Flow

MACH 4 WATERJET SERIES

YEARS AHEAD.
Wrapped in a sleek design, every feature on the Mach 4 is purposefully constructed to make you more productive.

CUTTING HEAD TECHNOLOGY

INVEST IN YOUR FUTURE

 PURE WATERJET
Hair-thin pure waterjet stream cuts soft materials.

STANDARD WATERJET
Use garnet abrasive to cut virtually any hard material.

DYNAMIC WATERJET
Three times faster and more accurate than Standard Waterjet.

DYNAMIC XD
The accuracy and speed of Dynamic Waterjet brought to the 3D world.

OPERATOR CONVENIENCE
EFFICIENCY THROUGH DETAILS

We work hard to provide operator convenience features that allow you to cut faster, more accurate parts. The Mach 4 takes productivity and ergonomics to the next level, making you more efficient through design.

A PUMP FOR EVERY APPLICATION

HYPERJET™
6,500 BAR [94,000 PSI]
With pressures rated at an industry leading 6,500 bar [94,000 psi] and continuous operating pressures of 6,000 bar [87,000 psi], Hyperjet pumps provide maximum productivity.

INTENSIFIER
4,150 BAR [60,000 PSI]
With continuous operating pressure at 4,150 bar [60,000 psi], this is the longest lasting, lowest maintenance ultrahigh-pressure pump in the industry.

HYPLEX® PRIME
4,150 BAR [60,000 PSI]
With pressures rated at 4,150 bar [60,000 psi] and continuous operating pressures of 3,800 bar [55,000 psi], HyFlex Prime pumps are the highest pressure, most advanced direct drive pumps available today.

PRESSURE = PRODUCTIVITY

Flow offers the widest array of high-pressure pumps. Each is fully integrated with sensor driven diagnostics that are monitored by the Mach 4 operator station.

1. ENHANCED WORKPIECE VISIBILITY
Exclusive under-bridge LED lighting provides increased visibility, helping to improve part accuracy and reduce operator fatigue.

2. HYDROCLEAN™ ABRASIVE REMOVAL
Specialty jets efficiently flush waterjet abrasive, removing it automatically, so you don’t have to do it manually. This revolutionary system provides easy removal for less downtime and increased production.

3. ACCESSIBILITY STEP
The machine design provides optimal system stability. It can also be used as an integrated operator step, for additional access to your workpiece as needed.

4. HANDY AIR & WATER CONNECTIONS
Easily access air and water, both on the same hand-held connection.

5. ERGONOMIC TOE-KICK
Designed with the operator in mind, the unique toe-kick allows for comfortable access to your materials and parts.

6. ROLL-AROUND CONTROL
Move freely about your waterjet, taking your touch screen control console with you for convenience.

Flow offers the widest array of high-pressure pumps. Each is fully integrated with sensor driven diagnostics that are monitored by the Mach 4 operator station.
With durable design throughout, the Mach 4 is made up of precision machined and thermally stress-relieved solid steel castings, easily handling even the most rigorous use day in and day out.

ENGINEERED TOUCH

Unlike any other system available, the easily expandable modular design shows your equipment system grow with your business. Add increased capabilities and cutting areas as needed.

MODULAR DESIGN

Our comprehensive software suite offers you to draw, design, import and program flat stock and 3D parts with ease and efficiency.

SIMPLE YET POWERFUL SOFTWARE

Whether you are prototyping one-off parts or producing large quantities of parts, Digipower provides the speed and accuracy expected and at an overall lower cost.

SMARTER REMOVAL TECHNOLOGY

Our exclusive SmartRemove technology uses patented complex mathematical models that automatically adjust your cutting stream based on the material parameters you choose. Simply select your material type and thickness from the library of over 100 tested and pre-programmed materials. SmartRemove will calculate the correct speed and angles to provide you with a precise part at the fastest speed possible.

PRESSURE = PRODUCTIVITY

Our patented Dynamic Waterjet works unlike any other system. Using our SmartStream technology, Dynamic Waterjet not only counteracts stream lag and taper (characteristic inherent to waterjet), but also automatically tilts and monitors the speed of your cutting head on the fly. This ensures the part you pick up off the table is cut as quickly as possible, and to high precision.

Faster, More Accurate Cutting

■ Exacting precision: ±0.0254 mm [±0.001 in]
■ Up to 3x faster than standard systems

DYNAMIC WATERJET®—DYNAMICALLY SUPERIOR PARTS

Dynamic 3D incorporates the unique capabilities of SmartStream technology and Dynamic Waterjet (described above) for angular cutting. This distinctive Flow technology can cut with 5-axis motion, even cutting compound angles with improved speed and accuracy. Simply cut flat stock with up to ±80° of motion.

Test cut for safety required on all formed and 3D parts.
Remote Handheld Pendant
Stainless Steel Catcher Tank
Workpiece Fixturing System
Multiple Cutting Heads
High-Performance Motion Package
HydroClean™ Abrasive Removal System
UltraPierce™ Material Piercing Assist
High-Pressure Pump Option up to 6,500 bar [94,000 psi]
Large Capacity Bulk Abrasive Hopper
ProXtract™ Part Removal Wand
Spray Containment Package
And More

**Mach 4 Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
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<tbody>
<tr>
<td>Linear Straightness Accuracy</td>
<td>.025 mm/m .001 in/3 ft</td>
</tr>
<tr>
<td>Repeatability</td>
<td>.025 mm .001 in</td>
</tr>
<tr>
<td>Maximum Speed</td>
<td>36 m/min 1,400 ipm</td>
</tr>
<tr>
<td>Z Travel</td>
<td>305 mm 12 in</td>
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<tr>
<td>Bridge (x-axis)</td>
<td>2 m, 3 m, 4 m 6.5 ft, 10 ft, 13 ft</td>
</tr>
<tr>
<td>Base (y-axis)</td>
<td>2 m–14 m (1 m increments) 6.5 ft–46 ft</td>
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