

Garant
Machine tap for synchronised spindles HSS-E-PM Form E, TiAlN, M: M4

Order data

Order number	136173 M4
GTIN	4045197508379
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%).

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: M

Tool material: HSS E PM

Standard: Manufacturer's standard

Tolerance class: ISO 2X 6HX

Thread pitch: 0.7 mm

Overall length L: 70 mm

Shank $\varnothing D_s$: 6 mm

Shank square \square : 4.9 mm

Tapping hole \varnothing : 3.3 mm

Technical description

Number of clamping slots	3
Number of cutting edges Z	3
Tapping hole \varnothing	3.3 mm
Thread \varnothing	4 mm

Thread pitch	0.7 mm
Standard	Manufacturer's standard
Shank $\varnothing D_s$	6 mm
Overall length L	70 mm
Shank square \square	4.9 mm
Tolerance class	ISO 2X 6HX
Tool material	HSS E PM
Thread depth	12 mm
Thread type	M
Thread size	M4
Coating	TiAlN
Flank angle	60°
Thread standard	DIN 13
Taper lead form	E
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_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 ²	suitable	33 m/min	P
Steel < 750 N/mm ²	suitable	32 m/min	P
Steel < 900 N/mm ²	suitable	20 m/min	P
Steel < 1100 N/mm ²	suitable	12 m/min	P
Steel < 1400 N/mm ²	suitable	7 m/min	P
INOX < 900 N/mm ²	suitable	11 m/min	M
INOX > 900 N/mm ²	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		