

# CNC V-Series Waterjet

Reliable turnkey solutions for any application requiring value, performance, and versatility.



**MULTICAM**  
Complete CNC Solutions

# HIGH-PERFORMANCE... ...AT AN AFFORDABLE PRICE

## V-SERIES WATERJET

The MultiCam V-Series Waterjet is a smart CNC investment that's easy on the budget. We designed this high-performing pure water or abrasive cutting system to be affordable and versatile. Enclosed bellows protect both the Y and Z axes from abrasive garnet buildup. Steel covers keep the dual drives and all X-axis precision bearing surfaces clean during the cutting process.

KMT's new Tri-Line pump is ideally suited for small job, sign, and automotive shops requiring the precision and flexibility found only with waterjet cutting. The pump features a small footprint, yet boasts 55,000 PSI of operating pressure for easily cutting steel, glass, plastic, aluminum, stone, and much more.



## FEATURES & SPECIFICATION GUIDE

PERFORMANCE / EASE OF USE / PRODUCTIVITY

# FEATURES

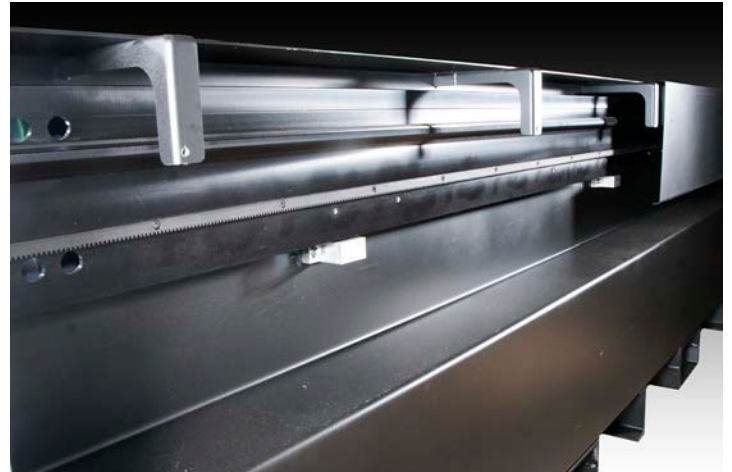
No machine offers more features than the innovative and versatile V-Series Waterjet.



## Nozzle

### Engineered for Performance

KMT Waterjet heads provide the most advanced alignment technology for precise cutting on a vast amount of materials with minimal kerf while holding tolerances up to  $\pm .003$ " or  $.076\text{mm}$ .



## Rails

### High Strength, Minimal Vibration

Robust V-Roller Rails are utilized in order to ensure rigidity for a smooth and precise operation during the cutting process.



## Working Surfaces

### Versatile, Effective, & Multi-functional

The standard working surface includes removable slat grates. Also available, is a support grid combined with 4" thick plastic corrugated brick for more precise cutting on thinner materials and for smaller parts.



## Base Frame

### Solid, Heavy-Duty Construction

The base frame is a one-piece plate steel frame that is welded, stress-relieved, and precision machined. This design allows for a very accurate, rigid, and smooth cutting system, while essentially removing the possibility for any installation errors that could affect the performance and accuracy of the system.



# FEATURES

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## Abrasive Feeder **Optimum Performance**

For abrasive systems, MultiCam's robust, programmable, easy to use, visible abrasive feeder allows you to cut with confidence. Abrasive control is one of the most critical items to control and monitor costs, and MultiCam's abrasive system provides the control you need.



## EZ Control **Easy-To-Use**

MultiCam's EZ Control is one of the most powerful yet easy-to-use motion control systems available on the market. It allows for multiple job reference positions as well as automatic Z surfacing, proximity restart, and cut speed & abrasive feeder control for the ultimate cut quality and reliability.



## Gantry Supports **Fluid & Accurate**

Precision machined gantry supports are used to house the X-axis drive motors and bearings. The supports provide an extremely stable support for the gantry to ensure the highest precision.



## Digital Stepper Drive System **Smooth & Reliable**

For the V-Series, MultiCam selected the extensively tested two-phase, digital, brush-less, synchronous electric motors. This setup provides optimized inductance and resistance of the windings provide resulting in a smooth system.



## Abrasive Hopper

### High Speed for Increased Productivity

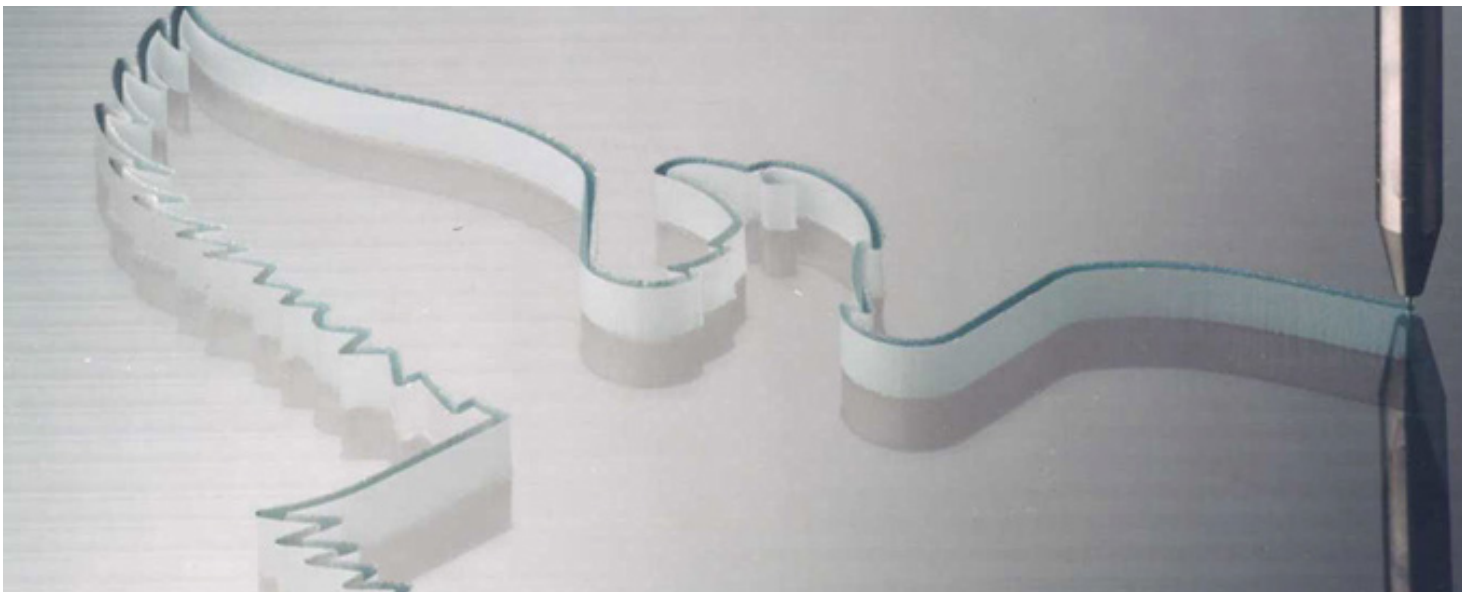
The MultiCam abrasive hopper provides hours of efficiency, with an easy to fill reservoir and efficient float ball for complete sealing to avoid costly and messy leaks.



## Drive Assembly

### High Acceleration, Excellent Cut Quality

Both the X and Y axes are driven by high-torque, NEMA 23 stepper motors coupled with a 4:1 transmission assembly. This results in both good acceleration of motion as well as smooth cut quality.



# PUMP OPTIONS



## KMT Waterjet Cutting Pumps

### TRILINE™ Direct Drive 55,000psi/30hp

### EFFICIENT & ECONOMICAL 55,000psi CUTTING

With the New TRILINE™ Direct Drive high pressure pump, KMT Waterjet Systems has expanded our product line by adding an alternative pump technology to the KMT portfolio. The TRILINE™ pump has an excellent cost of ownership value and can be used as a stand-alone unit for everyday cutting.

#### Efficiency for Everyday Cutting

The TRILINE™ high pressure pump with Direct Drive technology, is best used as a continuous duty water pressure generator.

The TRILINE™ has a small footprint and it's high efficiency at continuous operation is ideal for small job shops performing conventional shapecutting.

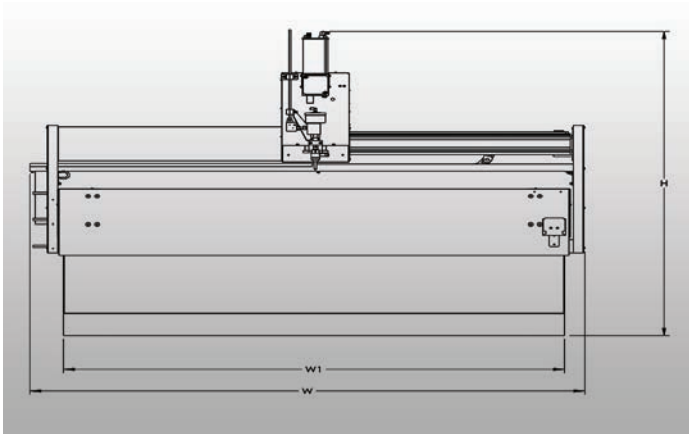
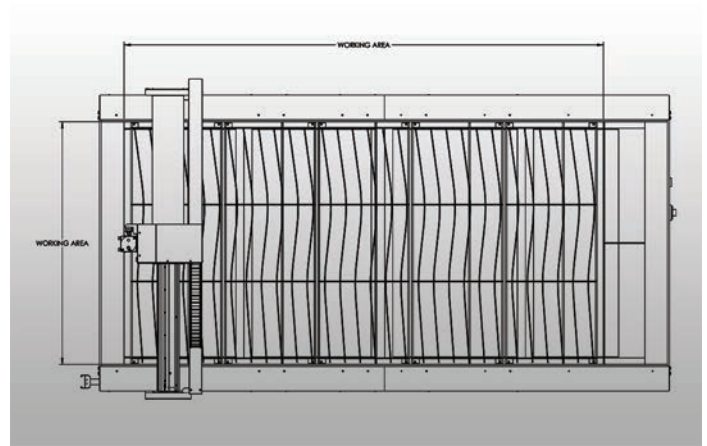
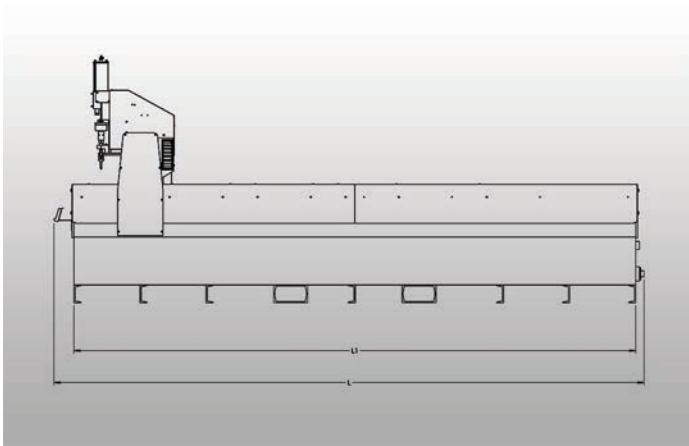
#### TRILINE™ Direct Drive Pump Features

- Patented valve automatically controls Pressure & Flow Rate
- Electrical control panel with relay-based control system
- Economical softstarter reduces demand of motor startup current
- Emits 82dBA Sound Level: *Lower than both OSHA (90dB) & NIOSH (85dBA) Daily Permissible Noise Level Exposure*
- IE3 compliant motor
- No separate cooling water required
- Adjustable high and low pressure
- Power transmission operates motor to topworks with easy to maintain belt and pulley drive system

#### Technical Data

Nominal Pump Speed	30 hp/22 kw (710 rpm)
Pressure Range	55,000psi/3,792 bar
Water Volume	0.83 gpm/3.10 lpm
Dimension LxWxH (in/mm)	41 x 43 x 50/1,041 x 1,092 x 1,270
Weight	1,125 lb./510 kg
Max. Orifice Size at Max. Pressure	0.012" in./0.30 mm

# SPECIFICATIONS



Specifications	Inches	Metric
Z-Axis Clearance	6"	152.4mm
Z-Axis Travel	6"	152.4mm
Repeatability	+/-0.001"	+/-0.0254mm
Cut Speed	600 IPM	15.24 MPM
Rapid Traverse	1000 IPM	25.4 MPM
Drive System (X,Y)	Rack & Pinion	Rack & Pinion
Drive System (Z)	Lead Screw	Lead Screw
Standard Work Surface	Slat Steel	Slat Steel

Model	L (in/mm)	L1 (in/mm)	W (in/mm)	W1 (in/mm)	H (in/mm)	Working Area (in/mm)
V-204	184/4674	152/3861	99/2515	76/1930	86/2184	60.5 x 122 / 1537 x 3099
V-205	202/5131	170/4318	99/2515	76/1930	86/2184	60.5 x 145 / 1537 x 3683
V-304	184/4674	152/3861	119/3023	96/3023	86/2184	80 x 122 / 2032 x 3099
V-305	202/5131	170/4318	119/3023	96/3023	86/2184	80 x 145 / 2032 x 3683
V-306	232/5893	206/5232	143/3632	98/2489	86/2184	84 x 170 / 2134 x 4318

\*\*Other models available





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