

**Garant**
**Machine tap for synchronised spindles HSS-E-PM Form C, TiAlN, M: M3**

**Order data**

Order number	136171 M3
GTIN	4045197867483
Item class	11H

**Description**
**Version:**
**Sturdy design with right-hand chip flutes and shank to DIN 1835-B.**

Special geometry for **universal applications** on machines with **synchronised spindle drive**. The tap is guided by the synchronised spindle on the machine. Special **TiAlN-S coating** for optimum tool life.

For use with **emulsion** (fat content minimum 8%).

**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: M

Tool material: HSS E PM

Standard: Manufacturer's standard

Tolerance class: ISO 2X 6HX

Thread pitch: 0.5 mm

Overall length L: 70 mm

Shank  $\varnothing D_s$ : 6 mm

Tapping hole  $\varnothing$ : 2.5 mm

**Technical description**

Number of cutting edges Z	3
Thread $\varnothing$	3 mm
Shank $\varnothing D_s$	6 mm
Number of clamping slots	3
Overall length L	70 mm

Tolerance class	ISO 2X 6HX
Tapping hole Ø	2.5 mm
Standard	Manufacturer's standard
Thread pitch	0.5 mm
Tool material	HSS E PM
Thread depth	9 mm
Thread type	M
Thread size	M3
Coating	TiAlN
Flank angle	60°
Thread standard	DIN 13
Taper lead form	C
Helix angle	40°
Shank	DIN 1835 B to 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 <sub>c</sub>	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		