



SHAPE TECHNOLOGIES GROUP®

Mach 500
Waterjet Series



Mach 500
make more.

Mach 500: THE WORKHORSE OF WATERJET

Experience a new level of uptime and productivity with the Mach 500, your total cutting solution. Combining unmatched accuracy with the fastest acceleration in waterjet, the Mach 500 will elevate your cutting production and performance levels.

More parts. More productivity. More accuracy. More reliability. **Make more.**

Acceleration
improvement of

200% 2X

improvement in
repeatability

Up to

50%

increase in Z travel
(over legacy systems)

The Magic Behind the Machine

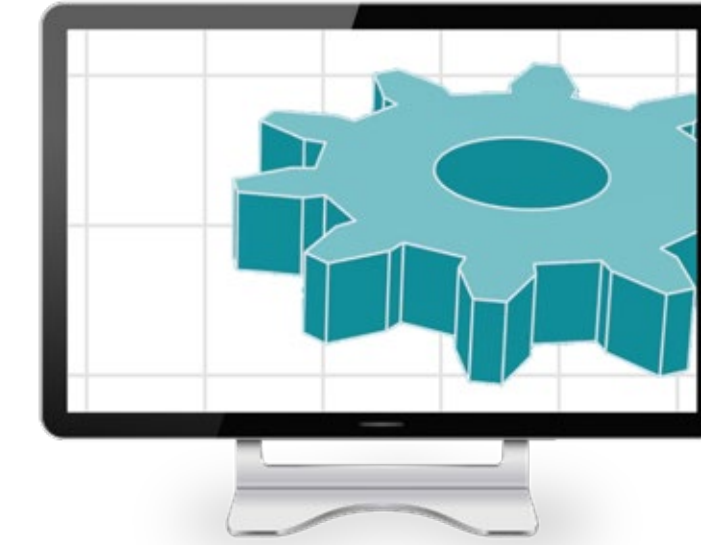
FlowXpert® Waterjet Software
Your part, fast and simple.

Fully integrated into the Mach 500, FlowXpert is a 3D modeling CAD/CAM software suite.

- Import any CAD file
- Build your own CAD file
- Create a CAD file from an image you import

Using intelligent algorithms and 40+ of waterjet expertise, FlowXpert automatically creates the most efficient waterjet cut path for you, so you can make more.

FlowXpert



State-of-the-art Cutting Technology

From 2D to multi-axis cutting, Flow technology provides the highest accuracy, fastest cut part.



Conventional Waterjet

Uses pure water or garnet abrasive to cut virtually any soft or hard material.

INVENTED



Dynamic Waterjet®

Up to 4x faster and more accurate cutting. Head tilts automatically eliminating stream lag and taper for flat stock cutting.

PATENTED



Dynamic Waterjet® XD

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

PATENTED

ENGINEERED FOR PRODUCTION
Industry leading drive technology for smooth motion and fast part production.

MODERN ARCHITECTURE
Ensuring peak performance from the absolute core of the system.

ROLL AROUND CONTROL
Move freely around your waterjet as you operate your system.

OPERATOR EFFICIENCY
Designed for efficiency, featuring water level control, toe kick, and easy fixturing.

ROBUST CONSTRUCTION
All steel, 2 piece construction, and full environmental protection to reliably handle rigorous use.

Industry Leading Pump Technology from Flow

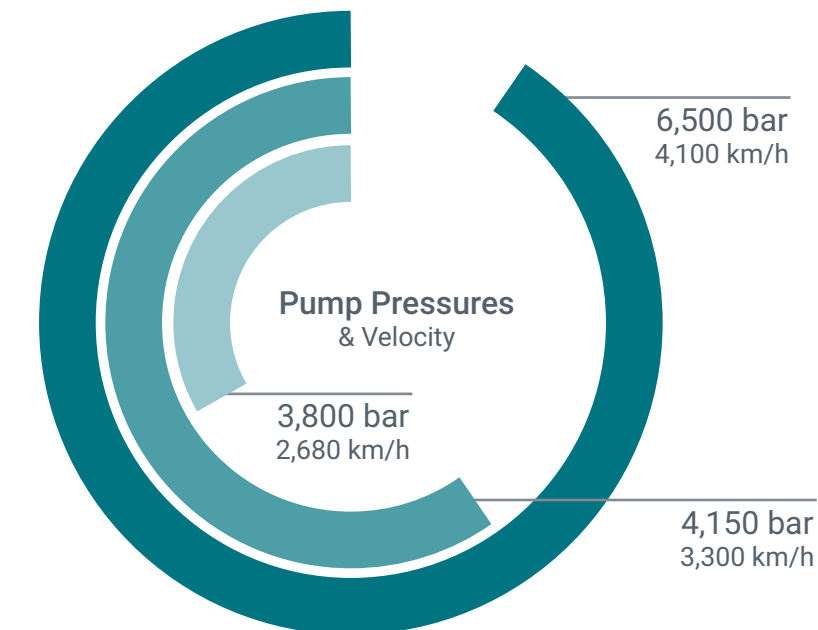
PRESSURE = PRODUCTIVITY

The pump is the heart of your waterjet. Higher pressure delivers faster cutting and lower cost per part.

Get the fastest velocity jet stream with our Flow HyperJet® pump.

The higher the pressure, the more parts cut – resulting in lower cost per part.

3,800 bar	4,150 bar	6,500 bar
€€€	€€	€



Flow offers the widest array of waterjet pumps.



+

compass

dynamicXd

For exceptional accuracy with Dynamic XD, add Compass (patented) – the world's first multi-axis contour follower. Get the most precise part regardless of material flatness.

Service

- We've committed ourselves to the success of our customers for over 40 years.
- As a result, nearly 1 out of every 3 systems built is delivered to repeat customers.
- We are proud to provide the largest and most highly trained support team, with the experience to ensure your success.

Spare Parts

- Genuine spare parts and consumables from Flow are the most reliable way to maintain the highest possible quality of your waterjet system.
- We stock more than 90% of all parts for instant delivery to ensure your production capabilities.

Meet Your Waterjet Team

- Flow has a worldwide service network that extends across all continents.
- Our factory certified technicians are waterjet enthusiasts.
- Our team knows the details of your equipment inside and out, and how to keep it running night and day.
- Service Matters.

Trainings

- Flow offers a wide array of training options that match these needs.
- Whether it's online, in our facility, or yours, Flow offers customized programs structured to increase your productivity and make you successful.



ACCELERATE your productivity

The Mach 500 is a highly productive waterjet system.

It provides you with high acceleration and cutting speed without compromises on accuracy.

SHORTER CYCLE TIMES = INCREASED PRODUCTIVITY

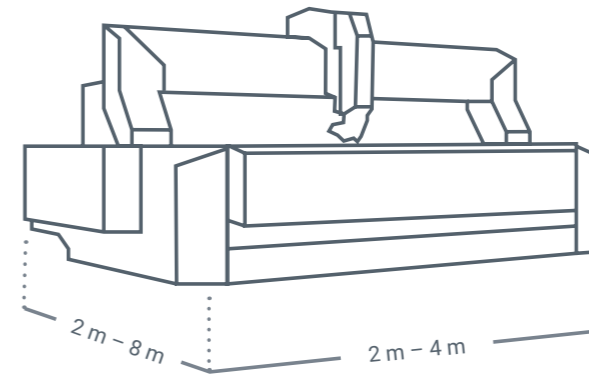
The result: more parts, faster. **Make more.**

ProTip ✓

The speed of a waterjet will tell you how fast you can cut in a straight line, but in the real world, parts are not just straight. The ability of your waterjet to get up to speed and around curves quickly is the most important factor in determining how quickly you will end up with cut parts in your hands.

Make more with the Mach 500.

Mach 500 make more.



SPECIFICATIONS & CONFIGURATIONS

Linear Straightness Accuracy ²	± 0.04 mm/m
Rapid Traverse Maximum	17.8 m/min
Acceleration ¹	0.1 g
Repeatability ²	± 0.025 mm/m
Ballbar Circularity ²	± 0.064 mm
Z-Axis Travel	305 mm, 610 mm
Base (Y)	2 m, 3 m, 4 m, 6 m, 8 m
Bridge (X)	2 m, 3 m, 4 m

ANCILLARY OPTIONS & ACCESSORIES

Compass™ 5 Axis Contour Follower
 UltraPierce™ Vacuum Assist
 Dynamic Contour Follower®
 Spray Containment Shields
 Laser Edge Finder
 Abrasive Removal System
 Stainless Steel Catcher Tank
 Water Level Control
 Clamping Kit
 Dual Hopper
 Dual Pumps
 Dual Z-Axis
 Multi Head Spreader Bar

¹ Systems with multi-head spreader bar(s) just 0.05 g

² Systems with base (Y) 4 meters or shorter

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