

You cut, we handle the pressure!



# ADVANTAGE. & SMP PUMPS





## Advantage. UHP Pumps

H100D \* H50R \* H50S

The Advantage. is ideal for both water-only and abrasive waterjet cutting applications. The operator friendly features provide real time diagnostics quiet operation and easy access to all internal pump components and the intensifiers are mounted at tabletop height for ease of maintenance.

#### ADVANTAGE, UHP PUMP FEATURES

- \* Supporting orifice sizes up to .025"
- \* Up to two gpm flow rate at 60,000 psi
- \* Ergonomic, accessible design with removable doors and covers, tabletop intensifier height
- \* Constant maximum pressure with minimum pressure fluctuation
- User-friendly operator interface with touchscreen controls and diagnostics
- \* Motor Starter included (optional Wye-Delta)
- \* Superior Reliability

#### **INTENSIFIER MODELS**

H100D: Dual intensifier, 100 hp motor

H50R: Redundant, two intensifiers, 50 hp motor

H50S: Single intensifier, 50 hp motor

#### Additional Options:

- \* 60K psi
- \* 40K psi
- \* Electric Shift Intensifiers
- \* Mechancial Shift Intensifiers
- \* Remote Control with Start-Stop, High-Low Pressure and E-Stop features
- \* Electrical Options: 208/3/60, 240/3/60, 415/3/50, 480/3/60, 575/3/60
- \* Wye-Delta Starter

#### **ATTENUATOR**

- \* Large 135 cu. in. volume minimizes pressure spikes
- \* Mounted in sound-dampening brackets
- \* Minimizes pressure fluctuations at the cutting head
- \* Provides consistent jet stream flow
- \* Enhances crisp, clean cuts for high quality results
- \* Adds life to downstream, fatigue prone components



#### **ERGONOMIC DESIGN**

- \* Designed for maintenance accessibility
- \* Forklift ports on front, rear, and sides
- Drip pan collects and transfers any leak to a removable reservoir
- Sealed base captures up to 30 gallons in case of a major oil spill
- \* Covers are removable for easy unobstructed access
- \* Rugged powder-coated finish on frame and covers for lasting durability

#### **HYDRAULICS**

- \*Variable displacement, pressure-compensated axial piston pump
- \*Oil recirculation pump continuously cycles oil through the filter and high efficiency heat exchanger
- \*Oversized suction and pressure lines for increased oil flow with less pressure drop
- \*Large 80 gallon reservoir enhances the life of the operating oil

#### WATER

- \*Custom dual-filtration manifold
- \*Stainless steel water booster pump
- \*Automatic high pressure water bleed down



| <u>Specifications</u>  | H100D                   | H50S or R               |
|------------------------|-------------------------|-------------------------|
| Intensifiers           | Dual                    | Single or Redundant     |
| Max Op Pressure        | 60,000 psi (4150 bar)   | 60,000 psi (4150 bar)   |
| Flow Rate              | 2 gpm (7.6 L/min)       | 1 gpm (3.8 L/min)       |
| Max orifice Size       | .020" (.508 mm)         | .014" (.36 mm)          |
| Horsepower             | 100 hp (74.57 kw)       | 50 hp (37.29 kw)        |
| Hydraulic Res Capacity | 80 gal (302.8 L/min)    | 80 gal (302.8 L/min)    |
| Cooling Water Flow     | 3-5 gpm (11.4-20 L/min) | 3-5 gpm (11.4-20 L/min) |
| Length                 | 79" (201 cm)            | 79" (201 cm)            |
| Width                  | 49" (124.5 cm)          | 49" (124.5 cm)          |
| Height                 | 51" (129.5 cm)          | 51" (129.5 cm)          |
| Weight                 | 4000 lb (1814 kg)       | 3500 lb (1588 kg)       |



### SMP Pumps

10HP \* 15HP \* 30HP \* 50HP

H2O JET's Skid Mount Pumps are high performance pumps designed with features that enhance operation and cutting effectiveness, including a low inlet water pressure safety switch (30 psi), three phase motor, manual pressure control, and an electrical junction box for convenient maintenance. The SMP delivers the same outstanding performance as our standard *Advantage* pumps. Removal of the framing option creates a lower cost, yet the high performance of the *Advantage* line is maintained.

#### SKID MOUNT PUMP FEATURES

- \* Low inlet water pressure safety switch (30 psi)
- \* Return line oil filter with service indicator
- \* Hi-temp/low level oil safety switch
- \* Oil/water heat exchanger
- \* Variable displacement axial piston pump
- \* Auto bleed down valve
- \* Sealed base captures oil in case of a major spill
- \* Rugged powder-coated finish
- \* Epoxy coated oil tank
- \* Vibration isolation pads on the motor





#### **INTENSIFIER MODELS**

SMP-10: Single intensifier, 10 hp motor SMP-15: Single intensifier, 15 hp motor SMP-30: Single intensifier, 30 hp motor SMP-50: Single intensifier, 50 hp motor

#### **OPTIONS**

- \* Basic control for Pump On/Off & E-stop
- \* Air/oil heat exchanger (oil temp controlled)
- \* Electronic pressure control
- \* Continuous recirculation pump for cooling system
- \* Mechanical shift
- \* PLC based controls with user friendly operator interface
- \* Remote start/stop, E-Stop, Hi/Low Panel
- \* Cooling water solenoid valve (oil temp controlled)
- \* 40,000 PSI Intensifier
- \* Single phase motor
- \* Pump Cover



| <u>Specifications</u>  | SMP-10                | SMP-15                | SMP-30                  | SMP-50                    |
|------------------------|-----------------------|-----------------------|-------------------------|---------------------------|
| Max Op Pressure        | 60,000 psi (4150 bar) | 60,000 psi (4150 bar) | 60,000 psi (4150 bar)   | 60,000 psi (4150 bar)     |
| Flow Rate              | 0.24 gpm (0.91 L/min) | 0.31 gpm (1.17 L/min) | 0.6 gpm (2.27 L/min)    | 1.0 gpm (3.81 L/min)      |
| Max orifice Size       | .007" (.178 mm)       | .008" (.203 mm)       | .011" (.28 mm)          | .014" (.36 mm)            |
| Horsepower             | 10 hp (7.3 kw)        | 15 hp (11 kw)         | 30 hp (22 kw)           | 50 hp (37 kw)             |
| Hydraulic Res Capacity | 25 gal (95 L)         | 25 gal (95 L)         | 35 gal (132 L)          | 50 gal (189 L/min)        |
| Cooling Water Flow     | 2-4 gpm (7-15 L/min)  | 2-4 gpm (7-15 L/min)  | 3-5 gpm (11.4-20 L/min) | 3-5 gpm (11.4-20 L/min)   |
| Attenuator Volume      | 25 cu. in. (.41 L)    | 25 cu. in. (.41 L)    | 61 cu.in. (1 L)         | 61 cu. in. (1 L) Standard |
|                        |                       |                       |                         | 135 cu. In. (2L) Optional |
| Length                 | 44" (111 cm)          | 44" (111 cm)          | 47" (119 cm)            | 51.5" (131 cm)            |
| Width                  | 34" (86 cm)           | 34" (86 cm)           | 37" (64 cm)             | 43" (109 cm)              |
| Height                 | 33" (83 cm)           | 33" (83 cm)           | 41" (104 cm)            | 46.4" (118 cm)            |
| Weight                 | 770 lbs (349 kg)      | 800 lbs (362 kg)      | 1500 lbs (680 kg)       | 1800 lbs (816 kg)         |



## Advantage. EF Pumps

#### H75SEF \* H75REF \* H150DEF

H2O Jet continues to set the standard with the *Advantage*<sub>®</sub> EF Pump series. This industrial workhorse provides the best solution to your waterjet needs. The *Advantage*<sub>®</sub> EF Pump maintains maximum pressure and flow rate with the lowest pressure fluctuation throughout the complete pressure range of cutting parameters. This insures minimum downtime and increases productivity.

#### **ADVANTAGE. EF PUMP FEATURES**

- Three models supporting orifice sizes up to .024"
- \* Up to three gpm flow rate at 60,000 psi
- Ergonomic, accessible design with removable doors and covers, tabletop intensifier height
- Constant maximum pressure with minimum pressure fluctuation
- User-friendly operator interface with touchscreen controls and diagnostics
- \* Motor Starter included (optional Wye-Delta)
- \* Superior Reliability

#### INTENSIFIER MODELS

H75SEF: Single intensifier, 75 hp motor

H75REF: Redundant, two intensifiers, 75 hp motor

H150DEF: Dual intensifier, 150 hp motor

#### Additional Options:

\*Remote Control with Start-Stop, High-Low Pressure and E-Stop features

#### CONTROLS (HMI)

- \*Allen Bradley PLC Controller
- \*Touchscreen operator Interface
- \*Diagnostic messaging providing continual monitoring of all critical parameters
- \*Automatic re-settable stroke counter provides precise information for performance analysis
- \*Instantaneous stroke rate parameter allowing you to quickly identify check valve performance

#### WATER

- \*Custom dual-filtration manifold
- \*Stainless steel water boster pump
- \*Automatic high pressure water bleed down





#### **ERGONOMIC DESIGN**

- \*Designed for maintenance accessibility
- \*Forklift ports on front, rear, and sides
- \*Drip pan collects and transfers any leak to a removable reservoir
- \*Sealed base captures up to 30 gallons in case of a major oil spill
- \*Covers are removable for easy unobstructed access
- \*Rugged powder-coated finish on frame and covers for lasting durability

#### **HYDRAULICS**

- \*Oil recirculation pump continuously cycles oil through the filter and high effeiciency heat exchanger
- \*Oversized suction and pressure lines for increased oil flow with less pressure drops
- \*Variable displacement, pressure-compensated axial piston pump
- \*Large 80 gallon reservoir enhances the life of the operating oil

#### **ATTENUATOR**

- \*Large 2 Ltr. minimizes pressure spikes
- \*Minimizes pressure fluctuations at the cutting head
- \*Provides consistant jet stream flow
- \*Enhances crisp, clean cuts for high quality results
- \*Adds life to downstream, fatigue prone componets

| <u>Specifications</u>  | H75 S or R EF           | H150D EF                |
|------------------------|-------------------------|-------------------------|
| Intensifiers           | Single or Redundant     | Dual                    |
| Max Op Pressure        | 60,000 psi (4150 bar)   | 60,000 psi (4150 bar)   |
| Flow Rate              | 1.5 gpm (5.7) L/min)    | 3.0 gpm (11.4 L/min)    |
| Max orifice Size       | .017" (.431 mm)         | .024" (.609 mm)         |
| Horsepower             | 75 hp (55.92 kw)        | 150 hp (111.85 kw)      |
| Hydraulic Res Capacity | 80 gal (302.8 L/min)    | 80 gal (302.8 L/min)    |
| Cooling Water Flow     | 3-5 gpm (11.4-20 L/min) | 3-5 gpm (11.4-20 L/min) |
| Length                 | 79" (201 cm)            | 79" (201 cm)            |
| Width                  | 49" (124.5 cm)          | 49" (124.5 cm)          |
| Height                 | 51" (129.5 cm)          | 51" (129.5 cm)          |
| Weight                 | 3600 lb (1633 kg)       | 4900 lb (2222 kg)       |



EP94-50S \* EP94-50R \* EP94-100D

H2O Jet continues to set the standard with the Advantage. Extreme Pressure Pump series. This industrial workhorse provides the best solution to your waterjet needs. The Advantage. Extreme Pressure Pump maintains maximum pressure and flow rate with the lowest pressure fluctuation throughout the complete high pressure range of cutting parameters. This insures minimum downtime and increases productivity.

#### ADVANTAGE. EP PUMP FEATURES

- \* Three models supporting orifice sizes up to .015"
- \* Up to 1.26 gpm flow rate at 94,000 psi
- \* Ergonomic, accessible design with removable doors and covers, tabletop intensifier height
- \* Constant maximum pressure with minimum pressure fluctuation
- User-friendly operator interface with touchscreen controls and diagnostics
- \* Motor Starter included (optional Wye-Delta)
- \* Superior Reliability

#### INTENSIFIER MODELS

EP94-50S: Single intensifier, 50 hp motor

EP94-50R: Redundant, two intensifiers, 50 hp motor

EP94-100D: Dual intensifier, 100 hp motor

#### Additional Options:

\* Remote Control with Start-Stop, High-Low Pressure and E-Stop features

#### CONTROLS (HMI)

- \* Allen Bradley PLC Controller
- \* Touchscreen operator Interface
- \* Diagnostic messaging providing continual monitoring of all critical parameters
- \* Automatic resettable stroke counter provides precise information for performance analysis
- \* Instantaneous stroke rate parameter allowing operator to quickly identify check valve performance

#### WATER

- \* Custom dual-filtration manifold
- \* Stainless steel water boster pump
- \* Automatic high pressure water bleed down





- \* Forklift ports on front, rear, and sides
- \* Drip pan collects and transfers any leak to a removable reservoir
- \* Sealed base captures up to 30 gallons in case of a major oil spill
- Covers are removable for easy unobstructed access
- \* Rugged powder-coated finish on frame and covers for lasting durability

#### **HYDRAULICS**

- \* Oil recirculation pump continuosly cycles oil through the filter and high efficiency heat exchanger
- \* Oversized suction and pressure lines for increased oil flow with less pressure drops
- \* Variable displacement, pressure-compensated axial piston pump
- \* Large 80 gallon reservoir enhances the life of the operating oil

#### ATTENUATOR

- \* Large 1.1 Liter minimizes pressure spikes
- \* Minimizes pressure fluctuations at the cutting head
- \* Provides consistent jet stream flow
- \* Enhances crisp, clean cuts for high quality results
- \* Adds life to downstream, fatigue prone components

| <u>Specifications</u>  | H50S or R EP            | H100 EP                 |
|------------------------|-------------------------|-------------------------|
| Intensifiers           | Single or Redundant     | Dual                    |
| Max Op Pressure        | 94,000 psi (6481 bar)   | 94,000 psi (6481 bar)   |
| Flow Rate              | .63 gpm (2.38 L/min)    | 1.26 gpm ( 4.77 L/min)  |
| Max orifice Size       | .010" (.254 mm)         | .015" (.381 mm)         |
| Horsepower             | 50 hp (37.29 kw)        | 100 hp (74.57 kw)       |
| Hydraulic Res Capacity | 80 gal (302.8 L/min)    | 80 gal (302.8 L/min)    |
| Cooling Water Flow     | 3-5 gpm (11.4-20 L/min) | 3-5 gpm (11.4-20 L/min) |
| Length                 | 79" (201 cm)            | 79" (201 cm)            |
| Width                  | 49" (124.5 cm)          | 49" (124.5 cm)          |
| Height                 | 51" (129.5 cm)          | 51" (129.5 cm)          |
| Weight                 | 3500 lb (1588 kg)       | 4300 lb (1950 kg)       |

Merging innovative ideas with real world demands