Waterjet Systems
INTERNATIONAL

REXPO
IMPORTACION EXPORTACION S.L.

UNRIVALED DEPENDABILITY IN CUTTING PUMPS, PARTS AND SERVICE

Waterjet Systems
INTERNATIONAL

REXPO
IMPORTACION EXPORTACION S.L

Only WSI Handcrafts

UNRIVALED DEPENDABILITY IN CUTTING PUMPS, PARTS AND SERVICE

WSI Waterjet Systems International is the only waterjet designer and manufacturer to handcraft its high-pressure cutting pumps, components, and replacement parts, which means everything from frame welding to patented technology is created onsite by WSI's skilled team of engineers and machinists.

The WSI Commitment

WSI Waterjet Systems International takes pride in being the globally established, recommended, and trusted designer, manufacturer, and servicer of ultra-high-pressure and high-performance waterjet cutting pumps and replacement parts.

With an internationally unmatched commitment to quality and service, WSI is defined by its unique approach to providing customers with the reliable long-term relationship necessary for the successful operation and maintenance of high-pressure waterjet cutting pumps, long after the sale.

Worldwide Customer Service and Support

Patented Technology. Next-Generation Performance.

Built on more than 20 years of experience and cutting-edge research and development, all WSI Waterjet Systems International products are made in America, and built to deliver proprietary technology and unrivaled dependability to the world.

WSI's cutting pumps and parts offer reduced operating costs and a longer running life – including its line of preferred replacement parts for use on KMT-style waterjet equipment – which lend to its reputation of great value and pricing for businesses both large and small.

WSI Headquarters, Joplin, MO - USA

Rigorous Quality Control Standards

WSI Waterjet Systems International's attention to detail and rigorous quality control standards are unmatched within the waterjet industry. No part, component, or pump will be branded with the WSI name before passing a meticulous inspection that guarantees both aesthetic and working perfection. It is this strict process that plays into WSI's reputation for having the most durable and dependable waterjet cutting products.

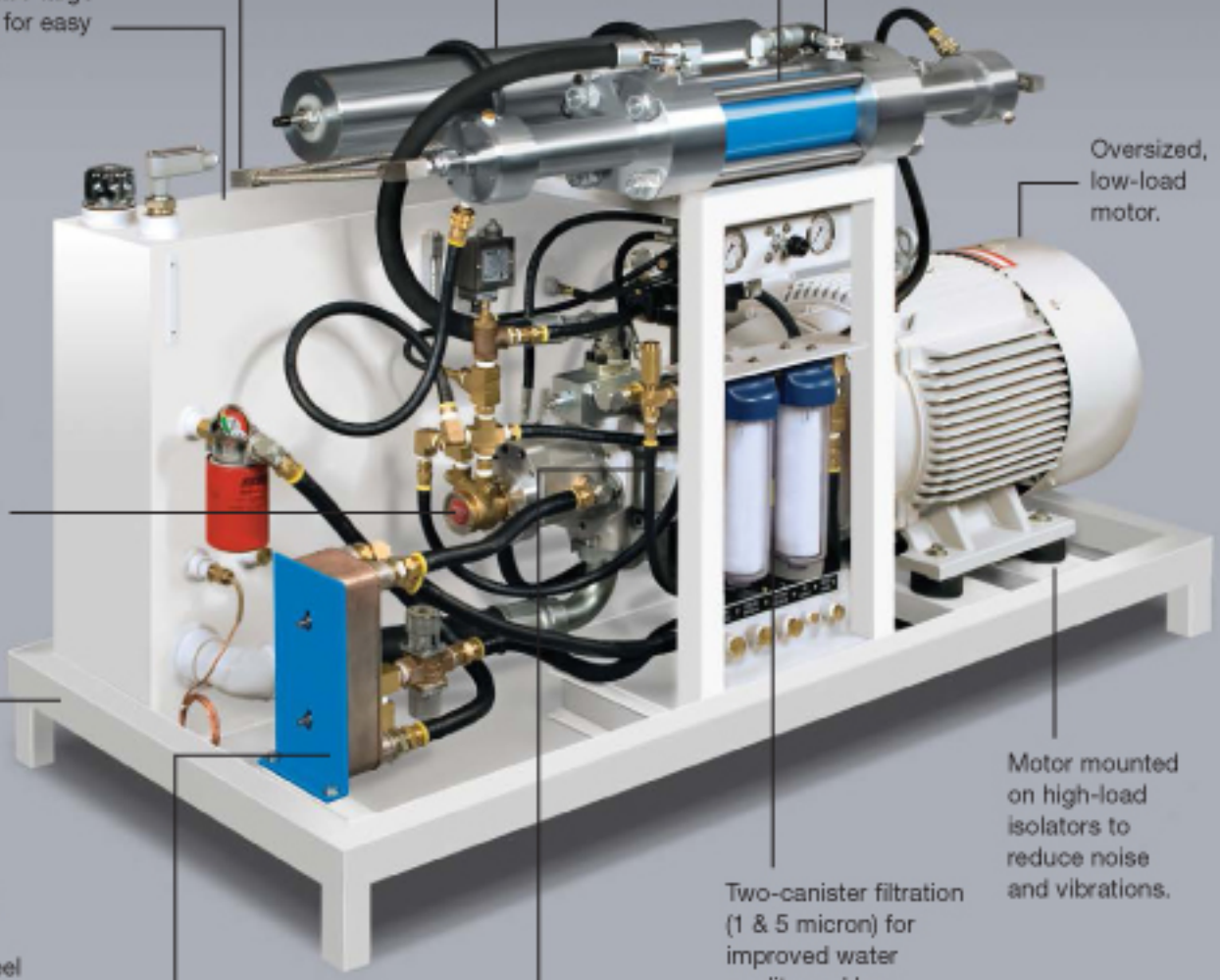
WSI Waterjet Systems International, European Office

WSI Waterjet Systems International's European office provides a full range of WSI Factory Certified Waterjet Service and Support to WSI's extensive European customer base.

In addition to waterjet service and support, the European office maintains a complete inventory of genuine WSI waterjet replacement parts as well as WSI's extensive line of waterjet spare parts manufactured to replace KMT Waterjet parts.

WSI's European office is centrally located in Bioggio (Lugano-Agno Airport), Switzerland, just 40 minutes north of Milan, Italy.

Pump Features and Advantages



Proven, industrial, high-pressure intensifier with ceramic plungers standard.

Large, 1.2-liter accumulator ensures low pulsations in the high-pressure system (2.4-liter optional)

Autoclave-brand high-pressure tubing and fittings throughout the system provide maximum operation life.

Allen-Bradley electrical components.

Oversized hydraulic reservoir has two large access doors for easy maintenance.

Oversized, low-load motor.

Optional Allen-Bradley junction box or control panel with multi-language touch screen.

Inlet, cutting water booster pump included in the unit.

Motor mounted on high-load isolators to reduce noise and vibrations.

Frame is constructed from 2" x 3" structural steel box beams. No tack welding.

Two-canister filtration (1 & 5 micron) for improved water quality and low replacement costs.

Interchangeable, high-efficiency water/oil, air/oil cooling. Use water cooling during summer months and air cooling during the winter season to reduce utility costs.

Bosch Rexroth hydraulic components throughout the system.

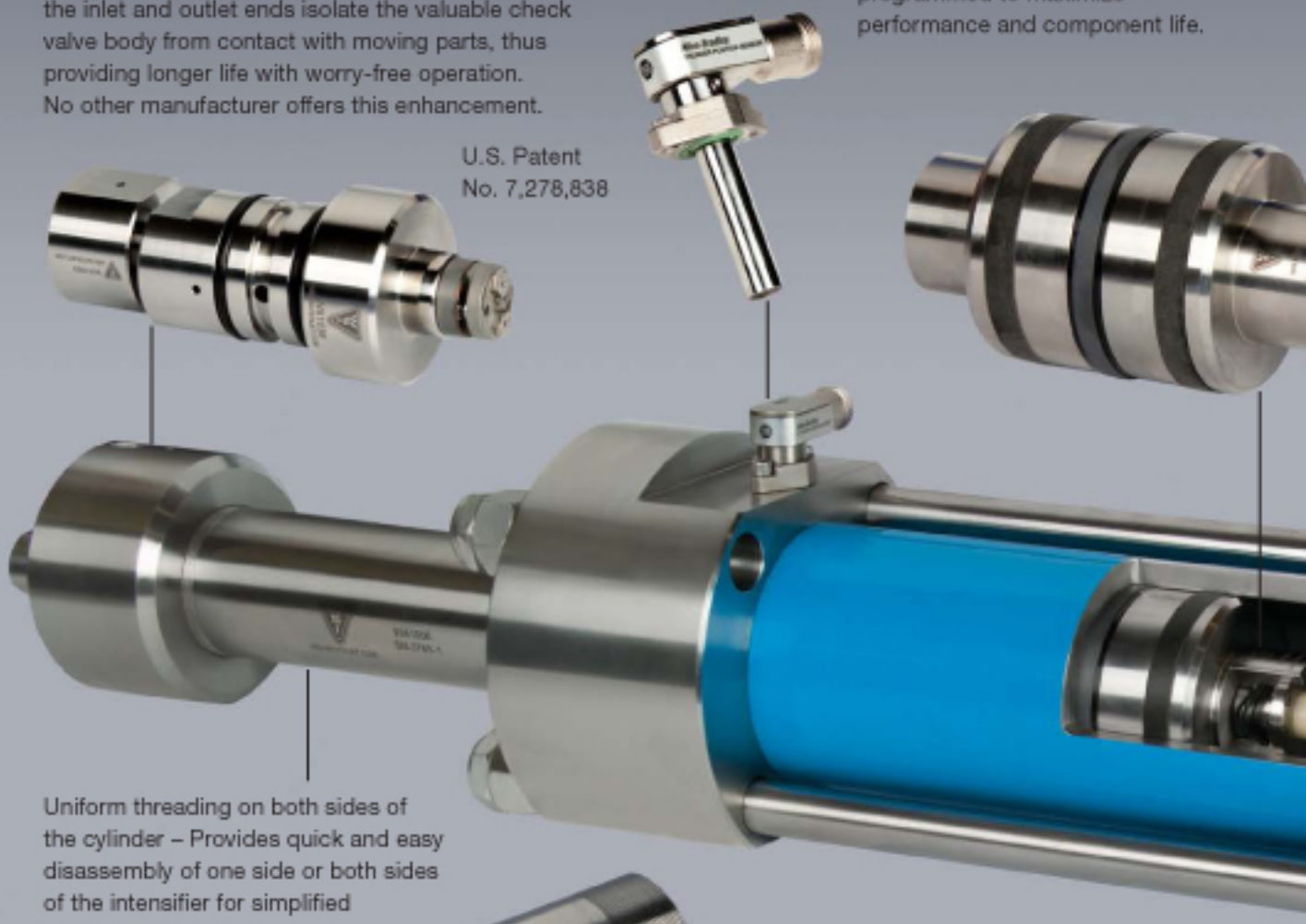
Allen-Bradley Rexroth Autoclave Engineers

Intensifier Technology

Dura-Check Replaceable Seat Check Valve Assembly – Patented replaceable seats on both the inlet and outlet ends isolate the valuable check valve body from contact with moving parts, thus providing longer life with worry-free operation. No other manufacturer offers this enhancement.

U.S. Patent No. 7,278,838

Industry-leading Allen-Bradley electronic shifting precisely programmed to maximize performance and component life.



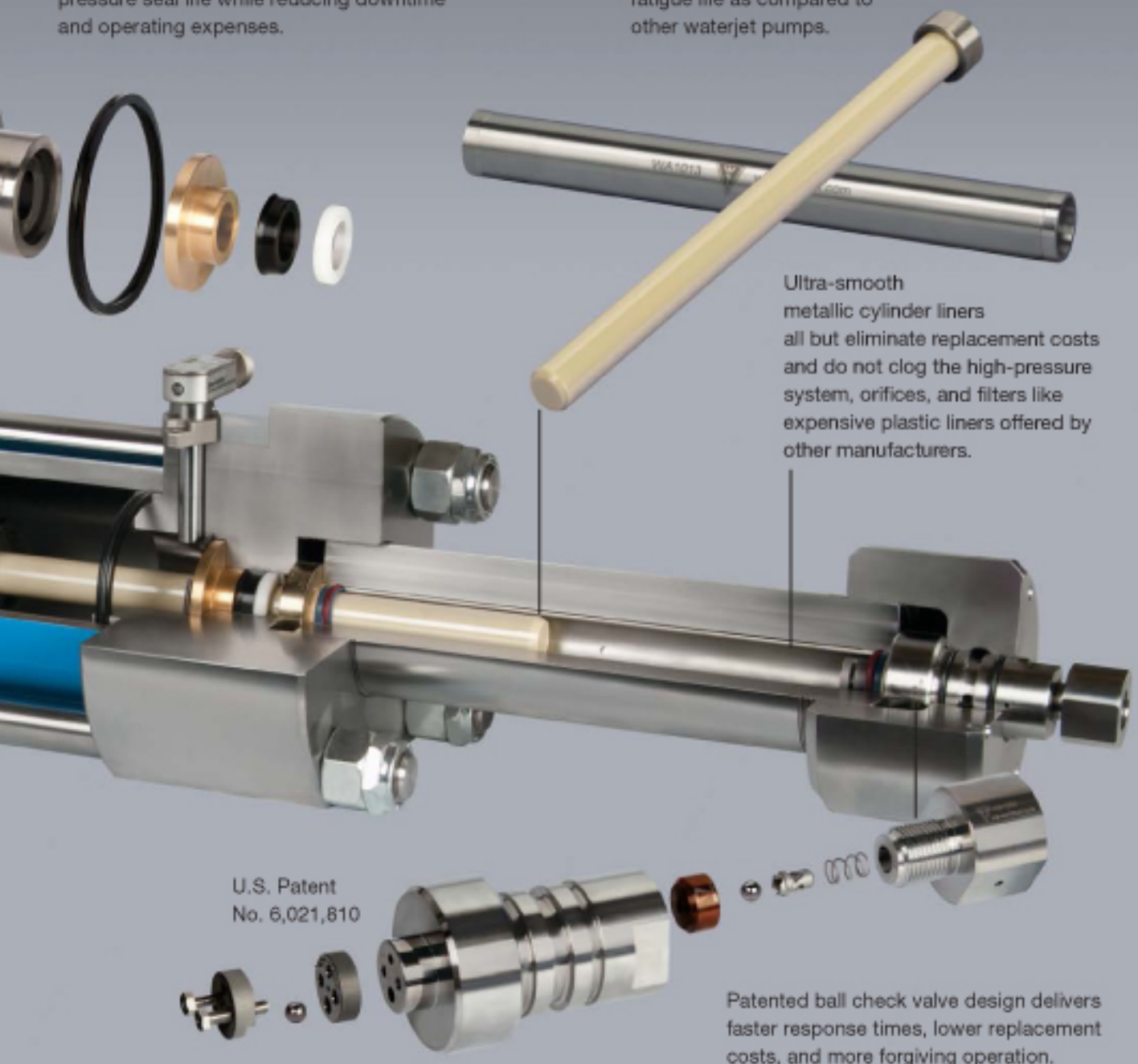
Uniform threading on both sides of the cylinder – Provides quick and easy disassembly of one side or both sides of the intensifier for simplified maintenance, superior to tie-rod designs.

The same threading on both ends of the cylinder provides valuable diagnostic testing and extends operational life.

With design features that provide performance and reliability that are unmatched by our waterjet-cutting competition, WSI's Intensifier Technology is among the most advanced in the world.

WS2002 Hydraulic Drive Assembly – Precision-aligned internal plunger seals offer triple the life as compared to externally accessible hydraulic cartridge designs. This precision alignment also extends high-pressure seal life while reducing downtime and operating expenses.

Large-diameter, ultra-high-sheen ceramic plungers further extend hydraulic and dynamic high-pressure seal life. The longest, slowest cycle rate in the industry reduces pressure spikes in the system and virtually doubles fatigue life as compared to other waterjet pumps.



Ultra-smooth metallic cylinder liners all but eliminate replacement costs and do not clog the high-pressure system, orifices, and filters like expensive plastic liners offered by other manufacturers.

U.S. Patent No. 6,021,810

Patented ball check valve design delivers faster response times, lower replacement costs, and more forgiving operation.

High-Pressure Waterjet Pumping Systems

E30

Design Pressure:
60,000 psi (4,140 bars)
Maximum Operating Pressure:
55,000 psi (3,800 bars)
High-Pressure Flow Rate:
0.60 gpm (2.27 lpm)
Intensifier Cycle Rate:
22 cycles/min. at max. flow rate
Electrical System:
Main Motor: 30 hp / 22 kW (TEFC)
208v / 3 ph. / 60 Hz
240v / 3 ph. / 60 Hz
480v / 3 ph. / 60 Hz
400v / 3 ph. / 50 Hz
Air/Oil Heat Exchanger Motor: 1/4 hp / 0.18 kW
120 VAC / 1 ph. / 60-50 Hz
208 VAC / 1 ph. / 60-50 Hz
240 VAC / 1 ph. / 60-50 Hz
Motor Speeds:
1800 rpm @ 60 Hz
1500 rpm @ 50 Hz
Controls:
120 VAC / 24 VDC
Safety Shutdown Circuits:
High Oil Temperature
Low Oil Level
Low Water Pressure
Intensifier Over-Speed
Intensifier Stall
Hydraulic System:
2.75 cu. in. (45 cu. cm) Axial Piston Pump
Max. Operating Pressure: 3,000 psi (207 bars)
Cooling Water Flow Rate: 2 gpm (7.56 lpm)
Low-Pressure Cutting Water System:
Optimum Inlet Pressure: 65 psi (4.50 bar)
Booster Pump Setting: 225 psi (15.5 bars)
Orifice Capacity at 55,000 psi (3,800 bars):
Quantity / Orifice Diameter:
1 – 0.010 in. (0.25 mm)
2 – 0.007 in. (0.17 mm)
4 – 0.005 in. (0.12 mm)
Physical Dimensions:
Height: 46 inches (1.17 meters)
Width: 35 inches (0.89 meter)
Length: 81 inches (2.06 meters) without control panel
Length: 93 inches (2.36 meters) with control panel
Weight: 2,050 pounds (930 kg)

V40

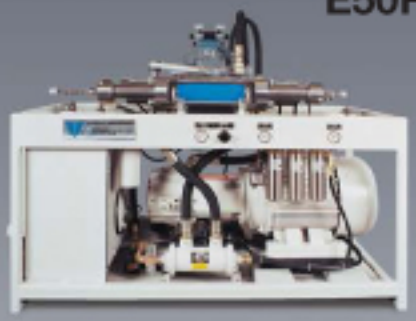
Design Pressure:
60,000 psi (4,140 bars)
Maximum Operating Pressure:
55,000 psi (3,800 bars)
High-Pressure Flow Rate:
.80 gpm (3.03 lpm)
Intensifier Cycle Rate:
25 cycles/min. at max. flow rate
Electrical System:
Main Motor: 40 hp / 30 kW (TEFC)
208v / 3 ph. / 60 Hz
240v / 3 ph. / 60 Hz
480v / 3 ph. / 60 Hz
400v / 3 ph. / 50 Hz
Air/Oil Heat Exchanger Motor: 1/4 hp / 0.18 kW
120 VAC / 1 ph. / 60-50 Hz
208 VAC / 1 ph. / 60-50 Hz
240 VAC / 1 ph. / 60-50 Hz
Motor Speeds:
1800 rpm @ 60 Hz
1500 rpm @ 50 Hz
Controls:
120 VAC / 24 VDC
Safety Shutdown Circuits:
High Oil Temperature
Low Oil Level
Low Water Pressure
Intensifier Over-Speed
Intensifier Stall
Hydraulic System:
2.75 cu. in. (45 cu. cm) Axial Piston Pump
Max. Operating Pressure: 3,000 psi (207 bars)
Cooling Water Flow Rate: 2 gpm (7.56 lpm)
Low-Pressure Cutting Water System:
Optimum Inlet Pressure: 65 psi (4.50 bars)
Booster Pump Setting: 175 psi (12.0 bars)
Orifice Capacity at 55,000 psi (3,800 bars):
Quantity / Orifice Diameter
1 – 0.012 in. (0.30 mm)
1 – 0.010 in. (0.25 mm)
2 – 0.007 in. (0.17 mm)
4 – 0.005 in. (0.12 mm)
Physical Dimensions:
Height: 36 inches (0.92 meters)
Width: 34 inches (0.86 meters)
Length: 59 inches (1.50 meters) without control panel
Length: 70 inches (1.78 meters) with control panel
Weight: 1,850 pounds (840 kg)

E50

Design Pressure:
60,000 psi (4,140 bars)
Maximum Operating Pressure:
55,000 psi (3,800 bars)
High-Pressure Flow Rate:
1.00 gpm (3.78 lpm)
Intensifier Cycle Rate:
22 cycles/min. at max. flow rate
Electrical System:
Main Motor: 50 hp / 37 kW (TEFC)
208v / 3 ph. / 60 Hz
240v / 3 ph. / 60 Hz
480v / 3 ph. / 60 Hz
400v / 3 ph. / 50 Hz
Air/Oil Heat Exchanger Motor: 1/4 hp / 0.18 kW
120 VAC / 1 ph. / 60-50 Hz
208 VAC / 1 ph. / 60-50 Hz
240 VAC / 1 ph. / 60-50 Hz
Motor Speeds:
1800 rpm @ 60 Hz
1500 rpm @ 50 Hz
Controls:
120 VAC / 24 VDC
Safety Shutdown Circuits:
High Oil Temperature
Low Oil Level
Low Water Pressure
Intensifier Over-Speed
Intensifier Stall
Hydraulic System:
4.33 cu. in. (71 cu. cm) Axial Piston Pump
Max. Operating Pressure: 3,000 psi (207 bars)
Cooling Water Flow Rate: 2 gpm (7.56 lpm)
Low-Pressure Cutting Water System:
Optimum Inlet Pressure: 65 psi (4.50 bars)
Booster Pump Setting: 225 psi (15.5 bars)
Orifice Capacity at 55,000 psi (3,800 bars):
Quantity / Orifice Diameter:
1 – 0.014 in. (0.35 mm)
2 – 0.010 in. (0.25 mm)
4 – 0.007 in. (0.17 mm)
8 – 0.005 in. (0.12 mm)
Physical Dimensions:
Height: 46 inches (1.17 meters)
Width: 35 inches (0.89 meter)
Length: 81 inches (2.06 meters) without control panel
Length: 93 inches (2.36 meters) with control panel
Weight: 2,250 pounds (1,022 kg)

Technical Specifications

E50R



Design Pressure:
60,000 psi (4,140 bars)
Maximum Operating Pressure:
55,000 psi (3,800 bars)
High-Pressure Flow Rate:
1.00 gpm (3.78 lpm)
Intensifier Cycle Rate:
22 cycles/min. at max. flow rate
Electrical System:
Main Motor: 50 hp / 37 kW (TEFC)
208v / 3 ph. / 60 Hz
240v / 3 ph. / 60 Hz
480v / 3 ph. / 60 Hz
400v / 3 ph. / 50 Hz
Air/Oil Heat Exchanger Motor: 1/4 hp / 0.18 kW
120 VAC / 1 ph. / 60-50 Hz
208 VAC / 1 ph. / 60-50 Hz
240 VAC / 1 ph. / 60-50 Hz
Motor Speeds:
1800 rpm @ 60 Hz
1500 rpm @ 50 Hz
Controls:
120 VAC / 24 VDC
Safety Shutdown Circuits:
High Oil Temperature
Low Oil Level
Low Water Pressure
Intensifier Over-Speed
Intensifier Stall
Hydraulic System:
4.33 cu. in. (71 cu. cm) Axial Piston Pump
Max. Operating Pressure: 3,000 psi (207 bars)
Cooling Water Flow Rate: 2 gpm (7.56 lpm)
Low-Pressure Cutting Water System:
Optimum Inlet Pressure: 65 psi (4.50 bars)
Booster Pump Setting: 225 psi (15.5 bars)
Orifice Capacity at 55,000 psi (3,800 bars):
Quantity / Orifice Diameter:
1 – 0.014 in. (0.35 mm)
2 – 0.010 in. (0.25 mm)
4 – 0.007 in. (0.17 mm)
8 – 0.005 in. (0.12 mm)
Physical Dimensions:
Height: 46 inches (1.17 meters)
Width: 35 inches (0.89 meter)
Length: 81 inches (2.06 meters) without control panel
Length: 93 inches (2.36 meters) with control panel
Weight: 2,750 pounds (1,247 kg)

E60

Design Pressure:
60,000 psi (4,140 bars)
Maximum Operating Pressure:
55,000 psi (3,800 bars)
High-Pressure Flow Rate:
1.10 gpm (4.15 lpm)
Intensifier Cycle Rate:
26 cycles/min. at max. flow rate
Electrical System:
Main Motor: 60 hp / 45 kW (TEFC)
208v / 3 ph. / 60 Hz
240v / 3 ph. / 60 Hz
480v / 3 ph. / 60 Hz
400v / 3 ph. / 50 Hz
Air/Oil Heat Exchanger Motor: 1/4 hp / 0.18 kW
120 VAC / 1 ph. / 60-50 Hz
208 VAC / 1 ph. / 60-50 Hz
240 VAC / 1 ph. / 60-50 Hz
Motor Speeds:
1800 rpm @ 60 Hz
1500 rpm @ 50 Hz
Controls:
120 VAC / 24 VDC
Safety Shutdown Circuits:
High Oil Temperature
Low Oil Level
Low Water Pressure
Intensifier Over-Speed
Intensifier Stall
Hydraulic System:
4.33 cu. in. (71 cu. cm) Axial Piston Pump
Max. Operating Pressure: 3,000 psi (207 bars)
Cooling Water Flow Rate: 2 gpm (7.56 lpm)
Low-Pressure Cutting Water System:
Optimum Inlet Pressure: 65 psi (4.50 bars)
Booster Pump Setting: 225 psi (15.5 bars)
Orifice Capacity at 55,000 psi (3,800 bars):
Quantity / Orifice Diameter:
1 – 0.015 in. (0.38 mm)
2 – 0.011 in. (0.28 mm)
5 – 0.007 in. (0.17 mm)
9 – 0.005 in. (0.12 mm)
Physical Dimensions:
Height: 46 inches (1.17 meters)
Width: 35 inches (0.89 meter)
Length: 81 inches (2.06 meters) without control panel
Length: 93 inches (2.36 meters) with control panel
Weight: 2,350 pounds (1,068 kg)

E100

Design Pressure:
60,000 psi (4,140 bars)
Maximum Operating Pressure:
55,000 psi (3,800 bars)
High-Pressure Flow Rate:
2.00 gpm (7.56 lpm)
Intensifier Cycle Rate:
22 cycles/min. at max. flow rate
Electrical System:
Main Motor: 100 hp / 74 kW (TEFC)
208v / 3 ph. / 60 Hz
240v / 3 ph. / 60 Hz
480v / 3 ph. / 60 Hz
400v / 3 ph. / 50 Hz
Booster Pump Motor: 1/2 hp / 0.37 kW (TEFC)
120v / 1 ph. / 60 Hz
208v / 1 ph. / 60 Hz
240v / 1 ph. / 60 Hz
Motor Speeds:
1800 rpm @ 60 Hz
1500 rpm @ 50 Hz
Controls:
120 VAC / 24 VDC
Safety Shutdown Circuits:
High Oil Temperature
Low Oil Level
Low Water Pressure
Intensifier Over-Speed
Intensifier Stall
Hydraulic System:
8.5 cu. in. (140 cu. cm) Piston Pump
Max. Operating Pressure: 3,000 psi (207 bars)
Cooling Water Flow Rate: 4 gpm (15 lpm)
Low-Pressure Cutting Water System:
Optimum Inlet Pressure: 65 psi (4.50 bars)
Booster Pump Setting: 225 psi (15.5 bars)
Orifice Capacity at 55,000 psi (3,800 bars):
Quantity / Orifice Diameter:
1 – 0.021 in. (0.53 mm)
2 – 0.014 in. (.035 mm)
4 – 0.010 in. (0.25 mm)
8 – 0.007 in. (0.17 mm)
Physical Dimensions:
Height: 64 inches (1.62 meters)
Width: 36 inches (0.91 meters)
Length: 80 inches (2.03 meters) without control panel
Length: 92 inches (2.34 meters) with control panel
Weight: 3,850 pounds (1,746 kg)

Dedication and Service, Long After the Sale

WSI Waterjet Systems International is known industry-wide for its unparalleled commitment to service after the sale. Your phone call to WSI will be answered before the third ring by a person instead of a machine. You will be directed immediately to an experienced service technician who stands ready to address your questions quickly and accurately.

Should you ever have additional service questions, you will speak with the same technician, a technician who knows your cutting application, maintenance history, and more importantly, you.

Service assistance is always free of charge and we'll stay with you until all your needs are met.

Worldwide Partner Network

To provide comprehensive solutions and support to our thousands of installations around the world, WSI has established a global network of sales, service, and distribution outlets.

Authorized WSI distributors and service centers stand ready to assist our customers from the United States to Australia, from Switzerland to China, and from Russia to South Africa.

To ensure the highest level of service and facilitate fast, efficient supply of product, Waterjet Systems International will continue to develop new partnerships worldwide.

An Extensive Line of Replacement Parts and Accessories

To assure the timely fulfillment of replacement part orders, WSI maintains an inventory of virtually all components used in our waterjet systems. As a result, orders are shipped the same business day in which they are received.

Our parts are produced using the highest quality materials and are specifically engineered to work together seamlessly with your original pump as if it were new.

In addition, WSI produces and maintains a complete line of accessory items. Accessories include high-pressure tubing and fittings, on/off valves, swivels, manual cutting stations, and abrasive systems. We also offer consulting services and an extensive OEM network of system integrators to provide you with a variety of cutting solutions.

Complete Web Shop For Your Convenience

The WSI Store and Customer Center provides a portal where guests can address all aspects of their high-pressure waterjet requirements...

- Manage account and shipping details
- Search for and view parts by part number, description, pump model, and assembly
- View detailed "exploded view" drawings for assistance with part selection and assembly
- Place orders 24 hours a day
- View order history and order statistics
- Convenient "quick order pad" for bulk ordering

Order with convenience and confidence 24 hours a day, 7 days a week, 365 days a year.

c/ Albasanz, 72 1.14 28037 Madrid. Spain
Tlf.: 0034 91 320 97 84 Mov.: 0034 616 27 22
Fax.: 0034 91 742 86 05

e-mail: info@rexpo.es
www.rexpo.es

Waterjet Systems
INTERNATIONAL

www.WaterjetSystemsInternational.com