

**Garant**
**Machine tap for synchronised spindles HSS-E-PM Form E, TiAlN, MF: 14X1,5**

**Order data**

Order number	137183 14X1,5
GTIN	4045197705402
Item class	11H

**Description**
**Version:**

**Sturdy version with right-hand helix and shank to DIN 1835-B.** Special geometry for **general-purpose use** on machines with **synchronised spindle drive**. The tap is controlled by the synchronising spindle of the machine. Special **TiAlN-S coating** for optimum tool life. For use with **emulsion** (fat content minimum 8%).

**Form E** (lead chamfer: 1.5 - 2 turns) for the deepest possible thread depths.

**Note:**

**For use on synchronised spindles, the GARANT quick-change tapping chuck No. 338100 – 338121 with minimum length adjustment (MLA)** ensures very high process reliability.

Thread type: MF

Tool material: HSS E PM

Standard: Manufacturer's standard

Tolerance class: ISO 2X 6HX

Thread pitch: 1.5 mm

Overall length L: 100 mm

Shank  $\varnothing D_s$ : 12 mm

Shank square  $\square$ : 9 mm

Tapping hole  $\varnothing$ : 12.5 mm

**Technical description**

Number of cutting edges Z	5
Thread $\varnothing$	14 mm
Tapping hole $\varnothing$	12.5 mm
Thread pitch	1.5 mm
Number of clamping slots	5

Shank $\varnothing D_s$	12 mm
Overall length L	100 mm
Shank square $\square$	9 mm
Tolerance class	ISO 2X 6HX
Tool material	HSS E PM
Standard	Manufacturer's standard
Thread depth	42 mm
Thread type	MF
Thread size	M14×1.5
Coating	TiAlN
Flank angle	60 °
Thread standard	DIN 13
Taper lead form	E
Helix angle	40 °
Shank	DIN 1835 B with h6
Through-coolant	no
Application for type of drilling	up to 3×D for blind holes
Cutting direction	right-hand
Shank tolerance	h6
Type of threading tool	Machine tap for synchronous machining
Colour ring	green
Type of product	Tap

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable only under restricted conditions	32 m/min	N
Aluminium (short chipping)	suitable	32 m/min	N

Steel < 500 N/mm <sup>2</sup>	suitable	33 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	32 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	20 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	12 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	7 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
CuZn	suitable only under restricted conditions	30 m/min	N
Uni	suitable		
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		