

AgieCharmilles

CUT 2000 OilTech

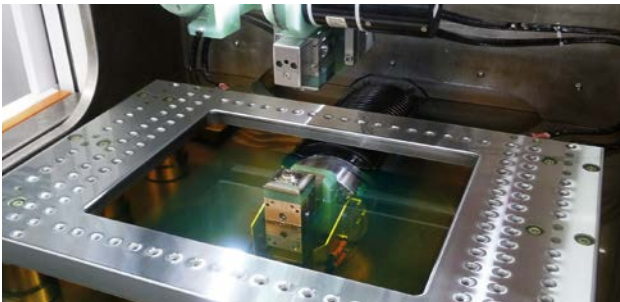


CUT 2000 OilTech

Surface quality and high precision

The CUT 2000 OilTech opens the door for the use of oil as a dielectric fluid, the perfect solution for the machining of tungsten carbide tools for powder metallurgy, progressive dies for magnetic lamination of electric motors and transformers, high speed stamping tools for mass production of information and communication technology components, and parts production for luxury watches.

+ CUT 2000 OilTech
First-in-class solution for machining in oil:
perfect surface quality and extended tool life



Finest surface finish, exceptional quality

Parts machined on the CUT 2000 OilTech have exceptional surface quality. There is no coloration due to oxidation. The parts are aesthetically perfect and meet the very high standards of the watch making industry.

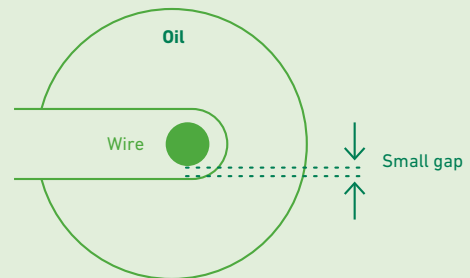
Generous travel enabling considerable running time

Without a limited workpiece immersion time in oil, the operator can take full advantage of the travel dimension of the CUT 2000 OilTech. A large number of workpieces can be pre-installed ready to be machined unattended.

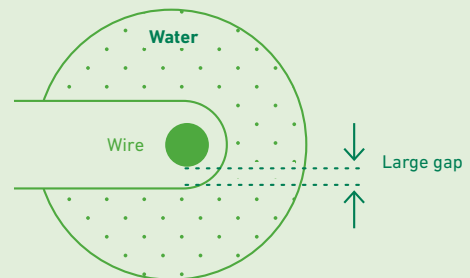


Advantages of cutting in oil

Precision machining



Fast machining



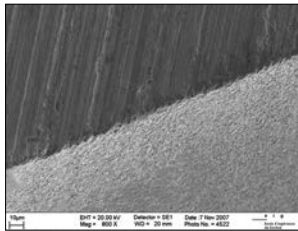


Technical Data

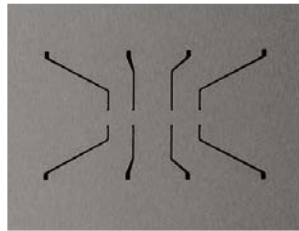
CUT 2000 OilTech

Drop tank		Automatic
X, Y, Z travel	mm (in)	350 x 250 x 256 (13.77 x 9.84 x 10)
U, V travel	mm (in)	± 70 (± 2.7)
Taper angle/Height	°/mm (in)	30 / 100 (30 / 3.93)
Maximum workpiece dimensions *	mm (in)	750 x 550 x 250 (29.5 x 21.6 x 9.8)
Maximum workpiece weight	kg (lbs)	450 (990)
Wire diameters	mm (in)	0.05 – 0.3 (0.002 – 0.011)
Minimum surface finish	µm Ra (µin)	0.05 (2)
CNC type		Vision 5

* Width x depth x height



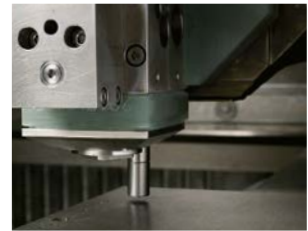
Sharp edge in carbide



Fine gaps for high precision stamping



Automatic Wire Changer (AWC)



3D Setup

Perfect cutting edge integrity after EDM

Most modern generators provide limited electro-chemical corrosion on the cut surface during machining in water. However, when machining tungsten carbide, for example, it is impossible to avoid the loss of cobalt (main binder) through natural dilution in water.

With an inert dielectric (oil), the CUT 2000 OilTech enables roughness values of Ra 0.05 µm to be obtained with perfect surface integrity.

Finest details with maximum precision

Machining with oil enables smaller gap distance between wire and workpiece. Therefore the minimum slot widths achieved with this type of dielectric are smaller than those obtained with water and comparable wire diameter. In addition, the use of filters is reduced due to the reduced spark gap.

Exclusive Automatic Wire Changer (option)

The impressive machining performance of the CUT 2000 OilTech combined with the unique wire circuit which allows machining with two wire diameters from 0.30 mm to 0.05 mm. The benefits are higher efficiency, more economy, and maximum productivity. Wire spool changes take place automatically and different wires can be used for main and trim cuts.

Exclusive 3D Setup (option)

With the CUT 2000 OilTech, perfect alignment of your workpiece is no longer necessary. The 3D Setup system with a touch probe on the Z axis detects the position of the workpiece and the machine's Vision 5 control automatically adjusts the wire perpendicularity to the surface workpiece.

At a glance

We enable our customers to run their businesses efficiently and effectively by offering innovative Milling, EDM, Laser, Additive Manufacturing, Spindle, Tooling and Automation solutions. A comprehensive package of services completes our proposition.

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