

**Garant**
**GARANT Master Tap machine tap HSS-E-PM, ALTiX, UNF: 1/2-20**

**Order data**

Order number	138010 1/2-20
GTIN	4045197901781
Item class	111

**Description**
**Version:**

**GARANT Master Tap Universal tap, designed for** use in a wide spectrum of materials with high process reliability.

- **HSS-E-PM tool material for maximum wear resistance.**
- **Reduced coefficient of friction due to the new high-performance coating.**
- **Special geometry for optimum swarf evacuation.**

**Application:**

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

Thread type: UNF

Tool material: HSS E PM

Standard: DIN 374

Threads per inch: 20

Thread Ø: 12.7 mm

Overall length L: 100 mm

Shank Ø D<sub>s</sub>: 9 mm

Shank square □: 7 mm

Tapping hole Ø: 11.5 mm

**Technical description**

Number of cutting edges Z	3
Thread depth	31.75 mm
Standard	DIN 374
Number of clamping slots	3

Thread Ø	12.7 mm
Overall length L	100 mm
Shank square □	7 mm
Tapping hole Ø	11.5 mm
Threads per inch	20
Thread size	1/2-20 UNF
Thread type	UNF
Shank Ø D <sub>s</sub>	9 mm
Tool material	HSS E PM
Thread pitch	1.27 mm
Series	Master Tap
Coating	AlTiX
Flank angle	60 °
Tolerance class	2BX
Taper lead form	C
Helix angle	40 °
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	green
Type of product	Tap

## User data

	Suitability	V <sub>c</sub>	ISO code
Alu plastics	suitable	30 m/min	N
Aluminium (short chipping)	suitable	35 m/min	N

Alu > 10% Si	suitable	20 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	30 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	30 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	25 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	12 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	8 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	10 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	8 m/min	M
GG(G)	suitable	20 m/min	K
CuZn	suitable	20 m/min	N
Uni	suitable		
Oil	suitable		
wet maximum	suitable		