



DREX[®]-TOOLS

UTENSILI DI PRECISIONE PER L'INDUSTRIA MECCANICA - AERONAUTICA - AEROSPAZIALE
PRECISION TOOLS FOR THE MECHANICAL AVIATION - AEROSPACE MANUFACTURING



BROACHING TOOLHOLDERS



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BROACHING TOOLHOLDERS

The broaching tool is used to make special-shaped holes with simple processing. It is applicable to general lathes, CNC automatic lathes, machining centers, drills and other equipment. It can make blind holes, through holes and regular or irregular polygons. In addition to standard hexagonal and square holes, it can also make stars, grooves and other special and customized shapes. It is only necessary to replace the cutting head.

The Broaching Tool is used to make quickly making regular-section polygonal slots (square, hexagonal, TORX®, toothed, splined, etc.) in blind or through holes. In addition, with the help of the adapter, regular section external profiles can be made on the same broaching tool. The broaching tool can be applied to most machine tools with rotary motion, both traditional (lathe, drill, milling machine) and numerical control, therefore it can work both vertically and horizontally. The broach holder pin is mounted inside the body at a certain angle and, when rotated by the machine tool, gives the broach itself a rotary and pendulum movement. The combined action of the rotation, the feed provided by the machine and the pendulum movement, allow the broach to gently penetrate the workpiece, in which a pre-drilled hole has been previously made, thus creating the desired profile.

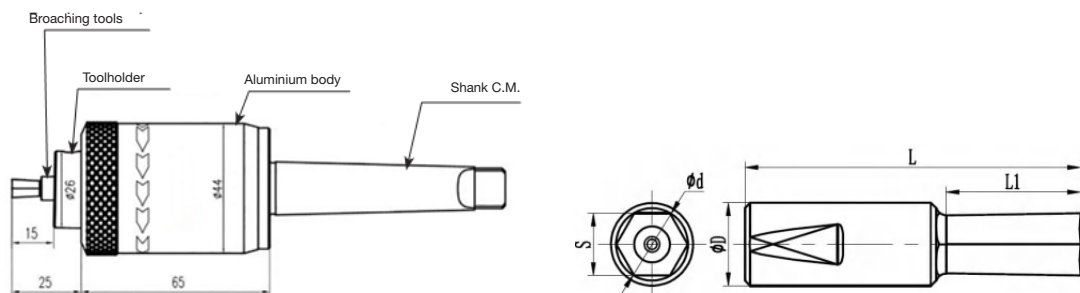




BROACHING TOOLHOLDERS

DX-ROP-08-CM2

Shank CM2 All straight holders are available



CODE	S	L1	L	D	Φ d (mm)
DX-D8-6-02	2	4	30	8	2-2.1
DX-D8-6-2.5	2.5	5			2.5-2.6
DX-D8-6-03	3	6			3-3.1
DX-D8-6-04	4	7			4-4.1
DX-D8-6-05	5	9			5-5.1
DX-D8-6-06	6	10.5			6 - 6.2
DX-D8-6-08	8	12			8.2-8.6
DX-D8-6-10	10	15			10.1-10.3
DX-D8-6-12	12	15			12.1-12.3

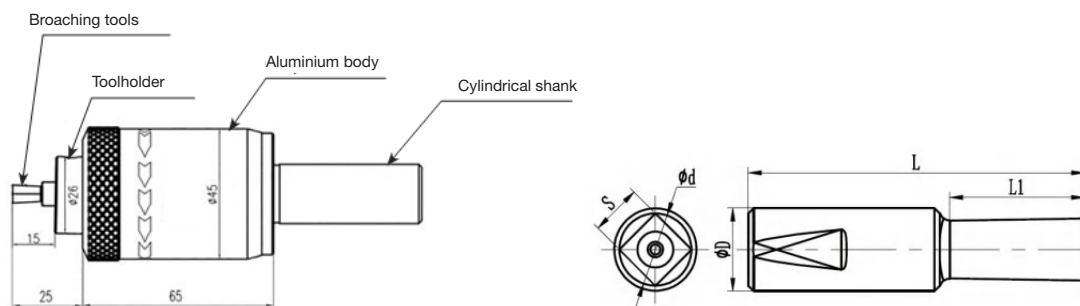
Rotating speed: 300-2000r/min Feed rate: 0.02-0.1mm/r (adjusted according to different material parameters)



BROACHING TOOLHOLDERS

DX-ROP-08-S20

Cylindrical shank 20mm
All straight holders are available



CODE	S	L1	L	D	Φ d (mm)
DX-D8-4-2	2	4	30	8	2-2.1
DX-D8-4-2.5	2.5	5			2.5-2.6
DX-D8-4-3	3	6			3-3.1
DX-D8-4-4	4	7			4-4.1
DX-D8-4-5	5	9			5-5.1
DX-D8-4-6	6	10.5			6 - 6.2
DX-D8-4-8	8	12			8.2-8.6

Rotating speed: 300-2000r/min Feed rate: 0.02-0.1mm/r (adjusted according to different material parameters)

It is possible to have internal and external broaches



Punching internal tooth type



Punching external tooth type



Customized type



Upgraded type

METHOD OF USE

Matters needing attention

- Select appropriate tools and clamp them on the tailstock or spindle of the equipment.
- To ensure the machining accuracy, the tool must be aligned with the center of the workpiece axis.
- The working time of the tool can be tool rotation or part rotation and the spindle can turn right.
- In order to improve the service life of the tool, please use coolant or cutting oil for cooling during operation.

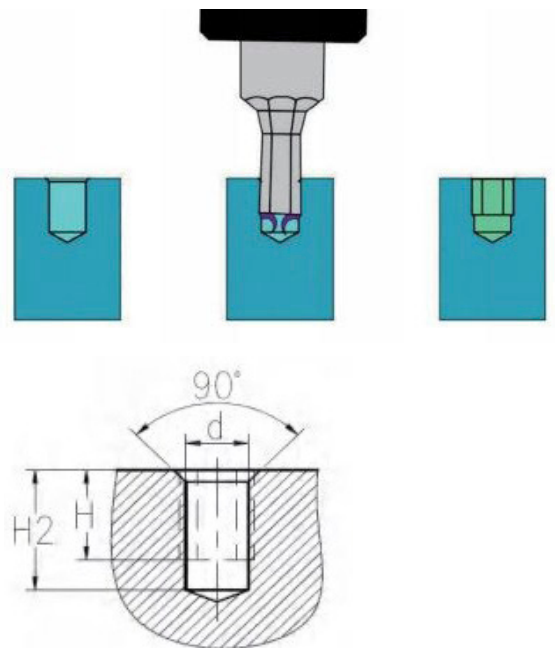
Hole processing size before punching

The drilling diameter $D \geq$ the size of the opposite side (or inscribed circle) of the blade.

The chamfer of the hole is 90 degrees, and the diameter of the chamfer hole is greater than the opposite side of the blade. It plays a guiding role.

Drilling depth $H_2 \geq 1.5 \times$ Effective punching depth (H).

Processing schematic diagram



Speed

300~2000 RPM. The principle of rotary punching tool allows high-speed use, but attention should be paid to high-speed use (such as machining center). When the tool is just in contact with the workpiece, use a slower speed or make the punch slowly contact the workpiece under static state, until the punch and the workpiece enter the working state and increase the speed.

Feed

0.02~0.1mm/revolution, the feed rate of aluminum and copper parts can be appropriately increased by 2~3 times.

Cutting depth

$\leq 1.5 \times$ Width across the blade