



## HEAD OFFICE

47 Barry Road  
Campbellfield, Victoria 3061, Australia  
Tel: 61 3 9357 8360  
Fax: 61 3 9357 0446  
Email: [sales@techniwaterjet.com](mailto:sales@techniwaterjet.com)



## USA HEAD OFFICE

855 North Martway Drive  
Olathe, KS 66061, USA  
Tel: 1 913 397 9300  
Fax: 1 913 397 9301  
Email: [sales@techniwaterjet.com](mailto:sales@techniwaterjet.com)

[www.techniwaterjet.com](http://www.techniwaterjet.com)



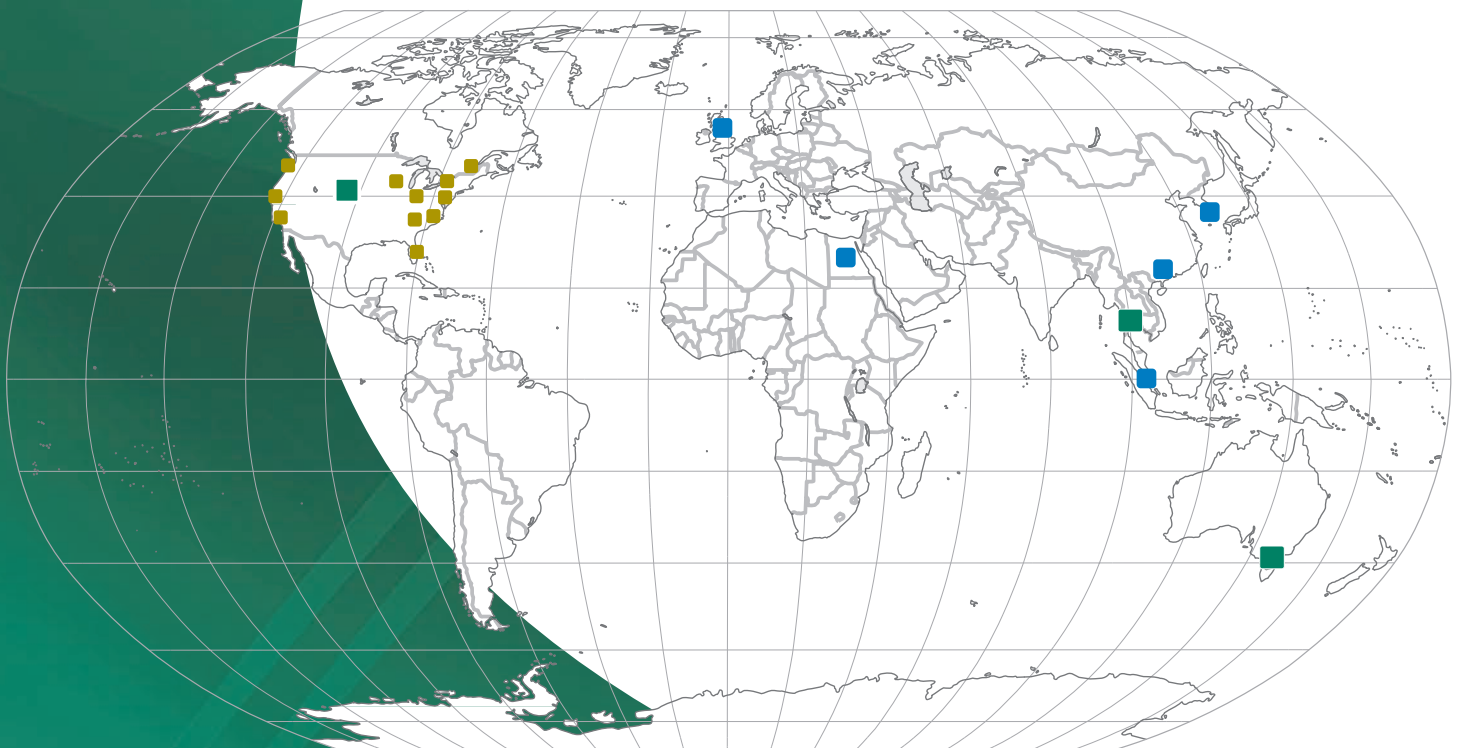
Techni Office



Agents



Distributors



# Distribution



**CERTIFIED**  
KMT Waterjet Systems  
Premium OEM



Waterjet Cutting Systems

WATERJET CUTTING SYSTEM

# RELIABLE FAST VERSATILE PRECISE

**Techni Waterjet is committed to manufacturing waterjet cutting machines that are easy to operate, reliable, accurate and will last beyond our customers' expectations.**

Our machines incorporate unique features that have been developed and implemented through our commitment to Research & Development.

Features such as :

1 We were the first company to incorporate a Crash Sensing Break Away Head to a production abrasive waterjet cutting machine, (some competitors now offer it as an option)

2 We incorporate a unique drive system which utilizes a highly-tensioned, precision stainless steel band, which allows us to achieve very fast cutting and air speeds (more than twice as fast as other major brands), while maintaining extremely high tolerances, and being able to withstand the very harsh waterjet environment in the case of water and abrasive coming into contact with the drive system.



3 We developed the patented Tech-Sense™ monitoring system that notifies an operator if the cutting head isn't working efficiently. When connected with the latest mobile phone technology, you can remotely communicate with your machine - ideal for "lights out" operation.

4 We incorporate a linear scale feedback on our premium product range "Techjet-X2®". The linear scales give positional feedback to .001mm (0.00004"), making them the most accurate waterjet machines within their price range by far.

5 The patented EZY-Load series of material handling has revolutionized the Glass and Stone industries.

The EZY-Loader allows for rapid loading/unloading of these brittle materials with almost no breakage.

6 Techni Waterjet is the only waterjet manufacturer to offer the patented "MPG" technology which allows the operator to automatically step through the program - forwards and reverse.

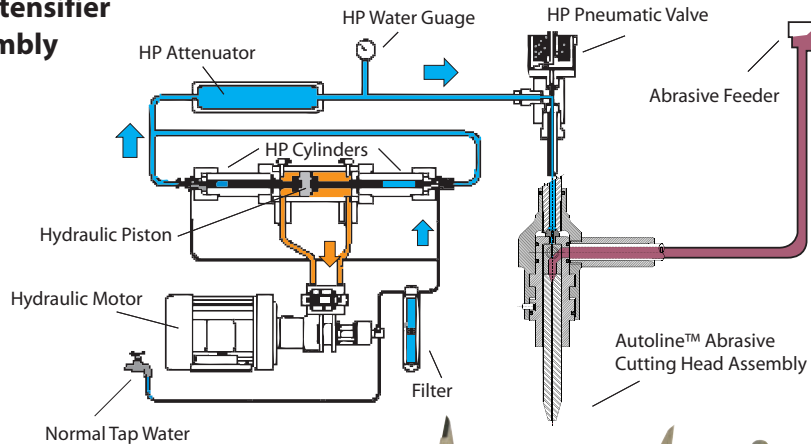
**“Techni Waterjet is committed to the continuing development of our waterjet cutting machines to ensure that we remain on the leading edge of this remarkable technology and dynamic industry.”**

Says Darren Reukers, Marketing Director

# POWER

## mission statement

### HP Intensifier Assembly



## ABOUT WATERJET

Waterjet cutting is an amazing technology. By utilizing some of Earth's most common resources, water and stone, we are able to cut almost any material in thicknesses up to 8" (200mm). Modern developments in waterjet cutting technology, software, and the machines that drive them has made waterjet cutting the fastest growing machine tool industry on Earth. This is largely due to the fact that waterjet is by far the most versatile cutting process, and with the latest developments has now become very economical. Add to this its simplicity, reliability, and environmental credentials, it's no wonder waterjet is rapidly becoming the cutting process of choice throughout most industries.

## BENEFITS OF WATERJET

**Versatile** – Waterjet is capable of cutting “any” material including; Stainless Steel, Aluminum, Glass, Marble, Plastic, Rubber, Cork and Wood, just to name a few.

**Powerful** – Capable of cutting up to 200mm (8”) thick titanium or at least 6” thick stainless steel.

**Accurate** – Finished parts to 0.05mm (.002”) tolerances.

**No Heat Affected Zone** – Resulting in less warping of components, increased cutter life on secondary operations and no grinding for weld preparation.

**Flexible** – Any two-dimensional shape can be cut by a simple program done on the machine CAD system or from any DXF file either networked, downloaded through the inbuilt modem, or from a USB disk or CD.

**Clean** – Waterjet produces no smoke or toxic gases because there is no burning process.

**Fast** – Rapid set up times, no tooling and reduced need for secondary operations due to its accuracy and quality of the cut edge.

To be a world leader in the manufacture and development of Waterjet Cutting Technology.

To be a team of dedicated people working in a safe and friendly environment, always trying to improve ourselves and be dedicated to total customer satisfaction.

## Introduction



Waterjet is a “Cold Cutting” process that produces no heat affected areas or burnt edges.

# GLASS

Glass cutting is an ideal application for waterjet. In one set up changes you can go from cutting the most delicate light glass, through to the strongest 100mm (4") thick resistant glass. The very fine cutting stream (approx. 0.001" dia) enables cutting of almost any shape, no matter how complex, with almost no load from the cutting process being applied to the glass. As long as you can handle it, waterjet can

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Waterjet cutting has revolutionized how we process our flat glass. No longer do we tie up expensive, and slow CNC machines with work that can be done much faster on the waterjet.

Says Dennis Loudoun of Bevellite Glass in Sydney.

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# STONE

Waterjet Cutting of all natural and man-made stone is simple, fast and highly effective. The very small size (approximately 0.040" or 1mm) allows for intricate patterns, while the extremely high pressure (up to 60,000 psi) ensures thick materials (up to 6" thick) can be cut. Softec™ Software enables you to go from design to finished part in minutes with very little training or experience.

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“Since installing our Waterjet Cutting Machine we have dramatically improved our processing time, while reducing our rejects and making the workshop so much cleaner and quieter. I don’t know how we got by without it.

Says Stewart Maccioli of Scelta Marble in Melbourne.

## GASKETS

The versatility of Waterjet Cutting makes it ideal for the production of gaskets. Capable of cutting anything from hard steels, to non-ferrous materials such as brass and copper, to delicate graphite composites and softer materials like paper. It is ideal for low volume, "one-offs" and production runs.

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Our waterjets have enabled us to significantly reduce production and delivery time, while also making the materials and producing gaskets of the highest quality.

Says David Nordeen, Pipeline Seal and Insulators, Texas

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A large, detailed image of a waterjet cutting machine in operation. The machine is shown cutting through various materials, including a large metal gear and a piece of wood. The waterjet stream is visible as a fine mist. The background is a dark green gradient.

## METALS

Waterjets are extremely powerful, capable of cutting up to 150mm (6") thick stainless steel. Waterjets don't care how hard the material is, and whether it's ferrous or non-ferrous, makes no difference to a waterjet.

The very small kerf (approx. 1mm or 0.040") allows it to produce tight corners, with very high tolerances.

Waterjet is a "Cold Cutting" process that produces no heat affected areas or burnt edges. These factors mean that there is little or no secondary operation required for most applications.

**“At Merrill Tool and Die we process all types of steel and aluminum materials, in a range of thickness with varying degrees of accuracies. The waterjet lets us take on virtually anything. In fact we were so successful with the first one, we purchased a second one.”**

Says Lee Opsahl of Merrill Tool and Die in Wisconsin.

## FOAM & RUBBER

Waterjet Cutting is ideal for many foam, rubber, plastic, insulation and woven materials. With an extremely fine cutting stream (down to 0.004" or 0.1mm) very tight nesting and therefore good material yields can be obtained. The high cutting speeds of waterjet (up to 60m/min or 2500"/min) also means that it is extremely fast, especially when combined with automated loading/unloading equipment.

**“In my shop, it's all about speed, versatility and quick response time to our customers, and nothing delivers better than a waterjet.”**

Says Cotton Davis of Universal Rubber Products in North Carolina.

Waterjet is **Verstile,**  
**Powerful & Accurate.**

Due to its very small stream size (approximately 1mm or 0.040") even the most intricate patterns can be cut out. With its extremely high pressure (up to 60,000 psi) materials up to 6" thick are easily cut.

Stainless Steel

Aluminium

Glass

Marble

Plastic

Rubber

Cork

Wood

Exotic Metals

Foam

Granite

Copper

Stone

and more...

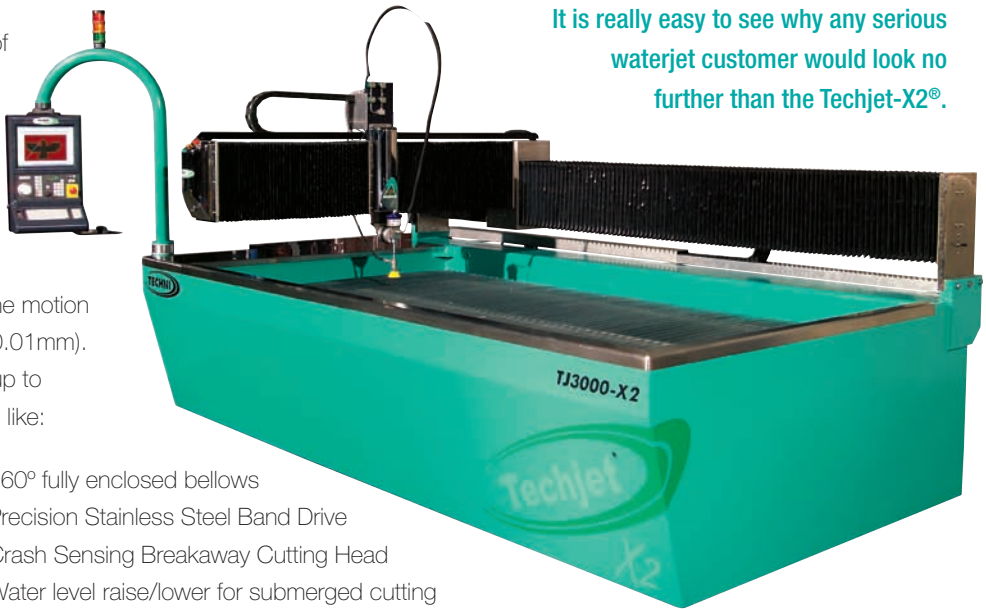
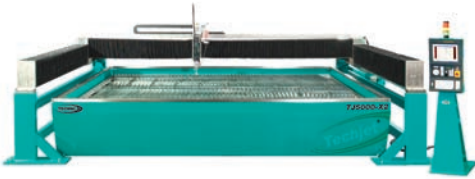
# Applications



## Techjet-X2® "Premium Series"

The Techjet-X2® series is the latest in our evolution of innovative products to create a precision, easy-to-operate, safe and highly reliable Waterjet Cutting Machine. The Techjet-X2® is built to the highest tolerances and incorporates Linear Scale Feedback to ensure the highest accuracy of motion in the industry. By mapping the entire cutting area with a laser-calibrated digital encoder, the motion system can deliver positional accuracy of 0.0005" (0.01mm). Combining this accuracy with high cutting speeds (up to 1000ipm or 25m/min) and exclusive design features like:

- 360° fully enclosed bellows
- Precision Stainless Steel Band Drive
- Crash Sensing Breakaway Cutting Head
- Water level raise/lower for submerged cutting
- Tech-Sense™ cutting head monitoring system



It is really easy to see why any serious waterjet customer would look no further than the Techjet-X2®.

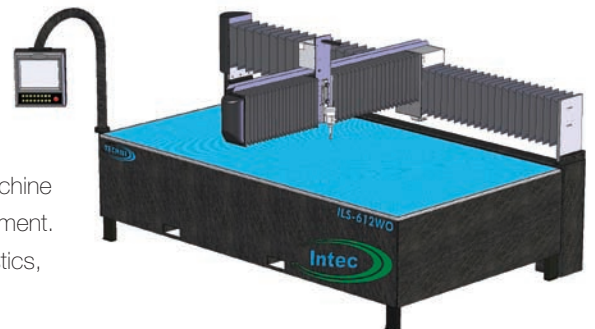


## Intec® "Value Series"

The Intec® series offers the greatest value for money of any waterjet cutting machine in the industry. It incorporates many of the innovative and practical designs of the Techjet® series, while offering a system that will meet the requirements of most applications, and stay within a budget. This series of machines are particularly well-suited for industries with slightly lower tolerances such as metal fabricating; marble and granite and glass.

## Intec® "Light Series"

The Intec light series was developed to suit industries with lighter cutting needs. The machine is simple to load and operate, making it ideal in a production or semi-production environment. It is perfect for industries such as Gaskets, Sheet Metal, Tile & Stone, Sign Makers, Plastics, Foam & Rubber, Insulation, and Ducted Pipe System manufacturers.



## Customized Machines

Techni Waterjet's roots were founded in the design and development of customized machinery. So if your waterjet application doesn't suit a standard "off the shelf" solution, we can customize a solution for you. Through our experience in automation, robotics and material handling we are able to design you a machine that will meet your exact demands and is designed to be suitable in the harsh waterjet environment.

SOFTEC™ Software

Softec™ Waterjet Cutting Software was developed with two very clear goals mind:

- To produce waterjet cut parts at the minimum cost with the greatest accuracy
- To have a simple and intuitive interface with the operator

The result is a comprehensive "All-In-One" Windows based software that is specifically designed for waterjet cutting, which maximizes productivity and anyone with basic PC experience can learn to operate quickly and easily. Softec™ incorporates many unique features, including: DXF Importation, Focusing Tube Wear Compensation, Off-site Notification, Multiple Origin Points, Maintenance Counters, Auto Mating Part Clearance, Standard Object Library, Re-start Cutting from Anywhere, and many, many more.

At the heart of Softec™ is "Tru-Cut Technology", a highly sophisticated algorithms database that determines the optimum cutting speeds and machine ramping characteristics for any material, thickness or profile. This ensures the fastest overall cutting speeds while achieving the greatest accuracy for a desired surface finish.

Softtec™ software runs on the very latest in controller technology, the AT2010. Developed by ANCA, one of the pioneers in servo control technology, and a leader in the very demanding "CNC Tool and Cutter Grinder" market, the AT2010 delivers maximum acceleration with ultra high speed feedback to ensure minimum processing time with maximum accuracy and best surface finish. It also incorporates "patented" technology such as the MPG wheel which allows the operator to take



the machine along the cutting path, forwards or backwards to any point, simply by winding the hand wheel.

## Product Range







**Waterjet Cutting Systems**





