Concrete Hydro-Demolition Solutions
Hydro-Demolition

Hydro-demolition is a popular and efficient method for concrete removal on roadways, bridges, and parking structures. High pressure waterblasting tools allow the concrete to be removed while maintaining structure integrity and preserving the rebar in the process. Hydro-demolition is a more productive and more surgical concrete removal method for many repair applications compared to jackhammering, rotomilling and other percussive methods. It’s ideal for removing damaged concrete and preparing a surface to apply new concrete.

Jetstream of Houston provides a range of hydro-demolition solutions for partial or full depth concrete removal, concrete scarification and membrane removal. Jetstream manufactures industrial high-pressure waterblasting equipment operated at pressures up to 40,000 psi. Product offerings include a complete line of skid- and trailer-mounted units, pumps, control guns, valves, hoses, replacement parts, nozzles, safety equipment and PPE, as well as serving as an authorized distributor of leading automated robotic hydro-demolition tools from AquaJet® and StoneAge®.

Automated Tools

StoneAge is recognized as a world leader in providing tools and equipment for waterblast applications. They specialize in mechanized equipment and rotary nozzles and offer a wide range of high pressure waterblasting tools that bring engineering and customer service together to create innovative solutions for tough applications.

**StoneAge® Blackhawk Automated Concrete Demolition System**

The StoneAge Blackhawk features completely integrated hydraulic controls and is adaptable to your choice of implement (Skid Steer, SkyTrack, etc.). It has adjustable RPM and traverse speeds for optimum removal rates. The Blackhawk was designed for vertical and horizontal use and provides effective concrete removal on bridges, garages, and roadways.
Jetstream® Hydro-Demolition Tools & Accessories

**Durasafe™ Dump Gun**
Durasafe™ hand operated dump style control guns allow the operator to have complete control of the pressure at all times. Designed with safety, comfort and simplicity in mind they are used for a variety of concrete prep, scarification and hydro-demolition applications.

**These waterblasting guns feature:**
- 30 second field-replaceable cartridge for minimal downtime
- 48 in (1219 mm) distance from primary trigger to end of barrel to ensure maximum operator safety (custom lengths available).
- Optionally equipped with fully adjustable body pad for maximum operator comfort in any position

**Deck Blaster**
The Jetstream deck blaster efficiently scarifies concrete and asphalt. The air-powered rotation and drive provide consistent and efficient operation up to 40,000 psi (2750 bar). It has a 14 in (350 mm) cleaning path with 8 nozzle jet head. Deck blasters are available with/without direct vacuuming capabilities.

**Rotolance 2500**
The Rotolance 2500 works with AQUA CUTTER robotic equipment and is the ideal tool for cleaning and light preparation of concrete surfaces, paint removal from steel and concrete, plastic and rubber removal, rust removal from steel and other industrial applications.

**The Design Advantages**
- Gradually adjusting rotation speed
- Replaceable wear shield to protect the rotor
- Full working width in the power head
- Computer-controlled movements
- Operates with 2 or 4 nozzles

**Jetstream X-Series Waterblast Unit**
The X-Series mobile waterblast unit features Jetstream’s patented UNx® fluid end system designed for fast conversion between 10,000, 20,000 and 40,000 psi operating pressures. The X-Series also features the Guardian Filter System™ – an innovative water tank system with integrated filters designed to help extend system life – and a corrosion resistant, galvanized frame with a lower center of gravity and optimized wheelbase for improved towing and steering.

The greaseless spread bearing PTO provides reliable power transmission and reduced maintenance time. The Jetstream X-Series is available with up to a 325HP diesel engine.
Automated Robotic Hydro-Demolition Tools

AquaJet® Automated Tools

**AQUA CUTTER Innovation & Design Advantages**

Aquajet Systems AB is a global leader in the design and manufacture of versatile hydrodemolition equipment. Their automated robots feature many design innovations including the EDS efficient cutting head, which keeps the set distance from the nozzle to the surface regardless of the selected lance angle for energy savings and optimized removal rates. One of the most important features is the patented ISC, Intelligent Sensing Control, which require no electronic cables or sensors in the front, eliminating the risk of malfunction due to moisture. The operator's panel uses clear, simple symbols. Wireless remote control is standard on all models.

**AQUA CUTTER 710H**

*For horizontal operations*

The 710H model is suitable for efficient concrete removal on all horizontal slab areas, where the front power head can move sideways to pass over the concrete as well as tilt sideways to compensate for surface inclinations. The removable side covers on the front power head ensure removal of the concrete all the way into corners. The front power head can be hydraulically tilted 90 degree upwards for easy inspection of the worked area. The robotic tool can selectively remove concrete to a pre-set level.

The 710H can operate with most of the accessories including: wireless radio control, Rotolance 400 to 2500, the single or double nozzle lance system and the 13 ft (4 m) operation-wide system.

**AQUA CUTTER 710V**

*For horizontal, vertical and over-head operations*

The 710V robot is an extremely versatile hydro-demolition unit suitable for operations that require horizontal, vertical or over-head concrete work. The flexibility allows the unique 3-D positioning of the front power head to give the operator full freedom to efficiently reach all areas, such as vertical operations along the surface or horizontal up against the surface or in confined areas due to the compact and maneuverable design. The removable side covers on the front ensure concrete removal all the way into corners.

The vertical and overhead operation height is controlled by a hydraulically operated steel mast that raises in sections; which means the robot does not carry any towers or protruding arms. It can raise up to 23 ft (7 m) working height without additional support.

The 710V can operate with most accessories including: wireless radio control, circular power head, extension kit for articulated and extended operating range, Rotolance 400–2500, single or double nozzle lance system, and 13 ft (4 m) operation-wide system.
Automated Robotic Hydro-Demolition Tools

**AQUA CUTTER 410V**

**Advanced hydro-demolition robot for tunnel operation**
The 410V is the world's smallest and most flexible hydro-demolition robot, offering increased versatility for working in confined areas such as concrete sewer pipes. Equipped with the tunnel kit this is ideal for applications such as the rehabilitation of concrete or steel sewer pipes in urban locations, small tunnels and inside buildings with restricted space. The tunnel kit’s advantages include automatic detection and adjustment of the distance to the tunnel surface, making it easy to operate in uneven or oval-shaped tunnels. The 410V is programmable to operate from a selected “zero point” and 0–360 degrees on the circumference.

**AQUA CUTTER 410A**

**Advanced hydro-demolition robot for tunnel operation**
The 410A features an articulated arm that can reach up to 9.8 ft (3 m). The 5 ft (1.5 m) front shroud is rubber lined for noise reduction and to function as a splash guard. It has removable side covers for better access in corners (between horizontal and vertical surfaces). The 410A can operate with a number of tools, including a multiple nozzle UHP rotor. Another tool is a single nozzle lance featuring adjustable lance angle with high performance oscillation and an easy adjustable pendulum, to ensure increased production rates.

All AQUA CUTTER models are available in Classic or EVOLUTION. **EVOLUTION models feature:**
- The unit has unlimited free setting of programs, all parameters are easily selected and adjusted on the TFT graphic color display.
- Programming for different removal depths in the same overpass.
- Will do geometrical patches such as circles, parallelograms, squares and triangles.
- The operator can save the program settings and view production data.
- Calculates and displays the removal area in square ft/hour from the current settings, and verify the actual removed area.

Jetstream hydro-demolition systems unite the best in waterblasting technology with the best in automated tools. The end result: efficient and productive concrete removal for repair applications.
Jetstream manufactures industrial high-pressure waterblasting equipment operated at pressures up to 40,000 psi for a wide range of applications, including hydro-demolition, industrial cleaning and surface preparation. Backed by strong after sales service and support, Jetstream product offerings include a complete line of skid- and trailer-mounted pump units, control guns, valves, hoses, replacement parts, nozzles, and safety gear.

From the people who bring you Jetstream, Guzzler, and Vactor, the brands you know and trust, we bring you FS Solutions. Locations across the United States are staffed with skilled, factory-trained technicians and provide a range of product and service offerings including:

• Service and repair of AquaJet and StoneAge hydro-demolition tools
• High-performance parts and accessories for most makes and models waterblasters
• Service and repair of waterblasters and waterblasting tools and accessories
• Waterblaster rentals of Jetstream X Series blasters.

Jetstream of Houston, LLP
5905 Thomas Rd., Houston, TX 77041
Phone: (832) 590-1300 Fax: (832) 590-1304 Toll Free: (800) 231-8192
www.waterblast.com

UNx® and DuraSafe™ are registered trademarks of Jetstream of Houston. Jetstream® is a registered trademark of Federal Signal. AQUA CUTTER is a registered product name of AquaJet Systems AB, Sweden. StoneAge is a registered trademark of StoneAge, Durango, CO.

Specifications and standard equipment listed are subject to change without notice. Some photos are shown with optional equipment.

©2013 Effective 12/2013 P/N:__________