

Garant
Fluteless machine tap with oil grooves HSS-E-PM IC / Form C 6HX, TiAlN, M: M20

Order data

Order number	139202 M20
GTIN	4062406383527
Item class	11I

Description
Version:

The latest generation of **high-performance fluteless taps**, specially developed for **use in steel materials**.

- **Optimised polygon geometry for a lower torque.**
- **Multi-layer HIPIMS coating for high wear resistance.**
- **HSS-E-PM substrate for exceptional process reliability.**

DIN 2174 (≈ DIN 371 ≤ M10; ≈ DIN 376 ≥ M12). With oil grooves; optimum lubrication effect even in deeper threads.

Tolerance class: ISO 2X/6HX.

With internal coolant feed laterally from the grooves. Permits the longest possible tool life when machining through holes and blind holes.

Tolerance class: ISO 2X 6HX

Thread pitch: 2.5 mm

Overall length L: 140 mm

Shank Ø D_s: 16 mm

Shank square □: 12 mm

Tapping hole Ø guide value: 18.9 mm

Technical description

Overall length L	140 mm
Series	GARANT Master
Number of cutting edges Z	8
Tolerance class	ISO 2X 6HX

Thread depth	60 mm
Tapping hole Ø guide value	18.9 mm
Shank Ø D _s	16 mm
Number of clamping slots	8
Thread size	M20
Thread pitch	2.5 mm
Shank square □	12 mm
Thread Ø	20 mm
Coating	TiAlN
Thread type	M
Flank angle	60 °
Tool material	HSS E PM
Standard	DIN 2174
Thread standard	DIN 13
Taper lead form	C
Shank	Plain shank with h9
Through-coolant	yes
Application for type of drilling	up to 3×D for blind holes
Application for type of drilling	up to 3×D for through holes
Cutting direction	right-hand
Colour ring	without
Type of product	Fluteless tap

User data

	Suitability	V _c	ISO code
Aluminium (short chipping)	suitable	42 m/min	N
Steel < 500 N/mm ²	suitable	40 m/min	P
Steel < 750 N/mm ²	suitable	38 m/min	P

Steel < 900 N/mm ²	suitable	29 m/min	P
Steel < 1100 N/mm ²	suitable	20 m/min	P
Steel < 1400 N/mm ²	suitable	15 m/min	P
INOX < 900 N/mm ²	suitable	15 m/min	M
INOX > 900 N/mm ²	suitable	8 m/min	M
CuZn	suitable	25 m/min	N
Oil	suitable		
wet maximum	suitable		
wet minimum	suitable		