

## TECHNICAL SPECIFICATION

### Machine Tap DIN 371/376, HSS-G, Metric Thread, All-purpose



### Application

The tap's main application is MACHINE tapping of internal, metric standard thread pitch. The thread is cut in a through hole pre-drilled with a certain nominal diameter drill /specified in the technical data/. The thread is cut by one tap with one operation.

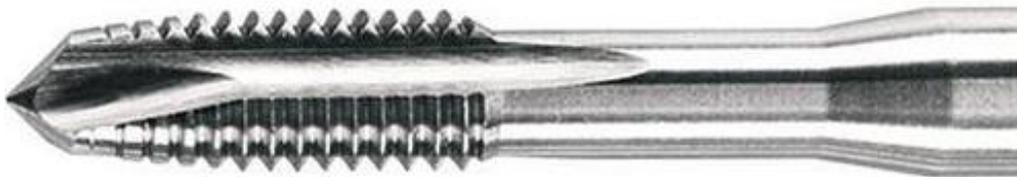
The tap is fixed on a screw-cutting chuck or thread-cutting lathe.

It is recommended a coolant lubricant liquid to be used. The force of friction and the risk of breakage and wear are significantly reduced thanks to it.

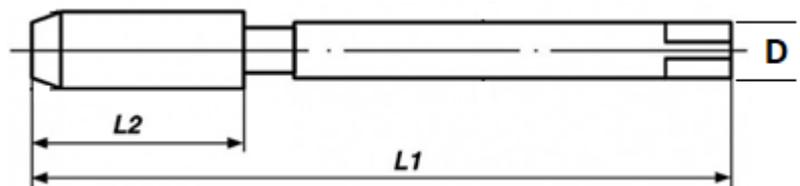
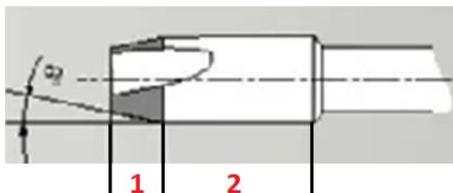
### Characteristics

The working part of the tap consists of 3 longitudinal straight channels and 3 cutting feathers. It includes 2 main parts – cutting and calibrating.

**Cutting part / 1 /:** The main part makes the shaping of the thread. This part is cone-shaped, with different number of cutting teeth depending on the diameter. In the MACHINE tap the cutting part is extended. The cutting teeth are more compared to a HAND tap. A specialized slot is cut in each channel of the MACHINE tap helping in this way the removal of chips during tapping. The more cutting edges and a specialized slot of the extended cutting part help to cut the thread in one operation of the machine.



**Calibrating part / 2 /:** Calibrates the tapped thread, cleans the hole and guides the tap.



## Standards

MACHINE taps are defined in shape and dimensions according to two standards – DIN 371 and DIN 376. The only difference is the tail diameter.

Up to size M10 including the tail is reinforced /thickened/ compared to the main body and the machine taps are according to DIN 371.

Above size M10 the tail is standard and the machine taps are according to DIN 376.

### DIN 371 - reinforced tail



### DIN 376 - standard tail



## Technical parameters

- Thread type: metric /M/, according to DIN 13
- Thread pitch: standard
- Thread direction: right
- Material: specialized HSS-G high strength steel
- Channel type: straight
- Tail: Cylindrical shaped tail ending in a square.

Tap size	Full length L1 / mm /	Length of working area L2 / mm /	Tail diameter D / mm /	Drill bit diameter / mm /
M3 x 0.5	60	11	3.5	2.5
M4 x 0.7	65	13	4.5	3.2
M5 x 0.8	75	16	6.0	4.2
M6 x 1.0	85	19	6.0	5.0
M8 x 1.25	90	22	8.0	6.7
M10 x 1.5	100	24	10.0	8.5
M12 x 1.75	110	29	9.0	10.5

## Advantages

- **Quality:** Specialized high strength steel HSS-G. High resistance of cutting edges and long service life.
- **Precision:** Cuts a thread with a clean, accurate and calibrated profile.
- **Convenience:** The thread is cut by one tap with one machine operation.
- **Practicality:** Easiness of usage and simplicity of the thread cutting operation.
- **Compactness:** Individual blister package.