

## Garant

### GARANT Master Tap machine tap HSS-E-PM Form C 6GX, AlTiX, M: M16



#### Order data

Order number	136158 M16
GTIN	4045197900173
Item class	111

#### Description

##### Version:

**Universal taps**, designed for use in a wide spectrum of materials with high process reliability.

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

**Tolerance class: ISO 3X/6GX**

##### Application:

For components which are galvanised or shrink slightly when hardened.

##### Recommendation:

We recommend increasing the size of the tapping hole  $\varnothing$  by the tolerance allowance.

Thread type: M

Tool material: HSS E PM

Standard: DIN 376

Tolerance class: ISO 3X 6GX

Thread pitch: 2 mm

Overall length L: 110 mm

Shank  $\varnothing$  D<sub>s</sub>: 12 mm

Shank square □: 9 mm

Tapping hole  $\varnothing$ : 14 mm

#### Technical description

Number of clamping slots	3
Thread $\varnothing$	16 mm
Overall length L	110 mm
Number of cutting edges Z	3

Tapping hole $\varnothing$	14 mm
Tolerance class	ISO 3X 6GX
Shank $\varnothing D_s$	12 mm
Standard	DIN 376
Thread depth	40 mm
Tool material	HSS E PM
Shank square $\square$	9 mm
Thread pitch	2 mm
Thread type	M
Thread size	M16
Coating	AlTiX
Flank angle	60°
Thread standard	DIN 13
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
Series	Master Tap
Type of product	Tap

## User data

	Suitability	$V_c$	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		