Ceramic Plunger
The large diameter ceramic plunger has a slow stroke rate with reduced friction for longer seal life.

Hydraulic Center Section
The piston design uses a long-life seal and low friction wear ring to significantly increase component life. Matching metal to metal sliding surfaces have been eliminated.

Plunger Rod Seal and Housing
Hydraulic rod seals and plunger bearing can be readily accessed from the outside of the hydraulic end cap. The result is quicker maintenance times.

Electronic Shift
Solid state end of travel sensing provides smooth quick reversal of the intensifier for stable pressure and quality cuts. Shift times are monitored by the PLC to prevent over working in case of a leak.

Non-threaded High Pressure Cylinders
Threadless rod accurately preload the HP cylinder and assists in the assembly process. Threadless cylinders reduce fatigue problems.

Check Valve
The check valve utilizes a screwless low pressure poppet design. This feature prevents loose parts in the high pressure cylinder.

Advanced Intensifier Technology
AccuStream’s AIT Technology combines innovative design, quality manufacturing, and carefully selected materials to maximize maintenance intervals, simplify component replacement and minimize cost of operation.

The AccuStream Advantage
AccuStream is committed to helping customers successfully select the system that is best for their specific application. AccuStream provides the highest level of support before, during and after the sale for the systems we make, directly and in cooperation with a network of system integrators. We offer on-site technical service calls, and training classes at our newly updated facility in St. Paul, Minnesota.

AS Series Pump Model Comparison

<table>
<thead>
<tr>
<th>Model</th>
<th>Max Continuous Output Pressure</th>
<th>Max Output Flow, gpm (lpm)</th>
<th>Max Orifice Diameter, in (mm)</th>
<th>Intensifier Configuration</th>
<th>Motor Power, hp (kw)</th>
<th>Overall Width, in (mm)</th>
<th>Overall Length, in (mm)</th>
<th>Overall Height, in (mm)</th>
<th>Full load amps @ 460 VAC (60Hz)*</th>
<th>Weight, lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS-6030</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>0.65 (2.5)</td>
<td>0.012 (0.30)</td>
<td>Single</td>
<td>30 (22)</td>
<td>34 (864)</td>
<td>62 (1575)</td>
<td>43 (1092)</td>
<td>41</td>
<td>1750</td>
</tr>
<tr>
<td>AS-6050</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>1.14 (4.2)</td>
<td>0.015 (0.39)</td>
<td>Single</td>
<td>50 (37)</td>
<td>40 (1016)</td>
<td>76 (1930)</td>
<td>56 (1422)</td>
<td>68</td>
<td>3100</td>
</tr>
<tr>
<td>AS-6075</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>1.46 (5.3)</td>
<td>0.018 (0.46)</td>
<td>Single</td>
<td>75 (56)</td>
<td>45 (1149)</td>
<td>86 (2184)</td>
<td>56 (1422)</td>
<td>95</td>
<td>3200</td>
</tr>
<tr>
<td>AS-60100</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>2.1 (8.0)</td>
<td>0.021 (0.53)</td>
<td>Single</td>
<td>100 (74)</td>
<td>55 (1397)</td>
<td>81 (2057)</td>
<td>56 (1422)</td>
<td>118</td>
<td>4100</td>
</tr>
<tr>
<td>AS-60150</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>2.2 (8.2)</td>
<td>0.026 (0.66)</td>
<td>Single</td>
<td>150 (110)</td>
<td>62 (1575)</td>
<td>81 (2057)</td>
<td>56 (1422)</td>
<td>180</td>
<td>5800</td>
</tr>
</tbody>
</table>

*For water/oil cooling (air-cooled models have increased current requirements).
AccuStream is a leading manufacturer of waterjet parts and products. The company focuses on supplying customers with the highest level of service in the industry.

Only AccuStream manufactures ultra-high pressure pumps with Advanced Intensifier Technology™ (AIT). AIT represents the latest in high pressure intensifier design that delivers increased reliability and efficiency. AccuStream's wide product range assures that there is a pump to meet your specific requirements.

AS Series Intensifier Pumps

AS Series intensifiers are built with design features to maximize performance, simplify component replacement and minimize actual cost of operation. Low maintenance cycles can be easily programmed into the PLC. AccuStream pumps can supply UHP water to more heads or to feed larger cutting head orifices.

Advanced Intensifier Design (AIT)
AccuStream intensifiers are built with design features to maximize performance, simplify component replacement and minimize actual cost of operation. All pumps will operate at continuous cutting pressures up to 60,000 psi. A higher output flow rate allows the pumps to supply UHP water to more heads or to feed larger cutting head orifices.

Dual Pressure Control
Switching between high pressure cutting and low pressure piercing of brittle materials can be done on the pump panel or remotely.

Remote Control
Pumps can be operated remotely by the motion control. Larger pumps include a key switch which allows the operator to select whether the pump is in the local or remote mode.

Electric Motor
Motors are totally enclosed force cooled (TEFC) for moisture and contamination resistance, and are inverter rated and premium efficiency. Fifty horsepower and larger pumps use a wye-delta soft start to minimize current draw at startup. Electric motor efficiency is improved.

Hydraulic Pump
Pressure compensated pumps are selected for reliability and have continuous ratings that far exceed their use in the intensifier pump. Output hydraulic pressure is held steady to maintain ultra-high pressure water as required at the cutting heads.

Inlet Water Boost Pump and Filtration
Inlet water passes through a series of filters before the intensifier. Pressure gages on either end of the filters indicate when filter elements need changing. Larger pumps include a boost pump to meet the higher flow requirements.

PLC Controls
The programmable logic controller (PLC) monitors the sensors and provides a warning or shuts the pump down if necessary. A touch panel provides easy operator interface for controlling the pump.

The Flexibility of Waterjet
From prototype to production waterjet can effectively and efficiently cut both hard and soft materials including:
- Stainless Steel
- Copper
- Aluminum
- Brass
- Iron
- Plastic
- Thermoplastics
- Composites
- Foam
- Rubber
- Insulation
- Food
- Textiles
- And much more!

Advanced Intensifier Design (AIT)

- AIT represents the latest in high pressure intensifier design that delivers increased reliability and efficiency.
- Only AccuStream manufactures ultra-high pressure pumps with AIT.
- AccuStream's wide product range assures that there is a pump to meet your specific requirements.

Dual Pressure Control

- Switching between high pressure cutting and low pressure piercing of brittle materials can be done on the pump panel or remotely.
- Larger pumps include a key switch which allows the operator to select whether the pump is in the local or remote mode.

Remote Control

- Pumps can be operated remotely by the motion control.
- Larger pumps include a key switch which allows the operator to select whether the pump is in the local or remote mode.

Electric Motor

- Motors are totally enclosed force cooled (TEFC) for moisture and contamination resistance, and are inverter rated and premium efficiency.
- Fifty horsepower and larger pumps include a wye-delta soft start to minimize current draw at startup.
- Electric motor efficiency is improved.

Hydraulic Pump

- Pressure compensated pumps are selected for reliability and have continuous ratings that far exceed their use in the intensifier pump.
- Output hydraulic pressure is held steady to maintain ultra-high pressure water as required at the cutting heads.

Inlet Water Boost Pump and Filtration

- Inlet water passes through a series of filters before the intensifier.
- Pressure gages on either end of the filters indicate when filter elements need changing.
- Larger pumps include a boost pump to meet the higher flow requirements.

PLC Controls

- The programmable logic controller (PLC) monitors the sensors and provides a warning or shuts the pump down if necessary.
- A touch panel provides easy operator interface for controlling the pump.

The Flexibility of Waterjet

- From prototype to production waterjet can effectively and efficiently cut both hard and soft materials including:
  - Stainless Steel
  - Copper
  - Aluminum
  - Brass
  - Iron
  - Plastic
  - Thermoplastics
  - Composites
  - Foam
  - Rubber
  - Insulation
  - Food
  - Textiles
  - And much more!
AccuStream is a leading manufacturer of waterjet parts and products. The company focuses on the manufacturing of quality products as well as providing customers with the highest level of service in the industries.

Only AccuStream manufactures ultra-high pressure pumps with Advanced Intensifier Technology™ (AIT). AIT represents the latest in high pressure intensifier design that delivers increased reliability and efficiency. AccuStream’s wide product range assures that there is a pump to meet your specific requirements.

AS Series
Intensifier Pumps

AccuStream intensifiers are built with design features to maximize maintenance intervals, simplify component replacement and minimize actual cost of operation. All pumps will operate at continuous cutting pressures up to 60,000 psi. A higher output flow rate allows the pumps to supply UHP water to more heads or to feed larger cutting head orifices.

As a part of its commitment to improve the operation of waterjet equipment, AccuStream has developed new pumps featuring a variety of design features that make them more efficient and reliable. These feature include:

- **Advanced Intensifier Design (AIT)**: AccuStream intensifiers are built with design features to maximize maintenance intervals, simplify component replacement and minimize actual cost of operation. All pumps will operate at continuous cutting pressures up to 60,000 psi. A higher output flow rate allows the pumps to supply UHP water to more heads or to feed larger cutting head orifices.

- **Dual Pressure Control**: Switching between high pressure cutting and low pressure piercing of brittle materials can be done on the pump panel or remotely.

- **Remote Control**: Pumps can be operated remotely by the motion control. Larger pumps include a key switch which allows the operator to select whether the pump is in the local or remote mode.

- **Electric Motor**: Motors are totally enclosed force cooled (TEFC) for moisture and contamination resistance, inverter rated and premium efficiency. Fifty horsepower and larger pumps include wye-delta soft start to minimize current draw at start-up. Electrical consumption and peak current are minimized.

- **Hydraulic Pump**: Pressure compensated pumps are selected for reliability and have continuous ratings that far exceed their use in the intensifier pump. Output hydraulic pressure is held steady to maintain ultra-high pressure water as required at the cutting heads.

- **PLC Controls**: The programmable logic controller (PLC) monitors the sensors and provides a warning or shuts the pump down if necessary. A touch panel provides easy operator interface for controlling the pump.

- **Inlet Water Boost Pump and Filtration**: Inlet water passes through a series of filters before the intensifier. Pressure gages on either end of the filters indicate when filter elements need changing. Larger pumps include a boost pump to meet the higher flow requirements.

- **Cooling**: All units come standard with oversized water/oil coolers. Optional air/oil coolers are available to reduce water consumption.

- **Kidney Loop**: Fifty horsepower and larger pumps use a smaller hydraulic pump to recirculate oil through a heat exchanger and oil filter. Oil is kept cool when the pump is in standby. Oil level and head exchange are not exposed to high pulsations from the output of the intensifier.

- **Inlet Water Boost Pump and Filtration**: Inlet water passes through a series of filters before the intensifier. Pressure gages on either end of the filters indicate when filter elements need changing. Larger pumps include a boost pump to meet the higher flow requirements.

- **Covers**: Covers have sound insulation to keep pump sound to a comfortable level of less than 75 dBa. Covers are standard on large pumps and optional on thirty horsepower and smaller pumps.

- **Dump Valve**: A safety dump valve relieves system pressure in case of a shutdown.

- **Attenuator**: The attenuator evens the output pressure from the pump so that cut edge quality is as smooth as possible. All AccuStream pumps have a large volume attenuator.

- **Inlet Water Boost Pump and Filtration**: Inlet water passes through a series of filters before the intensifier. Pressure gages on either end of the filters indicate when filter elements need changing. Larger pumps include a boost pump to meet the higher flow requirements.

- **Covers**: Covers have sound insulation to keep pump sound to a comfortable level of less than 75 dBa. Covers are standard on large pumps and optional on thirty horsepower and smaller pumps.

- **Dump Valve**: A safety dump valve relieves system pressure in case of a shutdown.

- **ATTENUATOR**: The attenuator is used on the pump where the total volume of the pump is less than 5000 gallons.

- **Inlet Water Boost Pump and Filtration**: Inlet water passes through a series of filters before the intensifier. Pressure gages on either end of the filters indicate when filter elements need changing. Larger pumps include a boost pump to meet the higher flow requirements.

- **Covers**: Covers have sound insulation to keep pump sound to a comfortable level of less than 75 dBa. Covers are standard on large pumps and optional on thirty horsepower and smaller pumps.

- **Dump Valve**: A safety dump valve relieves system pressure in case of a shutdown.
AccuStream is a leading manufacturer of waterjet parts and products. The company focuses on the manufacturing of quality products as well as providing customers with the highest level of service in the industries.

Only AccuStream manufactures ultra-high pressure pumps with Advanced Intensifier Technology™ (AIT). AIT represents the latest in high pressure intensifier design that delivers increased reliability and efficiency. AccuStream’s wide product range assures that there is a pump to meet your specific requirements.

### AS Series
**Intensifier Pumps**

AccuStream is a leading manufacturer of waterjet parts and products. The company focuses on the manufacturing of quality products as well as providing customers with the highest level of service in the industries. Only AccuStream manufactures ultra-high pressure pumps with Advanced Intensifier Technology™ (AIT). AIT represents the latest in high pressure intensifier design that delivers increased reliability and efficiency. AccuStream’s wide product range assures that there is a pump to meet your specific requirements.

### Advanced Intensifier Design (AIT)

AccuStream intensifiers are built with design features to maximize maintenance intervals, simplify component replacement and minimize actual cost of operation. All pumps will operate at continuous cutting pressures up to 60,000 psi. A higher output flow rate allows the pumps to supply UHP water to more heads or to feed larger cutting head orifices.

### Dual Pressure Control

Switching between high pressure cutting and low pressure piercing of brittle materials can be done on the pump panel or remotely.

### Remote Control

Pumps can be operated remotely by the motion control. Larger pumps include a key switch which allows the operator to select whether the pump is in the local or remote mode.

### Electric Motor

Motors are totally enclosed fan cooled (TEFC) for moisture and contamination resistance, inverter rated and premium efficiency. Fifty horsepower and larger pumps include wye-delta soft start to minimize current draw at start up. Electrical consumption and peak current are minimized.

### Hydraulic Pump

Pressure compensated pumps are selected for reliability and have continuous ratings that far exceed their use in the intensifier pump. Output hydraulic pressure is held steady to maintain ultra-high pressure water as required at the cutting heads.

### PLC Controls

The programmable logic controller (PLC) monitors the sensors and provides a warning or shuts the pump down if necessary. A touch panel provides easy operator interface for controlling the pump.

### Hydraulic Control

The hydraulic control circuit provides pressure compensation to a cutoff pressure setting. The fluid is returned to the oil tank through the filter line to clear the system of debris.

### Cooling

All units come standard with oversized water/oil coolers. Optional air/oil coolers are available to reduce water consumption.

### Kidney Loop

Fifty horsepower and larger pumps use a smaller hydraulic pump to recirculate oil through a heat exchanger and oil filter. Oil is kept cool when the pump is in standby. Oil quality and heat exchange are not exposed to high pulsations from the output of the intensifier.

### Inlet Water Boost Pump and Filtration

Inlet water passes through a series of filters before the intensifier. Pressure gages on either end of the filters indicate when filter elements need changing. Larger pumps include a boost pump to meet the higher flow requirements.

### Attenuator

The attenuator evens the output pressure from the pump so that cut edge quality is as smooth as possible. All AccuStream pumps have a large volume attenuator.

### Covers

Covers have sound insulation to keep pump sound to a comfortable level of less than 75 dBa. Covers are standard on large pumps and optional on thirty horsepower and smaller pumps.

### Dump Valve

A safety dump valve releases system pressure in case of a shutdown.

---

**The Flexibility of Waterjet**

From prototypes to production waterjet can effectively and efficiently cut both hard and soft materials including:

- Stainless Steel
- Aluminum
- Titanium
- Exotic Alloys
- Composites
- Foam
- Textiles
- ... and much more!
**Ceramic Plunger**
The large diameter ceramic plunger has a slow stroke rate with reduced friction for longer seal life.

**Hydraulic Center Section**
The piston design uses a long-life seal and low friction wear ring to significantly increase component life. Matting metal to metal sliding surfaces have been eliminated.

**Plunger Rod Seal and Bearing**
Hydraulic rod seals and plunger bearing can be readily accessed from the outside of the hydraulic end cap. The result is quicker maintenance times.

**Electronic Shift**
Solid state end of travel sensing provides smooth quick reversal of the intensifier for stable pressure and quality cuts. Shift times are monitored by the PLC to prevent over-stroking in case of a leak.

**Non-threaded High Pressure Cylinders**
Threaded rod securely preload the HP cylinder and assist in the realignment of the cylinder onto the plunger. Threadless cylinders reduce fatigue problems.

**Check Valve**
The check valve utilizes a screwless low pressure poppet design. This feature prevents loose parts in the high pressure cylinder.

---

**Advanced Intensifier Technology**
AccuStream’s AIT Technology combines innovative design, quality manufacturing, and carefully selected materials to maximize maintenance intervals, simplify component replacement and minimize cost of operation.

---

**The AccuStream Advantage**
AccuStream is committed to helping customers successfully select the system that is best for their specific application. AccuStream provides the highest level of support before, during and after the sale for the systems we make, directly and in cooperation with a network of system integrators. We offer on-site technical service calls, and training classes at our newly updated facility in St. Paul, Minnesota.

---

**AS Series Pump Model Comparison**

<table>
<thead>
<tr>
<th>Model</th>
<th>AS-6030</th>
<th>AS-6050</th>
<th>AS-6075</th>
<th>AS-60100</th>
<th>AS-60150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Continuous Output Pressure</td>
<td>Adjustable to 65,000 psi (444 bar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Output Flow, gpm (lpm)</td>
<td>0.65 (2.5)</td>
<td>1.4 (6.1)</td>
<td>2.1 (8.0)</td>
<td>3.2 (12.1)</td>
<td></td>
</tr>
<tr>
<td>Max Orifice Diameter, in (mm)</td>
<td>0.012 (0.30)</td>
<td>0.016 (0.41)</td>
<td>0.018 (0.46)</td>
<td>0.021 (0.53)</td>
<td>0.026 (0.66)</td>
</tr>
<tr>
<td>Intensifier Configuration</td>
<td>Single</td>
<td>Dual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Power, hp (kw)</td>
<td>30 (22)</td>
<td>50 (37)</td>
<td>75 (56)</td>
<td>100 (74)</td>
<td>150 (110)</td>
</tr>
<tr>
<td>Overall Width, in (mm)</td>
<td>34 (864)</td>
<td>40 (1016)</td>
<td>45 (1149)</td>
<td>55 (1397)</td>
<td></td>
</tr>
<tr>
<td>Overall Length, in (mm)</td>
<td>62 (1575)</td>
<td>76 (1930)</td>
<td>86 (2184)</td>
<td>81 (2057)</td>
<td></td>
</tr>
<tr>
<td>Overall Height, in (mm)</td>
<td>43 (1092)</td>
<td>56 (1422)</td>
<td>56 (1422)</td>
<td>56 (1422)</td>
<td></td>
</tr>
<tr>
<td>Full load amps @ 460 VAC (60Hz)*</td>
<td>41</td>
<td>68</td>
<td>95</td>
<td>118</td>
<td>180</td>
</tr>
<tr>
<td>Weight, lb</td>
<td>1750</td>
<td>3100</td>
<td>3200</td>
<td>4100</td>
<td>5800</td>
</tr>
</tbody>
</table>

*For water/oil cooling (air-cooled models have increased current requirements).
Unique Plunger Mode
The large diameter ceramic plunger has a slow stroke rate with reduced friction for longer seal life.

Hydraulic Center Section
The piston design uses a long-life seal and low friction wear ring to significantly increase component life. Matching metal to metal sealing surfaces have been eliminated.

Plunger Rod Seal and Bearing
Hydraulic rod seals and plunger bearing can be readily accessed from the outside of the hydraulic end cap. The result is quicker maintenance times.

Electronic Shift
Solid state end of travel sensing provides smooth quick reversal of the intensifier for stable pressure and quality cuts. Shift times are monitored by the PLC to prevent over working in case of a leak.

Non-threaded High Pressure Cylinders
Threaded rod securely preload the HP cylinder and assist in the realignment of the cylinder onto the plunger. Threadless cylinders reduce fatigue problems.

Ceramic Plunger
The large diameter ceramic plunger has a slow stroke rate with reduced friction for longer seal life.

Hydraulic Center Section
The piston design uses a long-life seal and low friction wear ring to significantly increase component life. Matching metal to metal sealing surfaces have been eliminated.

Plunger Rod Seal and Bearing
Hydraulic rod seals and plunger bearing can be readily accessed from the outside of the hydraulic end cap. The result is quicker maintenance times.

The AccuStream Advantage
AccuStream is committed to helping customers successfully select the system that is best for their specific application. AccuStream provides the highest level of support before, during and after the sale for the systems we make, directly and in cooperation with a network of system integrators. We offer on-site technical service calls, and training classes at our newly updated facility in St. Paul, Minnesota.

AS Series Model Comparison

<table>
<thead>
<tr>
<th>Model</th>
<th>Max Continuous Output Pressure</th>
<th>Max Output Flow, gpm (lpm)</th>
<th>Max Orifice Diameter, in (mm)</th>
<th>Intensifier Configuration</th>
<th>Motor Power, hp (kw)</th>
<th>Overall Width, in (mm)</th>
<th>Overall Length, in (mm)</th>
<th>Overall Height, in (mm)</th>
<th>Full load amps @ 460 VAC (60Hz)*</th>
<th>Weight, lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS-6030</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>0.65 (2.5)</td>
<td>0.012 (0.30)</td>
<td>Single</td>
<td>30 (22)</td>
<td>34 (864)</td>
<td>62 (1575)</td>
<td>43 (1092)</td>
<td>41</td>
<td>1750</td>
</tr>
<tr>
<td>AS-6050</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>1.1 (4.2)</td>
<td>0.015 (0.38)</td>
<td>Single</td>
<td>50 (37)</td>
<td>40 (1016)</td>
<td>75 (1930)</td>
<td>56 (1422)</td>
<td>68</td>
<td>3100</td>
</tr>
<tr>
<td>AS-6075</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>1.6 (6.1)</td>
<td>0.018 (0.46)</td>
<td>Single</td>
<td>75 (56)</td>
<td>45 (1149)</td>
<td>86 (2184)</td>
<td>56 (1422)</td>
<td>95</td>
<td>3200</td>
</tr>
<tr>
<td>AS-60100</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>2.1 (8.0)</td>
<td>0.021 (0.53)</td>
<td>Dual</td>
<td>100 (74)</td>
<td>55 (1397)</td>
<td>81 (2057)</td>
<td>56 (1422)</td>
<td>118</td>
<td>4100</td>
</tr>
<tr>
<td>AS-60150</td>
<td>Adjustable to 60,000 psi (4140 bar)</td>
<td>3.2 (12.1)</td>
<td>0.026 (0.66)</td>
<td>Dual</td>
<td>150 (110)</td>
<td>65 (1656)</td>
<td>81 (2057)</td>
<td>56 (1422)</td>
<td>180</td>
<td>5800</td>
</tr>
</tbody>
</table>

*For water/oil cooling (air-cooled models have increased current requirements).