

Hydrodemolition on the Guri Dam in Venezuela



Steel gates on top of the Guri Dam control overflow from the reservoir down the three spillway channels, which have a combined flow capacity of 27,000 m³/s.

Photograph courtesy of Conjet AB.

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Hydrodemolition on the Guri Dam in Venezuela

The 10,235 MW capacity Guri Hydroelectric Power Station in Venezuela is one of the world's largest hydroelectric power generation schemes. Officially known



as Central Hidroeléctrica Simón Bolívar, it was built in the state of Bolívar to dam the River Caroni across the Necuima Canyon, about 100 km upstream with its confluence with the River Orinoco, one of the longest rivers in South America. The scheme's 20 turbines, equally split in two separate powerhouses, have an annual generating capacity of 47,000 GWh and account for around 70% of Venezuela's power requirements.

Guri went on stream in 1978, but the original 2,935 MW power station was expanded in 1986 to its current capacity, creating a reservoir covering 4,250 km². The height of the combined concrete gravity and earth embankment dam was raised to 162 m and crest length increased to 7,426 m. Steel gates on top of the concrete section of the dam control overflow from the reservoir down three huge adjacent spillway channels, which have a combined flow capacity of 27,000 m³/s.



The Conjet 364 Robot was bought by Fapco specifically for repairing the spillways as the hydrodemolition technique produces a very rough surface for bonding on the fresh concrete.

The surfaces on parts of the spillway needed repairing and the Venezuelan government's power station owner and operator, Corporación Eléctrica Nacional, awarded a contract for the spillway renovation to the local general and civil engineering contractor Fapco C.A. based in Puerto Ordaz, Bolívar. The dam spillways have been in operation for over 30 years and the force of the fast flowing water and continuous exposure to the sun and

the environment have combined to erode the surface with caving and loosening of the concrete.

Fapco proposed the hydrodemolition technique of using high pressure waterjetting to selectively remove only the weakened and damaged sections of the concrete spillway, and leave a very rough surface for bonding on the fresh concrete. Pneumatic breakers would leave fractures and micro cracking in the undamaged concrete left in place. Fapco worked closely with Conjet AB, a leading manufacturer of hydrodemolition equipment, and the



The Conjet Robot was operated from a platform specially designed and made by Fapco to cater to the geometry and slope of the spillway channels, which have an average slope of 51°.

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Precision Waterjet Concepts Installs Waterjet Cutting System

Precision Waterjet Concepts Inc. has installed a Jet Edge Mid Rail Gantry waterjet cutting system at its full-service 5-axis and 2-axis waterjet cutting facility in Northern Minnesota. The Mid Rail Gantry is the company's second Jet Edge system. They also have two 5-axis waterjets.

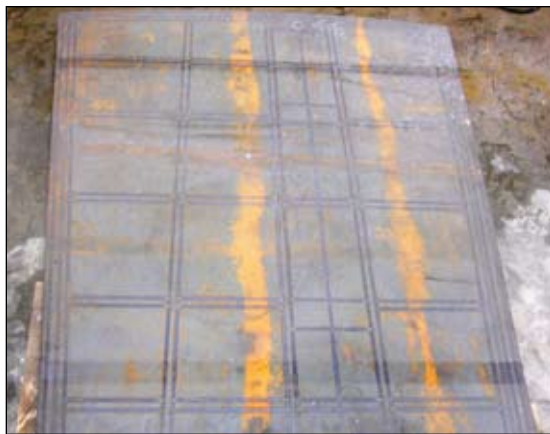
With their new system, Precision Waterjet Concepts can now cut large parts twice as fast thanks to the system's dual abrasivejet cutting heads with mirroring capabilities. Powered by a 60KSI, 150hp Jet Edge iP60-150 waterjet intensifier pump, the Mid Rail Gantry is capable of processing materials up to 8 ft. x 13 ft. The system complements the company's existing 5-axis waterjets which process materials up to 144 in. x 96 in. x 36 in., and its workhorse Jet Edge High Rail Gantry System which features four abrasivejet cutting heads for high-volume cutting of materials up to 9 ft. x 13 ft. The High Rail Gantry also is powered by a Jet Edge iP60-150 pump.

An ISO9001:2008-certified company, Precision Waterjet Concepts serves a wide variety of customers nationwide and cuts virtually any material, specializing in abrasion resistant (AR) plating and titanium.

Precision Waterjet Concepts has grown an average of 20-30% each year since opening in 2002 and has had to relocate three times to accommodate its growth, says Joe Quaal, company president. In 2008, the company built a state-of-the-art 19,000 square foot headquarters in Pequot Lakes, MN, designing it especially for the waterjet cutting process and for future growth.



Mirror cutting a 12 ft. x 7 ft. 2-in. AR 500 plate.)



2d cutting the profile of a 2-in. thick plate and etching the layout for the welder.

Quaal attributes his company's success to an overall increase in awareness about waterjet technology as well as to his company's commitment to quality and its full-service solutions approach that includes CNC programming, intricate 3D cutting, high-volume 2D cutting, CMM inspection, final machining and welding. The company even machines its own 5-axis fixtures on a vertical machining center to ensure parts are cut to customer specification.

Precision Waterjet Concepts originally started as a 5-axis only shop, but added its first Jet Edge system in 2006 after determining that many customers also needed high-volume parts cutting services that were impractical on a 5-axis system.

"We chose Jet Edge for our 2-axis systems because they are easier to run and maintain than the competitor systems that we looked at, plus

(continued on page 6)

Swedish Prime Minister Fredrik Reinfeldt Visits TST Sweden

On October 14, 2011, Swedish Prime Minister Fredrik Reinfeldt visited TST Sweden AB, a WJTA-IMCA corporate member who manufactures protective clothing for operators working with hydrodemolition and waterblasting at ultra high pressures. TST Sweden is based in the heart of Sweden's textile area in the town of Kinna in the province of Västra Götaland.

For more information, call +46 320 20 5880, email info@tst-sweden.se or visit www.tst-sweden.com.

Photograph courtesy of TST Sweden AB.



Swedish Prime Minister Fredrik Reinfeldt tries on a cooling vest.



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Precision Waterjet Concepts Installs Waterjet Cutting System, from page 4

we were looking for a manufacturer in Minnesota that could get someone in here quick if there was a problem,” Quaal says. “We went with a Mid Rail Gantry for our second system because of the mirroring system and programmable head spacing. We cut a lot of extremely large parts and we can save a lot of time and money by mirroring. Fifty percent of the time, we are mirroring. The programmable head spacing also saves us 10-15 minutes per job on set up time.”



Joe Quaal,
president of
Precision Waterjet
Concepts.

Quaal noted that Jet Edge’s mirroring system holds much tighter tolerances than competitor systems that he had considered.

“When we bought the second system, I got quotes from four companies and visited them all,” he says. “The Jet Edge’s tolerance was impressive. It met our specifications. The other machines that do mirroring don’t come back into spec. Some of them are off by .030 in. to .040 in. You can’t have a step like that on a part. Their head spacing tolerance had too much slop.”

Quaal also notes that his Jet Edge intensifier pumps have been much less expensive to maintain than a competitor pump that powers his 5-axis systems.

“Our Jet Edge pumps cost 20% less to maintain than our other pump because the Jet Edge seals are less

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Photographs courtesy of Precision Waterjet Concepts.

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High Pressure Equipment Company Launches New Website

High Pressure Equipment Company, a leading manufacturer of high pressure valves, fittings and tubing, has launched a new, customer-focused website. The site, www.HighPressure.com, allows visitors to easily research the various types of high pressure valves, fittings, tubing, reactors, pressure vessels, pumping and gas booster systems offered by High Pressure through a new mega-menu, an expandable side menu, as well as through a sophisticated in-site search device.

Visitors can also review High Pressure's recent product developments by browsing the regularly updated home page, which displays a Featured Product of the month and HiP's latest news items. In addition, the improved High Pressure Equipment website offers customers the ability to easily download pertinent technical data and bulletins under their Technical Support section.

The new High Pressure site also features an interactive Sales Representative & Distributors section, intended as a resource to help customers identify the sales representative or High Pressure Equipment distributor site nearest them. For additional questions or to request information, visitors can contact a High Pressure tech support specialist directly via the HiP "Contact Us" form.

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Peinemann's 2 LTC Now Available On A Lightweight Vertical Setup

Peinemann's dual flexlance machine, 2 LTC, which was demonstrated on a standard index frame at the recent WJTA-IMCA Conference and Expo, is now available on a lightweight vertical set up. For a lot of vertical exchangers, most contractors would prefer to have a setup that would be portable and quick to install to save on crane rental costs.



To address this issue, Peinemann created a mini

positioner, based on a StoneAge rail with a pneumatic or hydraulic drive. The rail can be moved from row to row manually on standard scaffold pipes by means of two sets of rollers with a brake mechanism. The remote control left/right function and the forward/reverse function can be used to clean each row of tubes semi-automatically.

Peinemann achieved cleaning rates of 160 tubes per hour with two flexlances on a 20-ft. bundle using 15K pressure and 18 GPM using a Banshee 13 nozzle with universal head and a 5/2 hose.

The machine is also suitable for 20K, and even 40K is possible. As the machine is based on the concept of the 1 LTC, the tracks are suitable for numerous sizes of flexlances and only the stoppers need to be changed. Compared to manual cleaning, the machine cleans both ways with a constant speed, achieving far better cleaning results that create a much better heat transfer, a longer running time of the exchanger for plant owners, and adds more safety and speed for the contractors.



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New Handle Design For Control Guns

Jetstream of Houston, LLP, a leading manufacturer of industrial high-pressure waterblasting equipment, has introduced improved handles for control guns used in a wide range of applications, including industrial cleaning and surface preparation. The new handle design features a 4-6 lb. trigger force for reduced operator fatigue and extended valve life, a narrower grip, more ergonomic trigger and textured rear surface for greater operator comfort and a more secure grip, a long dump tube to prevent hot water from running inside the trigger guard and onto the operator's hand, and pins to prevent trigger overtravel.



"The lower trigger force should reduce the cost of ownership by decreasing the likelihood that the operator will not squeeze the trigger hard enough, causing water to leak and destroy the sealing surfaces," says Mike Bullard, parts marketing manager for Jetstream.

The new handles will fit Jetstream control guns using previous designs with no modifications required. These improvements follow a recent overhaul of Jetstream's control gun offering to provide greater selection and faster delivery.

Additional control gun improvements include a shift from welded to field-repairable guns at every pressure as the standard model and more inlet connection options.

"Previously, most control guns were welded at all joints and had to be returned to Jetstream for repair if the barrels or valve bodies were damaged by abuse," Bullard says, adding that optional welded guns are still available.

For more information, call (800)822-8785, or visit www.waterblast.com or www.fssolutionsgroup.com.

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MultiCam® Inc. Introduces V-Series WaterJet

Global CNC cutting system manufacturer MultiCam® Inc. has added the Value-Series WaterJet to its product line. Now the flexibility of waterjet cutting is more economical. This pure water or abrasive cutting system features work surfaces up to 60 in. x 120 in.

"We designed the V-Series WaterJet to offer high performance, versatility and productivity at an affordable price," says MultiCam Director of Sales and Marketing John Harris. "It's easy on the budget and a smart CNC investment."

Fully enclosed bellows protect both the Y and Z axes from abrasive garnet buildup. The X axis features dual drives and completely covered custom aluminum extrusions to keep all precision bearing surfaces clean during the cutting process.



KMT's new NEOLine™ 10d direct-drive intensifier rated at 10 hp and 40,000 PSI powers the V-Series WaterJet. The pump also is available in a single-phase electrical configuration, which makes it ideal for small shops without three-phase power.

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StoneAge Launches New Sewer Nozzles Website

StoneAge, Inc. has launched a new sewer nozzles website at www.sewernozzles.com. The new site is easy to navigate and includes a variety of helpful information. Features include:

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Hydrodemolition on the Guri Dam in Venezuela, from page 2

Swedish company's hydrodemolition proposal was accepted by Corporación Eléctrica Nacional.

"One of Fapco's engineers came to our head office and factory in Sweden to assess our equipment and our suggestions relating to the Guri Dam spillway repairs," says Conjet AB Executive Vice President Lars Göran Nilsson. "We worked closely with Fapco and recommended using a Conjet Robot 364 operating on a purpose built working platform rolling up and down the steep face of the spillway. Fapco adopted and adapted our suggestion and bought a Robot 364 specifically for the spillway repairs and designed and built the platform for it to work from."


"The Conjet Robot was bought specifically for repairing the spillways and was operated from a platform specially designed for the geometry and slope of the spillway channels, which have an average slope of 51°," says Fapco Project Engineer Yerry Cabrera. "Conjet gave Fapco some preliminary ideas about the access platform, which was then designed and fabricated by Fapco. The platform was moved by four manually controlled winches mounted on the crest of the dam, and this combination of the platform and robot worked very well."

Fapco had to completely repair one channel and perform partial repairs to another, covering a total area of about

(continued on page 17)





Fapco's purpose built working platform was moved up and down the steep spillway channels by four winches mounted on the crest of the dam.



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MAXIEM® Expands JetCutting Centers Lineup with 16 New Models

MAXIEM Waterjets, a division of OMAX® Corporation, recently expanded its lineup of JetCutting Centers to include 16 new machines. Such an increase allows more shops, from sheet metal fabricators to trade schools, to benefit from industry-standard performance at an incredible value.

The latest high-performance, low-cost MAXIEM machines fall within the 2000 Series, 3000 Series and 4000 Series. Manufactured in the United States, all closely mimic OMAX's premium JetMachining® Centers by applying the same efficient OMAX 50,000 psi direct drive pump technology and sharing advanced features such as the robust Intelli-MAX® Software and Intelli-TRAX® linear drive technology for superior performance in harsh abrasive waterjet environments.

Other shared features among the 2000, 3000 and 4000 product lines include floor or tank mounting options for expanded configuration possibilities, easy access USB ports and power/pause controller interfaces, high-pressure track plumbing for additional X-axis coverage and DualBRIDGE System compatibility, which utilizes two Y-bridges for increased productivity.

When breaking down each series, the MAXIEM 2000 Series consists of the 2060, 2080, 20100, 20120 and 20140 and features X-Y cutting travel areas ranging from 240 in. x 80 in. to 560 in. x 80 in. The MAXIEM 3000 Series, which includes the 3040, 3060, 3080, 30100, 30120 and 30160, offers X-Y cutting travel areas ranging from 160 in. x 120 in. to 640 in. x 120 in. As the largest of all the MAXIEM JetCutting Centers, the 4000 Series is made up of the 4080, 40100, 40120, 40140 and 40160 and provides X-Y cutting travel

areas ranging from 320 in. x 160 in. to 640 in. x 160 in.

MAXIEM® Waterjets Launches New Website



MAXIEM Waterjets recently overhauled its website – www.maxiemwaterjets.com – to offer its customers a fresh experience and rich content surrounding the company's high-performance, affordable waterjet cutting machines.

From a functionality standpoint, the new MAXIEM site offers improved

navigation and user-friendliness – an example being easier access to news and events. The site's new live chat functionality allows the company to reach beyond a static website and provide a human touch. It also provides customers answers to their questions in real time.

“Nowadays more manufacturers are beginning their purchasing experiences through online research. They want to compare product specifications, read customer testimonials, watch product demonstrations and really understand the core values of a company,” says Sandra McLain, vice president of marketing for OMAX. “Therefore, we felt it was time to make a change and turn our site into a highly effective business development tool, especially with the continuous growth of the MAXIEM line.”

With respect to content, the new site is packed with useful information regarding MAXIEM products and partner solutions, including an enhanced video section with social media linking, waterjet cutting data for a variety of applications and materials and better coverage of customer spotlights.

For more information, call (800)838-0343 or visit www.maxiemwaterjets.com.

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For more information, see the enclosed insert.

Hydrodemolition on the Guri Dam in Venezuela, from page 14

7,500 m². The Robot 364, operating at water pressures up to 1200 bar, selectively removed the weakened and damaged concrete from the spillway surfaces to depths ranging from 20 mm to 150 mm and in some instances exposing the steel reinforcement. Concrete removal was up to 69 m²/day and was intermittent due to a combination of moving the platform, adjusting the robot to the spillway geometry and refilling the water tank supplying the robot. After concrete removal, Fapco followed on with a spray applied 800 kN/m² strength mortar in areas less than 100 mm deep and 500 kN/m² strength concrete in the deeper areas.

Fapco started on repairs to the first spillway in late 2009 and completed

its contract in May 2011. Work on the project had to stop several times for several months, during the rainy seasons, when the spillway channels, not being repaired, had to be opened to control the level of the reservoir.

“We have had a very good experience with the Conjet Robot on the spillway and also used it for some hydrodemolition work on other areas, such as the water intakes of some of the generation units,” says Yerry Cabrera. “There is also potential work for repairing another spillway, and possibly some repairs on another dam.”



The Conjet Robot 364 selectively removed the weakened and damaged concrete from the spillway surfaces to depths ranging from 20 mm to 150 mm and in some instances exposing the steel reinforcement.

For more information, call +46(0)8 5565-2240, email conjet@conjet.com or visit www.conjet.com. ■

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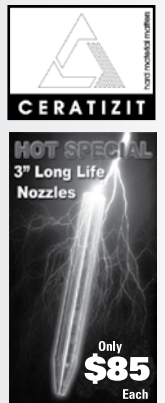


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FS Solutions Announces New Business Expansion Strategy

FS Solutions, a subsidiary of Federal Signal Corporation's Environmental Solutions Group, has announced the rollout of a new business expansion strategy, which includes an expansion of FS Solution centers, inventory and service offerings in North America, to continue to meet the needs of the company's industrial contractor customers. FS Solutions centers – currently located in Leeds, AL; Long Beach, CA; Streator, IL; Gonzales, LA; Toledo, OH; Lexington, SC; and La Porte, TX – provide genuine OEM parts and factory-trained, certified technicians to offer recommendations and resolutions to any challenges customers may present.

“Based on careful consideration of comprehensive customer research, and the steady growth in recent years from one FS Solutions location to seven locations, our new strategy summarizes our approach to our customers. We help our customers succeed and achieve sustained productivity by responding with urgency, flexibility and a commitment to go the extra mile,” says Tony Fuller, director of industrial sales for FS Solutions. “At FS Solutions, we want to help our customers ‘Be Unstoppable,’” he adds, referring to the company's new tagline created as a result of the business expansion strategy. The new tagline embodies the actions FS Solutions is taking to improve and expand its level of customer service and support.

FS Solutions recently relocated its Houston location to a more spacious center in nearby La Porte. The larger facility offers greater support with a wider selection of parts, accessories and rentals, and more room for large service jobs – from basic repair and refurbishing vacuum trucks, to pump-related mechanical problems and replacing worn parts. The Lexington center, which opened earlier this month, provides waterblast equipment rentals, parts, accessories and the training customers need to run their waterblasting business more profitably. And as one of six other FS Solutions locations that serve as authorized StoneAge® repair facilities, the Lexington center helps customers maintain their StoneAge tools used for specialized waterblast cleaning applications.

The implementation of the new strategy is designed to increase the clarity, consistency and strength of the FS Solutions brand. “There is no doubt that FS Solutions is a recognized brand in North America, but we need to take it even further by informing our customers, partners and employees about the catalyst behind everything that we do – our commitment to being ‘Unstoppable,’” Fuller says.

(continued on page 22)

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VLN Reach Foundation Vision – Helping Children Around the World

Mohan Vijay, Ph.D., president of VLN Advanced Technologies, Ottawa, has established VLN Reach Foundation to create spectacular and inspiring charitable centers to benefit children worldwide. Dr. Vijay's plan is to construct buildings in the shape of an open lotus flower, symbolizing friendship, harmony, love, peace, purity and understanding.

"I have to believe these are qualities that many people, whether they are in business or not, support and can relate to," says Dr. Vijay.

Dr. Vijay envisions that each petal of the lotus flower structure will contain office space that companies and individuals will rent. Profits will go to worthy charitable endeavors to help children around the world. He sees these buildings as sources of sustainable income that will benefit children indefinitely.

Dr. Vijay plans to construct the first lotus flower building in Ottawa. Additional buildings will be constructed in other major cities worldwide.

"Mohan's discipline, focus and perseverance sometimes remind me of the warriors of old times," says Stefan Sicking, president of Viking Consulting Ltd. and a foundation board member. "The symbolism of the lotus flower is very empowering and I hope we can translate his vision into a realistic business plan that will attract likeminded donors."

Dr. Vijay's main charitable purpose is to raise money to help children around the world, but he does not restrict his philanthropic work to young people. He hopes to use his

Find out how you can get involved in the VLN Reach Foundation vision. Contact William Bloom by telephone: (613)747-0107, ext. 107; email: wbloom@vln-tech.com, or visit www.vln-reach.com or visit, www.globeandmail.com/npd.

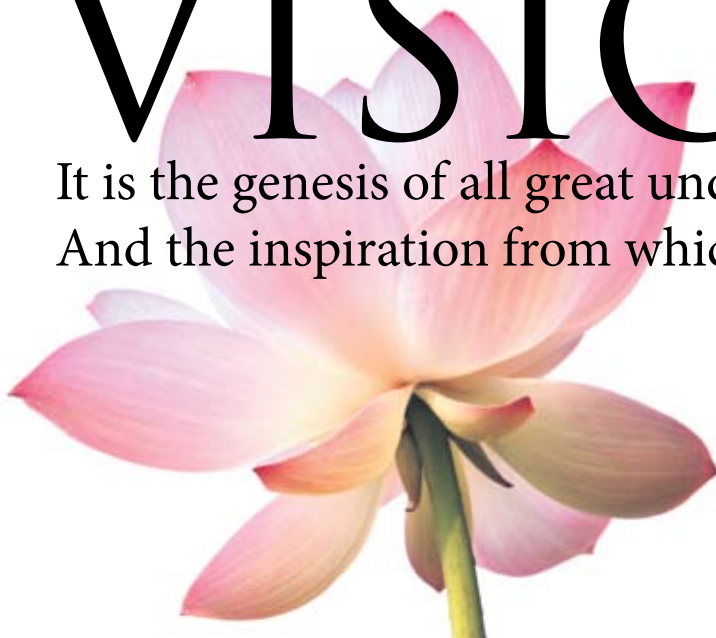
waterjet cutting technology for humanitarian causes.

Dr. Vijay sees potentially lifesaving uses for the high-frequency forced pulsed waterjet technology he invented. Used primarily in industries such as aerospace to remove coatings from aircraft parts and equipment, Dr. Vijay is developing another application for the technology to safely diffuse landmines in countries suffering the after-effects of war. The International Campaign to Ban Landmines estimates that millions of landmines are hidden in the ground of some 60 countries. Several thousand people are injured or killed every month after stepping on one of them, adults and children alike.

VISION

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And the inspiration from which grand concepts blossom.



Learn more about the
VLN Reach Foundation
and its vision to create
inspiring charitable centres to
benefit children worldwide.

www.vln-tech.com

The Establishment of the VLN Reach Foundation has been made possible through proceeds from a business transaction between VLN Advanced Technologies Inc. and Pratt & Whitney Military Aftermarket Services, Inc., a subsidiary of United Technologies Corporation.

New Durasucker® Liquid Vacuum Truck

Super Products LLC has announced the availability of the new Durasucker, a DOT/ASME approved vehicle for use in industrial and environmental cleanups. The Durasucker is a robust liquid vacuum truck with a 3,200-gallon payload capacity designed for removing and transporting liquids, sludge and semi-solid waste.



The unit's 72-inch carbon steel cargo tank has a maximum allowable working pressure of 35 psig internal and 15 psig external (full vacuum). The cargo tank is constructed and certified in conformance with Section VIII of the American Society of Mechanical Engineers pressure vessel code and the Durasucker is certified to meet the U.S. Department of Transportation's Specification DOT412 for hauling hazardous materials on the highway. The Durasucker is designed and built for high performance and long life and includes a wide range of features that ensure ease of use and optimize safety.

For more information, call (800)837-9711 or visit www.superproductsllc.com.

***Wishing you a
healthy, happy and
prosperous New
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***WJTA Officers, Board of
Directors & Staff***

Hughes Pumps Combines Jetting Power and Performance in an Ultra Compact Unit

Hughes Pumps has recently built and supplied a highly specialized high-pressure waterjetting unit to a contractor working on subsea cleaning applications in the UK and Norwegian sectors of the North Sea.

The system, comprising a 300 hp (225 kW) HPS3000 pump delivering performances from 20 gpm at 20,000 psi (74 lpm at 1400 bar) to 107 gpm at 4,200 psi (405 lpm at 290 bar), incorporates a Duplex stainless steel pumphead to provide maximum corrosion resistance when pumping sea water at high pressure; with all other wetted components, including the high capacity filter housing, manufactured in 316 stainless steel.

With space offshore always at a premium, the design brief demanded that the weight and footprint of the unit be minimized. Hughes' unique combination of an integral gearbox and SAE adaptor housing on the HPS3000 pump enabling the pump to be flange mounted to the engine makes for an extremely compact installation. To reduce size even further, a heat exchanger cooled Volvo marine engine was chosen to power the pump. Marine engines use an



onboard pump to lift seawater as the cooling medium, eliminating the need for a radiator and cooling fan, thus considerably reducing the overall size and eliminating fan noise.

The pumpset, packaged in a four-point lift, fully enclosed crashframe manufactured in 316 stainless steel to ensure years of maintenance free operation in the harshest of offshore environments, with overall dimensions of 110 in. long x 70 in. wide x 83 in. high x 9,240 lbs (2.8m x 1.8m x 2.1m x 4,200kg), makes this one of the most compact 300 hp units ever produced.

For more information, e-mail sales@hughes-pumps.co.uk or visit www.hughes-pumps.co.uk.

WJTA-IMCA Corporate Member Happenings

WJTA-IMCA Corporate Members can list their grand opening, open house, sale or other special event on the WJTA-IMCA Corporate Member Happenings page of the WJTA-IMCA website. This page is designed specifically for listings of corporate member events.

In order to list your event, please submit your company name, event, date, time and the location via email to wjta-imca@wjta.org, attention: LeAnn. A link from the listing to your website will be included. This service is limited to WJTA-IMCA corporate members.

Not a WJTA-IMCA Corporate member?

Contact the WJTA-IMCA office today to upgrade your individual membership to a corporate membership and take advantage of the many benefits available to WJTA-IMCA corporate members. If you have already renewed your individual membership, you can still upgrade for 2011 by remitting the balance.

Comments Solicited on Improvements to Recommended Practices

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

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

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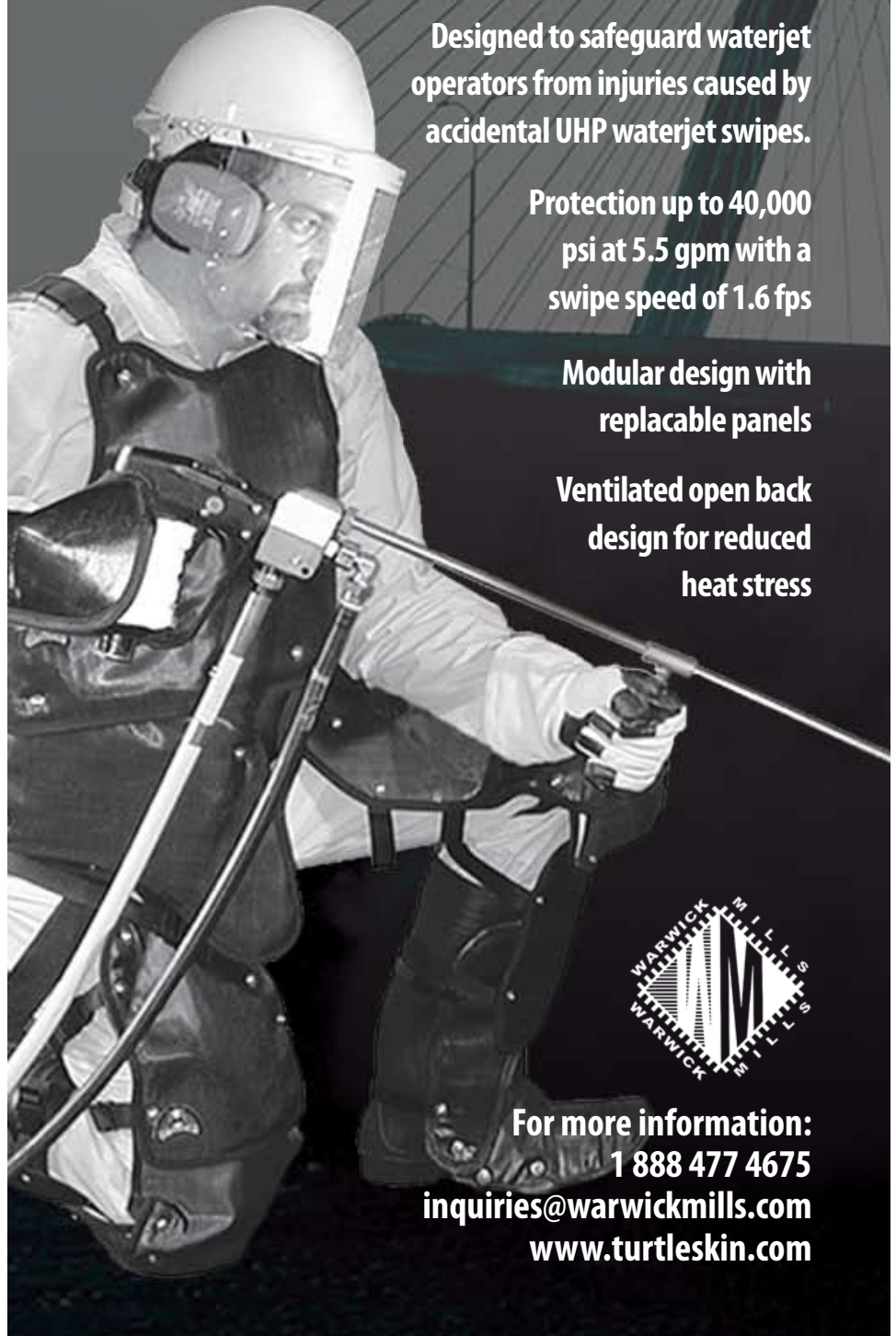
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FS Solutions Announces New Business Expansion Strategy, from page 18

According to Fuller, the fundamental success of FS Solutions will continue to be closely tied to offering customers the products, services and expertise they want, when and where they need it most. "Over the next year, we will expand our FS Solutions locations and service offerings in key areas throughout North America," Fuller says. "We have the right market growth, organization and people to successfully carry out our new brand strategy and meet the expectations of tomorrow's customers."

Fuller cited specific examples of FS Solutions' expanded service offerings, which include state-of-the-art chassis diagnostic software at the centers in Leeds and La Porte, and U.S. Department of Transportation (DOT) 407/412 inspection services for cargo tank equipped vehicles offered at the centers in Long Beach, Leeds and soon to be available at the center in La Porte. "Ensuring that our customers' vehicles comply with U.S. DOT 407/412 cargo tank regulations helps them reduce downtime and minimize the potential for costly fines," he says.

FS Solutions carries parts for all makes and models of airmoving and waterblasting equipment, as well as a team of experts at each FS Solutions center to provide repairs and maintenance.

For more information, call (800)822-8785, or visit www.fssolutionsgroup.com. ■

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