TCM Contract # 2021-118

PURCHASE AGREEMENT

University: University of North Texas

Vendor: Omax Corporation

Product(s): Water Jet Cutting Equipment per RFP752-21-248629DH see Exhibit A"

Price: \$234,496.00

Delivery: Delivery shall be FOB UNT Mechanical Engineering Lab Discovery Park

Warranty: 1-year warranty

<u>Payment</u>. In accordance with Chapter 2251 of the Texas Gov't Code: (a) payment shall be made no later than thirty days following the later of (i) delivery of the goods or completion of the services and (ii) delivery of an invoice to University; and (b) interest, if any, on past due payments shall accrue and be paid at the maximum rate allowed by law. Vendor must be in good standing, not indebted to the State of Texas, and current on all taxes owed to the State of Texas for payment to occur. Invoices and any required supporting documents must be presented to: University of North Texas System – Business Service Center, 1112 Dallas Dr. Ste. 4000, Denton, TX 76205.

<u>Eligibility to Receive Payment</u>. By entering into and performing under this Agreement, Vendor certifies that under Section 231.006 of the Texas Family Code and under Section 2155.004 of the Texas Gov't Code, it is not ineligible to receive the specified payment and acknowledges that this Agreement may be terminated and payment may be withheld if this certification is inaccurate.

<u>Tax Exempt</u>. University is exempt from the payment of taxes and will provide documentation confirming its tax exempt status.

Breach of Contract Claims Against University. Chapter 2260 of the Texas Gov't Code establishes a dispute resolution process for contracts involving goods, services, and certain types of projects. To the extent that Chapter 2260, Texas Gov't Code, is applicable to this Agreement and is not preempted by other applicable law, the dispute resolution process provided for in Chapter 2260 and the related rules adopted by the Texas Attorney General pursuant to Chapter 2260, shall be used by the parties to attempt to resolve any claim for breach of contract against University that cannot be resolved in the ordinary course of business.

Governing Law and Venue. This Agreement shall be construed and enforced under and in accordance with the laws of the State of Texas. Venue for any suit filed against University shall be subject to the mandatory venue statute set forth in § 105.151 of the Texas Education Code.

No Excess Obligations. In the event this Agreement spans multiple fiscal years, University's continuing performance under this Agreement is contingent upon the appropriation of funds to fulfill the requirements of the contract by the Texas State Legislature. If the Legislature fails to appropriate or allot the necessary funds, or if such appropriation is reduced by the veto of the Governor or by any means provided in the appropriations act, University shall issue written notice to Vendor that University may terminate the Agreement without further duty or obligation.

<u>Public Information</u>. University shall release information to the extent required by the Texas Public Information Act and other applicable law. If requested, Vendor shall make public information available to University in an electronic format.

Required Posting of Contracts on Website. Vendor acknowledges and agrees that University is required by Section 2261.253 of the Texas Gov't Code to post each contract it enters into for the purchase of goods or services from a private vendor on its Internet website, including any terms and conditions otherwise marked confidential and/or proprietary.

<u>Israel Non-Boycott Verification</u>. Pursuant to Texas Gov't Code Section 2270.002, Vendor hereby represents, verifies, and warrants that it does not boycott Israel and will not boycott Israel during the term of the Agreement.

OMAX CORPORATION

By:

Name:

Title:

Date: 5/21/2021

UNIVERSITY OF NORTH TEXAS

By:
Name
Title:

Date: May 21, 2021

EXHIBIT A

MAXIEM JetMachining® Center Proposal Summary

Salesperson Info

Customer Info

Proposal # 37470

University of North Texas

April 19, 2021

Omax

Mechanical Engineering Lab J105

- UNT Discovery Park / 3940 N

Elm St

21409 72nd Ave S

Kent, WA 98032 Phone: 253-796-3481

Denton, TX 76201

Proposal Summary

Description	Model Number	Qty	Price (ea.)	Price
MAXIEM JetMachining Center	1530	1		
MAXIEM M3050V	MAXIEM M3050V	1		
MAXJET 5i Nozzle .014"	306895-14	1		
Basic Start-Up Kit	311669	1		
Toolbox	310509	1		
ARTON BOOK BOOK BOOK BOOK BOOK BOOK BOOK BO		Subtotal		\$153,375.00
3 Axis Cutting Head	310673	1	Included	\$0.00
WRS Consumables Kit, Closed Loop System	311056	1	\$2,050.00	\$2,050.00
Variable Speed Solids Removal System (VS-SRS)	311948	1	\$12,950.00	\$12,950.00
MAXIEM Reverse Osmosis (NF) System, 115V	311754	1	\$8,000.00	\$8,000.00
Water Recycle System w/60,000 BTU/HR [3 Ton] Chiller	320225-03	1	\$39,500.00	\$39,500.00
and Laminar Filter, Single Pump				
Water Level Control	310300	1	\$6,300.00	\$6,300.00
Bulk Abrasive Hopper 600 lb.	303093	1	\$5,096.00	\$5,096.00
OMAX Premium Software	317987	1	\$12,000.00	\$12,000.00
Kit, Nozzle Spares MAXJET 5i	306869-14	1	\$2,625.00	\$2,625.00
Basic Pump Spares Kit [MAXIEM]	303283	1	\$2,550.00	\$2,550.00
EnduroMAX Upgrade	TBD	1	\$20,000.00	\$20,000.00
Drill Unit	311992	1	\$7,350.00	\$7,350.00
		Addition	al	
Freight to Denton, TX		1	\$3500.00	\$3,500.00
2 pump rebuilds, labor only		2	\$2500.00	\$5,000.00
One ton of Barton Abrasive		1	\$0.00	\$0.00
		Subtotal	(USD)	\$280,296.00
Discounts				
Educational Discount		1	\$-45800.00	\$-45,800.00
		Grand T	ntal (USD)	\$234 496 00



OMAX Background: OMAX has been in business over 28 years building abrasive waterjets. This is and always has been our sole focus. We are the only waterjet company to design, engineer, and build the waterjet pump, waterjet table, and waterjet software all in one location in the USA. Our offices are in Kent, WA. We are a proud USA supplier, top to bottom. Many of our competitors manufacture the tables and other components overseas or integrate third party pumps and software.

OMAX Organizational Structure: Our company is privately owned. Two engineers founded our business. Our business continues with this engineering focus. Some of our competitors are owned by hedge funds and are currently for sale.

OMAX Service: OMAX stands behind its products. We have over 5,000 waterjets in service all over the world. Our US Service team has over 50 people dedicated to answer phones, respond to emails, and visit customers. Our service techs are factory certified and OMAX employees. Our support services are open 7 days a week. Our service techs are strategically located throughout the USA. We have two service techs in the state of Texas. They can provide local service.

OMAX Software: The OMAX software suite is the most advanced waterjet cutting software on the market. We offer free software upgrades for life. Our customer portal has eLearning videos to show users how the software works. Our factory week long training class is free for the first year. Our software package includes CAM capability along with easy importing of 72 different file types. Additionally, OMAX offers live virtual training on our software and machine operation/maintenance.

OMAX Training: The MAXIEM 1530 waterjet includes a full day of operator training at your site. Our service tech will not leave until you are comfortable, confident, and safe with the operation of the MAXIEM 1530 waterjet.

University of North Texas

Request for Proposal

OMAX Compliance Statement

RFP no: RFP752-21-248629DH

Waterjet Cutting Equipment - UNT Mechanical Engineering

Proposal Submittal Deadline: April 21, 2021 2:00 pm local time

Item	Comply	Comment
1.1 UNTS System Description	Yes	Understand and Acknowledge
1.2 Background	Yes	Understand and Acknowledge
1.3 Group Purchase Authority	Yes	Understand and Acknowledge
2.1 Submittal Deadline	Yes	Understand and Acknowledge
2.2 UNTS Contact Person	Yes	Understand and Acknowledge
2.3 Criteria for Selection	Yes	Understand and Acknowledge
2.4 Schedule of Key Events	Yes	Understand and Acknowledge
2.5 Historically Underutilized Businesses	Yes	Understand and Acknowledge
3.1 Number of Copies	Yes	Understand and Acknowledge, one original hard copy and one copy on flash drive provided.
3.2 Submittal	Yes	Understand and Acknowledge
3.3 Proposal Validity Period	Yes	Proposal is valid for 180 days.
3.4 Terms and Conditions	Yes	Understand and Acknowledge
3.5 Submittal Checklist	Yes	All signed and completed documents are included.
4.1 Term.	Yes	Warranty is for one year. OMAX can extend the warranty, but in our experience the MAXIEM waterjet runs well with high reliability. The University is usually best served with a single year of warranty from a budget perspective. OMAX is happy to provide an extended warranty if the University would prefer. We show a full three year warranty as an option along with a full 5 year warranty.
4.2 Exceptions	Yes	Understand and Acknowledge
5.1 Vendor Minimum Requirements/Qualifications	Yes	Understand and Acknowledge
• Work area - 60"X 120"	Exceed	MAXIEM 1530 waterjet has a 62" x 120" cutting envelope. Table can accept 68" x 146" work piece.
Three-sided cutting tank	Yes	When the bridge is in the home location, 3 sides of the tank are open for loading
Integrated fork lift tubes	Yes	The bottom of the tank acts as a platform for fork lifts, no need to constrict with fork tubes
No cantilever arm system	Yes	MAXIEM 1530 is a Bridge machine, no cantilever arm system
• Full 360 degree bellows on all axes	Exceed	Intelli-Trac drive system is only drive system designed specifically for waterjet service. This liner drive system does not require 360 degree bellows as it is designed to operate in abrasive environments. It is the most robust and effective drive system in the waterjet industry.
• Z axis travel to 811 with 10" clearance	Exceed	Z-axis travel is 12"
• Maximum cutting speed: 2100 1PM	No	Cutting speed of 2100 ipm will never be used. Even speeds of 500 ipm are rarely used as waterjet can't cut real material this fast. The MAXIEM 1530 will cut ALL metal and other material faster than the MultiCAM 3000. Our software uses empiricial data to drive our speeds, not theory. The OMAX intelliMAX software is far superior as it is waterjet only software. This machine will cut faster than the recommended machine on the specification.

		· · · · · · · · · · · · · · · · · · ·
• Rapid traverse: 1500 1PM	No	MAXIEM 1530 traverse speed is 500 ipm. Traversing at 1500 ipm can be a personnel hazard and we don't recommend travel of those speeds. To put this in perspective the time to travel the longest distance of the tank takes the MAXIEM waterjet 14 seconds. Going faster to 1500 ipm drops the full traverse time to 5 seconds. This is not a meaningful time savings and is more dangerous to the operator.
• Repeatability: 00000+/- 0.001"	Yes	The MAXIEM 1530 has a repeatability of 0.001"
Positional displacement accuracy:/- 0.005" over 10 feet	Exceed	The MAXIEM 1530 linear positional accuracy is +- 0.002" over 10 feet. That is twice as good as the specification
Efficiency greater than 97%	Yes	Understand and Acknowledge
Drives: Brush-less AC servo motors	Yes	Understand and Acknowledge
Drive system X and Y-axis: Linear rack and Pinion	Exceed	Rack and Pinion drives are not the best fit for the waterjet environment. The rack and pinion drives have poor reliability in an abrasive and wet environment. The MAXIEM linear drive system is made for this enviroment and is very robust. The rack and pinion drives tend to have a high degree of maintenance issues after operating in an abrasive environment.
Drive system Z- Axis: Precision ball screw	Yes	Understand and Acknowledge
X Drives- Mounted to gantry of 10 m thick aluminum on dual bearing rails	Exceed	Intelli-Trac drive system is mounted differently from Rack and Pinion. It is separated from the top of the tank to eliminate temperature effects.
• 25 mm linear bearing profile rails with stainless steel spring strip on the X and Y axes	Exceed	Intelli-Trac drive system is designed differently from Rack and Pinion. A magnetic tape provides 1 micron position feedback. This is far superior and more accurate than any other drive system. This is why the MAXIEM can hold much tighter tolerances.
Y Drive- Dual sided drives	Yes	Understand and Acknowledge
Standard motorized Z drive	Yes	Understand and Acknowledge
• Lowest possible noise level	Yes	Understand and Acknowledge. The MAXIEM 1530 with water level control is significantly quieter than the MultiCAM offering. The primary difference is the pump. An intensifier pump is loud while the EnduroMAX direct drive pump is much quieter. Your operators will appreciate the noise level of the MAXIEM waterjet. Any intensifier will be loud.
Four bearing packs per axis	Exceed	Intelli-Trac drive system is designed differently from Rack and Pinion. The bearing packs require maintenance while the Intelli-Trac system is maintenance free. Big advantage when dealing with abrasive systems.
• 4000 pounds load capacity per bearing	Exceed	Intelli-Trac drive system is designed differently from Rack and Pinion. The load capacity is not based on a bearing system. We have over 2,000 MAXIEM machines in operation cutting a wide variety of material including 10" steel. Loading not an issue.
Alpha precision planetary gearbox	Exceed	Intelli-Trac drive system is designed differently from Rack and Pinion. Drive system has a drive wheel on the bottom of a rail. A flexure plate holds the two drive wheels on top of the rail. This system is robust and accurate.
Integrated PC with 19" LCD monitor and Windows 7 operating system	Exceed	PC with 21" LCD Monitor and Windows 10. Windows 7 is not secure a secure operating environment when compared to Windows 10.
• Intel 1.6-GHz CPU	Yes	Understand and Acknowledge
• 1-GB RAM	Yes	Understand and Acknowledge
• 160-GB hard drive	Yes	Understand and Acknowledge
Standard Ethernet interface with DNC file system and unlimited file size transfer capabilities	Yes	Understand and Acknowledge
Pneumatic drill	Yes	Pneumatic Drill is included in our package
		r ileumatic Di il is iliciadea ili dai backage

• 30 hp intensifier pump	Yes	A 30 HP direct drive pump is included in our quote. An EnduroMAX direct drive pump is far superior to an intensifier. It is more efficient and will drive a larger orifice than a 30 Hp intensifier. Intervals between maintenance cycles are longer for a direct drive pump and the maintenance itself is easier, faster, and parts cost less. Additionally the noise from a direct drive pump is much less than an intensifier.
• 60,000 psi	Yes	Understand and Acknowledge
Pump easily rebuilt	Yes	Understand and Acknowledge
Whip- High pressure stainless steel tubing running straight from the pump to the cutting head	Yes	Understand and Acknowledge
Rack and pinions-AGMA 9 rated with a normal deviation of+/- 0.0015" from tooth to tooth	Exceed	Intelli-Trac drive system is designed differently from Rack and Pinion. A tooth system is not a good fit for abrasive waterjet applications. Our solution does not have teeth and rides on a rail. Much more robust for the environment.
Chiller	Yes	Understand and Acknowledge
Advanced CNC interface	Yes	Understand and Acknowledge
Linear, circular, helical and smooth curve interpolation	Yes	Understand and Acknowledge
• 64-bit motion control algorithms• 1000-line look ahead	Yes	The OMAX software looks ahead at the entire part, not just 1000 lines. The MultiCAM software converts G code to windows. The OMAX software is resident in Windows and looks at the entire part before cutting. This is much better than a G code converter loooking at 1000 lines at a time.
Built -in self-testing and voltage protection12-Mb memory for file size transfer capabilities	Yes	Understand and Acknowledge
Industry-standard Mand G codes	Exceed	OMAX IntelliMAX software is designed for the Windows environment and is much more powerful than industry standard M and G codes. OMAX can convert these codes, but using a dxf file directly in our Windows software is more common.
Multiple home positions	Yes	Understand and Acknowledge
Proximity restart	Yes	Understand and Acknowledge
Tool compensation	Yes	Understand and Acknowledge
Abrasive removal system	Yes	A variable speed solids removal system is included
Fast switching between pure water and abrasive cutting	Yes	Understand and Acknowledge
Bulk hopper should hold 6.5 cubic feet (approximately 500 pounds) of abrasive	Exceed	OMAX is supplying a 600 pound hopper
Water recycling system	Yes	A water recycling system is included in our proposal
Reverse osmosis system	Yes	A Reverse Osmosis system is included in our proposal
Software for water jet	Yes	Included is the OMAX IntelliMAX software package including OMAX Layout and OMAX Make, along with OMAX interactive reference and IntelliVISOR
A built-in shape library	Yes	Understand and Acknowledge
First two pump rebuilds free labor only	Yes	Understand and Acknowledge
- i not two pump renulius free labor only		
A service technician, must respond within 4 hours of a service call	Yes	Understand and Acknowledge
• A service technician, must respond within 4 hours of a		Understand and Acknowledge Included in our offer is a service technician to commission the machine
A service technician, must respond within 4 hours of a service call	Yes	Understand and Acknowledge Included in our offer is a service technician to commission the machine and complete the training on your site. OMAX designs and manufactures the pump, table, and software all
A service technician, must respond within 4 hours of a service call Training provides all training onsite	Yes Yes	Understand and Acknowledge Included in our offer is a service technician to commission the machine and complete the training on your site. OMAX designs and manufactures the pump, table, and software all from our location in Kent, WA. MultiCAM buys the pump and software from third parties. OMAX is focused on abrasive waterjets only.
A service technician, must respond within 4 hours of a service call Training provides all training onsite Manufactured in USA	Yes Yes Yes	Understand and Acknowledge Included in our offer is a service technician to commission the machine and complete the training on your site. OMAX designs and manufactures the pump, table, and software all from our location in Kent, WA. MultiCAM buys the pump and software from third parties. OMAX is focused on abrasive waterjets only. MuliCAM is primarily a plasma company with a small waterjet base.
A service technician, must respond within 4 hours of a service call Training provides all training onsite Manufactured in USA 5.2 Specifications/Scope of Work/Service Requirements	Yes Yes Yes	Understand and Acknowledge Included in our offer is a service technician to commission the machine and complete the training on your site. OMAX designs and manufactures the pump, table, and software all from our location in Kent, WA. MultiCAM buys the pump and software from third parties. OMAX is focused on abrasive waterjets only. MuliCAM is primarily a plasma company with a small waterjet base. OMAX has two service technicians located in Texas.

1.2 Inquiries and Interpretations	Yes	Understand and Acknowledge
1.3 Public Information	Yes	Understand and Acknowledge
1.4 Type of Agreement	Yes	Understand and Acknowledge
1.5 Proposal Evaluation Process	Yes	Understand and Acknowledge
1.6 Proposer's Acceptance of Evaluation Methodology	Yes	Understand and Acknowledge
1.7 Solicitation for Proposal and Proposal Preparation Costs	Yes	Understand and Acknowledge
1.8 Proposal Requirements and General Instructions	Yes	Understand and Acknowledge
1.9 Execution of Offer	Yes	Understand and Acknowledge
1.10 Pricing and Delivery Schedule	Yes	Understand and Acknowledge
1.11 Proposer's General Questionnaire	Yes	Understand and Acknowledge
1.12 Addenda Checklist	Yes	Understand and Acknowledge
1.13 Submittal	Yes	Understand and Acknowledge
1.14 Page Size, Binders, and Dividers	Yes	Understand and Acknowledge
1.15 Table of Contents	Yes	Understand and Acknowledge
1.16 Pagination	Yes	Understand and Acknowledge
Section 2: Execution of Offer	Yes	Understand and Acknowledge
Section 3: Proposer's General Questionnaire	Yes	Understand and Acknowledge
Section 4: Addenda Checklist	Yes	Understand and Acknowledge
SERVICE AGREEMENT	Yes	Understand and Acknowledge
XHIBIT "A"	Yes	Understand and Acknowledge
SCOPE OF SERVICES	Yes	Understand and Acknowledge

MAXIEM JetMachining® Center Proposal Summary

Salesperson Info

Customer Info

Proposal # 37470

Omax

University of North Texas

April 19, 2021

Mechanical Engineering Lab J105

- UNT Discovery Park / 3940 N

Elm St

21409 72nd Ave S

Denton, TX 76201

Kent, WA 98032 Phone: 253-796-3481

Proposal Summary

Description	Model Number	Qty	Price (ea.)	Price
MAXIEM JetMachining Center	1530	1		
MAXIEM M3050V	MAXIEM M3050V	1		
MAXJET 5i Nozzle .014"	306895-14	1		
Basic Start-Up Kit	311669	1		
Γοοlbox	310509	1		
Have the beginning to the factor		Subtot	al	\$153,375.00
3 Axis Cutting Head	310673	1	Included	\$0.00
NRS Consumables Kit, Closed Loop System	311056	1	\$2,050.00	\$2,050.00
Variable Speed Solids Removal System (VS-SRS)	311948	1	\$12,950.00	\$12,950.00
MAXIEM Reverse Osmosis (NF) System, 115V	311754	1	\$8,000.00	\$8,000.00
Nater Recycle System w/60,000 BTU/HR [3 Ton] Chille	er 320225-03	1	\$39,500.00	\$39,500.00
and Laminar Filter, Single Pump				
Water Level Control	310300	1	\$6,300.00	\$6,300.00
Bulk Abrasive Hopper 600 lb.	303093	1	\$5,096.00	\$5,096.00
DMAX Premium Software	317987	1	\$12,000.00	\$12,000.00
Kit, Nozzle Spares MAXJET 5i	306869-14	1	\$2,625.00	\$2,625.00
Basic Pump Spares Kit (MAXIEM)	303283	'n	\$2,550.00	\$2,550.00
EnduroMAX Upgrade	TBD	1	\$20,000.00	\$20,000.00
Orill Unit	311992	1	\$7,350.00	\$7,350.00
		Additio	inal	
Freight to Denton, TX		1	\$3500.00	\$3,500.00
2 pump rebuilds, labor only		2	\$2500.00	\$5,000.00
One ton of Barton Abrasive		1	\$0.00	\$0.00
	A STATE OF THE STA	Subtot	al (USD)	\$280,296.00
Discounts				
Educational Discount		1	\$-45800.00	\$-45,800.00
		Grand	Total (USD)	\$234,496,00

DocuSign Envelope ID: 43B7D0BE-9ED0-4B91-9E90-1A9F4D12C694

Description	Model Number	Oty	Price (ea.)	Price
Five year parts warranty		1	\$24000.00	\$24,000.00
Three year parts warranty		1	\$12000.00	\$12,000.00
		Subtota		\$36,000.00

MAXIEM JetMachining® Center Proposal Summary

Salesperson Info Customer Info Proposal # 37470

University of North Texas April 19, 2021

Mechanical Engineering Lab J105
- UNT Discovery Park / 3940 N

Flm St

21409 72nd Ave S Denton, TX 76201

Kent, WA 98032 Phone: 253-796-3481

Omax

Proposal Summary

Description	Model Number	Qty	Price (ea.)	Price
MAXIEM JetMachining Center	1530	1	i rice (ea.)	FIICE
MAXIEM M3050V	MAXIEM M3050V	•		
		1		
MAXJET 5i Nozzle .014"	306895-14	1		
Basic Start-Up Kit	311669	1		
Toolbox	310509	1		
		Subtotal		\$153,375.00
3 Axis Cutting Head	310673	1	Included	\$0.00
WRS Consumables Kit, Closed Loop System	311056	1	\$2,050.00	\$2,050,00
Variable Speed Solids Removal System (VS-SRS)	311948	1	\$12,950.00	\$12,950.00
MAXIEM Reverse Osmosis (NF) System, 115V	311754	1	\$8,000.00	\$8,000.00
Water Recycle System w/60,000 BTU/HR [3 Ton] Chiller	320225-03	1	\$39,500.00	\$39,500.00
and Laminar Filter, Single Pump				
Water Level Control	310300	1	\$6,300.00	\$6,300.00
Bulk Abrasive Hopper 600 lb.	303093	1	\$5,096.00	\$5,096.00
OMAX Premium Software	317987	1	\$12,000.00	\$12,000.00
Kit, Nozzle Spares MAXJET 5i	306869-14	1	\$2,625.00	\$2,625.00
Basic Pump Spares Kit [MAXIEM]	303283	1	\$2,550.00	\$2,550.00
EnduroMAX Upgrade	TBD	1	\$20,000.00	\$20,000.00
Drill Unit	311992	1	\$7,350.00	\$7,350.00
		Addition	al	
Freight to Denton, TX		1	\$3500.00	\$3,500,00
2 pump rebuilds, labor only		2	\$2500.00	\$5,000.00
One ton of Barton Abrasive		1	\$0.00	\$0.00
		Subtotal	(USD)	\$280,296.00
Discounts				
Educational Discount		1	\$-45800.00	\$-45,800.00
		Grand T	otal (USD)	\$234,496.00
·	·	·		

Options and Accessories

Description	Model Number	Qty	Price (ea.)	Price
Five year parts warranty		1	\$24000.00	\$24,000.00
Three year parts warranty		1	\$12000.00	\$12,000.00
		Subtota		\$36,000.00

ADVANCED ABRASIVE WATERJET ACCESSORIES



BULK ABRASIVE DELIVERY SYSTEM



OMAX Bulk Abrasive Delivery System

The OMAX Bulk Abrasive Delivery System improves production times by automating garnet delivery to the nozzle. Available in multiple sizes, the Bulk Abrasive Delivery System uses pneumatic pressure to automatically transport garnet from an external bulk abrasive hopper to the cutting head hopper. The Bulk Abrasive Delivery System can extend your cutting times from under an hour to over a day. The 100lb and 600lb hoppers are on wheels for easy positioning, while the 2000lb hopper is stationary and can hold a full ton of garnet for high production cutting environments.

FEATURES & BENEFITS

- Heavy-duty steel construction
- Automatically feeds the 25lb (15lb on MAXIEM) garnet hopper located next to the cutting head
- Integrates with OMAX Intelli-VISOR® System Monitoring Package
- Retrofittable to all OMAX and MAXIEM systems

- Supplies garnet for long cuts to prevent delays or material damage
- Can be located up to 20 feet (6 meters) away from the machine
- 600lb Hopper included on OMAX 55100 and larger JetMachining Centers
- Filter screen included with 100lb Hopper

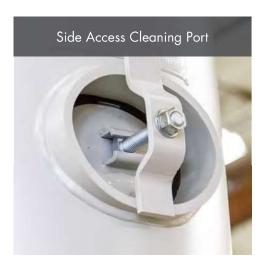




BULK ABRASIVE DELIVERY SYSTEM







	100LB HOPPER	600LB HOPPER	2000LB HOPPER			
HEIGHT 34" (864mm)		54" (1372mm)	82" (2083mm)			
FOOTPRINT	DOTPRINT 20" x 26" (508mm x 661mm) 37" x 37" (940mm x 940mm		38" x 38" (966mm x 966mm)			
MOBILITY	NOBILITY Wheeled Wheeled		Fixed			
MIN. PRESSURE	90 psi (0.62 MPa)					
MAX. PRESSURE		125 psi (0.86 MPa)				
ADDITIONAL CUTTING TIME ¹	1 hour 40 minutes	10 hours	33 hours 20 minutes			

Based on an abrasive flow rate of 1.0lb/min and continuous cutting. Different flow rates and system pauses will vary time values.

	170L HOPPER			
HEIGHT	54" (1372mm)			
FOOTPRINT	37" x 37" (940mm x 940mm)			
MOBILITY	Wheeled			
MIN. PRESSURE	90 psi (0.62 MPa)			
MAX. PRESSURE	150 psi (1.03 MPa)			
ADDITIONAL CUTTING TIME ¹	10 hours			

CE-RATED 170-LITER HOPPER

The 170-Liter Hopper answers the need for installations requiring CE-rated equipment. Comprable to the 600LB Hopper, the 170-Liter Hopper meets all the CE requirements while delivering the same performance as the 600LB Hopper.

ABOUT OMAX

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. 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. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

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



Specifications subject to change without notice. 600051A @ OMAX Corporation July 2015

TEL 1-253-872-2300 / 1-800-838-0343 FAX 1-253-872-6190

OMAX CORPORATION 21409 72nd Avenue South Kent, WA 98032









Global leadership in

ADVANCED ABRASIVE WATERJET TECHNOLOGY



INNOVATION WITHOUT LIMITS



extremely fast, highly precise multi-axis abrasive waterjet solutions that cut virtually any type of material and thickness.

Since 1993, our diverse array of table sizes, efficient direct drive pumps, intuitive software, retrofittable accessories and complete customer care has provided manufacturers across all industry segments with everything they need to operate highly profitable and productive businesses in a competitive, continuously evolving marketplace.

We continuously develop next generation abrasive waterjet solutions to create new opportunities, improve productivity and increase profitability to help our customers grow their businesses.

AT OMAX, YOUR SUCCESS IS OUR SUCCESS.

MADE IN THE USA

We offer the most comprehensive range of advanced abrasive waterjet solutions in the industry through our OMAX and MAXIEM product lines. These machines and their complementary accessories are made at our manufacturing campus in Kent, Washington.

OMAX JETMACHINING® CENTERS

Premium High-Speed, High-Precision Solutions

Our OMAX Jet/Machining Centers offer the ultimate in precision machining to quickly and accurately cut virtually all materials, from stainless and glass to exotic alloys and composites.



MAXIEM® JETMACHINING CENTERS

Versatile High-Performance, Value-Inspired Solutions

Our MAXIEM JetMachining Centers boost productivity in full-scale production fabrication and just-in-time machining applications.

STATE-OF-THE-ART PRODUCTION

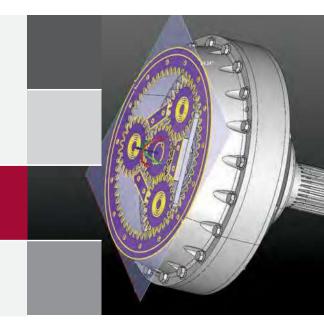
We design, manufacture, assemble and test all of our waterjet solutions at our state-of-the-art manufacturing facility in Kent, Washington. We are able to maximize our production efforts and consistently provide our customers with high-quality products through:

- Multiple machine assembly lines that offer exceptional production capacity,
- Using OMAX abrasive waterjet technology to accurately cut components and provide greater insight into the use of our equipment,
- Advanced technology, such as computerized assembly manuals and tablet devices, which
- allow us to access and print production information in real-time, enabling us to be highly responsive and flexible,
- Pull method of manufacturing establishes lean processes and just-in-time production.

SHAPING THE FUTURE

With the largest in-house waterjet systems research and development team in the world, we continuously advance our technology to meet the diverse and changing needs of the manufacturing industry. It is our investment in research and development that allows us to proactively address machining challenges of the future with innovative and efficient waterjet solutions that support tomorrow's part-production efforts.

- Our multiple technology patents continuously play an important role in new product development, keeping us at the forefront of high-speed, high-precision machining.
- Our expert engineering team, with hundreds of years of combined experience
 in all aspects of waterjet technology, allows us to develop quality, versatile
 products that reduce costs and simplify production for the 21st century and beyond.





With a presence in more than 50 countries, our advanced global support network of domestic and international distributor partners, as well as country-specific technical support teams, put unmatched engineering expertise, applications development, spare part services and comprehensive training in close proximity to all of our customers around the world. As the demand for our waterjet solutions and services continues to grow, so will our comprehensive and highly responsive support system.

CORPORATE BROCHURE 3



A SOLUTION FOR EVERY INDUSTRY AND APPLICATION

Manufacturing challenges vary by industry, material and customer and evolve over time. We work closely with our customers and are committed to providing them with new technology and scalable manufacturing solutions that can optimize any current and future part-processing requirement, whether they run a small job shop cutting traditional metals or a large manufacturing corporation machining exotic alloys.

AEROSPACE

From landing gear to controls to space exploration, our high-precision, multi-axis abrasive waterjets are ideal for the aerospace industry.

- Quickly produce stronger, lighter components
- Easily cut difficulto-machine materials, including exotic alloys, titanium, aluminum and composites, without thermal distortion

ARCHITECTURE

Our abrasive waterjets simplify architectural design and production, from granite countertops and set designs to outdoor facades and signage.

- Simply and accurately cut complex shapes and inlaid patterns
- Machine a wide range of materials, including stone, concrete, ceramics, hard rubber and glass

AUTOMATION

Whether creating an assembly line manufacturing system or automating the waterjet process, our abrasivejet solutions are the perfect choice.

- Save time, labor and material using nesting features and common line cutting
- Increase efficiency and uptime by staying informed of cutting operations, even from a remote location

EDUCATION

Whether for training or research, our waterjets serve as learning tools for high school, trade school, college and university engineering and physics labs.

- Fast setup and intuitive software are perfect for the rapid prototyping of experimental concepts and designs
- Range of table sizes, including small-footprint machines ideal for smaller facilities
- Expand research potential with micromachining

















ENERGY

Our precision-focused solutions provide energy-based applications, whether oil and gas exploration or wind power generation, with a competitive advantage.

- Cut tough materials such as composites and laminates with no delamination
- Advanced 3D capabilities allow for easy tube and pipe welding prep

GOVERNMENT

Our waterjet systems provide local and national governments, from fire departments to military units, with flexible solutions that save time and money.

- Easy-to-transport and operate mobile machines for rapid field repair
- Quickly machine a wide range of materials from tough metals to exotic alloys

MEDICAL

Our waterjet solutions provide the precision required for medical manufacturing applications, from orthopaedic devices to surgical instruments.

- Reduce cycle times with tight tolerances and fast cutting speeds
- Produce medical components, from titanium to stainless steel, from computer-designed patterns

TRANSPORTATION

From engine components for racecars to suspension brackets to gears for vehicles or trains, our waterjets offer advanced solutions to the transportation industry.

- Cut precision parts from a range of materials, including aluminum, steel and carbon fiber
- Reduce cycle times with no complex tooling changes
- Maximize productivity by stacking sheets and nesting parts

CORPORATE BROCHURE 5

A COMPETITIVE EDGE

VERSATILITY LEADS TO PROFITABILITY

Globalization is quickly changing the world and opening up new markets. At the same time, increasing pressure to shorten production cycles and control costs makes competition tougher than ever. Our OMAX and MAXIEM waterjet systems are available in a broad range of table sizes and pair with a wide variety of accessories to provide the versatility manufacturers need to simplify and optimize their part-production processes. Whether your application involves one-off rapid prototyping or mainstream

just-in-time (J-I-T) manufacturing involving exotic alloys or rubber materials, OMAX gives you the competitive edge you need in the evolving marketplace.



- Produce high-precision parts within thousandths of an inch
- Tilt-A-Jet® provides the fastest taper-free cutting of any waterjet
- A-Jet® provides taper compensation and 5-axis bevel and angled cut capabilities

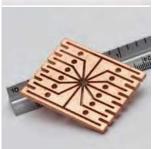
MICROMACHINING

- Cut precision miniature parts from several materials, including advanced composites and exotic metals
- 7/15 Mini MAXJET nozzle with small kerf for micromachining fine details
- A-Jet and Rotary Axis for precision
 5-axis micromachining



J-I-T MANUFACTURING

- Achieve shorter lead times, fast cutting speeds and minimal fixturing
- Maximize material usage by producing parts as needed
- Improve inventory control by producing parts on demand, with quick setup and cutting



RAPID PROTOTYPING

- Easy-to-use software allows for design changes at any time
- Minimal fixturing for quick setups and reduced cycle times
- Cut test parts from one material and production parts from another via a simple software setting change



NET BLANK SHAPES

- Complements existing machine tools for reduced overall production time
- Reduce material waste through nesting
- No heat-affected zones simplify final processing



OFM MACHINING

- Maximize profits by producing custom products with little effort
- Cut parts from various materials, opening up new market opportunities
- Allows for single-point production



EXOTIC MATERIALS

- Cut thick to thin parts from conductive and non-conductive materials
- Reliable piercing of fragile and brittle materials
- Smooth surface finishes without secondary operations





LEADING-EDGE SOLUTIONS

INTELLIGENT SOFTWARE

Our intuitive Intelli-MAX® Software Suite leads the waterjet industry in advanced motion control software. Through proprietary technology, our software makes it easy to create precision parts faster and at a lower cost by automatically optimizing tool paths.

- Easy programming tools allow beginners to make high-quality parts with minimal training.
- Integrated CAD/CAM tools make transitioning from design to production fast and seamless.



- Advanced communication tools keep users up-to-speed on machine operations, even from remote locations via smartphone connectivity.
- Continuous software updates meet the diverse and changing needs of manufacturers.

HIGH-EFFICIENCY PUMPS

Our unique direct drive pump technology makes our abrasive waterjet machines the most efficient on the market. Continuously improving upon the innovative design, our pumps provide double the operating life of other designs, as well as provide faster part processing, lower operating costs and easier maintenance.

- Direct drive pumps deliver more horsepower to the cutting nozzle, while using less electricity than older, inefficient intensifier designs.
- Latest generation pumps retrofit to all of our existing waterjet machines.
- Available in a variety of horsepower options, our direct drive pumps meet any specific manufacturing need.



UNRIVALED SUPPORT

A BETTER WAY TO MANUFACTURE

Not only do we produce the world's most advanced abrasive waterjet technology, our commitment to training, service, applications support and education helps our customers maximize their waterjet machine investment, improve their manufacturing processes and grow their businesses.

TRAINING PROGRAMS

We provide our customers with a wide variety of on-site and online training courses to ensure successful machine operation and lower operating costs.

- Hands-on training programs at our headquarters lead customers through the process of making parts, from drawing to cutting.
- Webinar-based operator training programs give customers basic information on how to successfully get their waterjet machines up and running.
- Customized training programs led by our qualified technicians are available to address individual customer needs.

TECHNICAL SUPPORT

We take a comprehensive approach to providing our customers with the technical support they need to optimize their processes and keep their waterjet machines running as seamlessly as possible.

- Online support site provides customers with 24/7 access to our software, product and training materials.
- Connect with our technical experts via phone, fax, e-mail or on-site.

EDUCATING TOMORROW'S MANUFACTURING LEADERS

Through our mentoring and internship programs that cater to technical-based high school and college students, we introduce abrasive waterjet machining to the next generation of operators as well as expose them to lucrative careers in manufacturing.

CORPORATE BROCHURE 7



WWW.OMAX.COM 1.800.838.0343 +1.253.872.2300

OMAX CORPORATION 21409 72nd Ave South Kent, WA 98032 USA



ADVANCED PUMP TECHNOLOGY







OMAX EnduroMAX Pump

The 4th Generation OMAX EnduroMAX® Pump is the industry leader in high efficiency reliable direct drive pump technology. Designed for long life, the EnduroMAX Pump is capable of over 1,000 hours between pump rebuilds, maximizing machine uptime. The simple yet robust design is specifically engineered to simplify maintenance through innovative features such as independent cylinders. The operator can rebuild each cylinder as needed, further shortening the maintenance cycle. The EnduroMAX Pump is standard on all new OMAX JetMachining® Centers and is retrofittable to earlier OMAX abrasive waterjet machines.

FEATURES

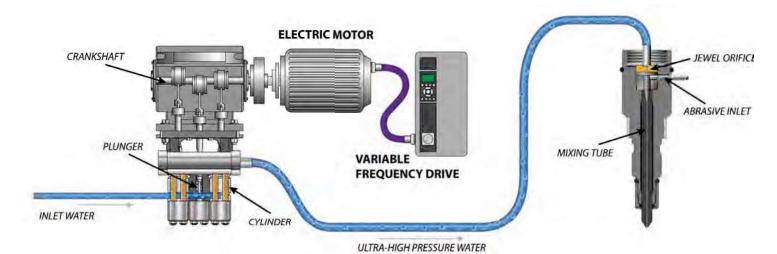
- Simplified, robust pump design.
- Independent cylinders for ease of maintenance
- Highly reliable design capable of over 1000 hours between maintenance
- Variable Frequency Drive reduces startup power consumption and maximizes operating flexibility
- Continuous 60,000 psi operation for faster part processing
- Available in 30 hp, 40 hp, and 50 hp models
- Increased productivity with operating efficiencies up to 85%
- Solid wood lid provides access to the pump and doubles as a workbench

BENEFITS

- 4th Generation direct drive pump technology lowers operating costs and increases pump operating life
- Continuously adjustable VFD technology significantly expands pump capabilities by controlling output flow rate and pressure
- Lower overall energy costs compared to inefficient intensifier pump designs
- EnduroMAX pump technology delivers the highest JetPower in the industry for faster and more efficient cutting
- Environmentally "green" system with quiet and clean operation and low electrical consumption
- Maximizes production with maintenance intervals more than double the industry standard



ENDUROMAX



	MOTOR POWER	MAXIMUM JET POWER ¹	OUTPUT PRESSURE	ORIFICE AND FLOW RATE ²	DIMENSIONS
3060V	30 HP (22 kVV)	25.5 HP (18.7 kW)		0.012" / 0.67 gpm (0.30mm / 2.54 lpm)	
4060V	40 HP (30 kVV)	34.0 HP (25.54 kW)	60,000 psi (4,100 bar)	0.014" / 0.92 gpm (0.36mm / 3.48 lpm)	66" x 36" x 38.5" (1,676mm x 914mm x 978mm)
5060V	50 HP (37 kVV)	42.5 HP (31.5 kW)		0.016" / 1.20 gpm (0.41mm / 4.54 lpm)	

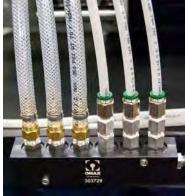
¹JetPower is directly proportional to the water pressure at the nozzle times the volume flow rate of the waterjet stream.

² Recommended maximum orifice size. Smaller orifice sizes have a corresponding lower flow rate.









ENHANCED VFD TECHNOLOGY

By incorporating Variable Frequency Drive technology, the Enduro/MAX pump can maximize production potential and achieve substantial energy savings by altering the speed of the motor based on demand. With the VFD, the Enduro/MAX pump can operate throughout a wide range of motor RPMs, resulting in precise pressure control. Varying the speed and torque of the electric motor also means there is less wear and tear on the motor itself, as well as the pump crankcase, reducing maintenance overhead. Whether adjusting for low pressure piercing of delicate materials or dialing in pump pressure for maintenance longevity, the Enduro/MAX pump with VFD technology provides the user the flexibility to adapt to their specific needs and requirements.

ABOUT OMAX

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. 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. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

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





21409 72nd Avenue South Kent, WA 98032

OMAX CORPORATION

TEL 1-253-872-2300 / 1-800-838-0343 FAX 1-253-872-6190





ACCESSORIES

LAMINAR FILTER



OMAX Laminar Filter

This settling tank efficiently cleans overflow water from the Catcher Tank for required recycling through a Closed Loop System (CLS) or for environmental disposal. When water enters the OMAX Laminar Filter, an ideal gravitational filtering process begins in the unit. The accessory contains angled plates that organize the water flow in a slow moving laminar manner. Small, lightweight particles fall a short distance before contacting the plates, where they stick together and are trapped. Clean water exits to a CLS or a disposal drain while sediment falls to the bottom of the tank, where routine removal is made easy with the integrated sediment pump system.

FEATURES

- Available for both OMAX JetMachining® Centers and MAXIEM JetCutting Centers
- Standard Catcher Tank hose fits directly to the Laminar Filter
- Modules of angled plates create laminar water flow to filter particles
- Submersible sediment pump with ground fault circuit interrupter moves sediment laden water to a Dump Hopper or Catcher Tank
- Custom rake included for pulling sediment to pump during cleaning

BENEFITS

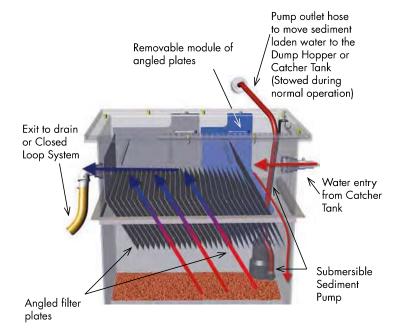
- Water returning to a Closed Loop System is cleaner, extending the life of the CLS filter
- Laminar water flow efficiently removes finer particles from water
- Easier to clean unlike other settling tanks or bag inserts
- Offers a means to comply with regional waste disposal regulations
- Low operating cost: no expensive filters or bags to replace

LAMINAR FILTER





When cleaning the tank, the removable angled plate module can be lifted from the accessory unit. An operator can clean out the sediment from under the stationary angled plates by using the Special Sediment Rake.



Water Filtration Process: Red/blue arrows indicate a slow moving, laminar water flow ideal for the maximum settling of small and lightweight particles

SYSTEM SPECIFICATIONS

- Submersible pump: 120 V, 60 Hz, 1 PH, 1/4 hp or less, thermally protected, cord-connected, with GFCI, UL or CSA
- 10 ft hose and fittings for sending clean water to a Closed Loop System or down the drain
- 15 ft sediment pump hose with Splash Diverter

OPTIONS

• Submersible pump: 220 V, 50 Hz, 1 PH, ¼ hp or less, thermally protected, cord-connected, with PRCD, CE-marked

HIGHLIGHTS

- Convenient hose for directing clean water to a Closed Loop System or drain
- Rust-proof construction
- Complete cleaning system includes Sediment Pump, Splash Diverter, and Special Sediment Rake
- Hose and Splash Diverter are conveniently stored inside the Laminar Filter tank

OMAX CORPORATION 21409 72nd Avenue South Kent, WA 98032 TEL 1-253-872-2300 / 1-800-838-0343 **FAX** 1-253-872-6190

RO





OMAX Reverse Osmosis System

Water quality varies depending on location. In some areas, total dissolved solids (TDS) can be sustained at or below 250 parts per million (ppm), eliminating pre-treatment measures for effective abrasive waterjet operation. However, in areas where the TDS is in excess of 250 ppm, an OMAX Reverse Osmosis System can provide the assurance you need to supply clean, pure water to your high performance abrasive waterjet system. Optimized for waterjet applications and designed to fit between your incoming water supply and the abrasive waterjet pump, the OMAX Reverse Osmosis System works with both OMAX and MAXIEM JetMachining Centers.

FEATURES

- Two types of pre-treatment filters: 5-micron and carbon black
- Includes a digital total dissolved solids meter for quick visual review
- Time clock initiated water softener system capable of a 10 gpm flow rate with 45,000 grains removed
- Sturdy powder-coated steel frame designed for out of the way wall mounting
- $\bullet\,$ Two 4" $\times\,40"$ membranes capable of handling over 4,000 gallons per day at 77 psi

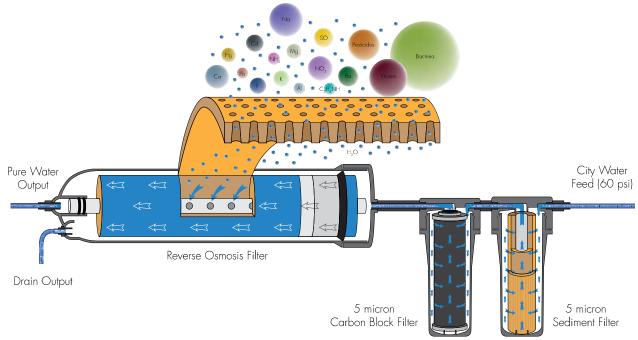
BENEFITS

- Can remove up to 90% of total dissolved solids in water
- Protects OMAX and MAXIEM abrasive waterjet systems to maximize machine uptime
- Virtually hands-free operation
- Excess pure water output can be used for other equipment in a shop (such as EDM, etc.)
- Inexpensive monthly filter changes









WHAT IS REVERSE OSMOSIS

During natural osmosis, water flows from a less concentrated solution through a semi-permeable membrane to a more concentrated saline solution until concentrations on both sides of the membrane are equal.

Reverse osmosis uses external pressure to reverse this natural osmotic flow. As pressure is applied to the saline solution, water flows from a more concentrated saline solution through the semi-permeable membrane to produce output water that has a higher purity level.

REVERSE OSMOSIS MEMBRANE

A reverse osmosis membrane has a thin microporous surface that rejects impurities, but allows water to pass through. Reverse osmosis is a percent rejection technology, and the membrane rejects 80-90% of inorganic solids. The purity of the product water depends on the purity of the inlet water, with the result being that the reverse osmosis product water has a much higher purity than the inlet feedwater.

WHEN TO CONSIDER A WATER SOFTENER

In some locations you will find the hardness (calcium and magnesium) in your water to be high but the TDS to be below 250 ppm. In situations like this a water softener is recommended over the full OMAX Reverse Osmosis System. With a water softener you will gain many of the same benefits that the OMAX RO System provides, but at a lower cost.

SPECIFICATIONS

Power Requirements	110V, 60 Cycle, 10AMP
Dimensions	Overall: 18"H x 38"W x 6"D Resin Tank: 10" x 54" Brine Tank: 18" x 30"
Pre-Treatment Filters	20" 5-Micron, 20" Carbon Black
Membranes (4" × 40")	Max operating pressure: 125 psi Feed temperature: 95° Recommended pH: 6 to 12 Free chlorine tolerance: <0.1 ppm Average rejection: 85% Reject Rate: 2.5 gpm Product Rate: 2.8 gpm Gallons per day: 4,032 (77 psi)
Water Softener	Type: Time clock initiated Grains Removed: 45,000 Flow Rate: 10 gpm Resin: 1.5 cubic feet total

ABOUT OMAX

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. 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. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

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



WWW.OMAX.COM/COMPARE





TEL 1-253-872-2300 / 1-800-838-0343

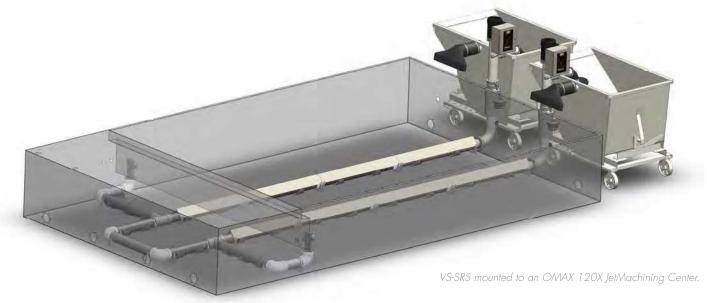
FAX 1-253-872-6190

OMAX CORPORATION 21409 72nd Avenue South Kent, WA 98032



VS-SRS





OMAX Variable Speed Solids Removal System

The programmable Variable Speed Solids Removal System (VS-SRS) provides precise control over abrasive evacuation rate, direction, and duration to efficiently remove garnet from the abrasive waterjet catcher tank. The VS-SRS gives the operator the ability to program flow rate and direction. The controller's programmability provides greater garnet removal than comparable fixed speed units. An optimized fluid return trough increases settling time and minimizes abrasive volume returning to the tank. The OMAX VS-SRS works on both OMAX and MAXIEM® JetMachining® Centers, from the smallest to the largest table sizes.

FEATURES

- Variable Frequency Drive (VFD) provides programmable flow rate and direction reversal for optimal abrasive removal
- 3/4 yard hopper that includes liner for ease of removing garnet from hopper
- Optimized fluid return trough minimizes abrasive volume returning to the tank
- Suction line flushing feature
- UL, CE and CSA compliant
- Built-in GFCI protection

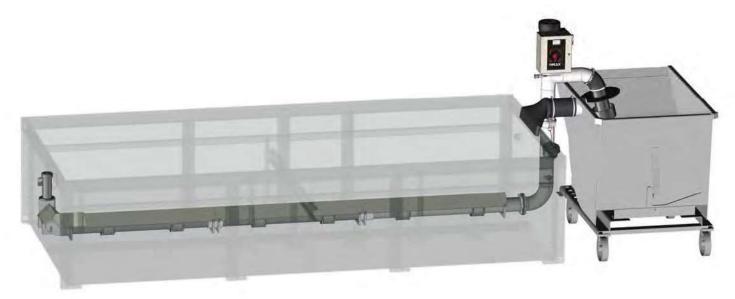
BENEFITS

- Garnet removal rate as high as 5.6 lbs/min
- Provides an easy, economical way to clean the Catcher Tank with minimal downtime for maintenance
- Uses only 21 sq ft of floor space
- Productively removes both large and fine particles



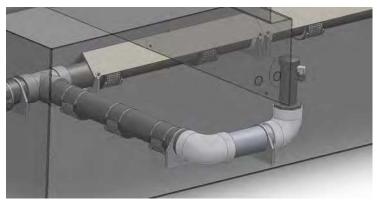


VS-SRS



VS-SRS mounted to a MAXIEM 1530 Jet/Machining Center.





ELECTRICAL REQUIREMENTS

- 220/240 VAC (50/60 Hz) Single Phase 10A GFCI protected (supplied by owner)
- Ships with a Nema 6-20 male plug
- Install according to local electrical code

ABOUT OMAX

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. 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. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

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



WWW.OMAX.COM/COMPARE





Kent, WA 98032

OMAX CORPORATION 21409 72nd Avenue South

TEL 1-253-872-2300 / 1-800-838-0343 **FAX** 1-253-872-6190





SOFTWARE

INTELLI-VISOR



OMAX Intelli-VISOR System Monitoring

With the OMAX Intelli-VISOR System Monitoring Package, you can increase efficiency and reduce downtime by connecting operation controls with machine maintenance and upkeep. Intelli-VISOR integrates real-time cutting data from different devices across the OMAX JetMachining® Center through its streamlined software interface and robust machine sensor network. Running in parallel with other programs in the Intelli-MAX® Software Suite, Intelli-VISOR is both simple and highly adaptable for the end user. A comprehensive alert system keeps you connected and aware of your machine's status to maximize productivity.

FEATURES

- Multi-User Notification System including email and SMS text messaging*
- Advanced Data Logging with export functionality
- Customizable pause and alert triggers
- Software Display Interface can be customized
- Industry-standard ModBus® communications protocol

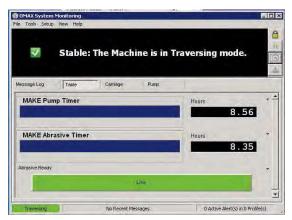
BENEFITS

- Preventative maintenance planning to reduce production downtime
- Monitor pump pressure, abrasive levels, and cutting activity to improve production
- Proactively pauses the machine before resources are exhausted
- Ensure proper pressure at the pump for optimal performance
- Predict potential interruptions before starting a cut

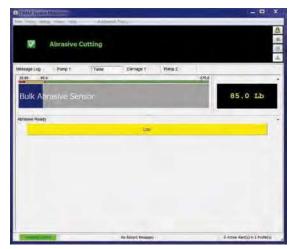


The OMAX Technology Guarantee entitles you, as the original owner, to free OMAX software upgrades for the life of the machine.

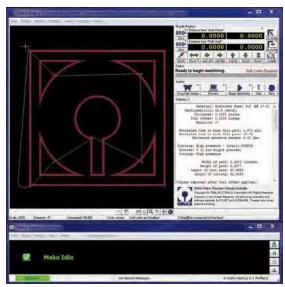
INTELLI-VISOR



The Intelli-VISOR display can present Module information in user-customizable formats.



Different checkpoints can be set in each Module, providing multiple levels of alerts and responses.



OMAX Intelli-VISOR runs alongside Make, working together to ensure productivity and uptime.



ENHANCED CONTROL

The heart of the Intelli-VISOR System Monitoring Package is its Modules. Modules are custom-programmed parameters that gather data from the sensor suite and process it according to the limits set by the user. When a limit is reached, the Module logs the data and can send an alert to the controller PC, an email address, or a cell phone text message.*

The Modules can also pause the machine to protect the cutting head and the part being cut.

MAINTENANCE TRACKING

- Preloaded with maintenance tracking Modules
- Can notify up to 4 people via email or SMS text message*
- Integrates maintenance into the Intelli-MAX Software Suite

PUMP MONITORING

- Improved communications with the pump controller
- Pauses machine when pump fault occurs or water pressure is outside specified window
- Provides feedback for charge pump pressure, filter pressure drop, pump water temperature, and supply water tank level

ABRASIVE MONITORING

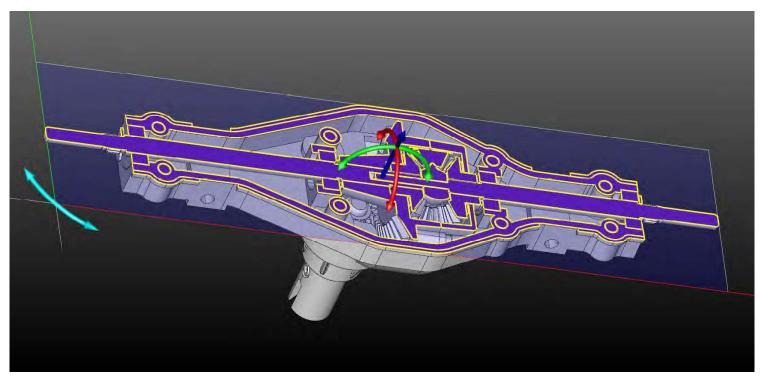
- Comprehensive abrasive monitoring improves reliability and usability of machine
- Constant feedback on abrasive levels help manage supply
- Sensors monitor the Bulk Hopper Supply and Carriage Hopper Level
- * Requires an Internet connection. Additional setup needed.

OMAX CORPORATION Kent, WA 98032 TEL 1-253-872-2300 / 1-800-838-0343

FAX 1-253-872-6190

INTELLI-CAM





OMAX Intelli-CAM

Intelli-CAM is a highly advanced computer-aided manufacturing (CAM) software tool available for free to OMAX machine owners that can generate 2D and 3D tool paths from 3D models. Simply import a 3D file in one of the many supported file types and the 3D object appears in an interactive window. Generating a 2D profile from any face or slice is just a click away. 3D pathing is just as easy, with the AutoPath function creating the tool path and applying the required attributes for 3D cutting before exporting straight to Intelli-MAX® MAKE.

FEATURES & BENEFITS

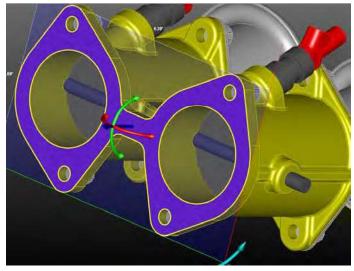
- Can run as a standalone application, or integrated into many popular 3D CAD systems, including SolidWorks®, AutoDesk® Inventor®, and Rhinoeceros® 3D
- Supports a wide range of neutral and native 3D file formats, including CATIA, SolidWorks, ACIS, Inventor, Step, Siemens® NX, Pro/E®, Creo®, IGES, Solid Edge, VDA-FS, Parasolid®, 3D DXF and DWG, and more
- Single click export to an OMAX CAD file or open direct into OMAX Intelli-MAX LAYOUT or MAKE
- Available free to existing original OMAX customers

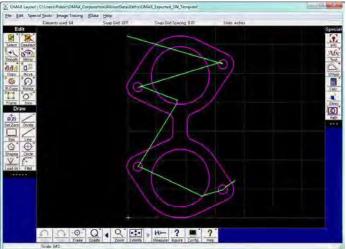
- Easily create 3D OMAX tool paths from solid models
- Easy and powerful 3D to 2D conversion tools
- Integrate into existing workflow to shorten production time
- Automatically recognizes viable cutting surfaces from 3D shapes, including variable bevels and tilted cones
- Easily control cutting path options such as cut quality
- Program complex dynamic bevels in minutes instead of hours

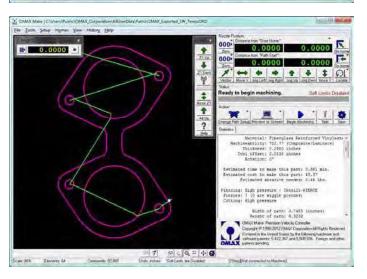














2D PROFILE EXPORT

The Intelli-CAM 2D Path Export system is a simple yet powerful system that generates OMAX-ready machine cut geometry with the click of a button. Once the 3D file is imported, the desired profile can be extracted with a slice plane or by selecting a face or projecting a shadow. Intuitive navigation tools make it easy to position and orient the slice, including rotations about all axes.

BEST APPLICATIONS

- Cut precision gaskets straight from a 3D assembly drawing
- Create 2D profiles directly from 3D faces, a slicing plane, or a shadow

For example: In a planetary gearbox model, the profile for a single gear can be selected and converted into a tool path.

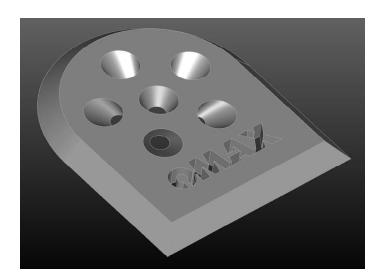
FEATURE LIST

- Choose any face of a 3D model to convert into a 2D pattern
- Slice plane allows access to features in a 3D model to convert to a 2D pattern

Note: Not all files import the same. Contact OMAX Software Support at softwareengineering@omax.com if Intelli-CAM fails to properly import a CAD file.

INTELLI-CAM





3D PATHER

With the 3D Pather tool, a multi-axis, machine-ready OMAX tool path is generated from a complex 3D shape. The complexity of cutting 3D parts is simplified, significantly reducing production times by eliminating the need to manually add 3D attributes to a 2D file.

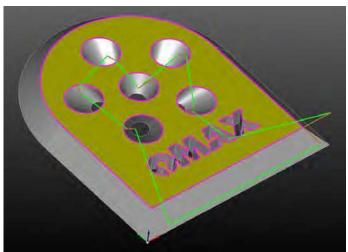
BEST APPLICATIONS

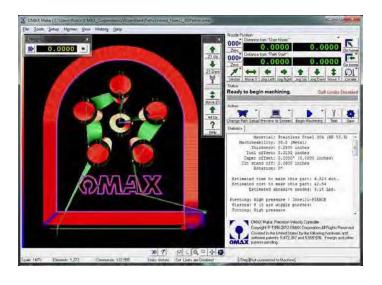
- Use existing 3D files to quickly generate OMAX tool paths without investing hours in programming
- Interface easily with your favorite CAD program, such as SolidWorks, Inventor, or Rhinoceros 3D, to streamline production and provide CAD functionality

FEATURE LIST

- Automatically generate a tool path complete with bevels and other tilting
- Tool paths can be sent directly to MAKE or edited in LAYOUT
- Supports compound and complex bevels, including bevels that vary in tilt

Note: The 3D pathing tool requires a part to be waterjet-machinable. This means that the part has to follow the limitations of the waterjet, such as tilt angles. Intelli-CAM currently supports 5-axis tool paths, with 6-axis functionality planned for a future release. 6-axis capability is supported through OMAX Layout and other CAM systems that are compatible with OMAX.

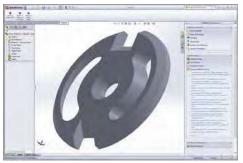








ATTACH TO POPULAR CAD SYSTEMS



SolidWorks Inventor



Company and the property of th

Rhinoceros

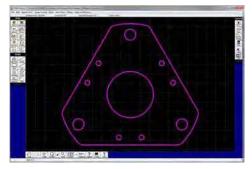
2D PATHING AND CONVERSION



Import a solid model file



Convert by slice or face



Open in LAYOUT or other CAD

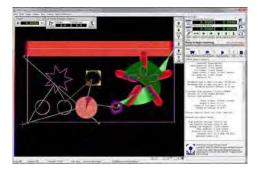
3D PATHING WITH ADVANCED FEATURE RECOGNITION



Part with a countersunk hole, a circular to square hole, and several holes tilted at angles.



All of these advanced features are recognized and pathed with a single click.



Tilt angles are automatically configured in the cutting path export.







ADVANCED ABRASIVE WATERJET ACCESSORIES







OMAX Water Recycling System

The OMAX® Water Recycling System reduces water consumption by up to 95% and prevents pulverized abrasive and heavy metals from entering regional sewers and drainage systems. The Water Recycling System addresses the four critical areas of water recycling: suspended solids, dissolved solids, temperature, and organic fouling. The Water Recycling System's advanced filtration works across multiple layers to ensure proper output water quality. The OMAX Water Recycling System is designed to integrate with existing water softeners, reverse osmosis (RO) systems, and deionization (DI) make-up water systems.

FEATURES

- Recycles all water used in the cutting and cooling process
- Laminar weir prefilter system
- Bag/cartridge filters for suspended solids
- Resin for TDS/dissolved solids filtering
- Ozone generator for bacteria control
- Separate chiller for heat dissipation
- One micron absolute final filter
- Filter, deionization resin, and low water alarms

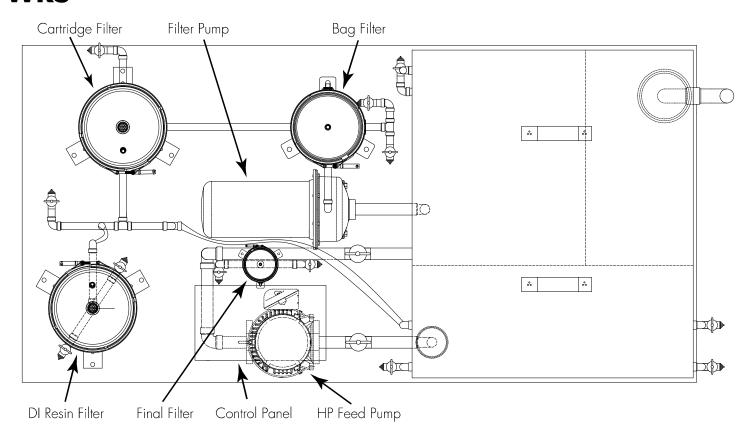
BENEFITS

- Closes the exit drain completely and allows you to reuse the water
- If maintained properly, the Water Recycling System meets the OEM desired water quality sent to the high pressure pump
- Recycles and conditions make-up water to OEM specifications
- Assists in complying to local or state waste authority disposal regulations
- Provides a configurable system so minimal solids are present in the recycled water





WRS



BEST APPLICATIONS

The OMAX Water Recycling System is ideal for locations that require additional water handling. This can include poor make-up water quality, high water and sewage costs, or regional water rationing. The Water Recycling System is also useful if the incoming water pressure fluctuates, the facility has no drain, or the drain is not accessible. If the facility is on a well or septic water system, the Water Recycling System is a useful addition to maintaining consistent and reliable input and output water. Companies that are ISO 14000 certified can use the OMAX Water Recycling System to help maintain and improve environmental compliance.

OPTIONAL ACCESSORIES

- Central water recycling for multiple pumps and/or machines
- Central chiller for multiple pumps and/or machines
- Waste water process system as an alternative to returning water back into the high pressure pump
- Multi-position air handlers for additional inlet water cooling

REQUIREMENTS

- Inlet water temperature at or below 70° F (21° C)
- Inlet water pressure above 30 psi (2.1 bar)



ABOUT OMAX

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. 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. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

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

OMAX CORPORATION

21409 72nd Avenue South Kent, WA 98032

TEL 1-253-872-2300 / 1-800-838-0343 FAX 1-253-872-6190







MAXIEM 1530 JetMachining Center

The next generation MAXIEM® 1530 JetMachining® Center sets a higher standard for abrasive waterjet machining. Faster, smoother, and more precise, the MAXIEM 1530 is ideal for a wide range of modern machining needs. The exclusive advanced Intelli-TRAX® digital linear encoder provides one-micron resolution instant feedback to the motor control system so the machine knows precisely where the cutting head is at all times. The mobile control station with widescreen display provides flexibility in controller positioning. Optional accessories such as the A-Jet® for 5-axis cutting and taper compensation, Rapid Water Level Control for submerged cutting, and Collision Sensing Terrain Follower for machining irregular surfaces expand your JetMachining capabilities and dramatically improve production.

FEATURES & BENEFITS

- Fast cutting speeds and high precision that is backed by our exclusive Intelli-MAX® Software with real world cutting data
- Programmable Motorized Z-Axis with a precision OMAX MAXJET®5i Nozzle boosts productivity and process efficiency
- Drive system protected against water, dirt, and grit
- Powerful all-in-one controller computer with large 23" screen
- Highly efficient, industry-proven direct drive pumps available up to 40 hp with operating efficiencies up to 85%
- Free Intelli-VISOR® SE System Monitoring simplifies routine maintenance planning to minimize downtime
- Optional Rapid Water Level Control for quiet submerged cutting
- Optional Bulk Abrasive Feed Assembly transports garnet from the assembly's large hopper into the Zero Downtime Hopper located at the Programmable Motorized Z-Axis
- Optional Variable Speed Solids Removal System (VS-SRS) designed for industrial use increases uptime through automated solids removal
- Factory tested as a complete system before shipping

- Machines a wide range of materials and thicknesses, from metals and composites to glass and plastics
- Designed and manufactured at the OMAX factory in Kent, Washington, USA
- Does not create heat-affected zones or mechanical stresses
- No tool changes & minimal fixturing dramatically reduce setup
- Convenient controller storage drawers keep essential tools and spares close by to maintain machine uptime
- Uses substantially less cooling water than inefficient hydraulic intensifier pumps
- Small, efficient footprint for minimal floor space utilization
- Lowest electrical consumption compared to other pump technology
- Leaves behind a satin-smooth edge, reducing secondary operations
- No noxious fumes, liquid or oils used in, or caused by, the machining process
- Environmentally "green" system uses only natural garnet abrasive and water in the cutting process





DC 1530

MACHINE DIMENSIONS

Footprint (without controller)	14'1" x 10'10" (4,293 mm x 3,302 mm)
Weight (tank empty)	4,000 lb (1,814 kg)
Height (with whip plumbing)	10'6" (3,200 mm)
Operating Weight (with water in tank)	15,700 lb (7,121 kg)

WORK ENVELOPE

X-Y Cutting Travel*	10'0" x 5'2" (3,048 mm x 1,575 mm)
Z-Axis Travel*	12" (305 mm)
Table Size*	12'2" x 5'8" (3,708 mm x 1,727 mm)

DRIVE DESCRIPTION

- Brushless servo motors
- Stainless steel hardened precision ground shaft ways
- Real-time closed loop feedback with digital drives
- Bridge-style Y-Axis
- Intelli-TRAX drive technology with precision linear encoders
- Precision Programmable Motorized Z-Axis









STANDARD MODEL SPECIFICATIONS

Material Support Slats	34 4" x 14Ga Galvanized Steel (102 mm x 2 mm)
Maximum Supported Material Load	300 lbs/sq ft (1,465 kg/sq meter)
Electrical Requirements	3-Phase, 380-480 VAC ±10%, 50-60 Hz
Speed	500 in/min (12,700 mm/min)
Linear Positional Accuracy	±0.003" (±0.076 mm)
Repeatability	±0.001" (±0.025 mm)

OPTIONAL ACCESSORIES

- A-Jet 5-Axis Cutting Head with Smart Taper Control
- Rapid Water Level Control for submerged cutting
- Intelli-VISOR EX Monitoring Expansion Package
- OMAX Mini MAXJET 5i Nozzle
- 7/15 Mini MAXJET5 Nozzle
- Bulk Abrasive Delivery Assembly
- Terrain Follower/A-Jet
- Collision Sensing Terrain Follower
- Manual Tilt Z-Axis
- Material Holding Kit
- Waterjet Brick Kit
- High Pressure Universal Swivel Plumbing
- Bridge-mounted Pause Button and USB Port

- Additional Seats of Intelli-MAX Software Suite
- Variable Speed Solids Removal System (VS-SRS)
- Water-only MAXJET 5 Nozzle
- Laser Feature Finder
- Z-Axis Pneumatic Drill
- Splash Shield Kit
- Water Resistant Keyboard and Mouse
- Access Control Circuit Interface for safety interlocks
- Catcher Tank Armor Plating
- Extended Slat Package
- Laminar Filter
- Air and Water Conditioning Kit
- Water Recycling System

*Optional accessories may reduce travel. Photos may show optional accessories. For a complete list of accessories, contact an OMAX sales representative. Contact OMAX for detailed utility requirements.

ABOUT OMAX

OMAX is the global total solutions provider in advanced abrasive waterjet systems. Our intuitive Intelli-MAX Software Suite simplifies programming and reduces setup times, increasing your productivity. 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. With the largest abrasive waterjet support network in the world, OMAX continues to shape the future of waterjets.

To see how a MAXIEM JetMachining Center can save you time and money, call or visit our website and request a free part analysis today.



WWW.OMAX.COM/COMPARE





Kent, WA 98032 **TEL** 1-253-872-2300 / 1-800-838-0343

OMAX CORPORATION 21409 72nd Avenue South

FAX 1-253-872-6190







REQUEST FOR PROPOSAL

RFP No.: RFP752-21-248629DH

Title: Water Jet Cutting Equipment – UNT Mechanical Engineering

Proposal Submittal Deadline: April 21, 2021, 2:00 pm, local time

Prepared by:

University of North Texas System Procurement Services
Business Service Center
1112 Dallas Drive, Suite 4000
Denton, Texas 76205
Date Issued: March 30, 2021

REQUEST FOR PROPOSAL

Table of Contents

SECTION 1: INTRODUCTION	3
SECTION 2: NOTICE TO PROPOSER	3
SECTION 3: SUBMITTAL OF PROPOSAL	5
SECTION 4: GENERAL TERMS AND CONDITIONS	6
SECTION 5: SCOPE OF SERVICES	6
APPENDIX ONE	8
Section 1: Affirmations and Confirmations	8
Section 2: Execution of Offer	12
Section 3: Proposer's General Questionnaire	15
Section 4: Addenda Checklist	16
ATTACHMENT(S)	

Attachment A: Sample Service Agreement

Attachment B: Pricing Form

SECTION 1: INTRODUCTION

1.1 UNTS System Description

The University of North Texas System (UNTS) is a University system that is composed of the University of North Texas in Denton (UNT), the University of North Texas Health Science Center (UNTHSC) in Fort Worth and the University of North Texas at Dallas (UNTD). The UNT System Administration is based in downtown Dallas. The three independent universities of the UNT System have combined enrollment of just over 42,000 students across five major teaching locations, including each main campus as well as Frisco and downtown Dallas. Proposals submitted in response to this RFP shall be for goods and/or services provided to UNTS, UNT, UNTHSC and/or UNTD, as agreed to in writing by the parties.

1.2 Background

UNTS is seeking proposals for Water Jet Cutting Equipment for UNT Mechanical Engineering (NIGP commodity code 334-19; 555-30; 815-00; 815-13. Waterjet cutting for any material, is a newer technology that UNT needs to teach students. This will not impact any statutory requirements, policies or business processes. We need to expand our technologies in fabrication methods especially for Mechanical Engineering and Design junior and senior level classes. In the Mechanical Engineering and Design Colleges current needs are not being met. The goal is to expand our curriculum for junior and senior mechanical engineering classes and senior design students. We will benefit by giving students a more complete educational experience.

1.3 Group Purchase Authority

Texas law authorizes institutions of higher education to use the group purchasing procurement method (ref. Sections 51.9335, 73.115, and 74.008, Education Code). Additional Texas institutions of higher education may therefore elect to enter into a contract with the successful Proposer(s) under this Section. Should another institution exercise this option the resulting contract and obligations shall be between that institution and the vendor with UNTS incurring no obligation as a result thereof.

SECTION 2: NOTICE TO PROPOSER

2.1 Submittal Deadline

UNTS will accept proposals submitted in response to this RFP until 2:00 p.m., local time, on April 21, 2021 (the "Submittal Deadline").

2.2 UNTS Contact Person

Proposers will direct all questions or concerns regarding this RFP to the following UNTS contact ("UNTS Contact"):

The University specifically instructs all interested parties to restrict all contact and questions regarding this RFP to written communications forwarded to the UNTS Contact via the following link: https://www.untsystem.edu/bid-inquiry.

The UNTS Contact must receive all questions or concerns no later than 2:00 pm on April 6, 2021. It is UNTS' intent to respond to all appropriate questions and concerns; however, UNTS reserves the right to decline to respond to any question or concern.

Answers to questions will be posted via addendum to this RFP on UNTS Business Service Center Bid Opportunities web page located at: https://www.untsystem.edu/hr-it-business-services/procurement/purchasing/bid-opportunities. Vendors are strongly advised to review this page at least four (4) business days prior to the due date for submissions or earlier to ensure that you have received all applicable addenda.

2.3 Criteria for Selection

The successful Proposer(s), if any, will be the Proposer(s) who submit a response to this RFP on or before the Submittal Deadline, and whose response is the best value UNTS, taking into consideration the evaluation criteria contained herein. Selection by UNTS will be in accordance with the requirements and specifications set forth in this RFP. The successful Proposer(s) is/are referred to as the "Contractor". UNTS reserves the right to make a single award from this solicitation or multiple awards, whatever is in the best interest of the University, with UNTS being the sole judge thereof.

Proposer is encouraged to propose terms and conditions offering the maximum benefit to UNTS as outlined below. Proposers should describe all educational, state and local government discounts, as well as any other applicable discounts that may be available to UNTS in a contract for the services.

An evaluation team from UNTS will evaluate proposals. The evaluation of proposals and the selection of Contractor will be based on the information provided by Proposer in its proposal. Proposers should address, within the response, each of the criteria listed in this section. Failure to respond to these criteria may result in your proposal receiving a negative rating or considered as non-responsive. Proposers should note that the awarded proposal may not be the lowest offer, but the offer(s) deemed most advantageous to UNTS as described in this section.

The criteria to be considered by UNTS in evaluating proposals and selecting awardee(s), will be the following factors:

- 2.3.1 The Vendors financial proposal including, but not limited to discounts, services and other charges/fees.
- 2.3.2 The Vendors relevant qualification and experience and availability, key personnel outlined in this RFP, as well as any special services the Vendor may provide.
- 2.3.3 The Vendors relevant experience, qualifications, and success in providing the goods and services outlined in this RFP.
- 2.3.4 The Vendors references as outlined in this RFP.
- 2.3.5 Quality and completeness of the submittal.

Furthermore, UNTS may consider information related to past contract performance of a respondent including, but not limited to, the Texas Comptroller of Public Accounts Vendor Performance Tracking System.

2.4 Schedule of Key Events

Issuance of RFP	3/30/2021
Deadline for Questions/Concerns	4/6/2021, 2:00pm
(Ref. Section 2.2 of this RFP)	•
Answers to Questions posted	4/13/2021, 5:00pm
Submittal Deadline	4/21/2021, 2:00pm, local time
(Ref. Section 2.1 of this RFP)	. ,

Note: This events schedule is for planning purposes only and may be changed at the sole discretion of UNTS.

2.5 Historically Underutilized Businesses

In accordance with Texas Gov't Code §2161.252 and Texas Administrative Code §20.14, each state agency (including institutions of higher education) as defined by §2151.002 that considers entering into a contract with an expected value of \$100,000 or more shall, before agency solicits bids, proposals, offers, or other applicable expressions of interest, determine whether subcontracting opportunities are probable under the contract.

UNTS has determined that subcontracting opportunities (check one) \square are probable \boxtimes are not probable under the agreement.

SECTION 3: SUBMITTAL OF PROPOSAL

3.1 Number of Copies

Proposer must submit one (1) complete original copy of its *entire* proposal. An *original* signature by an authorized officer must appear on the <u>Execution of Offer</u> (ref. Appendix One, Section 2) of submitted proposal. The Proposer's proposal bearing an original signature should contain the mark "<u>original</u>" on the front cover of the proposal.

The University does not consider electronic signatures to be valid for submittal of competitive solicitation responses.

In addition to the original proposal, Proposer must submit one (1) complete copy of the *entire* proposal electronically on a USB flash drive. The USB flash drive must include a protective cover and be labeled with Proposer's name and the RFP number.

3.2 Submittal

Proposals must be received by UNTS on or before the Submittal Deadline (ref. Section 2.1 of this RFP) and should be delivered to:

University of North Texas System Procurement Services Business Service Center 1112 Dallas Drive, Suite 4000 Denton, TX 76205

Proposals must be typed on letter-size (8.5" x 11") paper. Sections within the proposal are to be tabbed for ease of reference. Pre-printed material(s), if included, should be referenced in the proposal and included as labeled attachments.

Proposer should submit all proposal materials enclosed in a sealed envelope, box and/or container. The RFP No. and the Submittal Deadline (ref. Section 2.1 of this RFP) should be clearly shown in the lower left-hand corner on the top surface of the container. In addition, the name and the return address of the Proposer should be clearly visible.

Proposer must also submit the number of originals of the HUB Subcontracting Plan (also called the HSP), if required, as directed by this RFP (ref. Section 2.5 of the RFP.)

Note: If proposal requires the submittal of an HSP, the completed HSP documents and the proposal response documents must be in separate sealed envelopes. Both envelopes are to be placed in a master container, and such master container should be marked in the lower left-hand corner wither the RFP number and name and Submittal Deadline, as stated above. Request for Proposal number and submittal date should be marked in the lower left-hand corner of sealed bid envelope (box/container). If an HSP is required (refer to Section 2.5), both the proposal and the completed HSP must be in individual sealed envelopes and both envelopes placed in one sealed master container.

Note: Electronic submittals via facsimile or other electronic means will not be accepted, unless otherwise specified within this RFP.

3.3 Proposal Validity Period

Each proposal must state that it will remain valid for UNTS' acceptance for a minimum of one hundred and eighty (180) days after the Submittal Deadline, to allow time for evaluation, selection, and, any unforeseen delays. Should circumstances arise that require an extension to this period, UNTS reserves the right to provide extensions at its discretion.

3.4 Terms and Conditions

- 3.4.1 Proposer must comply with the requirements and specifications contained in this RFP, including the Notice to Proposer (ref. Section 2 of this RFP), Proposal Requirements (ref. Section 5 of this RFP). If there is a conflict among the provisions in this RFP, the provision requiring Proposer to supply the better quality or greater quantity of services will prevail, or if such conflict does not involve quality or quantity, then interpretation will be in the following order of precedence:
 - 3.4.1.1 Specification (ref. Section 5 of this RFP),
 - 3.4.1.2 Proposal Requirements (ref. Appendix One),
 - 3.4.1.3 Notice to Proposers (ref. Section 2 of this RFP).
- 3.4.2 UNTS intends to enter into an agreement with the Contractor in substantially the form of the attached Sample Agreement. (refer to Click to enter Attachment name). Award is contingent upon the successful execution of agreement.

3.5 Submittal Checklist

Proposer is to complete, sign, and return the following documents as a part of its proposal. Failure to return each of these items with the proposal may result in rejection of the proposal.

- 3.5.1 Signed and Completed Execution of Offer (ref. Appendix One, Section 2).
- 3.5.2 Responses to <u>Proposer's General Questionnaire</u> (ref. Appendix One, Section 3).
- 3.5.3 Signed and Completed Addenda Checklist (ref. Appendix One, Section 4).
- 3.5.4 Responses to evaluation criteria.

SECTION 4: GENERAL TERMS AND CONDITIONS

UNTS' standard purchase order terms and conditions can be found at https://www.untsystem.edu/sites/default/files/documents/bsc_po_terms_2019.pdf . Additionally, attached is a sample Services Agreement (refer to Section 3.4.2 of this RFP).

4.1 **Term**.

This is for the purchase and installation of one Water Jet Cutter equipment, and the service and warranty only. (Service and Warranty may be for 1 Year, 3 years or 5 years, which ever is best suited to the Universities needs and budget)

4.2 Exceptions

Any exceptions to the terms in either our standard purchase order terms and conditions or those included in the sample agreement should be clearly stated and included in a separate section of the Proposer's response and marked "exceptions". Proposers are advised that should UNTS not accept a stated exception, the result might be in the disqualification of the proposal.

SECTION 5: SCOPE OF SERVICES

5.1 Vendor Minimum Requirements/Qualifications

- Work area 60"X 120"
- Three-sided cutting tank
- Integrated fork lift tubes
- No cantilever arm system
- Full 360 degree bellows on all axes
- Z axis travel to 811 with 10" clearance
- Maximum cutting speed: 2100 1PM
- Rapid traverse: 1500 1PM
- Repeatability: 00000+/- 0.001"
- Positional displacement accuracy:/- 0.005" over 10 feet
- Efficiency greater than 97%
- Drives: Brush-less AC servo motors
- Drive system X and Y-axis: Linear rack and Pinion

- Drive system Z- Axis: Precision ball screw
- X Drives- Mounted to gantry of 10 m thick aluminum on dual bearing rails
- 25 mm linear bearing profile rails with stainless steel spring strip on the X and Y axes
- Y Drive- Dual sided drives
- Standard motorized Z drive
- Lowest possible noise level
- Four bearing packs per axis
- 4000 pounds load capacity per bearing
- Alpha precision planetary gearbox
- Integrated PC with 19" LCD monitor and Windows 7 operating system
- Intel 1.6-GHz CPU
- 1-GB RAM
- 160-GB hard drive
- Standard Ethernet interface with DNC file system and unlimited file size transfer capabilities
- Pneumatic drill
- Air ballast water leveling system
- 30 hp intensifier pump
- 60,000 psi
- Pump easily rebuilt
- Whip- High pressure stainless steel tubing running straight from the pump to the cutting head
- Rack and pinions-AGMA 9 rated with a normal deviation of+/- 0.0015" from tooth to tooth
- Chiller
- Advanced CNC interface
- Linear, circular, helical and smooth curve interpolation
- 64-bit motion control algorithms 1000-line look ahead
- Built -in self-testing and voltage protection12-Mb memory for file size transfer capabilities
- Industry-standard Mand G codes
- Multiple home positions
- Proximity restart
- Tool compensation
- Abrasive removal system
- Fast switching between pure water and abrasive cutting
- Bulk hopper should hold 6.5 cubic feet (approximately 500 pounds) of abrasive
- Water recycling system
- Reverse osmosis system
- Software for water jet
- A built-in shape library
- First two pump rebuilds free labor only
- A service technician, must respond within 4 hours of a service call
- Training provides all training onsite
- Manufactured in USA

The information listed is for the Multicam model #3000. By showing a manufactures model and part number, we are merely giving this information as a minimum requirement for the UNT need, and not intended to single source this procurement. Any suitable equal or better equipment will be considered.

5.2 Specifications/Scope of Work/Service Requirements

The proposal must include all delivery and installation of the Water Jet Cutting equipment located at Mechanical Engineering Lab J105 - UNT Discovery Park, 3940 N Elm St, Denton, TX 76201. The proposer must commission the equipment, include all training and software to operate the equipment, which includes best practices and routine maintenance. The proposer must have a minimum of one service technician located in Texas. The proposer must have been manufacturing Water Jet Cutting equipment for a minimum of 10 years, successfully.

5.3 Pricing/Fees

Please fill in the attached pricing form "Attachment B"

APPENDIX ONE

Section 1: Affirmations and Confirmations

1.1 Purpose

UNTS is soliciting competitive sealed proposals from Proposers having suitable qualifications and experience providing services in accordance with the terms, conditions and requirements set forth in this RFP. This RFP provides sufficient information for interested parties to prepare and submit proposals for consideration by UNTS.

By submitting a proposal, Proposer certifies that it understands this RFP and has full knowledge of the scope, nature, quality, and quantity of the services to be performed, the detailed requirements of the services to be provided, and the conditions under which such services are to be performed. Proposer also certifies that it understands that all costs relating to preparing a response to this RFP will be the sole responsibility of the Proposer.

PROPOSER IS CAUTIONED TO READ THE INFORMATION CONTAINED IN THIS RFP CAREFULLY AND TO SUBMIT A COMPLETE RESPONSE TO ALL REQUIREMENTS AND QUESTIONS AS DIRECTED.

1.2 Inquiries and Interpretations

UNTS may in its sole discretion respond in writing to written inquiries concerning this RFP and mail its response as an Addendum to all parties recorded by UNTS as having received a copy of this RFP. Only UNTS's responses that are made by formal written Addenda will be binding on UNTS. Any verbal responses, written interpretations or clarifications other than Addenda to this RFP will be without legal effect. All Addenda issued by UNTS prior to the Submittal Deadline will be and are hereby incorporated as a part of this RFP for all purposes. This addenda shall be posted to UNTS' Bid Opportunities Web Page located at: https://www.untsystem.edu/hr-it-business-services/procurement/purchasing/bid-opportunities. Vendors are strongly encouraged to visit this page at least four (4) business days prior to submitting your response to ensure that you have received all applicable addenda.

Proposers are required to acknowledge receipt of each Addendum as specified in this Section. The Proposer must acknowledge all Addenda by completing, signing and returning the <u>Addenda Checklist in Section 4 of this appendix</u>. The Addenda Checklist should accompany the Proposer's proposal.

Any interested party that receives this RFP by means other than directly from UNTS is responsible for notifying UNTS that it has received an RFP package, and should provide its name, address, telephone number and FAX number to UNTS, so that if UNTS issues Addenda to this RFP or provides written answers to questions, that information can be provided to such party.

1.3 Public Information

Proposer is hereby notified that UNTS strictly adheres to all statutes, court decisions and the opinions of the Texas Attorney General with respect to disclosure of public information.

All information, documentation, and other materials submitted in response to this RFP is subject to public disclosure under the *Texas Public Information Act* (*Government Code*, Chapter 552.001, et seq.). Proposer will be advised of a request for public information that implicates their materials if

those materials are marked "Confidential and Proprietary" and will have the opportunity to raise any objections to disclosure to the Texas Attorney General.

1.4 Type of Agreement

Refer to the attached Sample Service Agreement

1.5 Proposal Evaluation Process

UNTS will select Contractor by using the competitive sealed proposal process described in this Section.

UNTS may make the selection of Contractor on the basis of the proposals initially submitted, without discussion, clarification or modification. In the alternative, UNTS may make the selection of Contractor on the basis of negotiation with any of the Proposers. In conducting such negotiations, UNTS will use commercially reasonable efforts to avoid disclosing the contents of competing proposals.

At UNTS' sole option and discretion, UNTS may discuss and negotiate elements of proposals submitted with any or all proposers. Furthermore, UNTS may request presentations or system demonstrations from any or all proposers at no cost or obligation to UNTS.

After submission of a proposal but before final selection of Contractor is made, UNTS may permit a Proposer to revise its proposal in order to obtain the Proposer's best and final offer. In that event, representations made by Proposer in its revised proposal, including price and fee quotes, will be binding on Proposer. UNTS is not obligated to select the Proposer offering the most attractive economic terms if that Proposer is not the most advantageous to UNTS overall, as determined by UNTS according to the evaluation criteria contained herein.

UNTS reserves the right to (a) enter into an agreement for all or any portion of the requirements and specifications set forth in this RFP with one or more Proposers, (b) reject any and all proposals and re-solicit proposals, or (c) reject any and all proposals and temporarily or permanently abandon this selection process, if deemed to be in the best interests of UNTS. Proposer is hereby notified that UNTS will maintain in its files concerning this RFP a written record of the basis upon which a selection, if any, is made by UNTS.

1.6 Proposer's Acceptance of Evaluation Methodology

By submitting a proposal, Proposer acknowledges (1) Proposer's acceptance of [a] the Proposal Evaluation Process (ref. **Section 1.5** of **APPENDIX ONE**), [b] the Criteria for Selection (ref. **2.3** of this RFP), [c] the Specifications and, [d] the terms and all other requirements and specifications set forth in this RFP; and (2) Proposer's recognition that some subjective judgments must be made by UNTS during this RFP process.

1.7 Solicitation for Proposal and Proposal Preparation Costs

Proposer understands and agrees that (1) this RFP is a solicitation for proposals and UNTS has made no representation written or oral that one or more agreements with UNTS will be awarded under this RFP; (2) UNTS issues this RFP predicated on UNTS's anticipated requirements for the Services, and UNTS has made no representation, written or oral, that any particular scope of services will actually be required by UNTS; and (3) Proposer will bear, as its sole risk and responsibility, any cost that arises from Proposer's preparation of a proposal in response to this RFP.

1.8 Proposal Requirements and General Instructions

- 1.8.1 Proposer should carefully read the information contained herein and submit a complete proposal in response to all requirements and questions as directed.
- 1.8.2 Proposals and any other information submitted by Proposer in response to this RFP will become the property of UNTS.
- 1.8.3 UNTS will not provide compensation to Proposer for any expenses incurred by the Proposer for proposal preparation or for demonstrations or oral presentations that may be made by Proposer. Proposer submits its proposal at its own risk and expense.

- 1.8.4 Proposals that (i) are qualified with conditional clauses; (ii) alter, modify, or revise this RFP in any way; or (iii) contain irregularities of any kind, are subject to disqualification by UNTS, at UNTS's sole discretion.
- 1.8.5 Proposals should be prepared simply and economically, providing a straightforward, concise description of Proposer's ability to meet the requirements and specifications of this RFP. Emphasis should be on completeness, clarity of content, and responsiveness to the requirements and specifications of this RFP. Proposers are encouraged to completely address the evaluation criteria
- 1.8.6 UNTS makes no warranty or guarantee that an award will be made as a result of this RFP. UNTS reserves the right to accept or reject any or all proposals, waive any formalities, procedural requirements, or minor technical inconsistencies, and delete any requirement or specification from this RFP or the Agreement when deemed to be in UNTS's best interest. UNTS reserves the right to seek clarification from any Proposer concerning any item contained in its proposal prior to final selection. Such clarification may be provided by telephone conference or personal meeting with or writing to UNTS, at UNTS's sole discretion. Representations made by Proposer within its proposal will be binding on Proposer.
- 1.8.7 Any proposal that fails to comply with the requirements contained in this RFP may be rejected by UNTS, in UNTS' sole discretion.
- 1.8.8 Should a vendor wish to protest or dispute determinations or awards made in connection with this RFP, it shall be done by submitting a Letter of Protest/Dispute to UNTS Senior Director for Procurement Services outlining the issue to be considered.

1.9 Execution of Offer

Proposer must complete, sign and return the attached <u>Execution of Offer</u> (ref. Appendix One, Section 2) as part of its proposal. The Execution of Offer must be signed by a representative of Proposer duly authorized to bind the Proposer to its proposal. Any proposal received without a completed and signed Execution of Offer may be rejected by UNTS, in its sole discretion.

1.10 Pricing and Delivery Schedule

Proposer must complete and return the <u>Pricing Schedule</u> (ref. Section 5 of this RFP), as part of its proposal. In the <u>Pricing and Delivery Schedule</u>, the Proposer should describe in detail (a) the total fees for the entire scope of the Services; and (b) the method by which the fees are calculated. The fees must be inclusive of all associated costs for delivery, labor, insurance, taxes, overhead, and profit.

UNTS will not recognize or accept any charges or fees to perform the Services that are not specifically stated in the Pricing and Delivery Schedule.

In the <u>Pricing and Delivery Schedule</u>, Proposer should describe each significant phase in the process of providing the Services to UNTS, and the time period within which Proposer proposes to be able to complete each such phase.

1.11 Proposer's General Questionnaire

Proposals must include responses to the questions in <u>Section 3 of Appendix 1.</u> Proposer should reference the item number and repeat the question in its response. In cases where a question does not apply or if unable to respond, Proposer should refer to the item number, repeat the question, and indicate N/A (Not Applicable) or N/R (No Response), as appropriate. Proposer should explain the reason when responding N/A or N/R.

1.12 Addenda Checklist

Proposer should acknowledge all addenda to this RFP (if any) by completing, signing and returning the <u>Addenda Checklist</u> (ref. Appendix One, Section 4) as part of its proposal. Any proposal received without a completed and signed Addenda Checklist may be rejected by UNTS, in its sole discretion.