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# Hydroexcavation In The Oilfields: Merkley Oilfield Services Tackles Tough Jobs



Most of Merkley's projects take a day or two, covering a wide range of applications, including trenching for pipelines, cleaning drilling equipment, and cleaning up after spills or accidents. See article on page 2.

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### Hydroexcavation In The Oilfields: Merkley Oilfield Services Tackles Tough Jobs

### No project too big, dirty or demanding for experienced contractor

**66** It's a dirty job, but somebody has to do it." That's a challenge Scott Merkley is happy to accept. Throughout the oil fields of eastern Utah, Colorado and Wyoming, Merkley's three hydroexcavator trucks take on the toughest, dirtiest, most demanding jobs. And the result is usually the same – the sweet smell of success.

For more than ten years, Merkley has owned and operated Merkley Oilfield Services in Vernal, Utah, a small town in the northeastern part of the state. During that time, he and his team of six employees have built a following of loyal, repeat customers and a reputation for tackling the nastiest jobs in the oil patch.

Recently, for example, an important customer called on Merkley to drain a damaged evaporation pond, which contained sludge, mud and contaminants from well-drilling. The 300 x 500-ft pond's vinyl liner needed repair to prevent contaminated material from escaping into the ground. For two weeks, Merkley's two Vactor HXX hydroexcavator trucks vacuumed more than 1.5 million gallons of material from the pond.

Powered by a positive-displacement blower that delivers up to 5,150 CFM of suction, each HXX truck pulled the heavy sludge and mud through as much as 300 feet of 8-inch vacuum hose, providing a quick and effective solution to what could have been a serious environmental problem.

The hydroexcavators transferred nearly 600 truckloads of material for

disposal in another evaporation pond, enabling repairs to proceed on the damaged pond.

"We pulled some very heavy material over long distances, working long days for two straight weeks," Merkley says. "It's about as tough as it gets, but we got the job done and the customer was pleased. There's no other way we could have done the work so fast and efficiently."

# Moving mountains of rock for a dam foundation



In addition to the two HXX trucks, Merkley also operates a Vactor Prodigy vacuum excavator, a smaller capacity unit that meets the needs of some smaller projects. Most of Merkley's projects take a day or two, covering a wide range of applications, but a recent job kept an HXX hydroexcavator busy for most of a year.

Working as a subcontractor on a dam construction project at Big Sand Wash Reservoir near Altamont, Utah, Merkley used one of its Vactor trucks to vacuum rock debris and water from a 20-ft-deep, 3-ft-wide trench cut through a sandstone. The quarter-milelong trench provided a secure footing for the reservoir's new concrete dam, which replaced a deteriorating earthen dam. Big Sand Wash Reservoir serves both as a recreation center and as an irrigation resource for the area.

"The general contractor used a big wheel saw to cut the trench," Merkley explained. "We used the HXX to wash out the trench and vacuum up the rock debris from the bottom of the trench. The bottom of the trench had to be very clean and smooth to make sure the new concrete would form a complete bond with the rock. We were pulling heavy, abrasive material over long distances – 200 to 300 feet – but the hydroexcavator always had enough power to do the job."

Merkley says reliability was an important requirement for the project, because concrete forms were being set for concrete pours as the excavation proceeded.

"They were coming in right behind us to pour concrete," Merkley recalled. "It was a real 'clockwork' operation – excavate, clean the trench, set the forms, pour the concrete. Our work was an important part of the process, and we couldn't miss a day because of equipment problems."

# Hydroexcavation solves safety concerns

Merkley identified safety as a key benefit of hydroexcavation, especially for oilfield service applications. Potentially hazardous projects include pot-holing, in which the hydroexcavator operator uses high-powered water to uncover buried utilities or other underground installations. "Digging with water is obviously a lot safer in these situations," Merkley noted.

(continued on page 12)

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### Cleanability Factor

The terminology of machinability has been used in the abrasive waterjet cutting technology for many years. A similar terminology for the cleaning industry was also proposed by Conn et al.\* back in 1987. The intention was to standardize the relative ability of a water jet for cleaning applications. A parameter called "cleanability factor" or "erosion strength for cleanability," S<sub>c</sub>, was used to define the combined character of the substance-to-beremoved and the substrate-tobe-cleaned. A term called "area cleaning effectiveness", e<sub>a</sub>, was defined as:

 $e_a =$  Area cleaned per unit time / Power delivered by the nozzle.

It was proposed that for a given nozzle and a fixed set of operating conditions, the value of  $e_a$  is inversely proportional to that of  $S_c$ . The following log-log graph was created based on some preexisting test data. It shows that the values for comparable substances to be cleaned tend to group closely together. The authors pointed out that this approach was at a very preliminary stage and encouraged further research in this direction.

\* Conn, A.F., Gracey, M.T., and Rosenberg, W. (1987) A relative cleanability factor, Proceedings of the Fourth U.S. Water Jet Conference, the University of California, Berkeley, August 26-27, 1987, pp 212-216.

Reprinted by permission from *Quality Waterjet Newsletter*, January 5, 2010.

# BARTON

Introducing BART – The Barton Abrasive Removal Tool

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

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### Mark Your Calendar For The 2010 WJTA-IMCA Expo

W 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.

### WARDJet Introduces Ability To Use Waterjet As A Digitizer

T he digitizing capability of a WARDJet waterjet enables users to take a physical part for which they have no drawing or electronic file and reverse engineer these types of parts. If these parts are large, it may be easier to lay the part on the waterjet table and use the waterjet to memorize the part profile than using a tape measure. With the WARDJet X-Series controller, operators can use the wateriet cutting head, or a laser alignment guide mounted near the cutting head, to record the X, Y and even the Z coordinates of a part. Simply click "Teach new part" on the controller screen to start mapping the part geometry. Both lines and arcs can be easily taught. If further clean up is needed, the CNC file can be brought

into a CAD/CAM program. Within minutes, you can go from part to electronic file.

WARDJet is a leading designer and manufacturer of new and custom waterjet systems for precision cutting and machining applications. Their open-architecture CNC platforms are designed to accommodate multiple machining processes such as drilling, tapping, reaming, rotational indexing or multiple-head 5 axis waterjet cutting. WARDJet waterjet systems are made in the U.S.A. For more information, contact WARDJet by phone: 330-677-9100, ext. 6, fax: 330-677-9121; email: sales@wardjet.com or visit www.wardjet.com.

### Flow International Receives Multiple Orders For Aerospace Projects

Flow International Corporation, a leading developer and manufacturer of industrial waterjet machines for cutting and cleaning applications, today announced that it has received approximately \$11 million of orders for several new projects in its Advanced segment. These orders are for Composite Machining Center abrasive waterjet and routing machine tool systems to be completed over the next 12 to 18 months. The majority of the purchase orders are from Airbus supplier partners working on multiple Airbus programs.

"As waterjets continue to become integral to the aerospace industry's

adoption of composite materials, we are proud to again be selected as the only provider of composite machining technology," says Charley Brown, president and CEO, Flow International. "Flow has a long history and clear leadership position in developing and supporting abrasive waterjet cutting systems for major composites programs."

These new orders are in addition to the previously reported backlog of approximately \$20 million, as of the second quarter ended October 31, 2009, for Flow's Advanced segment.

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

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### Small, Light Hydrodemolition Unit Replaces Hand Lances

C onjet AB is extending its comprehensive range of leading hydrodemolition equipment with the launch of the latest revolutionary high-pressure hydrodemolition Conjet 'Nalta' Jetframe 101. Nalta is the world's smallest and lightest hydrodemolition unit. It replaces and robotizes the dangerous and far less productive hand lancing method of hydrodemolition, as the Nalta operator remotely controls all functions of the Jetframe 101 a safe distance from the working area.

The Nalta Jetframe is very flexible and versatile as it mounts, climbs and operates on standard scaffold tubes, and as there are no electrical sensors it can also operate under water. All components are small, light, easy to carry and position. The cutting head weighs 14 kg, the feed beam section 6 kg and the hydraulically controlled step units, which are fixed to each end of the feed beam and automatically climb up and down standard scaffold tubes, each weigh 9 kg. The trolley mounted hydraulic control unit weighs 90 kg.

Safety has been paramount in the design of the Conjet Nalta, which is a colloquial expression from Vilhelmina in Lappland in northern Sweden meaning something very small. Nalta operators do not need the 'spaceman type' bulky and heavy protective clothing that is vital when using awkward and cumbersome hand held lances.

Conjet Nalta will eliminate the accidents that can occur with the hazardous hand lancing operations and has already proved to be considerably more productive in pre-launch contract trials. "We are replacing the dangerous hand held lancing operations and making them safer with our new and revolutionary Nalta Jetframe," says **Conjet Vice President** Lars-Göran Nilsson. "Contractors that have so far used the Nalta, during on site contract trials, have been very impressed with its safety and performance. With a hand lance pump of 120 kW, generating 250N reaction force, production will be between 2 to 3 times higher than with a hand lance. Because Nalta can withstand a greater reaction force of 600N, compared to 250N for a hand held lance. higher powered pumps can be used, increasing productivity even further up to 5 to 6 times. Nalta is also very easy and quick to set up and can work continuously, so there is far less downtime compared to hand lancing, where operators have to stop and rest every 20 minutes or so. Hydrodemolition with Nalta is also far more controlled, uniform and accurate and selectively removes only damaged concrete. It will prove ideal for those contractors currently using water jetting hand lances."

The new compact and lightweight Nalta Jetframe complements the company's extensive line of Jetframes, hydrodemolition robots, powerpacks, accessories and custom built equipment to cater for all possible hydrodemolition projects. The Conjet Nalta Jetframe 101, the smallest in the leading Swedish company's range, has been specifically designed to replace hand lances for a large number of hydrodemolition applications, as the new equipment considerably increases productivity and dramatically



The patent protected Conjet Jetframe 101 Nalta replaces and robotizes numerous hand lance applications, improving safety and increasing productivity.



Conjet Jetframe 101 Nalta set up for performing hydrodemolition using existing scaffold.

improves safety for operators. A number of innovations, protected by international patents, have been incorporated into the Nalta Jetframe 101, which can be quickly and easily integrated for use on standard scaffolding tubes.

The Nalta Jetframe is supplied with high-pressure water from a standard hand lance pump. The operator controls all movements of the Nalta Jetframe from a hand held portable control box and can operate on flat as well as curved surfaces with a radius

(continued on page 17)



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### The Barton Abrasive Removal Tool – BART – Simplifies Garnet Removal

**B** arton Mines Company, a leading supplier of waterjet abrasives and waterjet replacement parts has introduced the first truly convenient, inexpensive and totally portable abrasive removal system available to the waterjet industry.



"Known as BART, the Barton Abrasive Removal Tool is a solution that addresses the shortcomings of traditional methods of waste garnet removal," states R. Joseph Ahrberg, vice president of sales.

With removal rates in excess of 2,000 lbs. per hour, waterjet operators will realize a significant savings in the time and money invested in waste abrasive removal using BART. Powered by a common pressure washer, the durable stainless steel BART wand is designed to fit between the table slats and can be operated while the waterjet is running, reducing downtime.

The BART system is easy to operate and can be used on multiple machines. BART eliminates the need for exhaustive shoveling, expensive pumping and costly downtime by removing the spent media in a quick and efficient manner.

U.S. and international patents are pending.

Visit www.barton.com/BART to view a demonstration video. For more information contact Barton Mines Company by email at info@barton. com, phone 800-741-7756, or fax: 518-798-5728.

### SAMI Instruments Releases A New 1-Inch Medium Pressure Needle Valve

S AMI America announces that SAMI Instruments has expanded their line of needle valves by adding a new 20,000 psi, 1-inch medium pressure needle valve.

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### Hydroexcavation In The Oilfields: Merkley Oilfield Services Tackles Tough Jobs, from page 2

Cleaning disposal tanks is another job made safer by hydroexcavation. The 400-barrel tanks can accumulate hazardous levels of hydrogen sulfide gas ( $H_2S$ ) that pose risks of explosion, fire and poisonous fumes. Without the availability of hydroexcavation, cleaning these tanks would require a worker to enter the tank through a small hatch and use manual tools for emptying and cleaning the tanks.

"I'd use hydroexcavation just for cleaning disposal tanks, even if there weren't other uses for it," Merkley says. "Because of hydroexcavation, we don't have to worry about exposure to  $H_2S$ . You can't overestimate the importance of that. When you also consider the efficiency and timesaving of hydroexcavation, you have a very powerful combination of benefits." Disposal tanks are commonly found around oil-drilling and processing sites. They contain 400 barrels of waste material from drilling or processing, which must be removed and taken off-site for ultimate disposal. Merkley says hydroexcavation is the fastest, simplest and safest way to empty and clean the tanks.

"We use the water jet to clean the tank, then drop in the hose to vacuum the material out of the tank," he explained. "It's one of our most common jobs."

Other common applications for Merkley's Vactor hydroexcavators include trenching for pipelines,



Scott Merkley, owner and operator of Merkley Oilfield Services, identified safety as a key benefit of hydroexcavation, especially for oilfield service applications.

cleaning drilling equipment, and cleaning up after spills or accidents.

A two-man crew operates each machine. Merkley Oilfield Services provides extensive operational and safety training for its hydroexcavator crews.

(continued on page 21)





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### Waterjet Manufacturers Tecnocut, Jet Edge Announce Strategic Research And Development Partnership

Waterjet manufacturers Tecnocut S.p.A. of Bergamo, Italy, and Jet Edge, Inc., of St. Michael, Minn., USA, today announced a strategic research and development partnership designed to strengthen both companies' position in the waterjet industry.

Through this unique partnership, Tecnocut will share its innovative IKC 5-axis waterjet cutting technology with taper control with Jet Edge. In exchange, Jet Edge will share its 90,000 psi (6,200 bar) waterjet intensifier pump technology with Tecnocut. The companies also have agreed to partner on a number of innovative research and development projects related to waterjet pump design, multi-axis cutting and robotics.

"This is a win-win for both of our companies," said Jude Lague, Jet Edge president. "It gives Jet Edge the ability to meet the rapidly increasing demand for 5-axis waterjet cutting and taper control, and it gives Tecnocut the ability to meet the growing demand for X-Stream cutting pressure."

Tecnocut President Stefano Dal Lago shared Mr. Lague's sentiments.

"Working together, while maintaining our independence, Tecnocut and Jet Edge will be much more competitive players in the waterjet industry. We are now both able to deliver the latest technologies found in waterjet systems: 5 axis, taper control and 6,200 bar cutting for increased productivity and lower operating costs, while we work together to rapidly develop the innovative waterjet products of the future for our customers." For information about Tecnocut, visit www.tecnocut.it, call +39 0354380330 or e-mail info@tecnocut.it For information about Jet Edge, visit www.jetedge.com, e-mail sales@ jetedge.com or call 1-800-JET-EDGE (538-3343).



### StoneAge 2010 Waterblast Solutions Catalog

The new *StoneAge 2010 Waterblast Solutions Catalog*, featuring new tools and an informative Tool Talk<sup>™</sup> series, is now available.

A sampling of some of the new tools featured in the catalog include the BA-P4<sup>TM</sup> designed to clean 2" pipes with long sweep elbows at up to

15K psi; the WV-P4<sup>TM</sup> designed to clean 2" sewer lines at up to 4K psi; the Light Weight Positioner<sup>TM</sup> (LWP) used to automatically index flexible hoses across vertical and horizontal tube bundles; the BN9.5<sup>TM</sup> for cleaning tubes as small as 1/2" in diameters; and the BLS<sup>TM</sup>, a new way



to extend a rotating lance up to 24 ft. into a boiler while keeping the operator safely outside.

The new catalog is available online at www. stoneagetools.com or call toll-free in the U.S. 866-795-1586, phone: 970-259-2869, fax: 970-259-2868.

### *WJTAListServ* - A Free Service To WJTA Members

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### 2010 WJTA-IMCA Expo

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

### **Preliminary Schedule of Events**

Tuesday, August 17 6:30-8:30 P.M. Welcoming Reception

### Wednesday, August 18

9:00 A.M.-5:00 P.M. Exhibit Hall Open

9:30 A.M.-5:00 P.M. 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



### **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.

### **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.

# StoneAge<sup>®</sup> Introduces The New Banshee<sup>®</sup> BN 9.5

StoneAge<sup>®</sup> has introduced the new Banshee<sup>®</sup> BN  $9.5^{\text{TM}}$ , the smallest Banshee in the StoneAge<sup>®</sup> line of Banshees. The BN  $9.5^{\text{TM}}$  offers greater versatility for smaller tubes. These tubes can be as small as  $1/2^{\text{TM}}$ and can be cleaned up to 22k psi.



The **BN 9.5**<sup>™</sup> will be available with

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### NLB 325 Waterjet Unit Now Convertible To 40,000 psi

N LB Corp. has extended the operating pressure range of its convertible NLB 325 Series waterjet pump units to 40,000 psi (2,800 bar), making the industry's widest operating pressure range available with up to 400 hp. These units can easily be converted in just 30 minutes to operate at 8,000 psi 10,000 psi

8,000 psi, 10,000 psi, 12,000 psi, 15,000 psi, 20,000 psi, 24,000 psi, or 40,000 psi (552, 690, 828, 1,035, 1,380, 1,656, or 2,800 bar).



Current NLB 325 users do not have

to buy a new unit, but can add the ultra-high pressure (UHP) capability with a simple kit. NLB's proven plunger pump design reduces wear, downtime and operating costs while simplifying maintenance.

The NLB 325 Series is available in 14 configurations to suit users' needs, with flows from 12 gpm to 74 gpm (45-279 lpm) and heavy-duty diesel engines of 365 hp or 400 hp (272-298 kW). All are trailer-mounted for portability, with 4-wheel electric brakes and a DOT lighting package.

For more information, contact Jim Van Dam, phone: 248-624-5555, fax: 248-624-0908, e-mail: vandamja@nlbusa.com.

### Small, Light Hydrodemolition Unit Replaces Hand Lances, from page 8

as small as 400 mm. The Nalta Jetframe is powered by a trolley mounted hydraulic unit that only needs to be connected to a single phase 10 A, 230 V electrical supply.

Conjet Nalta is primarily intended for the hydrodemolition of concrete, but is also suitable for other applications, such as cleaning and descaling of steel. A different power head with a self driven rotor is available as an option that can be used for numerous surface preparation tasks. For example, the Nalta Jetframe 101 can achieve HB 2  $\frac{1}{2}$  grade cleaning on steel surfaces when operating at pressures exceeding 2,500 bar.

The Nalta Jetframe system consists of a feed beam with an oscillating cassette, hydraulic unit and a remote control box. The oscillating lance, fixed to the cassette, travels along the 1 m long feed beam, which can also be extended with two extra sections to a maximum length of 3 m. The angle of attack of the lance changes direction when it hits the manually set turning points at each end of the feed beam. This eliminates the need for electric sensors, enabling the unit to be used underwater. Due to the innovative patent protection only one set of hydraulic hoses is required for controlling all functions of the Nalta Jetframe 101, including oscillating lance angle and cassette movements.

The feed beam is attached at each end to a patented hydraulically controlled step climbing unit. The two step units fix onto and automatically climb up and down standard scaffold tubes after each traversing pass of the cradle and lance. The step units can also operate on scaffold tubes bent to a minimum radius of 400 mm, making the versatile Nalta Jetframe ideal for working on curved as well as flat surfaces.

For more information, contact Lars Goran Nilsson, Conjet AB, PO Box 507, S-136 25 Haninge, Sweden, phone: 46-8-5565-2240, fax: 46-8-5565-2260, email: lars.nilsson@conjet. com, web: www.conjet.com. ■

# Comments Solicited On Improvements

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Comments Solicited On Improvements To Recommended Practices

Comments 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.



### **Under Pressure Systems Introduces Line Stripe Removal Tool**

Under Pressure Systems, Inc., New Philadelphia, Ohio, has introduced its new Line Stripe Removal Tool with

vacuum recovery. The Line Stripe Removal Tool has an 11-inch OD can, 10 jet spray bars with wear guards, vacuum recovery port(s), caster wheels, hydraulically driven gear drive gear box, a free floating swivel design, and a maximum pressure rating of 60,000 psi @ 7 gpm.



Many spray bar patterns are available to choose from or custom sizes can be built to suit.

For more information, contact Shawn Smith by telephone: (330) 602-4466 or email: shawn@underpressuresystems.com or visit www.underpressuresystems.com.

### Jet Edge, Affiliate Companies Contribute To Local Food Shelf

Monorail Systems, Inc, Chukar Waterjet, Inc., MHC, Inc. and Tilt Lock, Inc. packed \$1,000 worth of groceries under the tree to support their local food shelf. Their donations included

\$500 worth of food from employees along with matching company contributions.

Jet Edge is a global designer and manufacturer of waterjet systems for precision cutting, surface preparation and coating removal. Jet Edge



systems are used around the world in a broad range of industries, from the world's leading airlines to automotive, aerospace, industrial manufacturers, machine and job shops. Jet Edge waterjet systems are proudly made in the U.S.A. For information about Jet Edge, visit www.jetedge.com, e-mail sales@jetedge.com or call 1-800-JET-EDGE (538-3343).

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## 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 COSMOPOLITAN TWIST



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



Houston Pavilions, Now Oper www.houstonpavilions.com

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-squarefoot balconies, 100 flexible meeting rooms and an abundance of green initiatives** – and Houston never has been more appealing.

# **Pressure-Washing, Hydro-Blasting, UHP-Jetting, A "Business Operating Model"**

Pac Consulting, Salt Lake City, Utah, has introduced a Business Operating Model designed to retain and safeguard a contractor's application know-how and expertise within a customer's specific plant-area or production environment.

Wolfgang Maasberg, with over 40 years of experience in the industry, developed the system based on actual bid and job reports. Twentyfive industrial sectors are introduced presenting contacts, resources and applicable safety requirements. This is supported by 200 plus industry and job specific websites. Applications within the agricultural, marine, commercial, industrial, and residential criterion utilizing tool identities powered and manipulated by highpressure water are integrated. Specific safety measures, contact and resource information have been outlined for all included industries. The trade "application review" form is applied by professionals to revise and upgrade the 'introduction" manual with every new application encountered, thus expanding the manual's content. Recording the job analysis will identify and provide a guide to a variety of application methods within the application "index" chapter.

Providing in writing linked gear-up lists and pictorial record of more than 450 plus pressure washing and hydroblast application procedures, servicessales, plant maintenance, commercialindustrial buyers and entrepreneurs can equally be informed as to all necessary technical application aspects and proceedings. Recognizing safety requirements, hydro-tooling and job specific operations, the expandable business model negates the technical and proprietary knowledge migration from its administrative source. This comprehensive system is delivered in book hard-cover form accompanied by an office-field manual and instructional CD. For more information or to place an order, visit www.ipacconsulting.com or call (801)998-8617.



### Jet Edge Hosts AMT, NTMA Executives

J et Edge, Inc., a leading manufacturer of ultra-high pressure waterjet systems, recently hosted the president of the Association for Manufacturing Technology (AMT) and the chief operating officer of the National Tooling and Machining Association (NTMA).

AMT President

Douglas K. Woods and Robert L. Akers, Jr., NTMA Chief Operating Officer, toured Jet Edge's St. Michael, Minnesota, headquarters during a recent trip to Minnesota. Woods and Akers were in the Twin Cities to participate in a Great Manufacturing Get Together panel discussion regarding the economic recovery.

During their visit to Jet Edge, Woods and Akers toured the water jet manufacturer's 100,000 square foot manufacturing facility and saw live demonstrations of Jet Edge's 90,000 psi X-Stream® waterjet cutting technology. Woods and Akers discussed the recession's impact on OEMs with Jet Edge



From left, NTMA Chief Operating Officer Robert L. Akers Jr., AMT President Douglas K. Woods; and Jet Edge President Jude Lague. Photo courtesy of Jet Edge, Inc.

President Jude Lague, and shared their insight on how manufacturers can prepare for the recovery by concentrating on research and development, promoting productivity and cost-saving benefits of their products, and developing export business in growing international markets. Lague shared how Jet Edge is positioning itself to emerge as a recovery leader by developing innovative waterjet technologies, adding international distribution partners and exploring new markets.

For information, visit www. jetedge.com, e-mail sales@jetedge. com or call 1-800-JET-EDGE (538-3343).

### Hydroexcavation In The Oilfields: Merkley Oilfield Services Tackles Tough Jobs, from page 12

Training courses include working with  $H_2S$  gas, confined-space entry, as well as trenching, pot-holing and other hydroexcavation techniques.

# Reliability is key to customer loyalty

"We have developed a good reputation for reliability, which has resulted in a lot of loyal, repeat customers," Merkley observed. "We want to work for our customers forever."



A two-man crew operates each machine.

He says the Vactor trucks have compiled a solid record of reliability and dependability. "We work alongside of every imaginable kind of truck, and I think we get better performance and reliability from our machines than anything else out here. We're happy with the support we get from Vactor, but we have to be pretty self-reliant for everyday maintenance, being as isolated as we are. We count on these trucks to do a lot of dirty work. So far, we haven't found much they can't do."■





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The new-generation NLB 225 and NLB 325 units combine the industry's most dependable UHP water jetting with the broadest pressure range of any convertibles: 8,000 to 40,000 psi.

They're also the easiest units to convert (about 30 minutes), with a low-rpm pump that reduces wear, downtime and operating costs. And if you already own one, you can add UHP with a simple kit!

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### **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.

### Vacuum Truck Rentals Opens Two Northeastern Offices

Vacuum Truck Rentals recently opened new Northeastern offices in Massachusetts and New Jersey. Vacuum Truck Rentals' full line of vacuum equipment, including air machines, sewer cleaners, liquid vacs and roll-offs are available at the new locations.

New Sales Manager Bill Disanza is heading up Vacuum Truck Rentals' Northeastern operations. Disanza has 35 years of experience dealing with industrial vacuum equipment.



Bill Disanza

"We look forward to working with industrial and municipal cleaning contractors in the Northeast," says Disanza.

The new facilities are located at 45 Edison Avenue, Oakland, New Jersey 07436, (201) 651-1550, and at 37 Southwest Cutoff, Worcester, MA 01604, (508) 754-3550. Contact Bill Disanza at (201)259-9769.

# NEW TurtleSkin MFA WaterArmor UHP WaterJet Protection



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*Bill Zomro* 1216 Zonolite Road Atlanta, Georgia 30306 Phone: (800)959-5009 Fax: (864)721-2474

*Rob Eskew* 1216 Zonolite Road Atlanta, Georgia 30306 Phone: (404)607-1234 Fax: (864)721-2174

### GunWoo Tech.

Jaejoon Yoo Phone: [82](70)70172937

Changhyun Yeo Seiwon Kim Phone: [82](31)7636146 Fax: [82](31)7636147 213-2 Yujeong-Ri Docheok-Myeon Gwangju-Si, Gyonggi-Do 464-882 The Republic of Korea

### Hydroflow Pump Rental

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### **Burl Sampson**

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