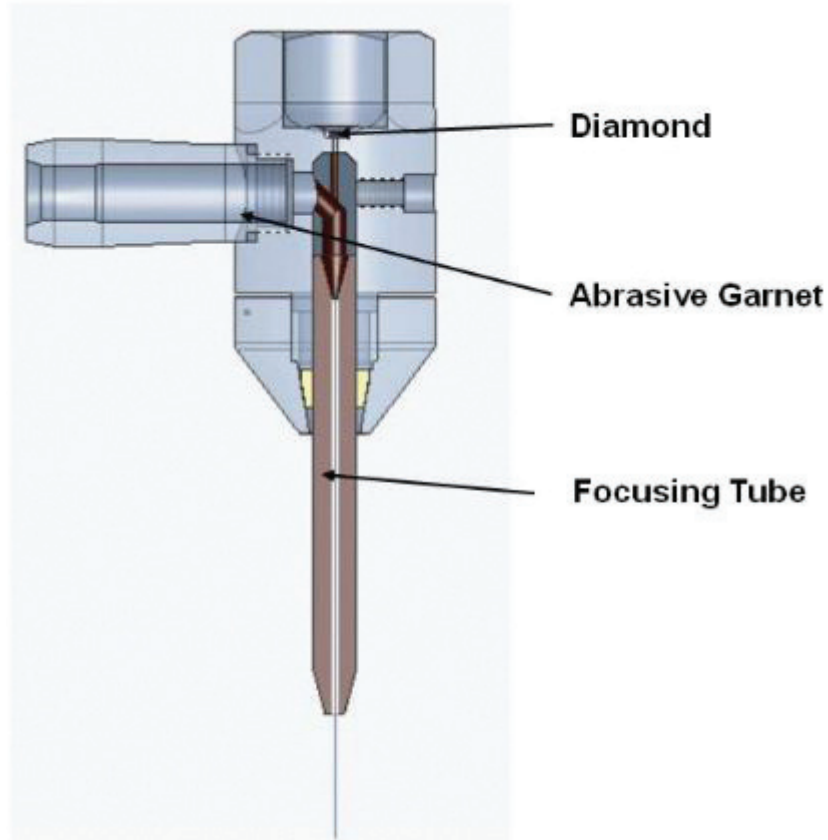




Powered by MITSUBISHI ELECTRIC CNC

- ◆ **Technology & Applications**
 - ◆ **Waterjet Cutting Systems**
 - State of the Art
 - The Range
 - CLASSICA® **CL 510**
 - ◆ **4 Axis I.T.C™ Technology (Intelligent Tapering Control™)**
 - SUPREMA® **DX 510**
 - ◆ **5 axis 2D-3D Technology**
 - EVOLUTION® **X5 510**
 - ◆ **High Pressure Technology 4.130 Bar = 60.000 PSI**
 - KMT S-30 & S-50 STREAMLINE Pumps
 - ◆ **Ultra High Pressure Technology 6.200 Bar = 90.000 PSI**
 - KMT PRO 60 Pump
 - ◆ **MITSUBISHI ELECTRIC CNC**
 - ◆ **Software WaterCad-Cam™**
 - ◆ **Options and Accessories**
 - ◆ **Special Customized Machines and other Applications**
 - ◆ **Machine Tool Engineering, Manufacturing and Quality Control**
 - ◆ **After Sales, Customer Care, Abrasive Garnet Abrajel™ & Spare Parts**
 - ◆ **World Wide Organization**
-



The intensifier pump boosts a jet of water at a maximum pressure of **6.200 Bar (90.000 PSI)** into a self-aligning cutting head driven by a CNC control system: the water, ejected through a gauged orifice at four times the speed of sound, can be mixed with abrasive, in order to cut any shapes from any materials up to a thickness of 300 mm (12").

Stone Materials



Glass



Metals



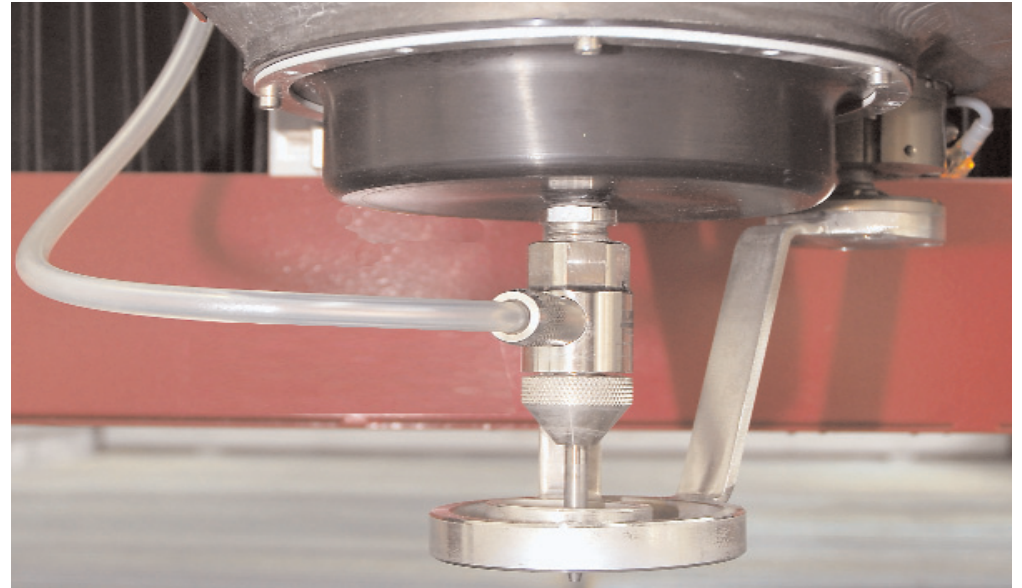
Composites



State of the Art



3 axis 2D with touch probe



4 Axis cutting with I.T.C.™



5 axis 2D inclined cutting with touch probe



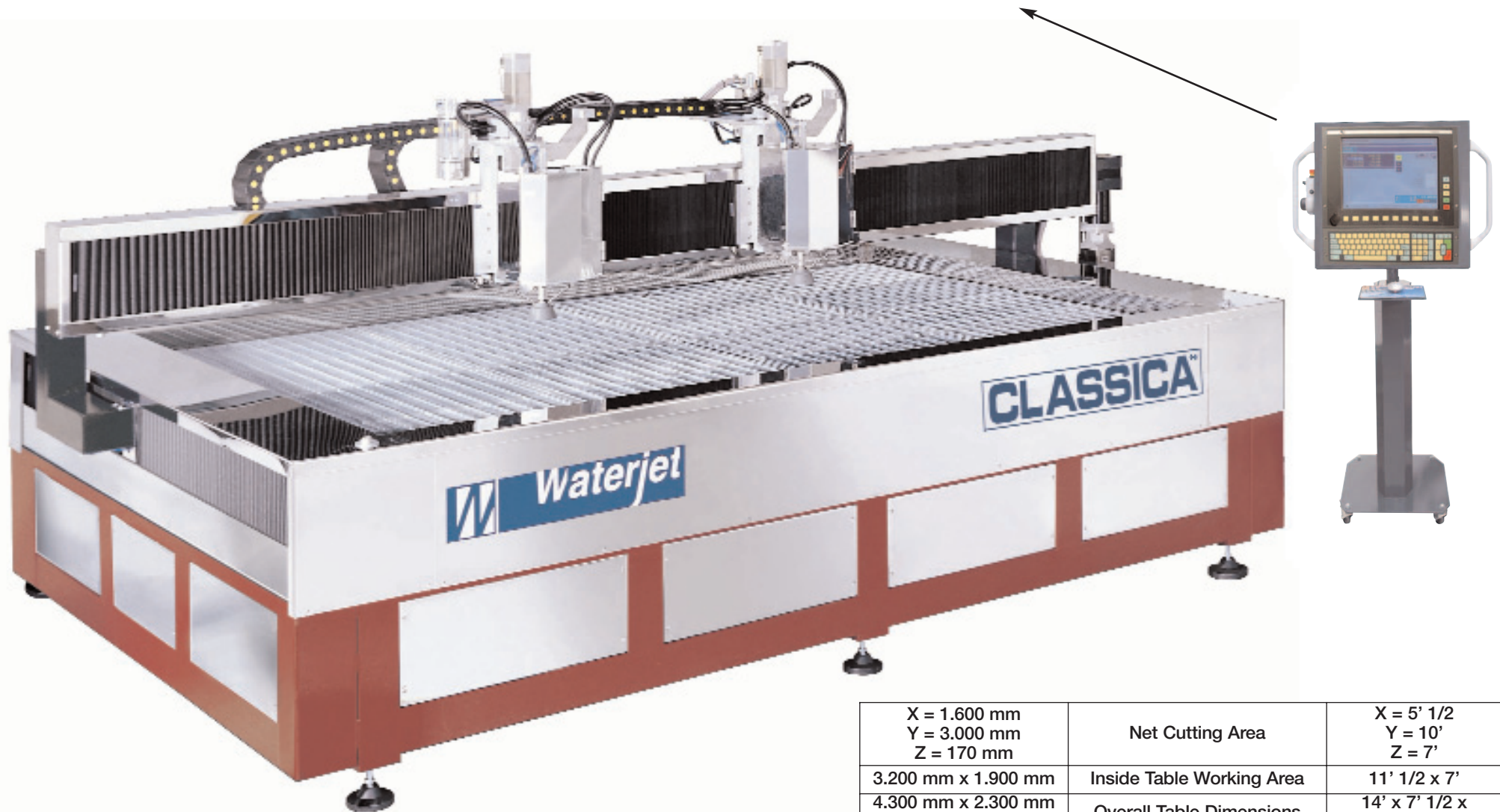
5 axis cutting in 3D

The Range

Model	CLASSICA™ CL (3 axis)		SUPREMA™ DX (4 axis)		EVOLUTION X5™ X5 (5 axis)
44		4' x 4' 1.200 x 1.200 mm	4' x 4' 1.250 x 1.250 mm		4' x 4' 1.250 x 1.250 mm
510		5' 1/2 x 10' 1.600 x 3.000 mm	6' x 11' 1.850 x 3.350 mm		5' 1/2 x 11' 1.650 x 3.350 mm
612		6' 1/2 x 13' 1/2 2.000 x 4.000 mm	6' 1/2 x 13' 1/2 2.000 x 4.000 mm		6' 1/2 x 13' 1/2 2.000 x 4.000 mm
620		6' 1/2 x 20' 2.000 x 6.000 mm	6' 1/2 x 20' 2.000 x 6.100 mm		6' 1/2 x 20' 2.000 x 6.100 mm
820			8' x 20' 2.500 x 6.100 mm		8' x 20' 2.500 x 6.100 mm
1020			10' x 20' 3.050 x 6.100 mm		10' x 20' 3.050 x 6.100 mm

CLASSICA® CL 510

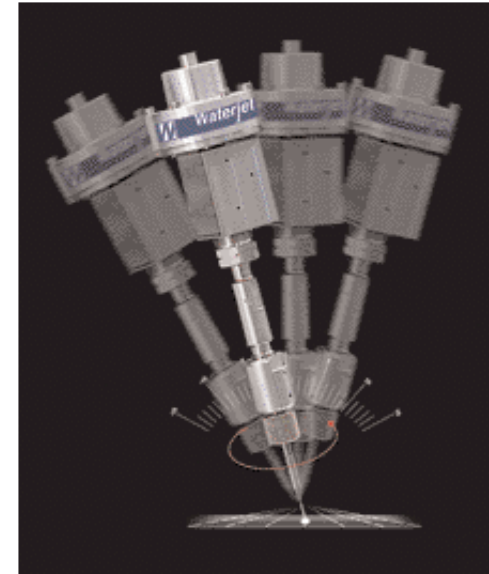
Steel tank and **3 axis** technology with standard **Waterjet Touch Screen Cnc**



X = 1.600 mm Y = 3.000 mm Z = 170 mm	Net Cutting Area	X = 5' 1/2 Y = 10' Z = 7'
3.200 mm x 1.900 mm	Inside Table Working Area	11' 1/2 x 7'
4.300 mm x 2.300 mm x h 1.900 mm	Overall Table Dimensions	14' x 7' 1/2 x h 6' 1/2
0 - 20 mt / min	Rapid Speed	0 - 67' / min
3000 Kg	Table Weight	6.300 lb
± 0,10 mm	Accuracy and Repeatability	± 0,004'

4 axis I.T.C™ Technology (Intelligent Tapering Control™)

EU Patent N.: DE 20 2007 012 572 U1



The **I.T.C™ System** manages to produce straight walls at the fastest cutting speed: in fact, the CNC automatically compensates the inclination (up to 2°) and the orientation of the jet of water to eliminate the tapering effect. This ensures a high quality part at a low cost.

During **I.T.C™** compensation, the Jet is also directed towards the piece in order to reduce the Tail Delay effect and the acceleration-deceleration ramp times in the corners, for faster and cheaper cutting cycles.

The **WaterCad-Cam™ Software** generates the **I.T.C™** Program automatically just through a few Clicks.

SUPREMA® DX 510

MITSUBISHI ELECTRIC
720M CNC

4 axis I.T.C™ with Touch Probe
and Anti-collision system

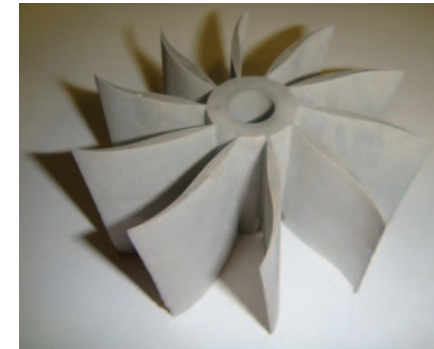
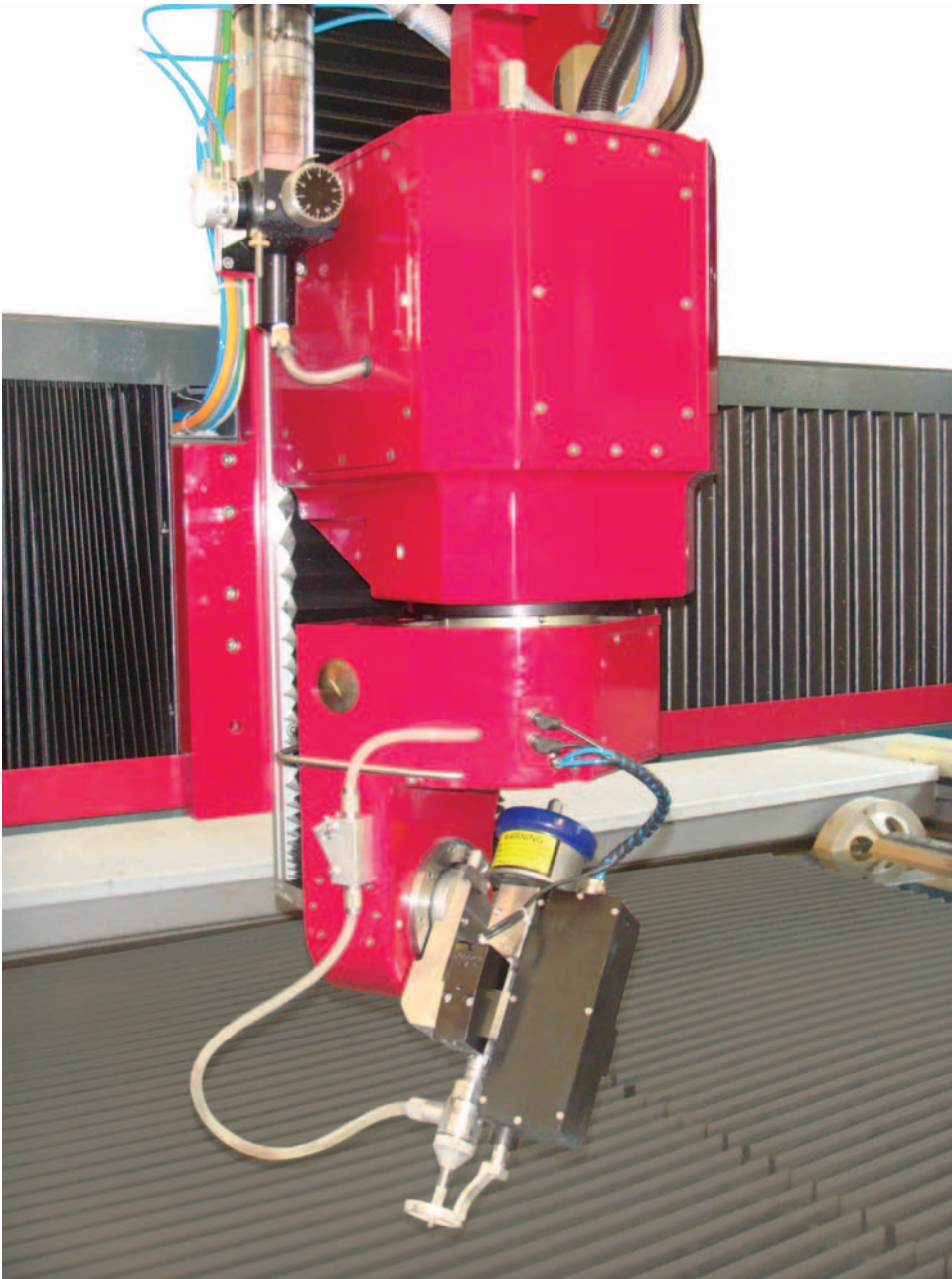
Separate Water Tank

Ball Screw
Transmission



X = 3.350 mm Y = 1.850 mm Z = 170 mm d= Infinite	Net Cutting Area	X = 11' Y = 6' Z = 7' d= Infinite
3.600 mm x 2.100 mm	Inside Table Working Area	12' x 7'
4.800 mm x 2.300 mm x h 1.900 mm	Overall Table Dimensions	16' x 7' 1/2 x h 6' 1/2
0 - 20 mt / min	Rapid Speed	0 - 67' / min
4000 Kg	Table Weight	8.900 lb
± 0,05 mm	Accuracy and Repeatability	± 0,002'

5 Axis 2D-3D Technology



The 5 axis Evolution 3D cutting system operates automatically by maintaining a constant distance from the nozzle to the material, even during rotation and interpolation up to $\pm 69^\circ$ (optional 90°). This is also possible by a 3D program to interpolate all the axes simultaneously

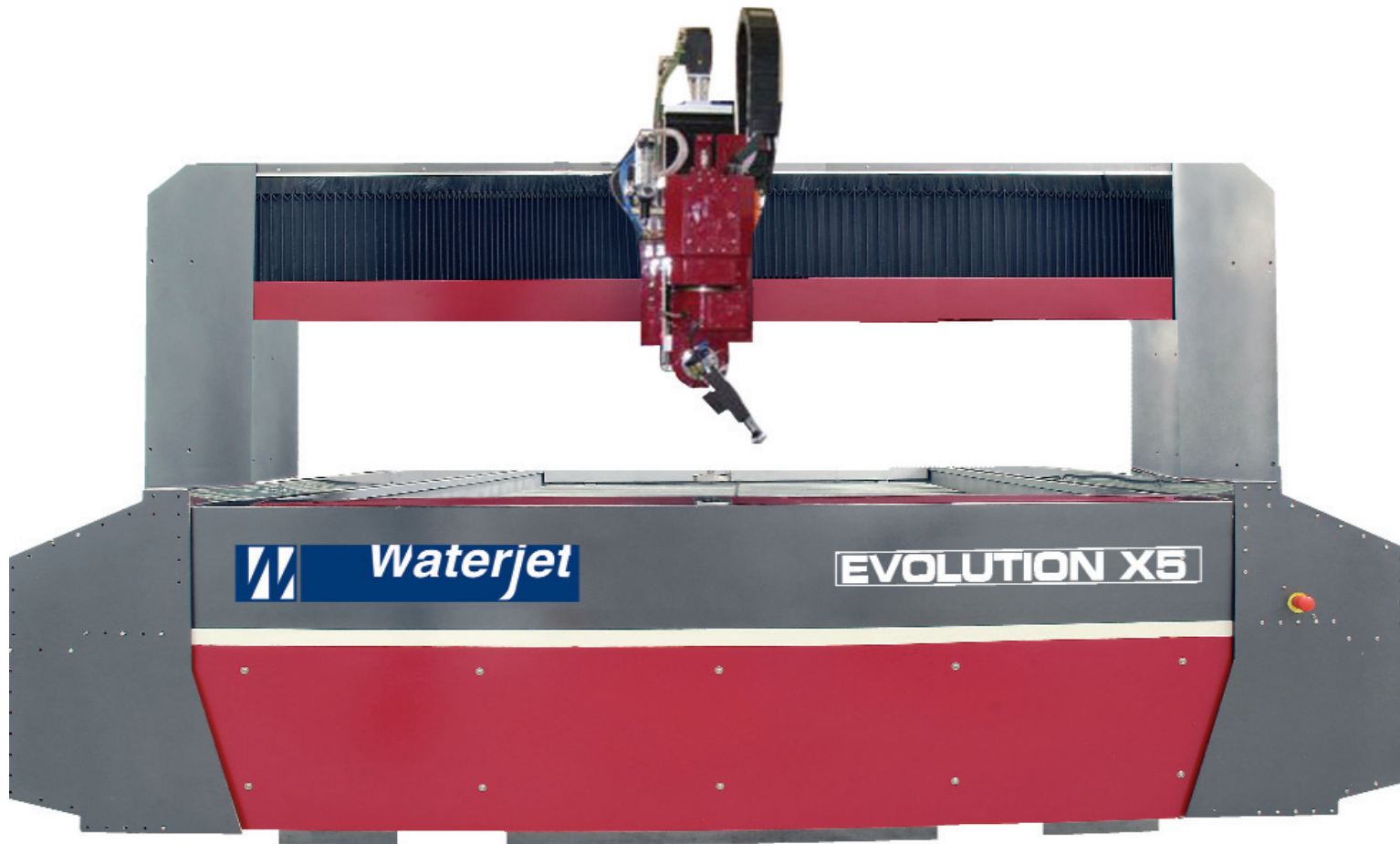
TECHNICAL SPECIFICATION:

- Innovative Design Manufactured by an Aluminum Cast
- Full Rotation of the C-Axis (360°)
- Inclination $\pm 90^\circ$ of the A-axis
- Innovative **4 Multi Swivel System (PATENT)**
- **High Pressure Water**
- **Air**
- **Abrasive**
- **Electrical**
- High Rigidity & Tolerance
- RTCP CNC Control
- All 5-Axis **Mitsubishi Electric** Motors & Drives
- High Pressure Abrasive through the Center
- **I.T.C.TM (Intelligent Tapering ControlTM) system by software**

SPECIAL FEATURES

- **Integrated 3D Touch Probe System**
- **Laser Pointer**

EVOLUTION X5® 510

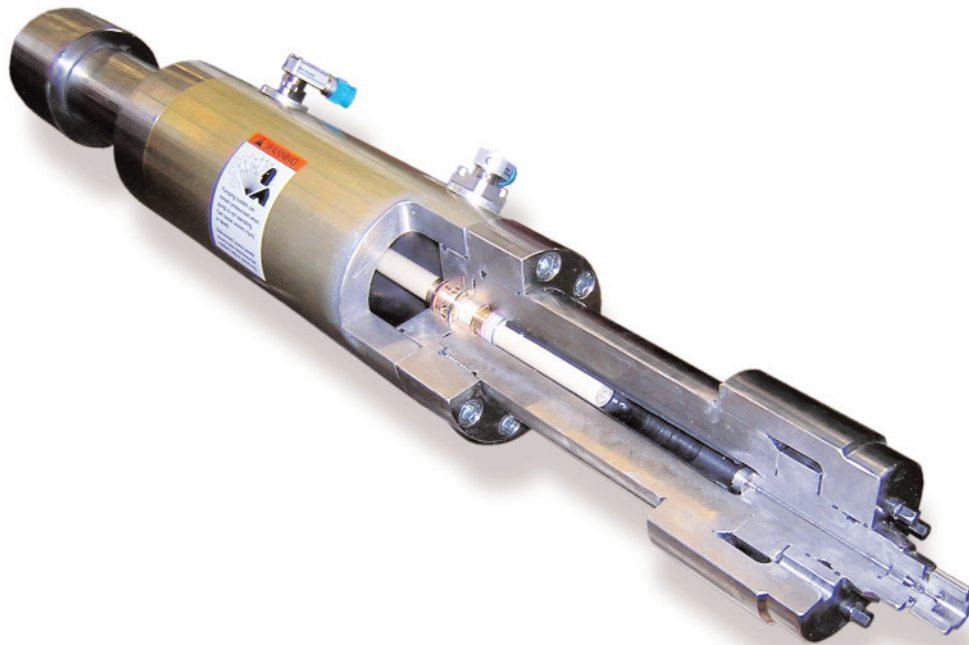


Separate tank with Ball Screw transmission and 5 axis 3D with I.T.C.™ software technology powered by MITSUBISHI ELECTRIC 750M CNC

X = 3.350 mm Y = 1.650 mm Z = 300 mm C = Infinite A = $\pm 69^\circ$	Net Cutting Area	X = 11' Y = 5' 1/2 Z = 12' C = Infinite A = $\pm 69^\circ$
3.500 mm x 2.000 mm	Inside Table Working Area	11' 1/2 x 6' 1/2
5.000 mm x 3.000 mm x h 2.000 mm	Overall Table Dimensions	17' x 10' x h 6' 1/2
0 - 20 mt / min	Rapid Speed	0 - 67' / min
5000 Kg	Table Weight	11.000 lb
$\pm 0,05$ mm	Accuracy and Repeatability	$\pm 0,002'$

Model	Power	Water Consumption	Orifice Size
S 30	30 HP - 22 KW	2,8 lt/min - 0,7 gal/min	0,25 mm - 0,010"
S 50	50 HP - 37 KW	3,8 lt/min - 0,9 gal/min	0,35 mm - 0,014"

KMT STREAMLINE™ High-Pressure Waterjet Pump System with Extended life mono intensifier



- ◆ Ceramic Plungers
- ◆ Dual Pressure Control
- ◆ Working Pressure: 4.000 Bar = 58.000 PSI
- ◆ Design Pressure: **4.130 Bar = 60.000 PSI**
- ◆ Attenuator



Model	Power	Water Consumption	Orifice Size
PRO 90	60 HP - 45 KW	2,5 lt/min - 0,61 gal/min	0,25 mm - 0,010"

- ◆ Electronic Pressure Control
- ◆ Working Pressure: 6.200 Bar = 90.000 PSI
- ◆ Design Pressure: **6.600 Bar = 96.000 PSI**
- ◆ Attenuators Volume: 2 lt = 1/2 gal



300 mm thick
ALUMINIUM



ADVANTAGES

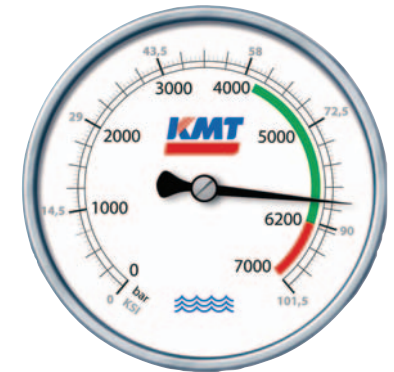
- ◆ increase cutting power density by 83%
- ◆ Possibility to cut materials with pure water only
 - 1/4" = 6 mm aluminium
 - 1/8" = 3 mm titanium
- ◆ Increase Max. cutting thickness
 - Titanium up to 10" = 250 mm
 - Steel up to 12" = 300 mm
 - Aluminium up to 16" = 400 mm
- ◆ Increase cutting speeds: up to 250% more with identical abrasive mass flow rate
- ◆ Reduced abrasive consumption: 30% less
- ◆ Reuction of groove zone area and increase of cutting quality up to 3 times better with identical cutting speed (less roughness degree)
- ◆ Cutting harder materials such as ceramics

6 mm thick
ALUMINUM cut with
PURE WATER ONLY





STREAMLINE™ PUMP PRO 60



MITSUBISHI ELECTRIC M700M CNC

1) The **Graphic-Window** shows the shape of the work piece and the cutting path. It can be used to define the start point for the restart function.

2) The Display-Bar shows Position, Time, Offset, Feedrates and Override data.

3) Operational Functions for the different modes.

4) Main menu switches for the different modes

5) Active NC-Program that can be used to select the line of the **restart** function.

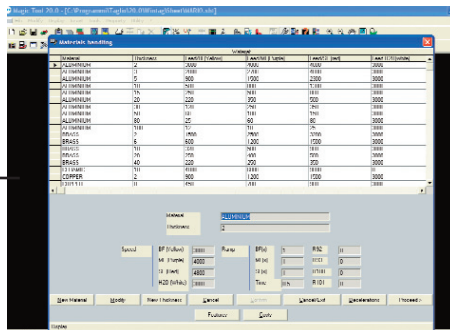
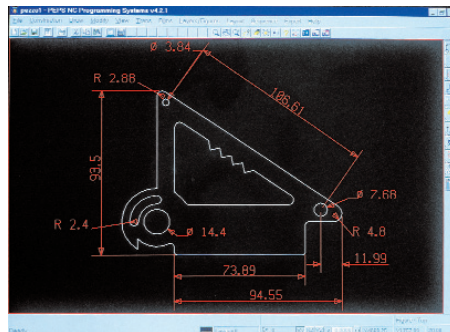
6) USB Port.

7) **WaterCad-Cam™** fast buttons.



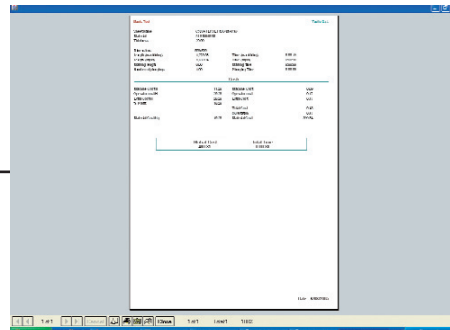
Software WaterCad-Cam™

WaterCad™ is the software tailor-made for the processing of materials in 2D: any complicated contour can be handled simply and quickly; compatibility is assured with most formats: **DXF, DWG, WMF, EPS, PLT, IGS, DSTV, SCANNER, DIGITIZER.**



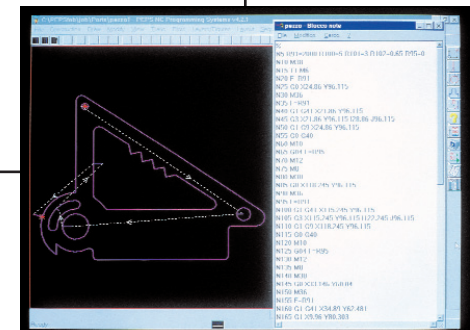
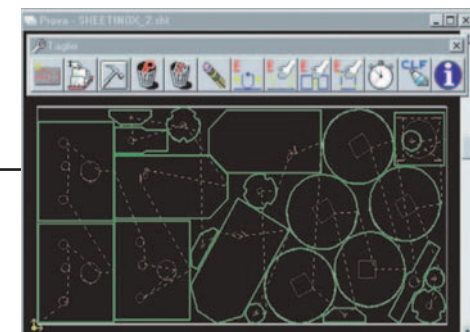
Proper **MATERIAL, THICKNESS and FINISH** for the relevant work can be selected from the technological tables.

WaterCam™ allows for the selection of types and quantities of differently shaped pieces stored in a library, to be laid on one or more plates.



The software can also generate an automatic estimation of job-related data, showing **COST, TIME and CUTTING LENGTHS**, before the actual production is run.

The **AUTOMATIC NESTING** helps to optimize the production and to reduce the waste

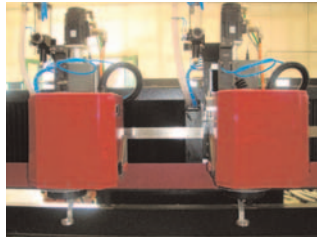


An ISO program is automatically generated for prompt trans ferral to the CNC by **ETHERNET FLOPPY DISC, SERIAL PORT, USB.**

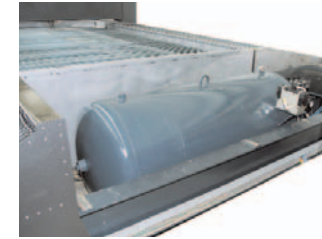
Options & Accessories



R - Sludge Removal System



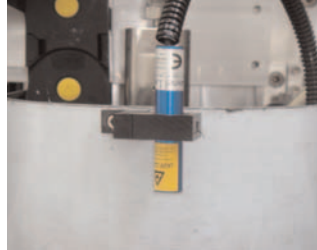
2 - Double Head System



U - Submerged Cutting System



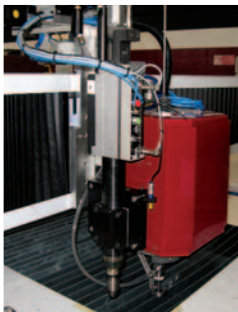
C - Closed Loop Water Recycling System



E - Laser Pointer



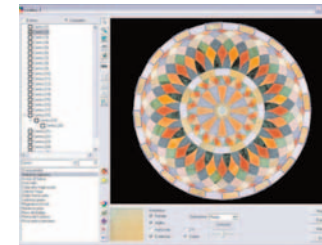
L - Cnc Lathe Rotating Device



T - Pre-piercing and Counter sink device



A - Touch Probe and Anti-Collision Device



M - Mosaic Software



K - Joystick



I - $\pm 45^\circ$ Manual Indexer



W - Camera and software for uploading images

Special Customized Machines and Other Applications



SUPREMA™ DX 1036
3.000 mm x 11.000 mm
(10' x 36').



WATERSTONE™ WS 150
Water Texturing Machine
for any kind of stone material.



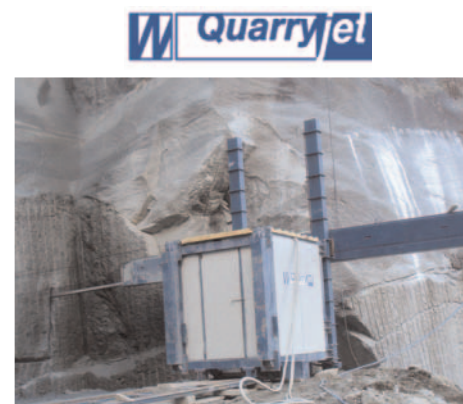
TUBE-JET™ TJ 120
Double Working Area Machine
designed for Tube Cutting only
Ø 300 mm x L = 6.000 mm
(Ø 12" x L = 20').



BRUSHSTONE™ BS 2100
Automatic Brushing and Bush
Hammering Machine for all
stone materials.



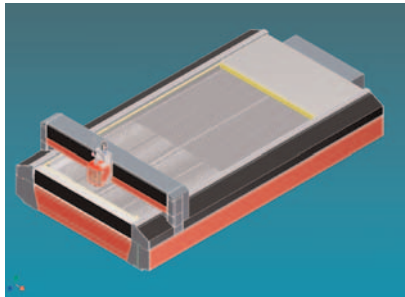
ROLL-JET™ RJ 710
Automatic Rolling Table
for cutting of Fibreglass Rolls
2.000 mm x 3.000 mm
(7' x 10').



QUARRYJET™ QJ 100
Patented waterjet cutting
machine specially developed
for Quarries and for Tunneling.

Machine Tool Engineering, Manufacturing and Quality Control

Design and Innovation



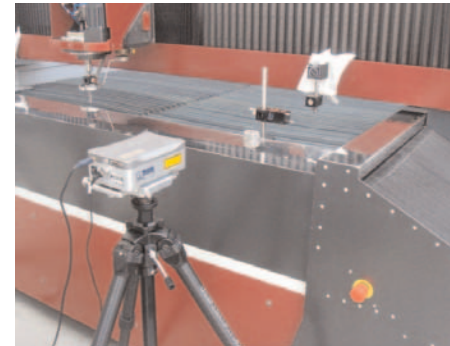
Patents



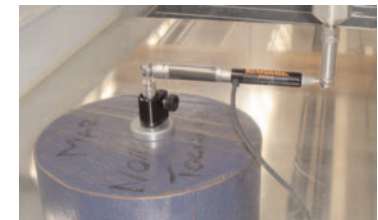
The Engineering Department designs in 3D the most innovative applications and top-notch solutions which are subsequently patented.

High Quality Controls

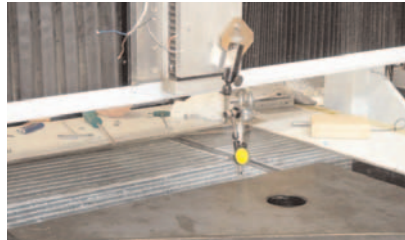
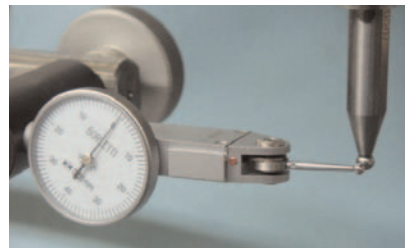
Laser Renishaw for Straightness and Position Accuracy adjustments



Ball-bar testing



Assembling Line and Process



Quality Controls abide by ISO 9001-2000 procedures and guarantee the consistency of each machine and components produced and finally assembled.

Final Quality Control Documents are released for each machine clearly reporting the actually measured precision and repeatability data and tolerances.

After Sales Customer Care, Abrasive Garnet and Spare Parts

The after sales WaterService™ Customer Care Team is composed by highly experienced technical staff and is committed to responding fast when maintenance or assistance is called for.

All claims history , data and technical information for each customer and machine are professionally stored in order to be monitored and evaluated for quality purposes.



Guaranteed original high quality parts and top quality abrasive are always available at all of our branches and ready to be shipped within 24 hours.

Through our new E-Waterjet™ web-shopping service, orders can be placed 24/7 and be easily paid by Credit Card to speed up the delivery process.



www.waterjetcorp.com



World Wide Organization



1991



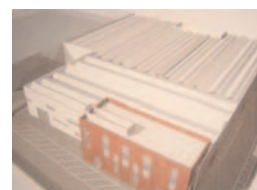
1997



1999



2000



2011



Waterjet USA L.L.C.
20 N. Wacker Drive,
Chicago, IL 60606
48985 Wixom Tech Drive
Wixom – Mi 48393 - U.S.A.
Tel +1-312-7959131
Fax +1-312-7959137
www.waterjetusa.com



Waterjet SPB
Magnitogorskaya Street, 51/E
Business Center KROL Office 308,
195263 St. Petersburg – Russia
Tel +7-812-4413224
Fax +7-812-4413619
www.waterjet-spb.ru
mvzhukov@waterjet-spb.ru



Waterjet Middle East
P.O. Box: 18650
Jebel Ali – U.A.E.
Tel +971-4-8816337
Fax +971-4-8871311
www.waterjetcorp.com



Waterjet Arabia
P.O. Box: 62701
Shahad Commercial center Imam
Saud Rd 2nd Floor Flat no. 26 -
Riyadh 11595 – Saudi Arabia
Tel +966-1-2102476
Fax +966-1-2102458
www.waterjetcorp.com



Waterjet Technologies Pvt Ltd
#38, 7th Cross, 17th Main,
Bharath Nagar II Phase BEL
Lay Out, Magadi Main Road
Bangalore – 560 091, India
www.waterjetcorp.com

Waterjet Corporation s.r.l.

Viale Stucchi 66/23 20052 Monza (MI) ITALY

Tel. +39-039-204971 - Fax. +39-039-2842479

www.waterjetcorp.com / waterjet@waterjet.it