

Jet News

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April 2010

IMCA

Industrial & Municipal Cleaning Association

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Hydrodemolition In A Canadian Highway Tunnel

See article on page 4.



The tunnel entrance.



Removing concrete at heights of 5 to 15 meters.

2010 WJTA-IMCA Expo

August 17-19, 2010 George R. Brown Convention Center Houston, Texas

- Hear innovative business ideas
- Network with professionals from around the world.
- Learn tips and techniques to improve workforce productivity and strengthen your bottom line
- See products and equipment from leading manufacturers and suppliers from around the world.

Details inside.

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FS Solutions Launches Industry's First Intermodal Training Simulator

Training Simulator Puts Focus on Safety, Operations, Compliance

F ederal Signal Environmental Solutions Group has introduced the industry's first intermodal training simulator, designed by FS Solutions to help its customers increase job safety, operational efficiency and regulatory compliance in a variety of applications.



Rear of intermodal training simulator showing horizontal confined space entry, 4- and 6-inch line cleaning stations.

The FS Solutions training simulator complements the company's industry-leading classroom training program. The simulator facilitates hands-on training in such common applications as high pressure and ultra-high pressure waterblasting, coatings removal, metal cutting, industrial vacuuming and confined-space operations.

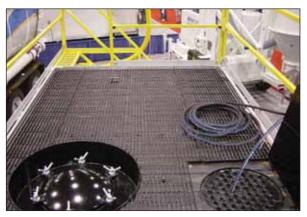
"Giving our professional cleaning contractor customers the knowledge to perform tasks safely and efficiently is only half the battle," said Gary Toothe, training manager, FS Solutions. "Our customers also need the experience of actually performing what they were taught, both for verification and

reinforcement. This is what the simulator provides."

The intermodal training simulator can also help companies practice compliance procedures that meet OSHA's Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) regulations, covering hazardous waste clean-

up operations, corrective actions, emergency response efforts and storage.

The simulator is configurable to match customer training needs. The unit has three distinct training areas –



Top of intermodal training simulator showing vertical evaporator, P-trap floor drain and vertical confined space stations.

top side, confined space and outside. A training supervisor can divide a class into three groups that can cycle through each of the simulator's training stations, maximizing every trainee's hands-on use of

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Mark Your Calendar For The 2010 WJTA-IMCA Expo

JTA and IMCA will host the inaugural WJTA – IMCA Expo, August 17-19, 2010, at the George R. Brown (GRB) Convention Center in Houston, Texas.

The WJTA – IMCA Expo will feature an expanded exhibit hall and boot camp sessions for individuals and companies in the waterjet and industrial vacuuming industries, including applications in precision waterjet cutting, industrial cleaning and other applications in the manufacturing, mining, construction, and process industries.

Exhibit displays will include equipment, products and services relating to precision waterjet cutting, industrial cleaning, waterblasting, hydrodemolition, surface preparation, and industrial vacuum equipment/trucks. There will be live table top precision waterjet cutting in the exhibit hall.

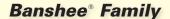
To reserve exhibit space, contact Ken Carroll by phone: 314-241-1445, fax: 314-241-1449, or email: wjta-imca@wjta.org. The exhibit hall floor plan and an application for exhibit space are available online at www.wjta.org.



New 2" Badger™ On Board

Our new 2''' BadgerTM is now available for contractors wanting a smaller tool to negotiate elbows. This new model, the **BA-P4**TM or **Little Badger**TM is designed for 2"-4" pipes, handles pressures from 2k-15k psi and flows of 5-15 gpm. This tool works well with our new backout preventer, the **BJ 305**TM, pictured at right.







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2010 WJTA-IMCA Expo

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Live, Onsite Demonstrations

- Armadillo Tube Cleaning Systems
- GapVax, Inc.
- Gardner Denver Water Jetting Systems
- Hammelmann Corporation
- Jet Edge (precision waterjet cutting in exhibit hall)
- · Jetstream of Houston, LLP
- NLB Corp.
- Peinemann Equipment
- · StoneAge, Inc.
- TurtleSkin WaterArmor by Warwick
- Veolia Environmental Services

Preliminary Schedule of Events

Tuesday, August 17

6:30-8:30 P.M. Welcoming Reception

Wednesday, August 18

8:00 A.M.-10:00 P.M. Live Demonstrations

10:30 A.M.-5:00 P.M. Exhibit Hall Open Boot Camp Sessions

Thursday, August 19

9:00 A.M.-3:00 P.M. Exhibit Hall Open

9:30 A.M.-3:00 P.M.

Boot Camp Sessions

Opportunities To Win \$\$\$

- Attendance Prizes Expo registrants are eligible to win one of eight \$250 cash prizes. Attendance prizes sponsored by High Pressure Equipment Company.
- Exhibit Passport Complete your Exhibit Passport for a chance to win one of four \$50 cash prizes.
- Expo Survey Complete your Expo survey and enter to win one of two \$50 cash prizes.

Hydrodemolition In A Canadian Highway Tunnel

ydrodemolition technigues were used for the refurbishment contract on Montreal's Highway 720 Ville Marie Tunnel – a key arterial east-west highway across the city – following the delivery of a new Aquajet HVD Evolution robot to main contractor GTS; the first in the region.



The wall after first phase of removal.

Canada's infrastructure and general contractor, GTS has taken delivery of the latest generation HVD Evolution robot from Sweden's Aquajet Systems AB, to use hydrodemolition techniques on its contract in Montreal's Vile Marie Tunnel.

Ordered through local distributor Pompaction, it's the first HVD Evolution hydrodemolition machine in Quebec and the Maritime Provinces.

The use of hydrodemolition techniques on the project ensured no rebar damage, minimized risk of good concrete removal, elimination of dust and crystalline silica and provide a superior bond surface.

It is also a substantially faster technique than mechanical removal methods and is also considerably less labour intensive.

Ville Marie Tunnel

The 3 km long tunnel was opened in mid 1974 and features a mix of 3, 4 or 5 lanes along its route. As a key arterial east-west highway across the city, with more than 100,000 vehicle movements a day, it was essential that traffic restrictions be minimized during the refurbishment.

The GTS contract involved replacing approximately 1 km of concrete on both sides of the eastern portals directly below the Montreal Palais des Congres and close to the Downtown Jacques Cartier Bridge.

Concrete was removed to a depth of 125 mm exposing the old rebar. An additional 100 mm and new rebar for further strength, making 225 mm thickness, was added.

In replacing the old concrete, the opportunity was taken to reroute electrical and telecom cables and fibre optics into a common conduit and install new improved lighting in the tunnel

Chequered pattern of concrete removal was specified taking into account structural design loadings of the tunnel wall. Alternate sections measuring 2.4 m x 5 m height along the bottom level and 0-15 m along the upper level at the portal, were undertaken at a time.

Close to the portal exit two areas over a length of 15 m were found to be particularly unsound and in very poor condition. The client therefore specified that for safety of the

(continued on page 15)

to operate to maintain to work with



Jetstream waterblasting equipment is easy to operate and easy to maintain.

More than that, our units, parts and accessories are backed by knowledgeable, approachable people who understand that our business is your business.

"We always use Jetstream because they have less downtime and they are easier to work on. The people are knowledgeable and helpful. You tell them your problem, and they help you fix it. They'll even drill special nozzles for you."

> Steve Johnson, Division Manager CCS, Longview, WA

"They worked with us until the operation was up and running smoothly. With Jetstream's help, we finished what would have been a two-week project in six days."

> Charlie Underwood, Operations Manager Midwest Waterblasting, Clinton, MI

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Controller Retrofit For Calypso Waterjets

A CS Precision, LLC, Mercersburg, PA, retrofitted their Calypso waterjet with a WARDJet X-Series Controller.



Calypso with WARDJet controller

Charlie Daniels, General Manager of ACS Precision, found that while one company was promising a beta model for a controller, no other company at that time had a controller that could be retrofitted to their Calypso waterjet with the features demanded. Daniels met with Richard Ward, President of WARDJet, a leading manufacturer of waterjet systems and accessories. Ward's philosophy of open architecture regarding hardware components won them over.

ACS Precision is extremely pleased with the WARDJet X-Series Controller's features. The high tech graphics and split touch-screen allow the waterjet operator to see every line of code, so any issues can be spotted before a cut is made. The way the controller jumps to any point on the contour even if that part has not been cut, allows total freedom for the operator. With the retrofit, they can run all programs, old and new and all the files they've received from customers.

ACS Precision waterjet operators are also finding the WARDJet wireless PDA pendant, carried or worn on the belt, to be tremendously useful, allowing them to move



away from the machine. The pendant untethers the operators from the waterjet and allows them to turn their attention to other machinery on the floor. Daniels thought that this would prove even more practical in a smaller job shop. When ACS Precision operators needed guidance they took advantage of the live interactive WebEx support with WARDJet technicians.

WARDJet's goal is to incorporate the latest, state-of-the-art technology for the WARDJet X-Series Controller so that almost any company can extend the capabilities of their waterjet system, even if it's not a Calypso.

For more information, visit www. wardjet.com, email: sales@wardjet.com, or call (330)677-9100, ext. 6. ■



Redi Services, Service And Safety Oriented

R edi Services, LLC, LCC, tered in Lyman, Wyoming, edi Services, LLC, headquaroffers hydro excavation, waterblasting, painting, insulation, electrical, valve repair, waste management, dehy cleaning, fire suppression, and high torque services for the oil and gas, mining, construction and trucking industries and for power plants and municipalities. The company operates fourteen vacuum trucks, five trailer-mounted waterblast pumps, and specialized equipment to meet customers' needs. Redi strives to be a one-call, one-service provider for its clients that span the spectrum of oil and gas services, trona and coal mining support, electrical generation, gold mining service support, gas plant and a wide variety of other industrial customers.

"We are a quality driven company dedicated to serving our customers in a safe, regulatory compliant and cost efficient manner," remarked Jay Anderson, CFO for Redi. "Our hydro excavation services provide a safe and reliable way to dig and uncover utility lines, pipelines and electrical systems." Redi has a stellar safety record with a strong safety management culture.

"Redi Services approach to safety begins with our number one asset, the great people that work for us – our employees," says Safety Director Buck Bruce. "There is nothing more important than the health and welfare of the good folks that come to work for us each day. We cannot be successful without them and the fine work that they perform for us, and we take all measures possible to protect them. We ultimately want to make sure each and every one of them make it home safely at the end of each day to their families. Safety is a team effort at Redi Services and we expect everyone to be involved and proactive in building a robust safety culture."

Redi Services safety program includes on site job safety analysis and observations, tailgate safety meetings, monthly safety newsletters, bilingual safety training and materials, behavior-based safety observations, a nearmiss and hazard identification reporting program, frequent field/ facility visits made by the safety director and coordinator, new employee orientations that stress safe operating practices, shared learning throughout the entire company on best safety practices, in house safety training on H₂S, respiratory protection. and confined space entry.

Hydro excavators can safely dig trenches, slots or holes with pressurized water and a high power vacuum. Unlike backhoes and other excavating methods, hydro

excavation provides a safe nondestructive solution when digging around underground lines. Hydro excavation minimizes the risk involved with working around existing infrastructures and greatly reduces backfill, landscape disturbances and minimizes restoration of the area.

Redi Services hydro excavation services include:

Potholing: Provides confirmation of buried lines and used for pipeline and utility crossings.

Slot Trenching: Pipeline tie-ins; line fault repairs; trenching up to 30 feet deep.



Locating utility lines prior to new construction of a clinic at the site.



Cleaning the side of a Barrick Goldstrike Mine building in Elko, Nevada, using a 300 hp pump at 15,000 psi and 29 gpm with a rotary cleaning tip for surface cleaning.

Cleanups: Road and box culvert cleanouts; sump drain cleanouts.

Tank Cleaning: Frac tank and drilling support.

Trench Shoring: Assists in shoring wells of an excavated site.

Pipeline Cleaning: Safe exposure of underground manifolds; expose pipeline crossings of conflicting facilities.

Redi Services also offers high pressure waterblast services.

"There are many, many applications for cleaning with high pressure water,"

(continued on page 21)



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FS Solutions Launches Industry's First Intermodal Training Simulator, from page 2

the simulator's equipment. Typical training sessions include two hours of class time and two hours of work in and around the simulator.

The simulator's training stations include areas for cleaning, cutting and surface preparation with a variety of equipment. The equipment is designed to provide students with the essential techniques required to be both safe and productive in the field.

A variety of simulated contaminants may be applied to the various heat exchangers and piping to provide realistic working conditions for trainees

The simulator can also be used for industrial vacuum training, confined space training and HAZWOPER training practice.

Training simulator available for remote training

FS Solutions will keep the training simulator at its Houston regional training center, but the unit is available for onsite customer training. In response to demand, the company will roll out additional intermodal training simulators at its other regional centers in Birmingham, Ala., Long Beach, Calif., and Toledo, Ohio in the future.

All FS Solutions locations provide access to factory-trained, certified technicians and genuine OEM parts. "FS Solutions customers look to us for recommendations and solutions to the unique

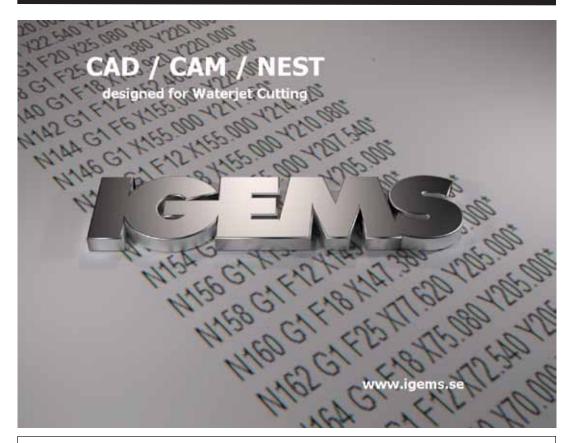


Inside horizontal confined space showing horizontal heat exchanger and flanged/unflanged lines.

challenges of their particular applications," Toothe said. "Whether it's a contractor looking for faster,

more cost-effective ways to perform cleaning operations or a business that can benefit from application expertise, equipment evaluations or training, we're providing solutions."

With nearly 100 years of collective experience in industrial vacuum loading, sewer and catch basin cleaning, vacuum excavation and industrial high-pressure waterblasting. FS Solutions offers unsurpassed expertise and a unique breadth of product lines and trusted brands to meet the needs of industrial cleaning contractors and other industry professionals. For more information about products and services available from the FS Solutions centers or to find the nearest location, call (800)822-8785, or visit www. fssolutionsgroup.com.



The *Jet News* is published by the WaterJet Technology Association (WJTA) and is a benefit of membership in the Association.

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Letter To The Editor

aterjetting's best kept secret – Terydon Inc. is a specialty manufacturer of high water pressure cutting and cleaning systems, tooling, and accessories. Terydon Inc. is proud to have developed the most superior cutting system in the world, the JACK TRACK.

Despite this world renowned success, our company is not limited to simply cutting. Built on 16 years of field experience. Terydon has developed sound systems and tooling to eliminate not only the everyday problems seen on the job, but the dilemmas specific to projects per company. Our company is built on the premise of our customers, for which we troubleshoot everyday problems and develop successful solutions by which to tackle them. In working closely with countless people, attacking endless problems, Terydon has expanded its knowledge and on-the-job "know how" to other areas of the waterjetting industry.

By working day in and day out with those handling our tools and making adjustments to fit their specific needs, we have developed a certain level of expertise in surface prep, abrasive nozzles, and pipe/stack cleaning. Customers satisfied with our cutting are often amazed at the wide variety of products we offer that are on the same superior level as the track. Terydon has been tagged the "best kept secret" of the waterjetting industry by these same customers.

Because of Terydon's smaller size, the bigger picture of what we are able to accomplish is sometimes limited to the average consumer. However, due to word of mouth advertisement, customers are able to receive firsthand accounts of personal success. Another aspect of our company that has become



an intricate part of all our designs is safety. A long time supporter of the WJTA, Terydon focuses on the safety and cost-effectiveness of its products to ensure the most durable and safe selections for its customers. Beginning with a vast product line of special order nozzles and cutting heads, tube/duct/stack cleaning, Terydon offers a variety of surface prep tooling, including SG-40 swivel gun, shot gun, and RSV valve.

To find out more specific details about how Terydon Inc. can assist your company, go to www.terydon. com or visit our booth at the WJTA-IMCA Expo in Houston, Texas, in August.

Sincerely,

Terry Gromes, President Terydon, Inc., Navarre, Ohio

StoneAge® Introduces Warthog® WV-1/4TM

The Warthog WV-1/4 is the newest member of the StoneAge Warthog family of tools.



It differs from other Warthog tools in that it features a revolutionary maintenance-free design for 2- and 4-inch lines found in residential or commercial applications, eliminating the need for field maintenance and replacing seals.

Expect the WV-1/4 to cut roots, clear grease, ice blockages, and remove hard mineral deposits faster and more efficiently than ever before.

This tool performs to the same superior standards as the entire family of Warthogs by providing a rotating head with impressive nozzles to clean the toughest applications.

For more information, visit www. sewernozzles.com or call (866)795-1586 for technical specifications and operation manuals.



A New Tube Bundle Cleaner

LB has introduced the SaflexTM 3000, a semi-automated waterjet system that cleans tube bundles much more productively than manual methods and has wireless remote controls that let the operator stand well clear of the action. The system cleans three tubes at once, on both the in and out strokes, and typically cleans 100 tubes in less than

three hours compared to 16 hours for manual waterjetting.

The Saflex 3000 operates at pressures up to 40,000 psi (2,800 bar), simultaneously inserting three flexible lances into tubes with an X-Y positioning



device. The flex lances can go around bends as needed, with adjustable stroke lengths to suit bundles of different lengths. With a simple hose change, the system can clean tubes ranging from 4 mm to 15 mm in diameter. No hose reel is needed.

The Saflex 3000 is one of a family of automated and semi-automated tube bundle cleaning accessories available from NLB Corp., a leader in high-pressure and ultra-high pressure waterjet productivity. For more information, visit www.nlbcorp.com or call (248)624-5555.

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A New 3-D Waterjet Tank Cleaning Head

The Torrent™, a new 3-D waterjet tank cleaning head from NLB, has higher flow than previous models for more

cleaning power, with advanced features to enhance performance and operating life. It is rated for flows up to 150 gpm (568 lpm) and operating pressures to 10,000 psi (690 bar).



The Torrent introduces new nozzle tips with carbide orifices that greatly improve the cohesiveness of the water jets and extend their reach. It also features improved seals and bearings for longer life and a stainless steel body that is durable and easy to clean. The long-life seals typically last three times longer than those in older 3-D heads, and are easier to change.

The combination of the higher flow, extended reach and 3-D action (the high-velocity nozzles rotate vertically while the head spins horizontally) easily removes hardened resins, plastics and more. Water jetting works significantly faster than other methods and is both environmentally-friendly and operator-friendly. It uses

nothing but high-pressure water, and inserting the head into a tank or reactor on a telescoping lance eliminates the need for any personnel to enter the vessel.

The TorrentTM 3-D head is the latest accessory from NLB Corp., a global leader in high-pressure and ultra-high pressure waterjet systems. For more information, visit www.nlbcorp.com or call (248)624-5555.

Comments Solicited On Improvements To Recommended Practices

omments are solicited regarding improvements to the WJTA publications, Recommended Practices for the Use of Manually Operated High Pressure Waterjetting Equipment and Recommended Practices for the Use of Industrial Vacuum Equipment. While both publications are reviewed periodically at the WJTA conferences and throughout the year, your comments and suggestions for improving the publications are invited and welcome anytime.

The Recommended Practices for the Use of Manually Operated High Pressure Waterjetting Equipment is currently under review and being revised.

Please address your comments and suggestions to: WJTA, 906 Olive Street, Suite 1200, st. Louis, MO 63101-1448, phone: (314)241-1445, fax: (314) 241-1449, email: wjta@wjta.org. Please specify which publication you are commenting on.

AccuSteam Introduces the A-Series Intensifier Pumps

ccuStream Waterjet Products is proud to introduce the A-Series, 60,000 psi, Intensifier Pumps. The A-Series is a reliable and cost efficient waterjet pump. With longer run times, slower stroke rates, available air over oil cooling system, and cost effective replacement parts, the A-Series is the choice for those conscious of the bottom line.

The A-Series is in the latest line of intensifier pumps from AccuStream. Developed from an economical standpoint, and designed with all the essential functions and simple controls of our larger pumps, the A-Series

brings a more streamlined approach to a variety of waterjet cutting applications without compromising on performance. Featuring the same Advanced Intensifier Technology (AIT) found in our fully featured AS Series Pumps, the A-Series offers the latest in high-pressure intensifier design, delivering increased reliability and efficiency. And its compact design allows for a smaller footprint where space utilization is vital. In all, the A-Series provides an ideal solution for micro abrasive cutting applications or multiple head pure water cutting requiring 60,000 psi. The A-Series is available in 15 hp



and 30 hp models with a 50 hp model coming soon.

For more information, visit www. accustream.com, email: info@ accustream.com, or call (651)294.8606.

Hydrodemolition In A Canadian Highway Tunnel, from page 4

workforce, the entire section should be removed in a single operation.

GTS had initially allocated two shifts a day for the hydrodemolition process but such is the speed and efficiency of the Aqua Cutter Evolution that the contractor worked just a single daily shift for the operation.

Project Manager Michel Francoeur had previous experience with hydrodemolition techniques using a standard Aqua Cutter robot rented from Toronto for a bridge deck slab project in Montreal.

"We had been very impressed with the performance and quality of work recognising the potential for this tunnel project," he said, adding, "On winning this contract we took delivery of the new unit together with the Power Pack – a PP700 and we have not been disappointed."

GTS started work on the contract in mid-August 2009 and finished in March 2010.

Operating in 'live'

traffic conditions
with very heavy
traffic flows and working at heights
of up to 15 m, it was essential that the
contractor protected both its workforce

and passing traffic from falling debris.



Additional rebar was installed before the new concrete.

As a result the robot was installed behind a protected frame and positioned on a telescopic handle

(continued on page 17)





Come ready to play in our new front yard in 2010!

Houston welcomes the 2010 WJTA - IMCA Expo, August 17-19

Spanning more than **five blocks**, the George R. Brown Convention Center anchors the revitalized east end of downtown Houston, where the **surroundings bustle** with new **urban development** and **world-class amenities**.

You couldn't dream of a better front yard – with **Toyota Center** and **Minute Maid Park** nearby, the 1,200-room **Hilton Americas-Houston** connected by sky bridge and the new 12-acre **Discovery Green park** (designed with special events in mind) across the street.

A VISION. A PLAN. A WALKABLE DESTINATION. SOUTHERN HOSPITALITY WITH A COSMOPOLITANTWIST



GRB Convention Center, Hilton Americas-Houston, Toyota Center, Discovery Green www.HoustonConventionCtr.com, www.AmericasHouston.Hilton.com, www.New.HoustonToyotaCenter.com, www.DiscoveryGreen.com



Houston Pavilions, Now Open

Or walk to Houston Pavilions, the four-block downtown retail, dining and entertainment hub, with House of Blues, McCormick and Schmick's, Guadalajara del Centro and Lucky Strike bowling.

Combine this with the convention center's 1.2 million square feet of dedicated meeting space – including a 30,000-square-foot ballroom, 3,600- tier-seated amphitheater, 6,500-seat arena, four 3,000-square-foot balconies, 100 flexible meeting rooms and an abundance of green initiatives – and Houston never has been more appealing.

Hydrodemolition In A Canadian Highway Tunnel, from page 15

for ease of access for the extended height operations. The Aqua Cutter is thought to be the only robot in the world that is able to operate at heights of up to 15 m and this was a key factor in GTS purchasing the Aquajet system.

Operating at 1000 bar the Aquajet system uses a water flow rate of 260 l/min and achieves a removal rate in the deteriorated concrete of up to 1.5 m³/h.

"Without the Aqua Cutter GTS would have used conventional jackhammers to remove the concrete," confirmed M. Francoeur.

Using the Aqua Cutter removes damaged concrete at the speed of several hydraulic jackhammers and more than 25 times faster than hand held 'hammers.'

It also requires just 1 or 2 operators compared with one per 'hammer.' Hydrodemolition also eliminates the risk of 'white finger' complying with European work practises.

For more information, visit www. aquajet.se, email: aquajet@aquajet. se or call: [46](383)508 01. ■

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The WJTA leadership requests that members respect the contact information of fellow members and not use that information for the dissemination of spam or junk email. Membership information is not meant to be circulated beyond the WJTA membership.





NLB accessories feature long-life, quick-change seals

If you're changing water jet seals every 40 hours, the cost of replacements adds up fast. But most NLB lances and foot controls (and other accessories: 19 in all) have a cartridge seal that typically lasts 280 hours. That can save you over \$900 a year.

The change itself takes only 60 seconds — just unscrew the cartridge and screw in a new one. You'll also like our patented instant pressure dump and a host of operator-friendly features.

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2010 WJTA-IMCA Expo

August 17-19, 2010 • George R. Brown Convention Center • Houston, Texas

\$30 Daily Expo Pass

One-day pass includes live demos, boot camp sessions and exhibits on Wednesday, August 18, or boot camp sessions and exhibits on Thursday, August 10. Registrants are invited to attend the welcoming reception on Tuesday, August 17, 6:30-8:30 p.m.

Register Online at www.wjta.org

For more information and to register online, visit www.wjta.org or contact: WJTA-IMCA, 906 Olive Street, Ste. 1200, St. Louis, MO 63101-1448, email: wjta-imca@wjta.org, telephone: (314)241-1445, fax: (314)241-1449.

The Contractors Guide And Prerequisite

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Based on actual bid and job reports, 25 industrial sectors are introduced presenting contacts, resources and applicable safety requirements. This is supported by 200 plus industry-job specific websites.

Manuals accompanied digitized version significantly supports entrepreneurs' ability to streamline in-house and job sites operational start-up effort to current technical and business standards.

Providing in writing and pictorial record more than 450 plus pressure washing and hydro-blast application procedures; services-sales, plant maintenance, commercial-industrial buyers and entrepreneurs can equally be informed as to all necessary technical application aspects and procedures. Recognizing safety requirements, hydro-tooling and job specific operations, the expandable business model negates the technical and proprietary knowledge migration from its administrative source.



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2010 WJTA-IMCA Expo

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Boot Camp Sessions - Preliminary Schedule

(As of April 1, 2010)

Wednesday, August 18, 2010

10:30 a.m. DOT Regulations for Trucks/Trailers

By: Dan Hoffman, DOT Commercial Vehicle

Enforcement Officer

LaPorte, Texas, Police Department

11:30 a.m. Safety in Waterjetting

By: Ed Twaddell, Sales Team Leader TurtleSkin Protective Materials

12:30 p.m. High Pressure Waterblasting

By: Gary Toothe, Training Manager

FS Solutions

1:30 p.m. Reducing Hydroblasting Risk and Incidents

Through Partnership and Technology

By: Kathy Krupp, Managed Services Leader

Dow Chemical Company

Sam Harkins, E, H, S, T & Crisis Director

Veolia ES Industrial Services

3:00 p.m. Hose Fittings, Pressure Testing

By: Paul Webster, Engineering Manager

Parker Hannifin-EPD

4:00 p.m. Is "Cold-Cutting" Really Non-Explosive?

By: Bill McClister, Vice President Support Services Veolia Environmental Services Thursday, August 19, 2010

9:30 a.m. Waterjet 101 - The Capabilities and Benefits

of Precision Waterjet Cutting

By: Bradley Schwartz, Pacific Regional Sales Manager

Jet Edge

10:30 a.m. Video Inspection of Pipelines

By: Rex Robinson RapidView, LLC

11:30 a.m. Hydro-Excavation

By: Neil McLean

Hydro-Excavation Consultant

12:30 p.m. Nozzle Selection for Sewer Cleaning

By: Jetstream of Houston, LLP

1:30 p.m. Static Electricity – Effects and Solutions

By: Alan Browne, President

Stewart R. Brown Manufacturing Co., Inc.

2:30 p.m. Tips for Choosing a Contractor

By: Pat DeBusk, Inland Industrial Services Gary Noto, Veolia Environmental Services

Waterjet Cutting Machine For Shops Requiring Smaller Cutting Systems

Jet Edge's 5 ft. x 5 ft. Mid Rail Gantry Waterjet System is an ideal waterjet cutting solution for shops that cut smaller material or have limited floor space available for machine tools.

Powered by a 60,000 psi or 90,000 psi Jet Edge waterjet intensifier pump (available in 30-200hp models), the 5 ft.

x 5 ft. water jet cutting machine features an exposed 72 in. x 72 in. tank that easily accommodates overhead loading. It is designed to cut virtually any material up to 60 in. x 60 in. If equipped with an optional



second cutting head, it can cut two parts up to 30 in. x 60 in. Optional mirroring cuts part cycle time in half.

The Jet Edge Mid Rail Gantry waterjet system utilizes an industrial PC controller and can be configured so that all three axes are fully programmable (Z optional). It also features direct-couple AC brushless digital servo motors and single or double carriages. Critical bearing components are protected with heavy metal covers with brush seals. The Mid Rail Gantry waterjet system also is available in 8 ft. x 5 ft., and 21 ft. x 5 ft., 8 ft. x 13 ft. and 21 ft. x 13 ft. and 5 ft. x 13 ft. work envelopes.

Jet Edge's Mid Rail Gantry Waterjet System is proudly made in the U.S.A. For more information, visit www. jetedge.com, e-mail sales@jetedge.com, call 1-800-JET_EDGE (538-3343) or 763-497-8700.







2010 WJTA-IMCA Expo

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Exhibitors

(As of April 1, 2010)

AMOT

Advanced Pressure Systems Aqua-Sales/Armadillo Tube Cleaning BIC Alliance/Impact Marketing

Blasters, Inc.

Dresser Roots

FS Solutions, Guzzler Manufacturing, and Jetstream of Houston, LLP

GapVax, Inc.

Gardner Denver Water Jetting Systems

General Pump

Giant Industries, Inc.

Global Vacuum Systems

Hammelmann Corporation

High Pressure Equipment Company

HoldTight Solutions, Inc.

Jack Doheny, Inc.

Jet Edge

KMT Waterjet Systems Inc./KMT

Aqua-Dyne, L.P.

Kroy Industries, Inc.

LaPlace Equipment Company

Legion Distribution, Inc.

Lemasa Ind. e Com. Ltda.

Maxpro Technologies, Inc.

NLB Corp.

Parker Hannifan-EPD

Peinemann Equipment

Powertrack International Inc.

Presvac

SPIR STAR

Stewart R. Browne Manufacturing Co., Inc.

StoneAge, Inc.

Stutes Enterprise Systems, Inc.

Super Products, LLC

Terydon, Inc.

TurtleSkin WaterArmor by Warwick Mills

Under Pressure Systems Inc.

Vacuum Truck Rentals, LLC

Waterblasting Technologies

Wilco Supply L.P.

World Wide Hose

Reserve Your Exhibit Space

Make plans now to exhibit at the 2010 WJTA-IMCA Expo. To reserve exhibit space, contact Ken Carroll by phone: 314-241-1445, fax: 314-241-1449, or email: wjta-imca@wjta. org. The exhibit hall floor plan and an application for exhibit space are available online at www.wjta.org.

Autoclave Engineers Manufactures High Pressure Air-Driven Pumps to 60,000 psi

A utoclave Engineers has designed a group of Air-Driven, Positive-Displacement, High Pressure Liquid Pumps designed for service with Oil, Water and many Chemicals.

The most popular "ASL Series" is available in a variety of drive ratios and includes both Single and Double Air-Drive designs that are capable of up to 60,000 psi (4135 bar). Manual "Hand-operated" options are available in our "ACHL Series" pump line and our AHL Series Double-Acting, Double Air-Drive pumps are designed for those that are looking for the combination of both high flow and high pressure.

Features include:

- Easy to Install and Operate
- Standard Drive Ratios Include Pressures to 60,000 psi (4135 bar)
- Pressure Maintained Without Energy Consumption

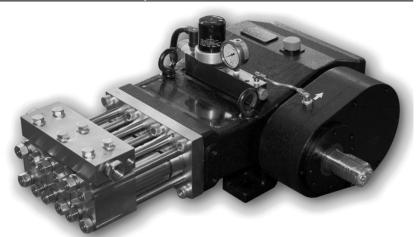


- Requires No Lubrication
- External Spool Valve for Easy Maintenance

Applications include pressure test stands (both stationary and mobile), component and vessel testing, burst testing, umbilical testing, lubrication, bolt tensioning, hydraulic control panels, chemical injection, and hydrostatic testing.

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Redi Services, Service and Safety Oriented, from page 8

says Sim Aimone, hydro blasting manager for Redi. "We waterblast rigs, sub-structures, buildings (inside and out), compressor stations and tanks, just to name a few." Redi has been highly successful in a number of service applications to combine both its hydro excavation and hydro blasting services for its customers.

"Redi Services is an employee empowered company that strives to find the safest, most economical ways of helping our community and surrounding area," says Gary Condos. "Our goal is to be the best at what we do safely and efficiently. We want to become the service provider of choice in all the fields we operate in."

Redi Services, LLC, headquartered in Lyman, Wyoming, was established in 2005 through an asset purchase by Jay Anderson and Gary Condos. Redi started with some 70 employees. Today, Redi Services has over 400 employees and offices in

Wyoming, Utah, Nevada, Colorado and North Dakota. The company serves Vernal, Utah; all of Western



Redi Services staff and guests celebrate the opening of the Vernal, Utah, shop with a ribbon cutting ceremony.

Wyoming; Cheyenne, Wyoming; Meeker and Rifle, Colorado; Elko, Nevada; and Minot, North Dakota.

For more information, visit rediservicesllc.com.

SPIR STAR, Ltd. Announces New Valve Website

PIR STAR, Ltd., an industry leader in high pressure hose and fittings, has announced the launch of a new website: www.spirstarvalves.com. As the Exclusive Distributor for SAMI Instruments High Pressure Valves, this new website displays the full range of NPT, Medium Pressure and High Pressure needle valves, ball vales and check valves with working pressures up to 60,000 p.s.i. Contact SPIR STAR for more information at (800)890-7827.

Nolan Blalock Joins SPIR STAR Ltd.

S PIR STAR Ltd. has introduced the newest member of the company team, Nolan Blalock, as outside sales representative. Nolan has several years of sales experience.

As outside sales representative, Nolan's primary responsibilities will be to assist in the development of the Company's sales strategies, to promote the SAMI Instruments



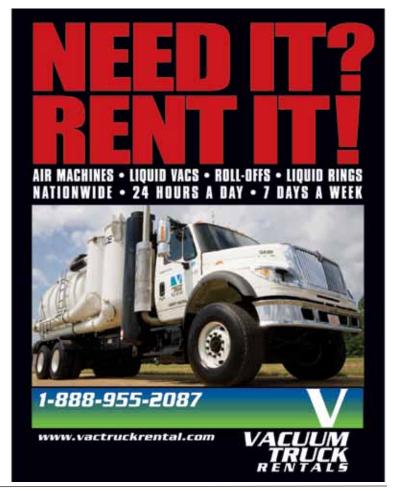
Nolan Blalock

high pressure valve line, and to help maximize customer satisfaction and performance. Nolan's commitment to customer service makes him a perfect fit to the *SPIR STAR* sales team.

WJTA-IMCAListServ - A Free Service To WJTA-IMCA Members

The *WJTA-IMCAListServ* enables you to take advantage of prompt email interaction with your colleagues. *WJTA-IMCAListServ* is a **FREE** email broadcast system developed by WJTA-IMCA to help you communicate and network with other waterjet and industrial cleaning and vacuuming professionals.

Participation is limited to WJTA-IMCA members in good standing. You must sign up in order to participate. To sign up for the *WJTA-IMCAListServ*, contact Beth at the WJTA-IMCA office by email: wjta-imca@wjta.org, phone: 314-241-1445, or fax: 314-241-1449.



WJTA Welcomes New Members

Corporate

Dragon Products, Ltd.

Will Crenshaw Casey Crenshaw Randy Prater 1655 Louisiana Beaumont, Texas 77701 Phone: (409)833-2665 Fax: (409)832-5870

Ledwell & Son Enterprises, Inc.

Steve Ledwell Garv Gathright Chuck Kift 3300 Waco Street Texarkana, Texas 75501 Phone: (903)838-6531 Fax: (903)831-2719

Sewer Equipment

John Wichmann Dan O'Brien 12 Howard Street Chadwick, Illinois 61014 Phone: (815)684-5566 Fax: (815)684-5568

Vacuum Truck Sales & Service

Jim Schweitzer 5291 Gateway Drive Geismar, Louisiana 70734 Phone: (225)744-2850 Fax: (225)744-2852

Wastewater Specialties, Inc.

Paige Clayton Brett Feldes Stoney Courville 2205 Industrial Drive Sulphur, Louisiana 70665 Phone: (337)882-8804 Fax: (337)882-8019

Corporate Individual

John K. Kinsey

130 Pearson Road Sumter, SC 29150 Phone: (803)418-8285 Fax: (803)934-8935 Email: jkinsey@ thompsonind.com

Johnny Matsoukas

Advanced Pressure Systems 701 S. Persimmon, Suite 85 Tomball, TX 77375-6876 Phone: (281)290-9950 Fax: (281)290-9952 Email: jmatsoukas@ advancedpressuresystems.com

Todd Shawver

NLB Corp 29830 Beck Road Wixom. MI 48393-2824 Phone: (248)624-5555 Fax: (248)624-0908

Email: shawveta@nlbusa.com

Individuals

Matt Brenes

CCS 1081 Columbia Boulevard Longview, WA 98632 Phone: (360)703-0444 Email: mattb@pnecorp.com

Martin Chavez

KM Industrial, Inc. 1411 W-Gaylord Street Long Beach, CA 90813 Phone: (562)572-6607 Fax: (562)786-6299 Email: martinchavez@ k2industrial.com

Richard Davis

Pollution Management, Inc. 3512 South Shackleford Road Little Rock, AR 72205 Phone: (501)221-7122 Fax: (501)221-7775 Email: rtd@

pollution-management.com

Steve Ham

Global Safety Consultants 102 Kettle Court Braussard, LA 70518 Phone: (337)254-7851 Fax: (337)330-2654

Email: steve@safetygsc.com

Peng Haojun

Hefei University of Technology School of Mechanical & Automotive Engineering No.193 Tunxi Road Hefei, 230009 China Phone: [86]13955117526 Fax: [86](551)3451640 Email: waterjet@sina.com

Richard G. Leonard

Shasta Industries Incorporated 3750 W. Indian School Road Phoenix, AZ 85019-3518 Phone: (602)532 3997 Email: rick.leonard@ shastapools.com

Frank Pude

Inspire AG Tannenstrasse 3 Zurich, 8092 Switzerland Phone: [41](44)6337350

Fax: [41](44)6321125 Email: pude@inspire.ethz.ch

Amy Shulund

Big Sky Industrial 9711 W Euclid Road Spokane, WA 99224 Phone: (509)624-4949 Fax: (509)624-0099 Email: amy@bigsky.pro

Lindsay Williamson

CSC Ltd. 4039-16 Street South East Calgary, AB T2G 3R8 Canada Phone: (403)262-7667 Fax: (403)237-6278

Email: lindsayw@cscltd.ca

Page Wright

7400 Cypress Gardens Boulevard Winter Haven, FL 33884 Phone: (770)639-4204 Email: millwrig@yahoo.com

Jay Zeng, Ph.D.

Chinese Academy of Sciences 1068 Xueyang Boulevard, Shenzhen University Town, Xili Nanshan District Shenzhen, 518055 China Phone: [867](55)86392160

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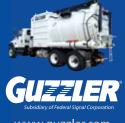
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