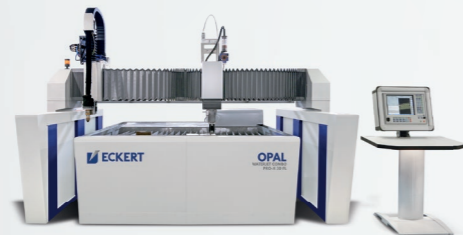


CUTTING TECHNOLOGIES

PLASMA SPEED

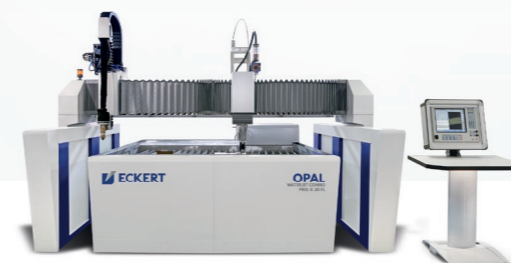
WATER QUALITY



Patent: EP 11460016.6

OPAL WATERJET COMBO

The patented combination of two cutting technologies



Pawicka 4c, 59-220 Legnica, Polska
tel: +48 (76) 856 09 31, fax: +48 (76) 852 20 78

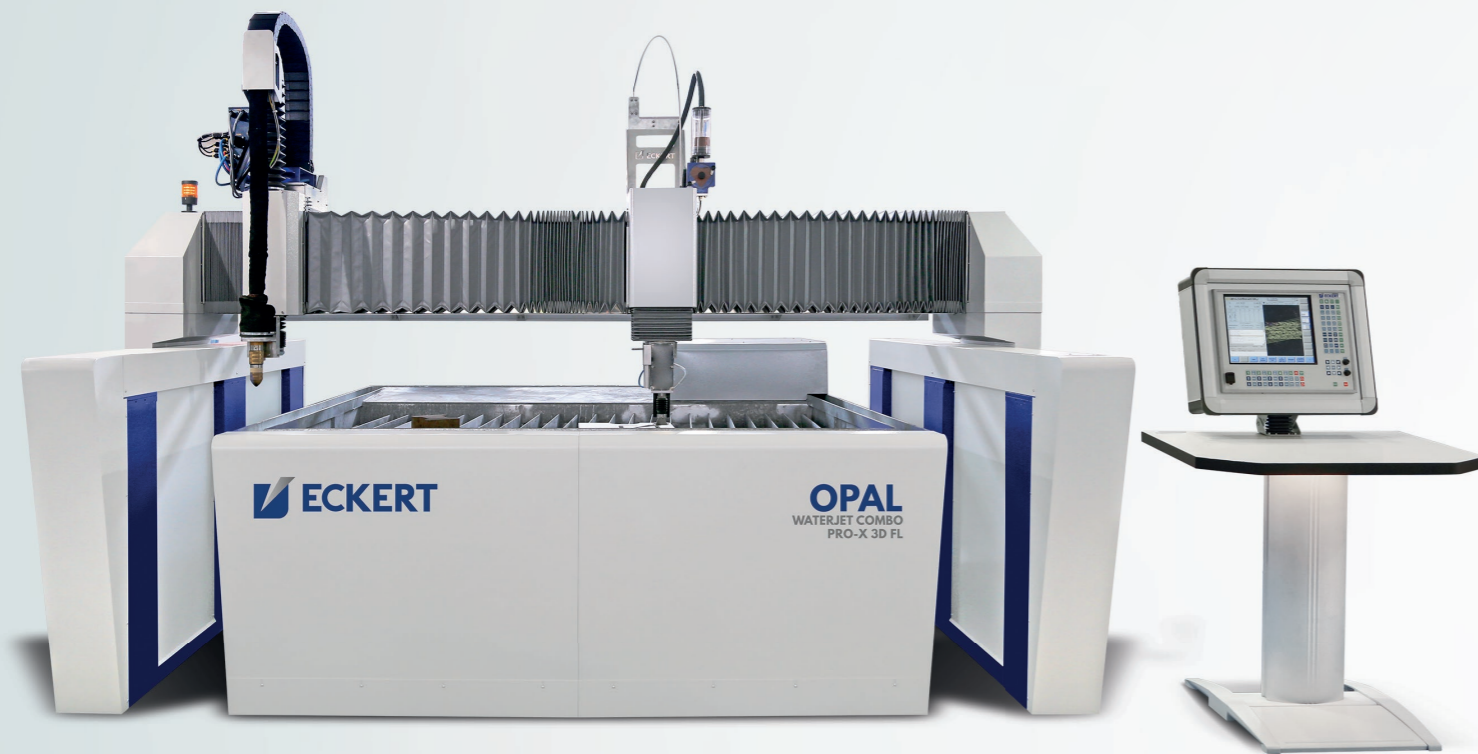
combo@eckert.com.pl
www.eckert.com.pl

OPAL WATERJET COMBO
Fastest CNC WaterJet in the World!



**WATER
PLASMA**

OPAL WATERJET COMBO



CHARACTERISTICS

Patented Opal WaterJet Combo is able to combine the advantages of quick plasma cutting with precision of water jet. Synergistic effect of combining two different technologies allows the cutting machine to exploit both assets. The cutting machine offers versatility and flexibility for a wide range of users from small to big companies.

MAIN FEATURES

- ▶ innovative, patent protected technology of integrating waterjet and plasma allows automatic cutting utilizing both of them
- ▶ fully automated cutting process with two different cutting technologies
- ▶ the reduction of production costs even by 70% with comparison to standard waterjet machines
- ▶ universal cutting tool for every material
- ▶ possibility of installing Pro-X 3D head
- ▶ ability to apply any required technology during edge cutting of a single element
- ▶ robust construction and reliability

This machine is equipped with an additional equipment.



PLASMA CUTTING

The plasma is sufficiently hot to melt the metal being cut and moves sufficiently fast to blow molten metal away from the cut. This technology can be used to cut all metals, because they are electrically conductive.



3D WATER CUTTING

Water cutting is separating the material with a jet of water. This is the most accurate method for cutting and chamfering almost any kind of material. Water cutting provides the highest quality of edges and lack of heat affected zone.

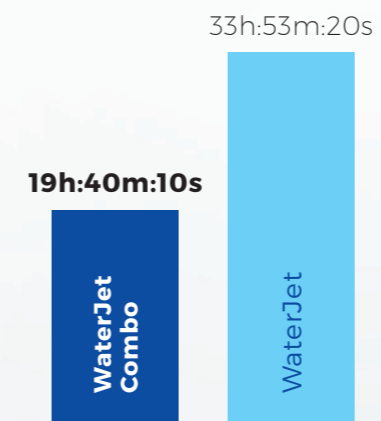


PARAMETERS OF SINGLE ELEMENT CUTTING

Water cutting	
Water cutting time	4 minutes 2 seconds
Water cutting speed	253 mm/min
Water consumption	15 dm ³
Abrasive consumption	1,7 kg
Equipment	Nozzle 0,35 mm Tube 1,02 mm Accustream DiaLine Head UHDE HPS4037 Pump
Total cutting time	4 minutes 2 seconds

Combo cutting (water+plasma)	
Water cutting time	2 minutes 3 seconds
Water cutting speed	253 mm/min
Water consumption	9 dm ³
Abrasive consumption	1,0 kg
Equipment	Nozzle 0,35 mm Tube 1,02 mm Accustream DiaLine Head UHDE HPS4037 Pump
Plasma cutting time	18 seconds
Plasma cutting speed	2020 mm/min
Power	100A
Gas	N ₂ /H ₂ O
Plasma source	Victor UltraCut 200XT
Total cutting time	2 minutes 21 second

500 DETAILS CUTTING TIME



500 DETAILS CUTTING COST



500 elements nesting, Aluminum 8 mm. Sheet 3000x1500 mm