

# WJTA

WaterJet Technology  
Association



# Jet News

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## A Day In The Life: A Combo Sewer Cleaner Operator At Work. See article on page 2.



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# Tanker Crew Uses High-Pressure Waterjets To Fight Off Somali Pirates

**A**thens, Greece — Crewmen fired high pressure waterjets to fight off heavily armed Somali pirates trying to board a Greek oil tanker in the dangerous Gulf of Aden on Friday, January 2, 2009 in the fourth such attack since the start of the year, authorities said.

The pirates in three speedboats and armed with guns and rocket-propelled grenades twice tried to board the Greek-flagged Kriti Episkopi but were scared off when the crew turned fire hoses on them and EU aircraft scrambled from a nearby EU naval flotilla to help, company and Greek government officials said.

The attack came a day after Somali pirates seized an Egyptian cargo ship and its 28 crew in the vast waterway, one of the world's most important sea routes, where incidents have continued after 111 attacks in 2008. A Malaysian military helicopter on Thursday, January 1, saved an Indian tanker from being hijacked and a French warship thwarted an attack on a Panamanian cargo ship.

The captain of the Kriti Episkopi spotted the speedboats just before 8 a.m. GMT approaching his ship and took evasive action to try to shake them off.

He contacted the Greek authorities who alerted the EU

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## Combo Sewer Cleaner Operator At Work

### A Day In The Life

By: Bill Gaff, Federal Signal, Environmental Products Group

**E**very day thousands of publicly and privately employed operators climb into their combination sewer cleaners to maintain North America's sewer and storm drain systems. Despite engineers' self-cleaning designs, these sewer systems require periodic cleaning, a necessity that has spawned a huge industry.

Combination sewer cleaners – typically truck mounted – use centrifugal compressors (fans), or positive-displacement blowers to create a powerful vacuum that removes debris from the sewer system. The trucks also employ high-pressure water systems to scour the walls of the sewer and to move material back into the manhole to be vacuumed up into the debris tank.

#### Review project lineup

The operator begins his day with a review of the projects for the day, which may involve underground systems with diameters as small as a few inches or as large as a tall man. Sewer pipes can range in depth from a few feet under ground level to hundreds of feet, often requiring elaborate, special vacuum setups. The operator must have the proper tools before he leaves the garage to ensure he can complete the task safely and efficiently.

#### Inspect vehicle

Before he gets into the truck, the operator inspects the vehicle and its systems. This includes checking fluid levels on the chassis as well as the specialized combination equipment mounted on it. It also may include lubricating a number

of high-wear locations and inspecting the high-pressure sewer hose for cuts or abrasions in the plastic protective cover. The operator may then fill the vehicle's water tanks from an approved fire hydrant, after flushing the hydrant to ensure the water source contains no rust or scale.

#### Set up the job

The operator proceeds to the first project on his daily list. His duty for the day may be simply cleaning a long segment of one system. More typically, he may have a list of trouble spots to service. Proper setup is key to completing the tasks safely while minimizing disruption to street traffic. The operator normally positions the vehicle between himself and oncoming traffic and above the manhole for optimum access. Additional safety precautions may be required, such as deploying safety cones around the vehicle to further protect the operator and any other crew members. After turning on the warning lights, the operator can engage the transfer case or PTO before leaving the cab, enabling operation of the vacuum and water systems from the front-mounted hose reel controls.

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# What Value Does WJTA Membership Bring To Maintenance Contractors?

By Gary Noto, Chief Operations Officer, Veolia ES Industrial Services, Inc.

The industrial cleaning and vacuuming industry is a constantly changing, constantly improving industry in regard to safety practices, technology, and operating efficiency. It is imperative that as a contractor, we must stay current with these changes to meet and exceed our customer's expectations. Our industry spends a great deal on resources to maintain these expectations. Even with our internal safety, training and operational resources, we still frequently require support to set company policy and operating practices.

The WaterJet Technology Association is the primary resource for outsourcing information and technology that is leading edge. The WJTA, with its unique ability to draw on the collective knowledge of its vast membership base representing the fields of education, research & development, manufacturing,

engineering and field operations, offers the industrial cleaning contractor a creditable resource for setting policy and customer referencing. Frequently we are faced with cleaning and vacuuming jobs that have safety and technology challenges. In most cases, we address these challenges with our in house expertise, but there are situations where a customer has a different policy or practice. In these cases we can use the WJTA as a reference to determine the best practice.

The entire world is in the midst of some difficult financial times that are and will continue to effect the operations and performance results for many of our companies. The WJTA *Jet News* magazine is an excellent resource that provides the contractor a cost effective method to keep in touch with the changes that affect our industry. We all have identified

and implemented new opportunities, processes, technologies, and safety awareness based on the content of the *Jet News*.

I see the recent inclusion of the industrial vacuum equipment manufacturers into the WJTA as a major step forward in building value for our association. Many water jetting contractors also operate vacuum equipment so this is a logical evolution. The WJTA has been quick to respond to the needs of the vacuum industry by developing a *Recommended Practices For The Use Of Industrial Vacuum Equipment* as well as a series of training seminars.

The WJTA is now well positioned to offer significant value not only to the industrial cleaning contractor, but to our customers, the plant owners. I believe that this activity will create a good environment for the continued growth of our association.

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

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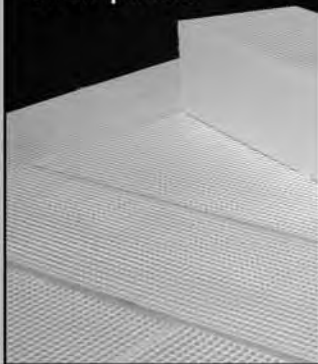
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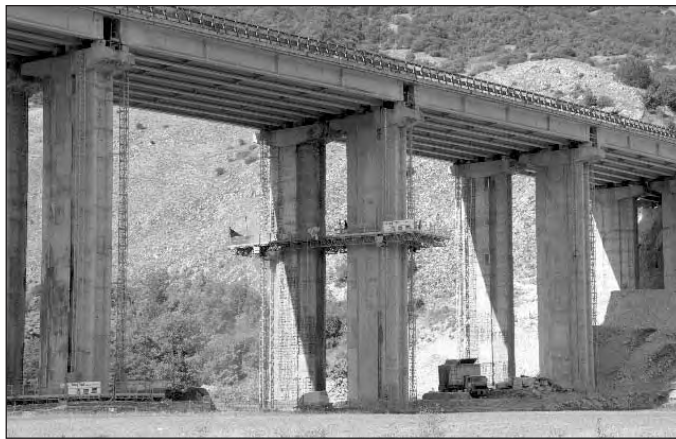
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# Conjet Assists With Repairs To Italian Viaduct

**T**he multi-span reinforced concrete viaduct at Torano, about 100 km east of the Italian capital Rome, is a major structure on the main E80/A24/A25 Autostrada crossing central Italy. The Viadotto Fiume Salto was opened in the late 1960s, but the use of de-icing salts during winter months has since caused considerable

calcium chloride damage to the structure, forcing the Italian Highways Authority and the Autostrada di Parchi's owner Toto S.p.a. to carryout extensive repairs. The renovation, funded by revenue from tolls, is expected to cost around €5M and is focusing on the piers and main joints in the concrete deck using the high pressure waterjetting technique of hydrodemolition to remove the calcium chloride infected concrete.

Specialist hydrodemolition contractor C.P.L. 2000 S.r.l., in joint venture with Edil C.R.R. and Global Klima S.r.l. and working for Toto, is using a Conjet 322 Robot hydrodemolition machine and Conjet Powerpack bought specifically for the repair from Conjet's sole Italian dealer Roald di Codecasa & C.s.n.c based in Milan. "This is a major bridge



**The use of de-icing salts during winter months has caused considerable calcium chloride damage to the multi-span reinforced concrete viaduct, which carries the busy dual two lane E80/A24 Autostrada across a narrow valley at Torano, Italy.**

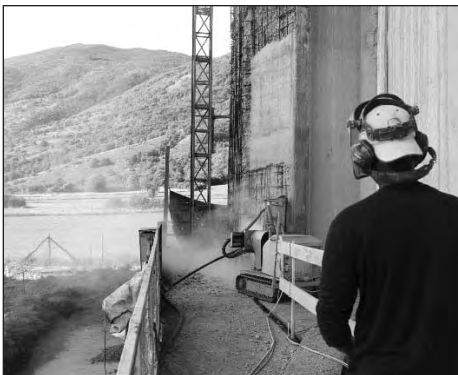
repair project and hydrodemolition with the Conjet Robot is the only method of removing the damaged concrete," says C.P.L. 2000 S.r.l president Angelino Rinaldi. "Using very high pressure jets of water to remove only the poor concrete does not cause any damage to the good concrete left behind and if necessary it also takes away concrete from below the reinforcement, which is also cleaned of any rust. Using breakers would have taken so much longer and also caused damage to the good concrete left behind. Hydrodemolition with the Conjet Robot also has the advantage of producing a very rough surface, which gives a good bond for the new concrete to key onto."

The viaduct carries the busy dual two lane E80/A24 Autostrada across a narrow valley skirting to the south of Torano and just before the E80/A24 forks northeast towards L'Aquila and southeast onto the A25 to Pescara. The bridge deck is supported on 12 pairs of reinforced concrete hollow piers up to 40 m high and spaced at intervals of about 42 m across the valley. The individual piers are spaced at about 11 m centres and each

one is topped with its own transverse crosshead, which in turn supports longitudinal precast concrete beams for each carriageway deck.

The main focus of the hydrodemolition repair is on the octagonal shaped piers and their crossheads where the de-icing salt has leaked down from the deck above. The calcium chloride attack on the concrete has created a patchwork of damaged areas over the surface of the 24 piers totalling about 380 m<sup>2</sup>. In many instances the de-icing salt has seeped deep into the concrete and the resulting corrosion of the reinforcement has pushed the concrete off and exposed the reinforcing to further corrosion from the elements. C.P.L. 2000 S.r.l concentrates on one pair of piers at a time and successfully uses a special purpose built rack and pinion climbing platform designed and built by Safi, which gives the Conjet 322 Robot unrestricted working access to all faces on each set of piers. The Conjet 322 Robot is connected to a Conjet Powerpack delivering clean fresh water at a pressure of about 1,300 bar and flow of 200 litres/min and is removing concrete generally to a depth of 30mm to 130mm. In some instances

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**Damaged concrete being removed by a Conjet 322 Robot.**



**The main focus of the hydrodemolition repair with the Conjet 322 Robot is on the octagonal shaped piers and their crossheads, where the de-icing salt has leaked down from the deck above.**



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# Noise Characteristics Of Abrasive Waterjets

**B**renner et al\* did an experimental study of the noise characteristics of abrasive waterjets in various conditions. Tests were done with a pump capable of 250 Mpa pressure and 25 l/min flow rate. Quartz sand was used as abrasive. Noise characteristic measurements were done at the operator's position by using a German made noise gage RFT-00.023. The measurement results (given in dB) are summarized in the table on the right.

In the table, the admissible data were from "Noise Characteristics Standards for Machines PTM 12.44.022-78" and the operation modes were as follows:

- Mode 1: Jet in free air (100 Mpa pressure)
- Mode 2: Jet impacted a concrete block with a standoff distance of 5 mm (100 Mpa pressure)
- Mode 3: Jet passed through a hole of 100 mm depth in the concrete block (100 Mpa pressure)
- Mode 4: Like Mode 2, but on a limestone block.
- Mode 5: Nozzle was immersed in the hole of limestone blocks at the depth of 120 mm (100 Mpa pressure).
- Mode 6: Like Mode 2, but the nozzle and the space between nozzle and the concrete block were covered with a noise absorptive case.
- Mode 7: Like Mode 2, but at 250 Mpa pressure.
- Mode 8: Like Mode 6, but at 250 Mpa pressure.

\* Brenner, V.A., Pushkarev, A.Y., Golovin, K.A., Chukov, A.N., & Naumov, Y.N. (2000) Measurement of noise characteristics of hydro-jet cutting tools, Proceedings of the 15<sup>th</sup> International Conference on Jetting Technology, Ronneby, Sweden, September 6-8, pp 277-281.

Reprinted by permission from Quality Waterjet Newsletter, December 9, 2008.

Operation Modes	Octave frequency bands Hz								Equivalent acoustic level, dB
	63	125	250	500	1000	2000	4000	8000	
1	66	63	69	63	77	76	77	72	86
2	66	58	57	52	57	58	69	69	69
3	59	58	54	56	57	52	65	65	69
4	66	58	58	53	57	53	68	69	69
5	59	55	56	50	55	55	58	58	64
6	62	56	54	48	50	50	59	59	64
7	120	108	99	92	88	88	94	94	97
8	78	76	67	62	60	61	72	72	79
Background noise	59	52	46	44	45	44	43	42	64
Admissible	99	92	86	80	80	78	76	74	85

## StoneAge 2009 Product Catalog

**S**toneAge, Inc., a manufacturer of quality waterblast accessories, is announcing the release of a new product catalog for 2009.

The 2009 catalog has nine new product introductions for all waterblasting applications including tanks and vessels, pipes, tubes, sewer cleaning, and surface preparation. These new products will be on display at this year's Pumper & Cleaner Exposition in booth 4133.

Call StoneAge at (866)795-1586 to request a catalog, or visit [www.stoneagetools.com](http://www.stoneagetools.com) or visit StoneAge at the Pumper & Cleaner Environmental Expo, booth 4133.



## Conjet Assists With Repairs To Italian Viaduct, from page 6

maximum removal depth has been as high as 180 mm, but the average on the project has been between 70 mm to 80 mm. "We bought the Conjet 322 Robot specifically for this project and has been operated by Yamadu Konate and Vittorio Triuzzo. The 322 has been a very good machine and I can't see how we could have done the job without it," says Angelino Rinaldi.

After C.P.L. 2000 S.r.l has finished concrete removal from one set of piers the company moves onto the next pair using a separate, but identical Safi working platform. Another contractor in the joint venture then follows on using the first platform to spray steel fibre reinforced concrete on the patches, which are levelled and float finished by hand. The entire sequence is repeated on all 12 pairs of piers. C.P.L.

2000 S.r.l is also using hydrodemolition with hand lances to remove the damaged concrete from the main joints on the bridge deck and also directly underneath the longitudinal beams supporting the deck.

Conjet was involved at the early stage of the project and assisted CPL 2000 S.r.l. in selecting the right type of platform they would need on the tall piers. Conjet considered the space the robot would require to work in an unrestricted manner and maintain high production during the concrete removal process. CPL 2000 S.r.l. is



A special purpose built rack and pinion climbing platform designed and built by Safi, gives the Conjet 322 Robot unrestricted working access to all faces on each set of piers and crossheads.

using three platforms and after concrete removal with the Conjet Robot they are also used for the placement of fresh concrete.

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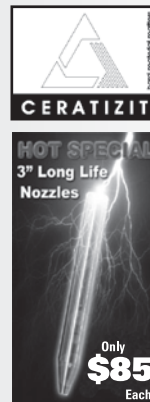


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- **Emerging Technology, New Applications**—Hear some of the world's foremost engineers and researchers share new developments in applications, mechanics, equipment, and procedures.

The WJTA Conference and Expo is unique in that the program is dedicated to high pressure waterjet technology and related industries. If you are involved in high pressure waterjetting for cleaning, surface preparation, industrial vacuuming/air moving for industrial cleanup/recovery, waterblasting or cutting, or if you are interested in finding out more about the industry, the WJTA Conference and Expo is an ideal resource for information and an excellent meeting for networking with other professionals in the field.

**Hotel Reservations at the Marriott Houston Westchase.** The Marriott Houston Westchase, 2900 Briarpark Drive, Houston, Texas 77042, is the central location for the WJTA Conference and Expo activities. The Marriott is a **smoke-free** facility. For reservations, call toll-free **800-452-5110** or contact the Marriott directly at **713-978-7400**. Be sure to identify yourself as attending the WaterJet Technology Association Conference to receive the special group rates of **\$149 single/double occupancy. August 2, 2009**, is the deadline for guaranteed room availability. Reservations received after **August 2, 2009**, will be confirmed on a space available basis. Rooms may still be available after August 2, but not necessarily at the rates listed above.

Visit [www.wjta.org](http://www.wjta.org) for Conference information or contact:  
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## New NLB Roto-Reel® Automates Pipe Cleaning

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## Conjet Assists With Repairs To Italian Viaduct, from page 9

To complete the concrete restoration the repaired structure will be finished off with a final coating of protective paint to prevent possible future attack from de-icing salt. The repairs started in June 2007 with the hydrodemolition following on three months later in September. The project shut down during the winter months from December to March and restarted in spring of 2008 and finished on schedule at the end of November.

For further information please contact: Lars Göran Nilsson, Conjet AB, P.O. Box 507 S-136 25, Haninge, Sweden, phone: +46-(0)8-5565-2240, fax: +46-(0)8-5565-2260, email: [conjet@conjet.com](mailto:conjet@conjet.com), website: [www.conjet.com](http://www.conjet.com). ■



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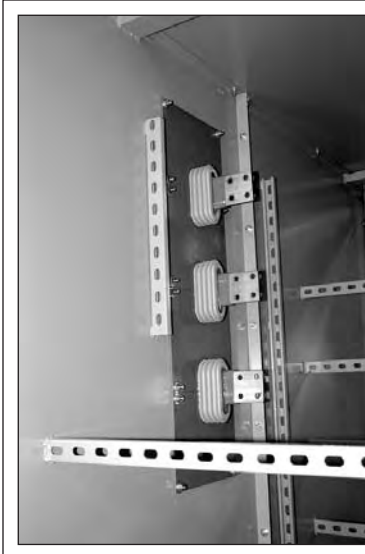
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## Electrical Components Manufacturer Installs Jet Edge Mid Rail Gantry Waterjet System

**R**euel Inc. of Goldsboro, North Carolina, has installed Jet Edge's latest ultra-high pressure waterjet cutting system, the Jet Edge Mid Rail Gantry. With its new waterjet system, Reuel is now capable of cutting complex parts from virtually any material with water that has been pressurized to 60,000 psi and mixed with an abrasive.

Reuel is a manufacturer of insulating components for the electrical power equipment industry. The company specializes in molded switchgear components, apparatus bushings and specialty products for medium voltage electrical distribution equipment. It also manufactures traction-power substations for mass transit authorities and large-scale contractors.



Reuel Inc. uses its new Jet Edge waterjet to cut insulating components from GP03 fiberglass. Waterjet is the most effective way to cut this material because other cutting methods produce a fine abrasive dust that damages other shop equipment.

Photo courtesy of Jet Edge.

According to Jason Stevens, Reuel project engineer, Reuel decided to add waterjet cutting to its extensive machining capabilities because it is the most effective way to cut GP03 fiberglass, one of the primary materials used in the company's switchgear components for its traction-power substation line.

"Waterjet is the best way to cut parts from this material because it eliminates an aggravating fine dust that is created by other cutting methods," Stevens said. "This dust can cause accelerated

machine wear especially in machine ways and optical encoders."

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### Select hose and nozzles to fit the job

Before placing the hose into the sewer and equipping it with the proper nozzle and fin guard, the operator must know the diameter of the pipe he is cleaning and have a good estimate of how much material is in the pipe. The hose is typically 1 inch in diameter but the operator can choose a ¾-inch hose for small diameter pipes. Hoses with 1¼-, 1½- or even 2-inch diameters are available for cleaning larger lines in major municipal systems. Nozzle selection is also very important as nozzles come in a variety of diameters, shapes, flows, and designs to accomplish specific cleaning requirements.

### Set flow

The operator needs to know how much flow the high-pressure water pump will need to accomplish the job. Many of the combo units come with multi-flow systems that will allow the operator to vary the flow of the pump from 40, 60, 80 or 100 gallons per minute. Reducing the flow can conserve water and enable the vehicle to remain on the job longer without having to refill its freshwater tanks. Varying the water flow also allows the operator to customize his unit's capability for the task at hand. Larger combo units are also available that may pump from 100 to 300 gpm for very large cleaning tasks.

### Insert hose, with proper guards in place

The fin guard helps keep the nozzle off the bottom of the sewer to improve performance and prevent the hose from turning around in the pipe, which can create a dangerous situation. The sewer hose must have a hose guide to help with initial insertion and serve as a protective device for the high pressure hose when making the bend into the sewer. The operator inserts

the hose into the pipe and activates the pump at a low speed, allowing the nozzle to pull the hose into the pipe. This permits the operator to tie off the hose guide to help protect the hose. By setting the footage counter to zero, the operator knows where the nozzle is in the pipe.

### Coordinate vacuuming with jetting for best results

If the operator is running the unit in combination – jetting and vacuuming – the vacuum tubes must be attached in the proper length to be able to vacuum

continued on page 16



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# Noise...No Problem For Swedish Contractors On Hydrodemolition Project In A Residential Environment

Swedish hydrodemolition specialist E-schakt made up lost time on multi-story car park repavement project with increased production and extended working hours by using its recently delivered Ecosilence Power Pack in the residential area of a Stockholm suburb.

A newly developed 'silenced' powerpack, from Sweden's Aquajet Systems AB, has allowed hydrodemolition specialist E-schakt to make up lost time on its 6-storey car parks project, with extended working hours and increased production, in a suburb of Stockholm, just meters from residential apartments.

The newly introduced Ecosilence Power Pack's performance is appreciated by the residents and contractor alike – its noise level being less than half that of conventional power packs and similar to that of a normal conversation.

E-schakt started work on the 6-story car park, located in Södermalm and owned by the BRF Hamnvakten housing cooperative, in October 2007; relying on a competitive marque power pack.

Operating from 8:00 a.m. – 4:30 p.m. during the working weeks, the project was beset by noise complaints from residents of the adjacent apartments.

With work terminating as planned for the summer months, E-schakt had fallen behind schedule due to the reduced working hours. On resumption of work in August 2008 E-schakt had taken delivery of Aquajet's Ecosilence Power Pack.

The effect was immediate with the extended operating hours from 6.30 a.m. – 7:00 p.m. and even at weekends

if necessary. "Something we could never contemplate with the old power pack," said site engineer Andreas Larsson.

The number of complaints from the residents, some just meters away from the power pack has significantly reduced.

## Car Park Contract

E-schakt won the contract to remove the concrete decking of the top five floors and remedial work on the ceilings of the first floor and basement level.

Using hydrodemolition techniques for the floor decks, E-schakt has 'stripped' 4-5cm in the center of each parking lane and up to 10cm around the columns; over more than 6000m<sup>2</sup>.

Built in the late 1980's, the car park decks had no gradient or drainage. The concrete, affected by salt brought in by cars during Stockholm's inclement winters, had badly deteriorated and was becoming a threat to the rebar.

A slight gradient to provide a run off surface for water has been incorporated into the new decking together with a piped drainage system to alleviate the salt problem.

## Increased Production

The selected diesel engine was chosen for its excellent operating range offering a very high torque from



**The Aquajet System's Ecosilence Power Pack not only meets noise levels of less than half that of conventional power packs, it also provides the contractor with significant fuel savings.**



**The Swedish contractor was able to make up 'lost time' on the 6-storey car park project by being able to operate extended working hours despite being located in a residential area.**

1100 rpm to 1800 rpm ensuring that the operator never needs to use more power than is needed. This assists the contractor with extra power compared with similar sized power packs guaranteeing faster production with increased water pressure up to 1000 bar over a larger working area.

"This for me is a 'key' feature of the new power pack" said Andreas

**continued on page 15**

## Noise...No Problem For Swedish Contractors On Hydrodemolition Project In A Residential Environment, from page 14

Larssen continuing "It has allowed me to make up lost time and will allow us to finish on schedule for November 2008."

### Significant Fuel Savings

Use of the Ecosilence also achieves a substantial reduction in fuel consumption compared with conventional power packs, saving an estimated €35,000 a year in a typical operation.

Traditional power packs use between 105 l/hr and 120 l/hr and fuel consumption is of increasing concern both in environmental terms and because of today's escalating prices.

Ecosilence's efficient design means that it requires just 70 l/hr when producing water at 189l/min at 1000 bar at just 73% of its full power capacity.

### Key Features

Key features of the Ecosilence Power Pack include:

- A 40% increase in sound insulation, including the provision of tailor-made seals for all doors and hatches to block noise propagation;
- Specially-designed wall construction, with an acoustic surface treatment and sound-absorbing insulation to reduce noise and vibrations;
- A purpose-built steel enclosure that features two hydraulically-operated hatches for the engine compartment so that the operator can vent excess hot air between operations;
- An advanced heat exchange system in place of traditional cooling;

- Incorporation of new criteria into the exhaust silencer, with every aspect rigorously considered including the location, shape and fastenings;
- A vibration dampener that has been specially designed for the Ecosilence;
- Pipes, hoses and tubing that have been refined and improved in line with the new design approach;
- A specially adapted diesel engine with high torque power.

The new Power Pack from Aquajet

has been developed to cater for the demanding requirements of the global hydrodemolition market and can be used for every task from scarifying to removal of deep concrete beams and heavy industrial cleaning applications.

Its development will help contractors meet the increasingly stringent operational noise requirements that are imposed when working close to sensitive locations such as residential and office complexes.

For more information, visit [www.aquajet.se](http://www.aquajet.se).

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

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## A Day in the Life, from page 13

the material from the pipe. Typically 8 inches in diameter and made of aluminum for ease of handling, the vacuum tubes are connected with clamps to a hydraulically driven boom with a rotation of 120 degrees or greater. The operator engages the high-pressure water pump to propel the nozzle against the sewer's direction of flow. The material is brought back under pressure with the flow of the sewer to minimize sending charged water up the lateral connections that attach each home and business to the sewer system. As the high-pressure hose is being placed into the sewer, the vacuum is engaged but is not lowered to make contact with the wastewater until the hose is being drawn back to the unit. The operator usually cleans the line in increments to ensure a proper cleaning in a process called step cleaning. While the hose in the line is brought back to the unit, the vacuum hose is lowered and the unit begins picking up the water and material. The operator cleans the pipe in segments until he cleans the entire length of pipe to the next manhole. These manholes typically are spaced at 400- to 600-foot intervals.

### Dewater as needed

During the entire cleaning process the operator monitors the liquid-level indicator on the debris body to determine when the debris vessel has reached its capacity. When the debris body is filled, the operator must drain the excess fluid from the debris body, retaining the solids in the vessel while returning the excess liquid back into the sewer system. This dewatering process typically happens several times during the work day. The process may require moving the vehicle so the debris body can be raised, enabling the excess liquid to drain through a hose back into the manhole. This also can be accomplished with a variety of pump-

off systems that use pumps and filters to pump the fluids off while retaining the solid materials.

### Empty the debris body at an approved disposal station

When the debris body is filled with material, or at the end of the

work shift, the operator drives the combination unit to a dumping location that will accept this type of special waste for disposal. The operator backs the vehicle into an acceptable location and disengages the mechanical or manual locks to

**continued on page 17**

## See a star debut at the Louisville Show



Every star has great range, and the NLB 225 Series has more than any other convertible water jet unit — eight pressures from 8,000 to 40,000 psi. Yet the price of admission is low: there's no new unit to buy, just a simple conversion kit.

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If you're going to Louisville, don't miss the debuts of the latest stars from NLB in Booth 7095. If you can't make it, call **1-877-NLB-7988**.

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## Conjet At Pumper And Cleaner Expo

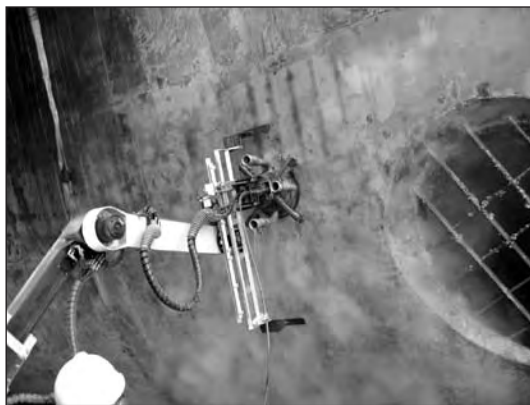
**C**onjet AB will present its comprehensive range of high-pressure water-jetting equipment at booth number 7196 at the Pumper and Cleaner International Environmental Expo at the Kentucky Exposition Center in Louisville, Kentucky, February 26-28, 2009. The equipment is used for hydrodemolition of selectively removing weakened and damaged reinforced concrete from numerous structures as well as a wide variety of industrial cleaning operations, such as removing rust, scale and paint from ships' hulls and steel decks and inside steel tubes.

Conjet will present a number of applications from around the world where its equipment is being used for concrete hydrodemolition and industrial cleaning projects. Conjet will be supported at the Pumper and Cleaner Expo by its US representative National Hydro Inc, based in Fowlerville, Michigan.

For more information, visit [www.conjet.com](http://www.conjet.com)



**Conjet hydrodemolition equipment selectively removes weakened and damaged concrete from numerous structures, such as the Panama Canal locks.**



**Conjet high-pressure water jetting equipment is also used in industrial cleaning operations such as removing rust, scale and paint from ships' hulls.**

### A Day in the Life, from page 16

allow the debris tank to empty. Elevating the debris body helps the material discharge. Many units have debris body flush-out systems that use fresh water under pressure to help clean the debris vessel. The operator uses a handgun spray system to adequately clean the unit for the next day's tasks.

Combo operators encounter a virtually endless variety of tasks. They may include hydro excavation

projects, cleaning digesters or wet wells, catch basin cleaning, lift station maintenance and a variety of storm and sanitary sewer cleaning applications. Since their introduction in the early 1970s, combo vehicles have proven to be one of the most flexible and valuable pieces of equipment in municipal and industrial fleets, a value that is expected to endure well into the current century. ■

## Vacuum Truck Rentals Opens Gonzales, Louisiana, Facility

**V**acuum Truck Rentals recently opened a new facility in Gonzales, Louisiana. Vacuum Truck Rentals' full line of vacuum equipment, including Air Machines, Sewer Cleaners, Liquid Vacs and Roll-Offs will be available at the new location.

Graham Kinchen has been chosen to lead the operations in Louisiana. Kinchen has over fifteen years of experience in the industrial contracting business, most recently with Team Industrial.

The new facility is located at 39051 Highway 74 in Gonzales, Louisiana. For more information, call (225)744-2850.



**Graham Kinchen**

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## WJTA Vacuum Equipment Seminar

January 22, 2009 • Orlando, Florida



**Phil Stein uses "lab" demonstrations to show how vacuum trucks work.**



**Ravel Ammerman discusses electrical safety hazards.**



**Gary Toothe reviews vacuum truck components.**

## Electrical Components Manufacturer Installs Jet Edge Mid Rail Gantry Waterjet, from page 12

Reuel also plans to cut other materials with its waterjet machine, including steel, stainless steel, polycarbonate and copper, Stevens noted.

Prior to purchasing its Jet Edge system, Reuel had been outsourcing its waterjetting, but determined it would be more cost-effective and efficient to bring its waterjet cutting in-house, Stevens explained.

"Now that we have our Jet Edge waterjet, we will have control over our process and control over lead time in addition to cost savings," he said.

Within a week of installing the Jet Edge, Reuel had already trained five employees how to run the machine (the company cross-trains its fabrication shop employees) and was busy cutting GP03 insulating components for a traction-power substation it is building for a light rail system in New Orleans. Reuel is building two substations for the city's transit authority to replace units damaged by flooding following Hurricane Katrina.

"Jet Edge's training was great," Stevens said. "The machine is working great, it can be run relatively unattended, and it looks like maintenance should be easy. I like the SigmaNEST® Companion CAD/CAM software on the controller. It seems to be very intuitive and the controller also is fairly intuitive. It's one of the easiest that I've used."

Stevens said he researched 20 waterjet systems from various manufacturers before deciding on Jet Edge.

"I like Jet Edge's vertical integration and one call for service," he said. "A lot of the other companies require you to call one company for parts and service on the gantry and another for parts and service on the pump. I also liked Jet Edge's 24-hour availability. Many other waterjet manufacturers were available eight to five in their time zone or they had online support. Plus, I really liked working with David Arthur [Jet Edge's Southeast U.S. regional sales manager]. I felt that he was as honest as a salesman could be and was willing to work with us to determine the best solution."

The Jet Edge Mid Rail Gantry selected by Reuel features an 8'X13' work envelope with an exposed tank that easily accommodates overhead loading. It comes standard with one abrasivejet cutting head; a second cutting head can be added to increase productivity. The Mid Rail Gantry is ball-screw driven for higher accuracy. Its sturdy heavy-wall tubular steel construction eliminates vibration and increases longevity. The Mid Rail Gantry 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.

For more information, visit [www.jetedge.com](http://www.jetedge.com), call 1-800-JET-EDGE (538-3343) or e-mail [sales@jetedge.com](mailto:sales@jetedge.com). ■

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## **Flow Completes Minority Investment In China's Leading Waterjet Manufacturer**

**F**low International Corporation (NASDAQ: FLOW) announced on January 5, 2009, that it has completed its \$2 million purchase of a minority ownership position in Dardi International Corporation, China's leading waterjet manufacturer.

Privately held Dardi is a leading waterjet supplier for the "economy" segment of the market, and the largest volume producer of waterjets in Asia with three factories located near Nanjing, China. Flow announced its intent to purchase the minority position in November 2008, having previously introduced Dardi as the new supplier of its economy segment product line. By establishing a minority equity position, Flow has formalized its relationship with Dardi.

"We believe this enhanced relationship with Dardi will improve access to Dardi's low cost manufacturing, products and distribution base in China," said Charley Brown, Flow's President and CEO. "We believe this small investment will enhance our competitive position in China and the rest of the world."

Flow International Corporation develops and manufactures ultrahigh-pressure waterjet technology for cutting and cleaning. Flow provides state-of-the-art ultrahigh-pressure (UHP) technology to numerous industries including automotive, aerospace, job shop, surface preparation, food and dozens more. For more information, visit [www.flowcorp.com](http://www.flowcorp.com).

# Candidates Sought For 2009 WJTA Awards

**Y**ou are invited to submit candidates for the special awards that are presented biennially by the WaterJet Technology Association to honor a company, organization or individual who has made a significant contribution to the industry through accomplishments that directly enhance waterjet technology and the industry as a whole. A list of previous WJTA award recipients appears below.

**Candidate nominations must be received no later than July 3, 2009.** The award recipient(s), to be selected by the Awards Committee of the WaterJet Technology Association, will be honored at a presentation ceremony on Wednesday, August 19, 2009, in conjunction with the 2009 American WJTA Conference and Expo in Houston, Texas.

An official form for candidate nominations appears on the right. Complete one form for each nomination submitted. Please make additional copies of the form as needed. Completed nomination forms may be faxed to (314)241-1449 or mailed to the WaterJet Technology Association, 906 Olive Street, Suite 1200, St. Louis, MO 63101-1448, USA.

## 2009 WJTA Awards Nomination Form

Candidate \_\_\_\_\_  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_ Postal Code \_\_\_\_\_  
 Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
 Email \_\_\_\_\_

Candidate Submitted by \_\_\_\_\_  
 Title \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_ Postal Code \_\_\_\_\_  
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**Nominations must be received no later than July 3, 2009**

For a prompt response, fax completed form to 314-241-1449, or mail to WJTA, 906 Olive Street, Suite 1200, Saint Louis, MO 63101-1448

## Previous Award Recipients

1981 Pioneer Award  
Jacob Frank  
 1983 Pioneer Award  
H.D Stephens  
 1985 Pioneer Award  
William Cooley  
 1987 Pioneer Award  
Norman Franz, Ph.D.  
 1989 Pioneer Award  
Richard Paseman  
 1991 Pioneer Award  
John H. Olsen, Ph.D.  
 1993 Pioneer Award  
Fun-Den Wang, Ph.D.,  
 Safety Award  
David Summers, Ph.D.  
 NLB Corporation  
 Service Award  
George A. Savanick, Ph.D.  
 Mohan Vijay, Ph.D.  
 Technology Award  
Mohamed Hashish, Ph.D.  
 Autoclave Engineers  
 Hammelmann Corporation

1995 Pioneer Award  
George Rankin  
 Safety Award  
Autoclave Engineers  
 Service Award  
Thomas J. Labus  
 Technology Award  
Thomas J. Kim, Ph.D.  
 1997 Pioneer Award  
David A. Summers, Ph.D.  
 Service Award  
Andrew F. Conn, Ph.D.  
 Technology Award  
Prof. Dr-Ing. Hartmut Louis  
 1999 Pioneer Award  
Mohamed Hashish, Ph.D.  
 Safety Award  
Bruce Wood  
 Service Award  
John Wolgamott  
 Technology Award  
Ryoji Kobayashi, Ph.D.  
 2001 Pioneer Award  
George A. Savanick, Ph.D.  
 Technology Award  
Richard Ward

2003 Pioneer Award  
Pat DeBusk  
 Service Award  
Mohamed Hashish, Ph.D.  
 Technology Award  
Ernest S. Geskin, Ph.D.  
 2005 Pioneer Award  
Hartmut Louis, Dr.-Ing.  
 Safety Award  
TurtleSkin WaterArmor  
 Service Award  
NLB Corporation  
 Technology Award  
Jay Zeng, Ph.D.  
 2007 Pioneer Award  
Forrest Shook  
 Safety Award  
Vacuum Equipment Safety  
 Committee  
 Service Award  
Tony Fuller  
 Jim Petillo  
 Technology Award  
Mamidala Ramulu, Ph.D.

## Tanker Crew Uses High-Pressure Waterjets To Fight Off Somali Pirates,

from page 2

naval flotilla which swiftly scrambled an airplane and helicopter, the Greek Merchant Marine Ministry said.

“An aircraft and a helicopter reached the ship very quickly, which scared the pirates off,” a ministry spokesman said, on customary condition of anonymity. “A frigate also sped to the scene. Everything now seems to be under control, but we remain vigilant.”

The 29 crew members were unhurt and the tanker, carrying oil from the Persian Gulf to Greece, was not damaged in the attack off the pirate-infested Somali coast, said a statement by the ship’s operating company Avin International.

“The ship is continuing its journey to its port of destination,” the company said.

More than a dozen warships are now patrolling between the shores of Yemen and Somalia to try to protect commercial vessels. Countries as diverse as Britain, India, Iran, the United States, China, France and Germany have naval forces in the waters.

A French warship on Thursday, January 1, intercepted two speedboats carrying eight Somali pirates as they were preparing to board the Panamanian ship, said a statement released January 1 by the office of French President Nicolas Sarkozy.

The crew of the “PM L’Her” dispatch boat seized weapons and munitions on board. The French navy will hand over the men to Somali authorities.



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Pirates successfully hijacked 42 ships in the Gulf of Aden in 2008. Of those, 14 are still in the hands of pirates with more than 240 hostages, according to the International Maritime Bureau.

The pirates have been given a free hand to operate because of more than

a decade of turmoil in Somalia. The nation of about eight million people has not had a functioning government since warlords overthrew a dictator in 1991 and then turned on each other.

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# Putzmeister America's Water Technology Division Offers PWT 170 Series Industrial High Pressure Waterjetting Unit

The Water Technology Division of Putzmeister America, Inc. has available as part of its line of high and ultrahigh pressure waterjetting units the PWT 170 Industrial Series. The PWT 170 Series offers maximum performance, mobility and efficiency, even under extreme conditions. Its compact yet powerful design is economical to use, offers flexibility and easy maintenance.

Available with various options, the PWT 170 Series can be specified with or without covers and skid or trailer-mounted. Its 170 hp John Deere 4-cylinder diesel engine drives a triplex plunger pump to achieve flow rates and pressures from 18.2 gpm at 10,000 psi to 4.8 gpm at 40,000 psi.

Combining a lightweight, compact design and easy-to-use industrial control system, these models offer flexibility and convenience. The



optional hoods reduce noise and tilt up for convenient maintenance. The trailer-mounted units meet all U.S. D.O.T. requirements.

"With this contractor-grade addition to the PWT 170 Series, Putzmeister America further proves its commitment to the U.S. market in industrial cleaning and surface preparation," says Putzmeister Water Technology general manager Eric Zimmermann. The PWT 170 Series was designed to meet the needs of U.S. industrial plants as well as contractors' requirements. It sets

new standards in design, operation and maintenance, while extending Putzmeister America's leadership in quality."

The PWT TD 170 is equipped with

a rugged, low center of gravity trailer for improved towing and steering, center enclosure with lifting capabilities, heavy-duty fenders, rugged axles, all stainless steel piping on suction and discharge lines, integrated pump gear box for low-rpm and less wear, 180-gallon water tanks and an easy-to-operate industrial style control system.

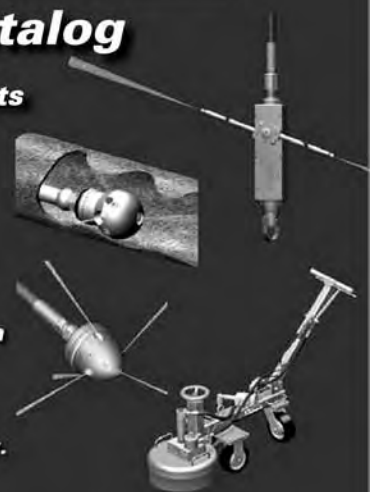
For more information, visit the Water Technology section of [www.putzmeister.com](http://www.putzmeister.com) or contact the Houston Service Center at (281)449-2100.

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## 2009 American WJTA Conference & Expo

August 18-20, 2009  
Marriott Houston Westchase • Houston, Texas

### Proposed Schedule of Events

(as of 2/11/09)

#### MONDAY, AUGUST 17, 2009

- |            |                            |
|------------|----------------------------|
| 12:00 Noon | Board of Directors Meeting |
| 6:30 p.m.  | Board Dinner               |

#### TUESDAY, AUGUST 18, 2009

- |                     |   |
|---------------------|---|
| 8:00 a.m.           | Pre Conference Seminars <ul style="list-style-type: none"><li>• Basics &amp; Beyond</li><li>• Vacuum Equipment Safety Seminar</li></ul> |
| 5:30 p.m.-7:00 p.m. | Welcome Reception – Exhibit Hall A  |

#### WEDNESDAY, AUGUST 19, 2009

- |                      |                                     |
|----------------------|-------------------------------------|
| 8:00 a.m.-10:00 a.m. | Live Demonstrations                 |
| 10:00 a.m.-4:30 p.m. | Boot Camp                           |
| 10:00 a.m.-5:00 p.m. | Exhibits – Hall A                   |
| 10:00 a.m.-7:00 p.m. | Exhibits – Hall B                   |
| 1:00 p.m.-5:00 p.m.  | Paper Presentations                 |
| 5:30 p.m.-6:00 p.m.  | Awards Presentation – Rose Garden   |
| 6:00 p.m.-7:00 p.m.  | Cocktail Reception – Exhibit Hall B |

#### THURSDAY, AUGUST 20, 2009

- |                      |                            |
|----------------------|----------------------------|
| 8:00 a.m.-10:00 a.m. | Live Demonstrations        |
| 10:00 a.m.           | General Membership Meeting |
| 10:00 a.m.-1:30 p.m. | Exhibits – Halls A & B     |
| 10:00 a.m.-1:30 p.m. | Boot Camp                  |
| 1:00 p.m.-5:00 p.m.  | Paper Presentations        |

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# Nominations Open For WJTA Board Of Directors

**CORRECTION:** William Gaff was elected to a two-year term of office in August 2007, and his term of office will expire in August 2009. Greg Galecki, Ph.D., was elected to a four-year term of office in August 2007. Therefore, Dr. Galecki's term of office extends **through August 2011**.

The terms of office of **William Gaff, Mohamed Hashish, Ph.D., Hugh B. Miller, Ph.D., Bill McClister, George A. Savanick, Ph.D., and B.T. Steadman** will expire in August 2009. Therefore, nominations are sought for six (6) board members, each to serve a four-year term of office beginning August 17, 2009.

The WJTA bylaws provide that no more than one of the elected board members may be from the same company or organization. Therefore, board members may not be nominated from the same company or organization already represented on the board by individuals whose terms expire in 2011, including DeBusk Industrial Services Company (Pat DeBusk), Missouri University of Science and Technology (Greg Galecki, Ph.D.), High Pressure Equipment Company (Larry Loper), NLB Corporation (Forrest A. Shook), StoneAge, Inc. (John Wolgamott), and Polyflex Business Unit/Parker Hannifin Corporation (Paul Webster).

According to the WJTA bylaws, any WJTA member in good standing (2008 membership dues paid) may submit a nomination(s). A nominee who has not paid his/her dues by March 31, 2009, shall be declared ineligible to run for office in the 2009 election. The deadline for making nominations is **March 31, 2009**. Your nomination(s) should reach the WJTA office **no later than March 31, 2009**.

**To submit a nomination(s), complete the Nomination Form and return, along with biographical information and a brief statement of your nominee's mission and vision for WJTA, to:**

**WJTA Administrative Office  
906 Olive Street, Suite 1200  
Saint Louis, MO 63101-1448  
Phone: (314) 241-1445  
Fax: (314) 241-1449**

Remember, nominations must be received **no later than March 31, 2009**.

## Nominations/Elections Procedures

In accordance with the bylaws of the WaterJet Technology Association, nominations and elections to the Board of Directors include the following procedures:

- At least two calls for nominations to the board of directors will be published in the *Jet News*. The first call for nominations appears in this issue. **Nominations will be accepted through March 31, 2009.**
- An official ballot listing the eligible nominees and a brief biographical sketch for each individual will then be forwarded by mail to all eligible voting members of the Association on **May 28, 2009**. **Signed and executed ballots must be mailed to the Association's office for tallying by June 25, 2009.**
- The names of newly elected board members will be announced in the *Jet News* and on the WJTA web site.

Only WJTA members in good standing (2008 membership dues paid) may submit a nomination(s). A nominee who has not paid his/her dues by March 31, 2009, shall be declared ineligible to run for office in the 2009 election.

### Nomination Form

Name of Nominee \_\_\_\_\_  
Title \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Country \_\_\_\_\_ Postal Code \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
Email \_\_\_\_\_

\_\_\_\_\_  
*Attach biographical information with a brief statement  
of your nominee's mission and vision for WJTA.*  
\_\_\_\_\_

Name of Nominator \_\_\_\_\_  
Title \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Country \_\_\_\_\_ Postal Code \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
Email \_\_\_\_\_

**Return completed Nomination Form and supporting information to:  
WJTA Administrative Office, 906 Olive Street, Suite 1200, Saint Louis, MO 63101-1448**

# Seven Easy Ways To Attend The 2009 American WJTA Conference And Expo

## 1. FULL CONFERENCE

Includes admission to all research and applications sessions (except pre-conference seminars on Tuesday, August 18), onsite live demonstrations, boot camp presentations, pass to welcoming reception in exhibit hall (Tuesday, August 18), exhibits, luncheon on Wednesday, August 19, and Thursday, August 20, coffee breaks, and cocktail reception on Wednesday, August 19. Each full registration also receives one copy of the Conference *Proceedings* on CD-ROM.

## 2. COMBO

Includes everything listed under full conference **PLUS** a pre-conference workshop on Tuesday, August 18: Waterjet Technology - Basics and Beyond **OR** Industrial Vacuum Equipment Recommended Practices Seminar.

## 3. SAVE \$ - MULTIPLE EMPLOYEE FULL/COMBO REGISTRATIONS

Companies that purchase three or more full or combo registrations receive a special discount for each additional employee registered after the first two. To take advantage of the special discount, register the first two (2) employees from your company at the regular FULL/COMBO rate and receive the discounted rate for the third and subsequent employee registrations.

## 4. DAILY ATTENDANCE

Includes admission to all research and applications sessions, onsite live demonstrations, boot camp presentations, exhibit hall, coffee breaks, and luncheon on that day. Tuesday, August 18, daily registration includes welcoming reception. Wednesday, August 19, daily registration includes cocktail reception. Register for one day and receive a "50% off" coupon for the 2009 Conference *Proceedings* on CD-ROM. Register for two days and the *Proceedings* are included.

## 5. PRE-CONFERENCE SEMINARS - Tuesday, August 18, 2009

**Choose one:** Waterjet Technology - Basics and Beyond **OR** Industrial Vacuum Equipment Recommended Practices Seminar.

Includes handout materials for seminar selected, coffee breaks, luncheon, and August 18 Welcoming Reception in exhibit hall.

## 6. EXHIBIT HALL and/or LIVE DEMO PASS

A \$30 exhibit hall and/or live demonstration pass for one day includes admission to the WJTA exhibit hall where you'll see waterjet and industrial vacuum equipment, supplies, and services, onsite live demonstrations between the hours of 8:00 a.m.-10:00 a.m., and WJTA boot camp presentations. Passes do **NOT** include luncheon in the exhibit hall. Tickets for lunch can be purchased separately.

You must purchase a ticket to attend the welcoming reception in Exhibit Hall A on Tuesday, August 18, or the cocktail reception in Exhibit Hall B on Wednesday, August 19, if you are not registered as a full or combo, or if you are not registered for a pre-conference seminar.

## 7. STUDENTS

The registration fee for WJTA student members is \$20. Student registration includes admittance to technical programs, onsite live demonstrations, and the exhibit hall on Wednesday and Thursday, but does **NOT** include copies of the *Proceedings*, welcoming reception in exhibit hall on Tuesday, August 18, or admittance to any food/social functions. **NO** discount is available for students that are not members of the WJTA. WJTA student members must be enrolled **full-time** in a university graduate or undergraduate program.

**WJTA members and  
early-bird  
registrants  
SAVE UP TO \$120!**

WJTA members receive a special discount off the regular registration fees. You will also receive a discount if your registration is postmarked or received in the WJTA office by **August 2, 2009. TOTAL SAVINGS: UP TO \$120!**

## OPTIONAL TRIP - NASA'S JOHNSON SPACE CENTER

An optional trip to NASA's Johnson Space Center is scheduled for Monday, August 17, from 9:30 a.m.-4:30 p.m. Buses will begin boarding a half-hour prior to departure times listed. Trip includes bus transportation, entrance to the space center and 1-1/2 hour tram tour. Lunch is not included and will be on your own.



## HOTEL RESERVATIONS

It's not too early to make hotel reservations for the 2009 American WJTA Conference and Expo to be held August 18-20, 2009. The room rate is \$149, single or double occupancy. For room reservations at the central location of the Conference, call the **Marriott Houston Westchase Hotel** in Houston, Texas, toll free at 800-452-5110 or call the hotel direct at 713-978-7400. The Marriott is a smoke-free facility.

The **Hilton Houston Westchase**, an alternate hotel, also provides non-smoking rooms. The room rate is \$154, single or double occupancy. For room reservations, call (713)974-1000.

When calling either hotel, be sure to mention that you are attending the WJTA Conference.

## CANCELLATION POLICY

Fees will be refunded in full for cancellations received at least four weeks prior to the Conference. Cancellations received more than 10 days and less than four weeks prior to the Conference will be subject to a \$50 charge. No refund will be made for cancellations received less than 10 days prior to the Conference. However, substitutions may be made at anytime. Refunds will not be processed until after the Conference.

# 2009 American WJTA Conference And Expo Registration Form

Name \_\_\_\_\_ Member # \_\_\_\_\_  
 Company \_\_\_\_\_ Title \_\_\_\_\_  
 Address \_\_\_\_\_ Mailing Address: ☐ Home ☐ Work  
 City \_\_\_\_\_ State \_\_\_\_\_ Country \_\_\_\_\_ Postal Code \_\_\_\_\_  
 Telephone # [ ]( ) \_\_\_\_\_ Fax # [ ]( ) \_\_\_\_\_  
 E-mail Address: \_\_\_\_\_  
 Information for name tag \_\_\_\_\_

*Print name as you wish it to appear on your name tag*

**Payment Method:** ☐ Enclosed is my check, payable to **WaterJet Technology Association** (U.S. DOLLARS ONLY).  
 Please charge my ☐ MasterCard ☐ VISA ☐ AMEX ☐ Discover

Credit Card # \_\_\_\_\_ Expiration Date \_\_\_\_\_

Print name as it appears on card

Cardholder's signature

## THREE EASY WAYS TO REGISTER

**By Phone:** Just call (314)241-1445 and have your credit card information ready. (MC/VISA/AMEX/Discover ONLY).

**By Fax:** Fill out the registration form with your credit card information and call our 24-hour fax number at: (314)241-1449.

**By Mail:** Fill out the registration form and mail with applicable payment to:

**WJTA**  
 906 Olive Street  
 Suite 1200  
 St. Louis, MO 63101-1448

*Join the WaterJet Technology Association now and receive a substantial discount off Conference registration fees.*

### WJTA MEMBER

By 8/2/09 After 8/2/09

### NONMEMBER

By 8/2/09 After 8/2/09

☐ **OPTIONAL TRIP to NASA's Johnson Center** ..... \$ 30 ..... \$ 30 ..... \$ 30 ..... \$ 30 ..... = \$ \_\_\_\_\_

## Seven Ways To Register

☐ **Full Conference ONLY** ..... \$ 475 ..... \$ 535 ..... \$ 535 ..... \$ 595 ..... = \$ \_\_\_\_\_

☐ **Combo** (Full Conference PLUS Pre-Conference Seminar) ..... \$ 645 ..... \$ 705 ..... \$ 705 ..... \$ 765 ..... = \$ \_\_\_\_\_

**Pre-Conference Seminar** (choose one): ☐ Waterjet Technology - Basics and Beyond ☐ Industrial Vacuum Equipment Seminar

### ☐ Daily

☐ **Tuesday - Pre-Conference Seminar** (Includes Luncheon) ..... \$ 280 ..... \$ 340 ..... \$ 340 ..... \$ 400 ..... = \$ \_\_\_\_\_

**Pre-Conference Seminar** (choose one): ☐ Waterjet Technology - Basics and Beyond ☐ Industrial Vacuum Equipment Seminar

☐ **Wednesday** (includes Luncheon and Cocktail Reception) ..... \$ 265 ..... \$ 295 ..... \$ 295 ..... \$ 355 ..... = \$ \_\_\_\_\_

☐ **Thursday** (includes Luncheon) ..... \$ 265 ..... \$ 295 ..... \$ 295 ..... \$ 355 ..... = \$ \_\_\_\_\_

### ☐ Exhibit Hall/Live Demo Pass

☐ **Wednesday** (does NOT include Luncheon or Cocktail Reception) ..... \$ 30 ..... \$ 30 ..... \$ 30 ..... \$ 30 ..... = \$ \_\_\_\_\_

☐ **Thursday** (does NOT include Luncheon) ..... \$ 30 ..... \$ 30 ..... \$ 30 ..... \$ 30 ..... = \$ \_\_\_\_\_

☐ **Student** (WJTA members ONLY) ..... \$ 20 ..... \$ 20 ..... N/A ..... N/A ..... = \$ \_\_\_\_\_

### MULTIPLE CORPORATE REGISTRATIONS (Applies to third and subsequent registrants from same company)

☐ **Full Conference ONLY** ..... \$ 425 ..... \$ 485 ..... \$ 485 ..... \$ 545 ..... = \$ \_\_\_\_\_

☐ **Combo** (Full Conference PLUS Preconference Seminar) ..... \$ 595 ..... \$ 655 ..... \$ 655 ..... \$ 715 ..... = \$ \_\_\_\_\_

**Pre-Conference Seminar** (choose one): ☐ Waterjet Technology - Basics and Beyond ☐ Vacuum Equipment Safety

**WJTA MEMBERSHIP** (US, Mexico, Canada)

☐ \$60 Individual

☐ \$20 Student

☐ \$400 Corporate ..... = \$ \_\_\_\_\_

**WJTA MEMBERSHIP - International** (all other countries)

☐ \$80 Individual

☐ \$40 Student

☐ \$460 Corporate ..... = \$ \_\_\_\_\_

☐ **Conference Proceedings** \_\_\_\_\_ Copies x \$89.00 ..... = \$ \_\_\_\_\_

2009 American WJTA Conference registrants may purchase extra copies of the Conference *Proceedings* on CD-ROM for only \$89. Regularly priced at \$109, you will **SAVE \$20**. Offer valid through 8/31/09.

**SPECIAL OFFER!**

**EXTRA TICKETS** — The Full and Combo registrations include one ticket per registration for the Exhibit Hall Luncheons (Wednesday and Thursday), Welcoming Reception in Exhibit Hall (Tuesday) and Cocktail Party (Wednesday). Each Daily registration includes a luncheon ticket for the day registered: Tuesday, Wednesday and/or Thursday. Tuesday daily includes Welcoming Reception in Exhibit Hall and Wednesday daily includes the Cocktail Reception. Additional tickets may be purchased as follows:

☐ **Welcoming Reception in Exhibit Hall - Tuesday** ..... \$ 60 ..... \$ 60 ..... \$ 60 ..... \$ 60 ..... = \$ \_\_\_\_\_

☐ **Luncheon in Exhibit Hall - Wednesday or Thursday or both (\$40)** ..... \$ 20 ..... \$ 20 ..... \$ 20 ..... \$ 20 ..... = \$ \_\_\_\_\_

☐ **Cocktail Reception - Wednesday** ..... \$ 40 ..... \$ 40 ..... \$ 40 ..... \$ 40 ..... = \$ \_\_\_\_\_

**TOTAL ENCLOSED**

\$ \_\_\_\_\_

# WJTA Welcomes New Members

## Corporate

### Certified Coating Specialists Inc.

*Cliff Harper*  
*Byran Place*  
*Darren Ponte*  
 1840 Co-Op Lane  
 Castlegar BC V1N 4K2  
 Canada  
 Phone: (866)822-5900  
 Fax: (250)365-3390

### MultiCam, Inc.

*John Harris*  
*Kris Hanchette*  
*Galen Derrickson*  
 1025 West Royal Lane  
 P.O. Box 612048  
 DFW Airport, TX 75261  
 Phone: (972)929-4070  
 Fax: (972)929-4071

### mvt AG

*Massimo Lucchini*  
 Phone: [41](32)332-9767  
*Martin Waelti*  
 Phone: [41](32)332-9760  
 Sparsstrasse 5  
 Port BE 2562  
 Switzerland  
 Fax: [41](32)332-9761

## Corporate Alternates

### Buster Austin

DeBusk Industrial Services  
 Company  
 P.O. Box 840  
 LaPorte, TX 77572-0840  
 Phone: (281)307-1200  
 Fax: (281)307-1241

### Chris Daniels

DeBusk Industrial Services  
 Company  
 P.O. Box 840  
 LaPorte, TX 77572-0840  
 Phone: (281)307-1200  
 Fax: (281)307-1241

### Mark Maloney

Maxpro Technologies, Inc.  
 7728 Klier Drive South  
 Fairview, PA 16415-2454  
 Phone: (814)474-9191  
 Fax: (814)474-9391

### Todd Nestel

Chariot Robotics  
 4398 SW Port Way  
 Palm City, FL 34990-5583  
 Phone: (772)403-2373  
 Fax: (772)403-2376

## Corporate Individuals

### Chris Boase

Eveready Energy Services  
 9856 Steelman Street  
 Houston, TX 77017  
 Phone: (713)534-8656  
 Fax: (713)534-8618

### Graham Kinchen

Vacuum Truck Rental, LLC  
 39051 Highway 74  
 Gonzales, LA 70737  
 Phone: (225)744-2850

### Mike Landry

Pelichem Industrial Cleaning  
 Services  
 284 Airport Road  
 Reserve, LA 70084-0468  
 Phone: (985)535-3000  
 Fax: (985)479-1865

### Kevin Leah

Certified Coating Specialists Inc.  
 1840 Co-Op Lane  
 Castlegar BC V1N 4K2,  
 Canada  
 Phone: (866)822-5900  
 Fax: (250)365-3390

### Keith Marlin

Veolia ES Industrial Services, Inc.  
 PO Box 488  
 North East, MD 21901-0488  
 Phone: (410)287-7200  
 Fax: (410)287-7208

### Daniel Marti

Bystronic, Division Waterjet  
 Industriestrasse 21  
 Niederoenz 3362  
 Switzerland  
 Phone: [41](62)956-3472  
 Fax: [41](62)956-3729

### John H. Streetman

DeBusk Industrial Services  
 Company  
 10910 Spencer Highway  
 LaPorte, TX 77571  
 Phone: (281)307-1200  
 Fax: (281)307-1241

### Randy Tilley

Certified Coating Specialists Inc.  
 1840 Co-Op Lane  
 Castlegar BC V1N 4K2,  
 Canada  
 Phone: (866)822-5900  
 Fax: (250)365-3390

## Individuals

### Gary Driscoll

Xstrata Zinc Brunswick Smelter  
 692 Main Street  
 Belledune, NB, E8G 2M1  
 Canada  
 Phone: (506)522-7055  
 Fax: (506)522-7099

### Jason Magwire

Pollard Pumping, Inc.  
 813 W. Monroe Avenue  
 Norfolk, NE 68701-6633  
 Phone: (402)371-8492  
 Fax: (402)371-3175

### Christie McClung

Freedom Waterjet  
 Components, Inc.  
 P.O. Box 66  
 Auburn, GA 30011-0066  
 Phone: (770)236-8788  
 Fax: (678)225-7087

### Bob Moran

HTH Companies Inc.  
 239 Rock Industrial Blvd.  
 Union, MO 63084  
 Phone: (636)583-8698  
 Fax: (636)583-5971

### Tony Pioprowski

FFC Environmental  
 1055 Alexander  
 Plant City, FL 33563  
 Phone: (813)754-1504

### Jason Reagan

Smith Industrial Service  
 913 Kevin Court  
 Panama City, FL 32404-5954

### Roger Seegren

Smith Industrial Service  
 6709 Chipewa Street  
 Callaway, FL 32404

### Rick Smith

FCC Environmental  
 1055 Alexander  
 Plant City, FL 33563  
 Phone: (813)754-1504

### George W. Swauger

Smith Industrial Service  
 322 Sukoshi Drive  
 Panama City, FL 32404

### Amedeo Roncallo

PTC Italiana SRL  
 Via Tagliolini, 50  
 Genoa 16152 Italy  
 Phone: [39](010)6509422  
 Fax: [39](010)6509406

### Michelle Wells

Ausjet Incorporated  
 PO Box 1426  
 Bibra Lake WA 6965  
 Australia  
 Phone: [61](430)391166  
 Fax: [61](08)93288311

## IMPORTANT NOTICE REGARDING SPAM

Email addresses and other member contact information published in the WJTA Membership Directory is meant to encourage helpful, informative communication between members. The information is not provided to circulate spam or junk mail.

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.

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#### **High Pressure Fittings**

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Ball, high temperature, micro-metering, relief, pipe connection and male bottom connection valves. Special materials available.