: 2.84 mm

Overall length L: 56 mm

Shank Ø D<sub>s</sub>: 3.5 mm

Shank square □: 2.7 mm

Tapping hole Ø: 2.4 mm

**Technical description**

Thread depth	7.1 mm
Number of clamping slots	3
Thread Ø	2.84 mm

Threads per inch	48
Thread pitch	0.529 mm
Thread type	UNF
Number of cutting edges Z	3
Shank $\varnothing D_s$	3.5 mm
Tool material	HSS E PM
Standard	DIN 371
Tapping hole $\varnothing$	2.4 mm
Overall length L	56 mm
Thread size	4-48 UNF
Shank square $\square$	2.7 mm
Series	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	$V_c$	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		