

**Garant**
**GARANT Master Tap SteelHT machine tap HSS-E-PM Form B 6GX, TiCN, M: M14**

**Order data**

Order number	131946 M14
GTIN	4062406236328
Item class	111

**Description**
**Version:**

High-performance tap, specially developed for use in **steels with high tensile strength** and for **difficult-to-machine materials**. **Strong spiral point**, for process stability at high cutting forces.

- **HSS-E-PM tool material – for very high cutting edge stability.**
- **Optimised honed cutting edges.**
- **TiCN coating – for maximum wear protection.**

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

**Application:**

For components which are galvanised or shrink slightly when hardened.

**Recommendation:**

For **TOOLOX** and **HARDOX** materials we recommend deviating from the **DIN data** (see table) by **selecting a larger tapping hole  $\varnothing$** .

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>: 11 mm

Shank square  $\square$ : 9 mm

Tapping hole  $\varnothing$ : 12 mm

**Technical description**

Tolerance class	ISO 3X 6GX
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Shank $\varnothing D_s$	11 mm
Thread $\varnothing$	14 mm
Thread depth	42 mm
Overall length L	110 mm
Number of cutting edges Z	3
Standard	DIN 376
Number of clamping slots	3
Tapping hole $\varnothing$	12 mm
Thread type	M
Tool material	HSS E PM
Thread pitch	2 mm
Thread size	M14
Shank square $\square$	9 mm
Coating	TiCN
Flank angle	60°
Thread standard	DIN 13
Taper lead form	B
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	red
Series	Master Tap
Type of product	Tap

## User data

	Suitability	V <sub>c</sub>	ISO code
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Steel < 750 N/mm <sup>2</sup>	suitable only under restricted conditions	30 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	20 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	15 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable		
Steel < 50 HRC	suitable only under restricted conditions		
TOOLOX 33	suitable	15 m/min	H
TOOLOX 44	suitable		
HARDOX 500 < 1600 N/mm <sup>2</sup>	suitable only under restricted conditions		
INOX > 900 N/mm <sup>2</sup>	suitable		
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions		
Oil	suitable		
wet maximum	suitable		