

# Direct drive technology



### Maximum efficiency with minimum downtime

OMAX Corporation's advanced direct drive technology delivers the most nozzle horsepower, or Jet Power, of any waterjet pump. This translates to more production and less downtime. OMAX direct drive pumps provide:

- Faster and smoother cutting due to reduced pressure ripples
- Maximized operating cycles thanks to advanced hardened materials
- Simplified maintenance thanks to service-friendly design
- Reduced user involvement through automation and advanced pump monitoring

All this combined makes OMAX direct drive pumps the most efficient and cost-effective waterjet pump technology in the world.

#### EnduroMAX technology

System uptime is a critical requirement for waterjet operators. EnduroMAX® technology:

- Extends pump life
- Reduces maintenance cycles
- Simplifies maintenance
- Reduces downtime





### Factory tested, field proven

All EnduroMAX direct drive pumps are extensively tested at the factory, first in a standalone testing rig and then connected to your machine for a final test. With thousands of machines installed and operating worldwide, our direct drive pump technology is the premier abrasive waterjet pump solution for maximum productivity.

#### **Enhanced technology**

Variable Frequency Drive technology:

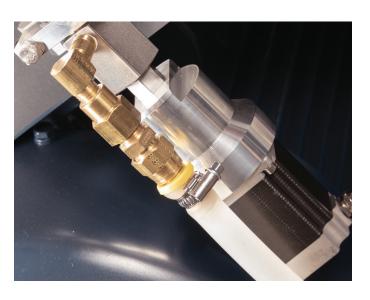
- Maximizes production potential
- Provides substantial energy savings by altering motor speed based on demand
- Provides precise pressure control by operating throughout a wide range of motor RPMs
- Reduces wear and tear on motor and pump crankcase resulting in limited maintenance costs by varying the speed and torque of the electric motor
- Flexibility to adapt to specific needs and requirements



#### **Pump specifications**

	EnduroMAX 5-series³			EnduroMAX <sup>4</sup>				MAXIEM			GlobalMAX		
Motor power	30 hp	40 hp	50 hp	30 hp	40 hp	50 hp	100 hp	20 hp	30 hp	40 hp	10 hp	20 hp	30 hp
Maximum jet power¹	25.5 hp	34.0 hp	42.5 hp	25.5 hp	34.0 hp	42.5 hp	85 hp	17 hp	25.5 hp	34 hp	7 hp	17 hp	25.5 hp
Output pressure	4138 bar (60,000 psi)			4138 bar (60,000 psi)				3447 bar (50,000 psi)			2069 bar (30,000 psi)	3103 bar (45,000 psi)	
Orifice and flow rate <sup>2</sup>	0.012"/0.67 gpm	0.014"/0.92 gpm	0.016"/1.20 gpm	0.012"/0.67 gpm	0.014"/0.92 gpm	0.016"/1.20 gpm	0.022"/2.25 gpm	0.011"/0.52 gpm	0.014"/0.84 gpm	0.015"/0.96 gpm	0.011"/0.40 gpm	0.012"/0.62 gpm	0.015"/0.96 gpm

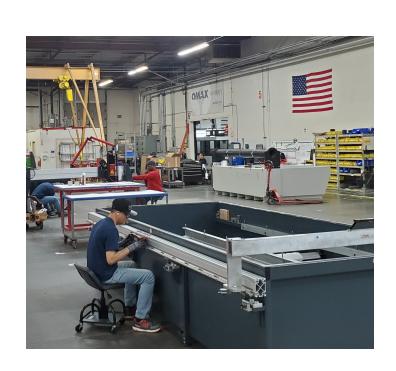
- 1 Jet Power is directly proportional to the water pressure at the nozzle times the volume flow rate of the waterjet stream.
- 2 Recommended maximum orifice size. Smaller orifice sizes have a corresponding lower flow rate.
- 3 EnduroMAX 5-Series pumps are only available on OptiMAX JetMachining Centers.
- 4 EnduroMAX pumps are standard on all OMAX JetMachining Centers and optional on MAXIEM® systems.
- Specifications subject to change without notice.



#### 5-Series: beyond direct drive

Developed alongside the OptiMAX® JetMachining Center, the EnduroMAX 5-Series takes all the benefits of the previous generation of EnduroMAX and dials them up. The motorized adjustable dump orifice and complete software control:

- Further reduces operator involvement
- Automatically adjusts pressure settings
- Reduces fluctuations
- Extends pump life
- Reduces operator dependency
- Maximizes production



## World-class service, support and innovation for advanced abrasive waterjet systems

OMAX, part of Hypertherm Associates, sets the standard for service and support in the waterjet machine tool industry. It starts with a rigorous certification program at OMAX in Kent, Washington where OMAX direct and distributor technicians are trained to install, operate and maintain OMAX abrasive waterjet systems. OMAX engineers continue to innovate technology for abrasive waterjet machining, from proven 4th generation pump designs to cutting edge drive systems with micron-level accuracy. Customers have a number of contact options to suit their schedules and needs, including an extensive library of online resources. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

To see how an OMAX abrasive waterjet system can save you time and money, call or visit our website and request a free part analysis today.



PLASMA | LASER | WATERJET | AUTOMATION | SOFTWARE | CONSUMABLES







For more information, visit: www.omax.com

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