



WATER WILL CUT  
VIRTUALLY ANYTHING...  
INCLUDING COSTS



[www.jetedge.com](http://www.jetedge.com) | 763.497.8700 | 1-800-JET-EDGE

# APPLICATIONS & BENEFITS

Waterjet is the most versatile cutting technology in the world. It cuts virtually any material without heat, flames or toxic fumes, and can produce precise parts with a smooth edge requiring no secondary finishing. Waterjets use CNC software coupled with nesting and other automated cutting path software to process standard CAD drawing files, either as a stand-alone system or integrated into factory automated processes.

## WATERJET CUTS VIRTUALLY ANYTHING...

Steel – Titanium – Aluminum – Inconel® - Nickel Alloys – Exotic Metals - Brass – Copper – Armor Plating  
- Fiberglass – Plastic – Foam - Rubber – Food – Paper – Carpet – Stone – Tile – Glass - Composites...&  
Much More.

## AND PRODUCES VIRTUALLY EVERYTHING...

Auto Parts – NASCAR Racecar Parts - Aircraft Parts – Rubber Gym Mats – Terrazzo Graphics  
– Diapers – Tile Inlays – Gaskets – Insulation – Chicken Strips - Shims ...& Much More.

### APPLICATIONS:

- Shape Cutting
- Blank Cutting
- Short & Long Runs
- Cutting Thick Materials
- All Types of Hardened Materials
- Rough Cutting to Near Net Shapes Before Other Processes
- Cutting Stacked Parts
- Trimming Castings
- Edge Trimming and/or Crosscutting
- Static Pressure Testing
- Tube and Pipe Cutting
- Etching and Scarification
- & Much More

### BENEFITS:

- Achieves Tight Tolerances
- Eliminates Heat-Affected Zones
- Often Eliminates Secondary Finishing
- Tight Nesting Reduces Material Waste
- Cuts Thick Materials
- Makes Near Net Cuts to Reduce CNC Usage
- Produces No Noxious Fumes
- Employs a Cold Cutting Process
- Cuts Modern Composite Materials Without Delamination
- Environmentally Friendly



## REQUEST A FREE TEST CUT

**Discover how Jet Edge can help you cut parts better, faster!**

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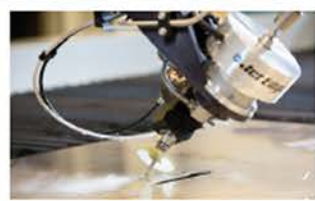
## INDUSTRIAL GRADE CNC MACHINE TOOL

Jet Edge's precision waterjet systems are designed to provide years of dependable service in harsh industrial environments. Our industrial grade components are selected to minimize unscheduled downtime and operate 24 hours per day. All of our gantries incorporate a rock-solid design that separates the motion system from the catcher tank, eliminating vibration and ensuring maximum part quality. Our powerful and flexible AquaVision Di® Controller features an open architecture design that gives operators the freedom to fine-tune programs from any CAD/CAM/nesting software, utilizing advanced HMI features and/or standard G&M code.

**EDGE X-5 5-axis cutting power!**

### A CUT ABOVE:

- Many sizes up to 30'x100' (9mx30.5m)
- Multiple Cutting Heads
- 5 axis and 3 axis Cutting Heads
- Zero Taper
- Contour Beveling
- Mirroring Control Capabilities
- Industrial PC Controller
- Industry-Leading Precision & Accuracy
- Sturdy Gantry Design Eliminates Vibration
- Ball Screw Driven for Higher Accuracy
- Industry-Leading Warranty



5-Axis for cutting sophisticated taper-free 3D parts



Full-featured pendant for operator convenience



Motion components are protected with metal covers, seals and blower fans



Large format, high production systems are our specialty.

## GETTING FASTER, FASTER...

Michael Waltrip Racing waterjets 1,000 parts for each of their racecars. Since installing their Jet Edge systems, MWR has increased productivity 50% and gets design improvements to the racetrack 2 weeks faster.

**On one part alone, MWR saves \$120,000 a year.**



  
**michael waltrip racing,**  
Technical Partners



# WATERJET PUMPS

## WIDEST RANGE OF PUMPS IN THE INDUSTRY

Jet Edge has a pump for every application. We offer hydraulic intensifier pumps and direct drive pumps in 36KSI, 60KSI and 90KSI models, 30-280hp, electric and diesel. This allows you to select the exact pump you need to maximize productivity and profitability, whether you are cutting with water only or running a 24/7 operation with multiple abrasivejets.

### **A Cut Above - Intensifier Pumps**

**Reliable Tie-Rod Design** eliminates threads on the high pressure cylinders, end caps, and hydraulic cylinders. This reduces the likelihood of cracking and increases component life. Matched metal components prevent galling of hydraulic components. Intensifier designs allow for the usage of common tools instead of specialized jacking system tools.

**Hydraulic accumulators are standard on all intensifier pumps.** This provides smoother hydraulic pressure, reduces spikes and prolongs hydraulic pump life. Hydraulic fluid is cooled and filtered. Rugged hydraulic center section incorporates high duty cycle-rated piston seal and wear rings.

**Easy Maintenance** - Access panels make it easy to maintain the pump. Intensifier components can be accessed without having to get into the hydraulic center section and hydraulic rod seal. Leak detection block indicates seals needing replacement. (optional on some pumps). No special tools required.

**CE-marked attenuator** smoothes pressure fluctuations and delivers constant and steady stream of UHP water.

**On-board water filtration** protects pump components, maximizing machine run time.

**Standard Wye-Delta motor starter** - Extends the life of the high-efficiency motor and minimizes installation costs.

**Easy Operation** - Jet Edge pumps can be controlled remotely from the motion controller and have programmable dual pressures.

**Patented Metal-on-Metal Seal Technology** - This revolutionary technology eliminates half of the seals needing to be replaced.

## WHAT OUR CUSTOMERS ARE SAYING...

"Jet Edge waterjet intensifier pumps are the best there are. They are the Rolls Royce of ultra-high pressure waterjet pumps..."

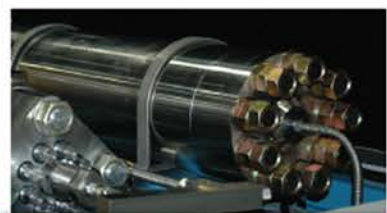
Martin Grijpstra, Jet Set Hydro Technics B.V.

"Our Jet Edge pumps cost 20% less to maintain than our other pump because the Jet Edge seals are less expensive. The seal life is similar, but we save \$8,000 to \$9,000 a year. The Jet Edge iP60-150s are the best thing on the market. I will keep putting them in."

Joe Quaal, Precision Waterjet Concepts



**Hydraulic Intensifier**



**Attenuator**



**Tie-Rod Design**



**Leak Detection Block**

# JET EDGE WATERJET PUMPS

## X-STREAM

Take Your Waterjet Cutting to a New X-Stream!  
Our X-Stream Series Intensifier Pumps Cut Parts up to 50% Faster! Lower Operating Costs as much as 40%!

Model	xP 90-50	xP90-100
Intensifiers	1	2
Pressure	75KSI (5200 bar) continuous, 90KSI (6200 bar static)	
Power	50hp	100hp
Flow GPM (L/m)	0.7 (2.6)	1.45 (5.5)
Max Orifice	.011 in. (.28 mm)	.017 in. (.43 mm)

## DOMINATOR

There's a reason our Dominator Series hydraulic intensifier pumps dominate the market. They are built to provide years of dependable service and are the easiest and most cost-efficient pumps to maintain.

Model	iP55-30	iP60-50	iP55-75	iP60-100	iP60-150	iP55-200
Intensifiers	1	1	1	1 and 2	2	2
Pressure	55KSI (3800 bar) continuous, 60KSI (4100 bar) static					
Power	30hp	50hp	75hp	100hp	150hp	200hp
Flow GPM (L/m)	0.6 (2.3)	1 (3.8)	1.5 (5.7)	2.3 (8.7)	3 (11.4)	4.0 (15.2)
Max Orifice	.011 (.28)	.015 (.38)	0.18 (.46)	.021 (.53)	.025 (.64)	.028 (.71)

## POWERHOUSE

Powered by reliable Cummins turbo diesel engines, our Tier 3 certified Powerhouse Series intensifier pumps are built with the contractor in mind. They are easy to transport and maintain in the field.

Model	iP36-80DS	iP36-280DS	iP60-80DS	iP55-280DS
Intensifiers	1	2	1	2
Pressure	36KSI continuous/40KSI static		55KSI continuous/60KSI static	
Power	80hp	280hp	80hp	280hp
Flow GPM (L/m)	1.8 (6.8)	4.3 (16)	1.3 (5)	4.3 (16)
Max Orifice	.021 (.53)	.042 (1.06)	.16 (.41)	.028 (.71)

## 36 SERIES

Our 36 Series hydraulic intensifier pumps are ideal for applications that require a higher flow rate, including surface preparation and water-only cutting.

Model	iP36-50	iP36-50 Modular	iP36-100	iP36-200
Intensifiers	1	1	2	2
Pressure	36KSI (2500 bar) continuous/40KSI (2800 bar) static			
Power	50hp	50hp	100hp	200hp
Flow GPM (L/m)	2.0 (7.6)	1.8 (6)	2.3 (8.7)	4.0 (15.2)
Max Orifice	.023 (.58)	.023 (.58)	.034 (.86)	.040 (1.01)

## ECO-JET

Eco-friendly and economical to purchase and operate, our Eco-Jet direct-drive pumps use 40% less electricity than a 50hp hydraulic intensifier pump, yet produce the same output!

Model	Eco-Jet
Type	Direct Drive
Pressure	55KSI (3800 bar)
Power	30hp
Flow GPM (L/m)	1 (3.8)
Max Orifice	.015 (.38)

### NEW! AN INDUSTRY FIRST!

Turn your tractor or skid steer into a powerful waterjet cutting tool! These unique pumps incorporate our Eco-Jet direct-drive pump design, but use tractor or skid steer hydraulics, creating a powerful yet inexpensive waterjet pump that requires only 120 V 60 Hz power, fresh water and a suitable tractor or skid steer.

**ECO-JET PTO:** Available for 540 RPM and 1000 rpm PTO shafts capable of producing a minimum of 50hp. Category 1 & 2 Three-point Hitches.

**ECO-JET TACH:** Available for hydraulic circuit units capable of producing a minimum of 50hp. Maximum pressure is dependent on tractor's hydraulic fluid flow and pressure.

See [www.jetedge.com](http://www.jetedge.com) for details.

# ACCESSORIES

We offer a wide range of parts and accessories to complete your Jet Edge waterjet system, from cutting heads and abrasive delivery systems to closed loop water filtration and abrasive removal systems.

## CUTTING COMPONENTS

### Omnijet® Water-Only Cutting Head

The patented OmniJet® Cutting Head creates a coherent waterjet stream and provides responsive on/off UHP water control.



### Permalign® II-B Abrasivejet Cutting Head

The patented Permalign® II Cutting Head, combined with the OmniJet®, creates an abrasivejet capable of cutting virtually anything. Long lasting and easy to maintain, the Permalign II-B achieves ultimate performance and reliability for abrasivejet cutting. Compatible with diamond, ruby and sapphire orifices.



### Abrasive Delivery System

The patented Solid-Phase Abrasive Delivery® System and the Fluidized Abrasive Delivery System convey abrasive to single or multiple cutting heads. Using compressed air, the systems create an even distribution of abrasive flow to achieve reliable cutting results.



### Pneumatic Drill

The pneumatic drill gives waterjet operators the opportunity to expand their cutting capabilities and take in new types of work by enabling them to quickly pierce sensitive materials prior to cutting them with waterjet. It also can be used for reaming holes to a precise diameter.



### Contact Height Sensor

Overcome significant fluctuations in material flatness by maintaining a constant automatic standoff within 0.040" (1mm) of your set standoff height. As a result, you will achieve optimum cut quality, tolerance, taper and speed without having to monitor the standoff.



### Laser Mapping System

The Laser Mapping System measures the terrain of the plate and records and stores plate variations for use in programming the cut.



### Dual Pressure Valve®

The patented Dual Pressure Valve® is a remotely mounted valve that allows waterjet operators to control water pressure independently of the intensifier pump. This enables operators to run a number of tables or cutting stations at various pressures.



## GREEN COST-SAVERS

Jet Edge's eco-friendly accessories lower your operating costs, extend the life of your system and protect our planet.

### Closed Loop Filtration System

Filtering and recycling water lowers your sewer and water bill, protects your pump, maximizes orifice life and prevents the introduction of hazardous materials into drainage systems.



### Chiller

An in-line chiller cools pump hydraulics and cutting water (when used with a closed loop system), significantly reducing water use and prolonging the life of pump components, including high pressure seals.



### Overflow to Drain

An overflow to drain removes spent abrasive and other suspended solids from the catch tank overflow water.



### Abrasive Removal Systems

Jet Edge's Abrasive Removal Systems separate solids from tank water to allow continuous, economical system operation.



## GENUINE JET EDGE PARTS

When you need a part and you need it fast, you can count on Jet Edge to be there for you. We sell quality genuine Jet Edge parts at competitive prices and nobody beats our on-time delivery record!



### A Cut Above

- 24/7 Service 365 Days a Year
- 99% On-Time Delivery
- Discounts for Quantity Orders



Jet Edge is one of the few waterjet manufacturers willing to custom engineer solutions so you receive a system manufactured to satisfy your specific requirements. Our willingness to customize has made us the go-to waterjet supplier for solving the world's toughest waterjet problems.

## A Cut Above

- Shuttle Systems
- Extra-deep tanks
- Integration into food processing and manufacturing systems
- In-Floor Systems
- Underwater Cutting
- Tilting Jets
- Modular Pump Designs for tight spaces
- Precision and Mobile Cutting Solutions
- Precision and Mobile Surface Preparation Solutions

**Call us today to discuss a custom solution for your manufacturing challenge!**

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## WATER WILL CUT VIRTUALLY ANYTHING... INCLUDING COSTS

Jet Edge is a leading manufacturer of ultra-high pressure waterjet technology. Our systems are used around the world in a broad range of industries, from the world's leading airlines to automotive, aerospace and industrial manufacturers, and machine and job shops.

**OUR GOAL IS SIMPLE:  
TO HELP OUR CUSTOMERS SUCCEED.**

Our mission is to help our customers solve their manufacturing challenges and achieve their highest level of productivity, precision and accuracy.

Sold Worldwide Since 1984




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**PERFORMANCE - FLEXIBILITY - PRODUCTIVITY**