Cuoghi MICRA 10 and MICRA 10 INTEGRAL sharpening machines are specifically designed and built for sharpening systems of the self-centering type. They are able to eliminate intermediate centering operations and ensure an adequate level of accuracy, both for HSS and carbide drills. The quality and accuracy of the MICRA 10 and MICRA 10 INTEGRAL sharpening systems are achieved thanks to highly advanced constructional technologies and by a more modern design, able to comply with the most modern ergonomic and functional dictates.

**SHARPENING MACHINES FOR TWIST DRILLS**

**MICRA 10**

**SHARPENING MACHINE MOD. MICRA 10**

**TECHNICAL SPECIFICATIONS:**
- Sharpening diameter: from 0.5 to 20 mm
- Right and left cutting edges: 2-3
- Web thinning: negative
- Drill angle: 80°-180°
- Cutting angle adjustment: 0°-18°
- Spindle motor power: 0.18 kW
- Motor rotation: clockwise and anticlockwise
- Grinding wheel spindle speed: 7100 rpm
- Approximate weight: 40 kg
- Machine dimensions mm: 570 x 500 x 520

**SUPPLIED ACCESSORIES:**
- 16x optical projector with LED light
- One high precision 4-jaw chuck for clamping 0.5 to 6.35 mm drills
- One collet chuck with set of collets for clamping 6 to 16 mm drills
- Halogen lamp
- 3 grinding wheels

**OPTIONAL EQUIPMENT:**
- One collet chuck with set of collets for clamping 16 to 20 mm drills
- Diamond and CBN grinding wheels
- Work table, which can also be fitted with the pneumatic cooling and suction system.
With a single drill clamping operation, the two main sharpening rakes can be obtained in sequence on both cutting surfaces. The rake intersection will perfectly coincide with the drill center while the third rake will correspond to the thinned part of the web obtainable with

- negative geometry for HSS drills with conventional twist (Micra 10 and Micra 10 Integral)
- positive geometry for HSS drills with thick web and hard metal drills (Micra 10 Integral)

**SHARPENING MACHINES FOR TWIST DRILLS**

**MICRA 10 INTEGRAL**

**SHARPENING MACHINE MOD. MICRA 10 INTEGRAL**

**TECHNICAL SPECIFICATIONS:**
- Sharpening diameter: from 0.5 to 20 mm
- Right and left cutting edges: 2-3
- Web thinning: negative and positive
- Drill angle: 80°-180°
- Cutting angle adjustment: 0°-18°
- Spindle motor power: 0.18 KW
- Motor rotation: anticlockwise
- Grinding wheel spindle speed: 7100 rpm
- Approximate weight: 57 kg
- Machine dimensions mm: 680 x 500 x 520

**SUPPLIED ACCESSORIES:**
- 16x optical projector with LED light, one high precision
- 4-jaw chuck for clamping 0.5 to 6.35 mm drills, one collet chuck with set of collets for clamping 6 to 16 mm drills, one positive web thinning device, halogen lamp, 4 grinding wheels

**OPTIONAL EQUIPMENT:**
- one collet chuck with set of collets for clamping 16 to 20 mm drills, diamond and CBN grinding wheels, work table, which can also be fitted with the pneumatic cooling and suction system.
The advantages of this “3+3 rake” self-centering sharpening system can be briefly outlined in the following way:

- shorter drilling times
- longer tool life from one sharpening operation to the next
- increased boring depth between successive undercuts
- greater tool penetration with less machining tool stress
- can be used for the most varied ferrous and non-ferrous materials
- radial stability during drilling, with consequently less likelihood of twist edge seizure.