

QUE

WORLD'S FASTEST WATERJET

KMT WATERJET SYSTEMS. OVER 50 YEARS OF GLOBAL WATERJET TECHNOLOGY!

In 1971, KMT became the "Birthplace of Waterjet" and history was made when the very first commercial use waterjet cutting system was installed in a cardboard box manufacturing facility.

Known as the "Fluid Jet Cutting System", it eliminated the use of commercial saws, and was designed for the contour cutting of furniture packing forms.



Over 45 Years later, KMT Waterjet is known as the Global Leader in Waterjet Technology with the release of the <u>World's Fastest Waterjet</u>, the PRO-III Series 90,000psi intensifier pumps and PRO Series precision cutting heads.

Thousands of companies around the world have harnessed waterjet cutting to manufacture products for use in a variety of industries including Aerospace, Automotive, Agriculture, Baking, Construction, Energy, Oil & Gas, Manufacturing, Marble/Stone, Signage and much more.

WATERJET BENEFITS:

- Burr Free Finish
- Tight Nesting of Parts
- Smaller Cutting Kerf
- No HAZ (Heat Affected Zone)
- Eliminates Most Finishing
- Environmentally Friendly
- Cuts Multilayer Materials

- Cuts Materials & Thicknesses:
 Thin foil to 12" Titanium
- High Speeds for Most Materials
- Easily Adapted to Automation
- Contouring Systems
- Easy Programming w/Standard CAD/CAM Systems

- Multiple-axis Cutting Capability
- Allows Rapid Prototyping
- Minimal Fixturing Required
- No Material Stress or Crushing
- No Tool Sharpening
- No Dust, Fumes or Gases

OEM SYSTEM OPTIONS:

- Standard and Customized Tables
- Multiple Cutting Heads
- X-Y, X-Y-Z, 4, 5 & 6 Axis Cutting
- Robotic Integration
- Combination Systems: Saw, Plasma & Drill
- Conveyors for Food Production
- Vision Systems Fish & Chicken Portioning
- Cake & Pastry Unique Shape Cutting Machines







KMT Original Equipment Manufacturers (OEM's) design, engineer & manufacture the right waterjet cutting system for your application.

KMT Waterjet Integrators are experienced in waterjet cutting to ensure that you and your employees are well trained, and have all the tools and support you need for a successful and profitable waterjet cutting business.

STREAMLINE® PRO-III SERIES 90,000PSI PUMPS



125hp/60hp Dual Head Cutting, Redundant Intensifiers

When you factor in the greater productivity of cutting faster, a 50-100% increase in capacity, reduced abrasive costs up to 50% and increase gross margins, the PRO III 90,000psi waterjet system is an attractive alternative to the standard 60,000psi waterjet technology.

WORLD'S FASTEST WATERJET

- Increase Productivity and Profitability
- Lowest Cost Per Part
- Thinner Kerf, less waste of raw materials



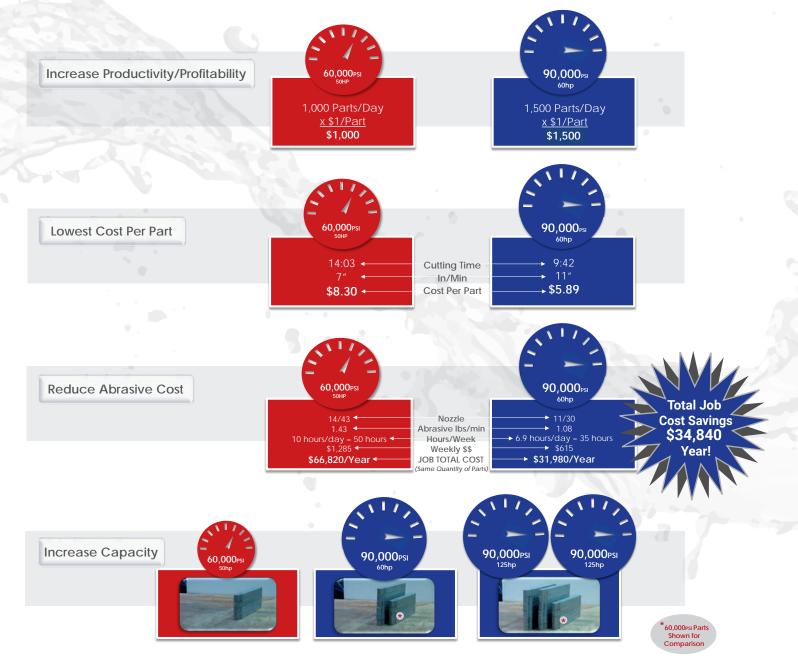
- Reduced Abrasive Costs
- Increased Capacity

NEW! Cut Calculator APP 2.0 Compare 90,000psi to 60,000psi cutting. Increase Productivity @ 90.000psi!



THE PRO-III ADVANTAGE: 60,000 PSI vs. 90,000 PSI Comparison

The diagrams below shows the KMT PRO-III 90,000PsI (60hp & 125hp) pumps compared to standard 60,000PsI (50hp) waterjet pumps. The data demonstrates when cutting 1 inch aluminum at 90,000PsI, there is a significant improvement in productivity, lower cost per part and substantial abrasive savings.





NEO[™] 60,000PSI **PUMPS**





Removeable Magnetic Doors For Faster Maintenance

WORLD CLASS ENGINEERING Available in 50hp & 30hp

Time tested & proven performance of the NEO 50 components are the foundation for it's Lowest Cost of Ownership. New HMI cutting edge technology permits real time monitoring & puts the command and control with the operator.

STANDARD FEATURES

- Proportional Control Provides Ultimate Pressure Control
- Booster Pump For Positive Water Pressure to Topworks









CUTTING NOZZLES - 60,000PSI & 90,000PSI

AUTOLINE® PRO 90,000PSI Nozzle

HIGH SPEED, SELF-ALIGNING ABRASIVE CUTTING NOZZLE

Independent tests prove the KMT AUTOLINE® Series of Abrasive Nozzles cut faster and at a lower cost than any other nozzle. The Next Generation of the AUTOLINE® Series, the AUTOLINE® PRO, is designed to provide the ultimate in cutting efficiency at 90,000 PSI/6.200 bar.

Simple, Self-aligning Components

The self-aligning components of the KMT AUTOLINE PRO® provide true, perfect alignment to extend the life of focusing tubes and mixing chambers.

AUTOLINE® 60,000psi Pressure Available

IDE® PRO DIAMOND 90,000PSI NOZZLE (IDE - Integrated Diamond Eductor)

DIAMOND MOUNTING DESIGN IMPROVES ALIGNMENT AND CUTTING PERFORMANCE

The KMT Diamond Orifice Integrated Diamond Eductor PRO is integral to the cutting head & factory aligned for life. The IDE® PRO cutting nozzle is a 1 piece body, with a permanent mounted orifice, reducing operating downtime compared to changing a diamond orifice.

The IDE® PRO has achieved successful test cutting performance at 100,000esi & has demonstrated 1,000+ cutting hours in the field for many applications. The IDE® PRO performance rating is 10-20 times better over sapphires or rubies.

IDE® 60,000psi Pressure Available



Normally Closed Options

AQUALINE® PRO PURE WATER VALVES

PROVEN PERFORMANCE AT EXTREME PRESSURES

Pure water cutting applications are among the most demanding of subcontracting jobs in the industry.

Demands put on waterjet components and some industry production units usually run 3 x 8-hour shifts throughout the complete week highlighting a need for extremely high reliability and speed.

AQUALINE® 60,000psi Pressure Available



WATERJET CUTTING: THE TECHNOLOGY OF POSSIBILITIES



Water Only Cutting

This method is primarily used for soft materials such as plastics, foam, paper, rubber, produce, cardboard, baked goods, and much more. Tap water is pressurized and forced through a small precious stone orifice, producing a water jet exiting the orifice at Mach 3 speed, and cuts materials at much higher speeds (determined by the properties of the material).





Abrasive Cutting

For hard materials that cannot be machined with water only, abrasive garnet is added to the cutting head mixing chamber and through a diamond orifice (or other precious stones) for a pressurized stream. This process is ideal for cutting thick & thin metals, creating intricate patterns in sheet metal, aluminum, decorative tile & stone, composites, ceramics, glass, and much more.



One-Dimensional Cutting

One-dimensional systems most often employ multiple cutting heads on a conveyor. These systems are used in high production multi-shift operations where high cutting speeds and reliability are very important: Slitting paper, cutting produce, cakes, pastries & much more.

Two-Dimensional Cutting

The most used application is the 2D cutting table from 2' x 2' to much larger tables and move in X-Y axes. In many cases, the Z (height) axis is controllable to cut irregular shaped or thicker materials & used for rapid production of parts from different materials.

Multi-Axis 3D Cutting

Three dimensional systems use a 5-axis cutting head to cut cones from flat sheets, drill holes in tubing & producing beveled edges. These flexible cutting systems are mostly used in the aerospace, automotive and medical device industries.

Robotic Cutting

In most robotic systems, the cutting head is attached to a robot arm, enabling numerous application options. Motion control robots operate several tasks simultaneously, are safe, productive and environmentally friendly compared to sawing, plasma, laser, punching, milling and deburring processes.











ACCESSORIES - Abrasive Systems

FEEDLINE V (ABRASIVE METERING SYSTEM)





OPTIMIZED ABRASIVE FLOW FOR CUSTOMIZED APPLICATIONS

Stable and Repeatable Parameters are a fundamental requirement for high quality waterjet cutting. Without this controlled supply, the mixing chamber for abrasive, air and water would become clogged up and lead to higher costs.

abrasive flow required for each application, further lowering costs of operation.



The FEEDLINE V accurately controls the

FEEDLINE PRECISION (ABRASIVE METERING SYSTEM)

COMPACT, LIGHTWEIGHT, AND RELIABLE!

An Accurate & Consistent Abrasive Feed Rate is critical and a well regulated feed rate of abrasive cuts down on waste and results in a tighter cutting stream with a cleaner, smoother cutting edge.

The KMT EZ Feedline™ is EZ to mount, operate and maintain----no tools required to replace wear components! The gravity fed abrasive automatically feeds to the fill line.

ADS SERIES HOPPERS (ABRASIVE DELIVERY SYSTEM) CONTINUOUS LEVEL MONITORING

--FOR EFFICIENT PRODUCTION!

Abrasive Monitoring Saves Time & Costs KMT ADS SERIES HOPPERS precisely monitor the availability of sufficient abrasive closely during the entire cutting process.

The abrasive level indicator uses a weighing mechanism combined with a low-level alarm (or warning light on 2,000lb unit) to detect the low limit (100 lbs.) and notify the user. Available in 500 LB. & 2,000 LB. Capacity.

KMT WATERJET CUTS...

Alloys Marble Granola Bars Steel Plexiglass Titanium Aluminum Composites Tile Cardboard Granite Broccoli Copper Plastic Acrylic Food Inconel Stone St. Steel Phenolics Ceramic Rubber Graphite Paper Glass Bronze Produce Textiles Laminates Foam Porcelain Carpet Cake

Carbon Fiber

& more...



KMT Genuine Parts & Service Your business is worth it.



KMT offers a Preventive Maintenance (PM) Program which provides a 65 Point **Comprehensive Inspection for your KMT** pumps, parts and components

 Trained & Certified Technicians • Worldwide Sales & Support Network ISO 9001:2015 Compliant CSA & CE Marked • USDA Equipment Certification





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Order Parts Online: kmtgenuineparts.com



More Information on KMT Genuine Service PM Program



NEW! Cut Calculator APP 2.0 Compare 90,000psi to 60,000psi cutting. Increase Productivity @ 90,000PSI!



