

CNC Waterjet (3/4/5 AXIS)

Other Names Of Machine: Abrasive Water Jet Cutting Machine, High Pressure Water Jet Cutting Machine, Water Jet Cutting Machine, KMT Water Jet Cutting Machine, CNC Marble Cutting Machine.

PURE WATER

Take tap water, pressurize it to 60,000 psi (4,000 bar) / 90,000 psi (6200 bar) then force it through a very small hole, or orifice. This creates a tremendous amount of energy concentrated in a thin beam of water, travelling at close to the speed of sound. The result is an extremely powerful and a precise 'Pure Water' cutting tool.

ABRASIVE CUTTING

An 'Abrasive' water system employs the same methods as 'Pure Water' however; the addition of an abrasive garnet mixed into the stream increases the cutting forces significantly. When the high-velocity water exits the orifice it creates a vacuum within the mixing chamber. The vacuum pulls abrasive from the abrasive line into the chamber where it is mixed with the water jet stream. The resulting mixture is then realigned in a focusing tube before exiting the cutting head nozzle. At this point the accelerated abrasive particles are now travelling at speeds fast enough to cut through the hardest of materials, all this is achieved by a water jet that is little more than 0.8mm in diameter.

What can we cut?

With over 8 years of experience we have successfully profile cut a vast range of materials from low density foams to wear resistant steels.

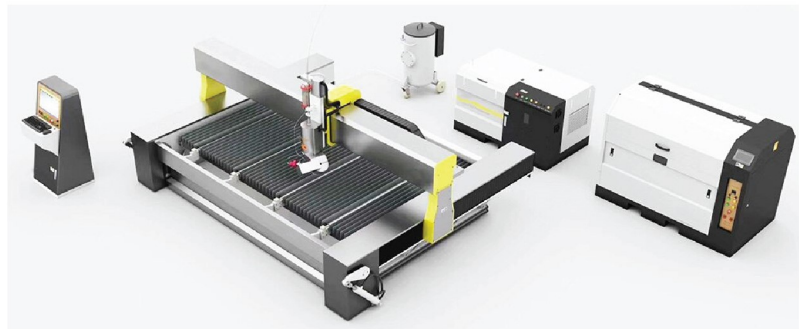
Metals – Aluminum, Brass, Bronze, Copper, Lead, Mild Steel, Nickel Alloys, Stainless Steel, Titanium.

Non Metals – Carbon Fiber, Ceramics, Glass, Granite, Laminates, Plastics, PTFE, Teflon, Wood.

Soft Materials – Cork, Foams, Foam Rubbers, Graphite, Neoprene Rubber, synthetic material.



WATER JET PUMP



Machine Overview	Tool Fully Equipped for 2D & 3D Abrasive Cutting	Special Design for Extremely High Pressure Pump
Motion System	Linear Drive (Rack & Pinion)	Linear Drive (Rack & Pinion)
Cutting Area	1.3 m x 2.5 m	Customizable
	1.5 m x 2.5 m	
	1.5 m x 3.0 m	
	2.0 m x 2.0 m	
	2.0 m x 3.0 m	
	2.0 m x 4.0 m	
	2.0 m x 6.0 m	
	3.0 x 6.0 m	
Z-Travel	250 mm	≥ 250 mm
Linear Positional Accuracy	± 0.05 mm per Axis	0.03 mm per Axis
Material Used in Tank	MS with SS (Lining over the edge)	SS
Control System	WEIHONG/ECKELMANN/ECS	Customizable
Software	MOST 2D/IGEMS/FASTCAM	MOST 2D/IGEMS/FASTCAM
Warranty	12 Month Standard Warranty	12 Month Standard Warranty
Wireless Remote	✓	✓