Hydrodemolition Of Offshore Oil And Gas Facilities

Gulf coast oil service provider Proserv provides an essential service to the oil industry, in many cases under difficult and sometimes hazardous conditions. Highly trained and experienced crews dismantle offshore oil-drilling platforms, wells and pipelines. See article on page 2.
Customized hydrodemolition units handle projects on platforms and underwater

Dismantling decommissioned oil-drilling platforms, wells and pipelines requires precision demolition techniques. Gulf coast specialty oil service contractor Proserv Offshore, a unit of Norwegian-based Proserv Group, has become an industry leader in using high pressure water abrasive cutting technologies—also known as cold-cutting—to aid in the removal of a variety of oil and gas facilities. During the month of June 2009 alone, Proserv Offshore’s Subsea & Marine Technology division, based in Houma, La., used waterblasting equipment along with abrasive to help dismantle 11 offshore platforms and wells.

“We’re a side of the oil industry that doesn’t get much attention,” said Nick Speer, base operations supervisor for the Subsea & Marine Technology division, “but we provide an essential service under difficult and sometimes hazardous conditions. It can be just as satisfying to take something apart properly as it is to put something together.”

The conditions are demanding and the weather often brutal and unpredictable, but the work gets done. Each three-man crew includes a supervisor, a pump system operator and an operations assistant. The company uses customized Jetstream X-series pump units and nozzles for all its hydrodemolition work. “We have highly trained and experienced crews, but it’s important that they all have capable, efficient and reliable equipment to keep each project on track,” Speer said.

“We designed our own modifications to the standard pump units and worked with Jetstream of Houston on the engineering and manufacturing,” Speer explained. “In a standard configuration, the pump unit is mounted on a wheeled trailer. We designed a skid-mounted version, using all stainless and galvanized steel, and heavier gauge steel for enhanced durability and corrosion-resistance. We also specified that the pressure capacities be machine-stamped on all appropriate components of the system as an additional safety feature.”

Although the waterblasting pumps are rated for up to 40,000 psi, Speer... (continued on page 14)

Waterjet Technology Helps BP Cap Gulf Oil Leak

Waterjet technology companies Jet Edge, Inc. and Chukar Waterjet, Inc. recently played a key role in helping BP stop the oil leak in the Gulf of Mexico. The companies provided ultra-high pressure waterjet equipment and application expertise to blast away hydrate ice crystals that had formed inside a containment cap at the spill site, clogging the containment system.

Jet Edge custom engineered a 36,000 psi waterjet intensifier pump that was dropped 5,000 feet into the Gulf to power a robot-operated waterjetting lance that blasted away the hydrates. To ensure the hydrate... (continued on page 16)
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K Services, a Boston-area contractor, has completed some of the nation’s toughest and most historically and environmentally significant waterjet surface preparation and mobile cutting projects. Its impressive resume includes removing radioactive concrete from an infamous Hanford Site nuclear waste basin just 400 yards from the Columbia River in Washington state, repairing the Queen Elizabeth 2’s (QE2) damaged hull after she ran aground near Martha’s Vineyard, and rehabbing the leftfield seating steps at Boston’s historic Fenway Park.

AK Services’ other waterjetting feats include cutting 3,500 lineal feet of steel during a bridge construction project in California, waterjetting 90 percent of the road surface on Boston’s Central Artery, and removing PCB-contaminated caulk from a pumping station situated directly over the city’s drinking water supply.

AK Services entered the ultra-high pressure waterjet industry in 1992, a spinoff of the former Aqua Kleen which specialized in using high-pressure water to clean Navy vessel oil tanks during the Navy’s 70s-era conversion from black oil fuel systems to cleaner distillate fuel systems.

AK Services first ultra-high pressure project involved blasting away 20,000 square feet of lead paint from a Coast Guard vessel’s engine room and bilge while another crew simultaneously removed the ship’s engines for replacement. The project involved removing every speck of paint from tiny nooks and crannies and working in extremely confined spaces among numerous pipes and other obstacles.

AK Services President Patrick Canonica recalled how he immediately ordered his first Cummins diesel-powered Jet Edge ultra-high pressure waterjet intensifier pump

(continued on page 8)
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The 12MW Glenlee hydro-electric power station in Scotland is part of the 106.5MW Galloway Hydro-Electric power scheme, which was the first large scale integrated hydro-electricity supply complex in the UK when it was built and commissioned in the mid 1930s. A 60km long network of lochs, dams, tunnels, aqueducts, pipelines and rivers interconnect six power stations in a cascade system, which reuses the water several times for power generation. Each station reuses the water that has been discharged by the one above to generate electricity. A dam blocks the natural outflow of Loch Doon and acts as the main storage reservoir at the top of the scheme, which has a drop of 210m over its length.

Glenlee is the fifth of the six power stations in the interlinking renewable energy scheme that covers a large area of Galloway and South Ayrshire. Water for Glenlee Power Station gathers in Loch Clatteringshaws and flows through a 6km long tunnel to a portal control valve above the power station. From here water plunges 125m down the hillside through a 570m long steel penstock of varying diameter to Glenlee power station’s twin 6MW turbines.

Outflow from Tongland Power Station rejoins the lower reaches of the River Dee and flows into the Solway Firth at Kirkcudbright Bay.

The Glenlee penstock was in need of cleaning and repainting and power station operator Scottish Power Generation Ltd awarded a contract for its refurbishment to the specialist contractor Concrete Repairs Ltd. (CRL) based in Falkirk. The flange bolted steel pipeline had not been cleaned and painted internally for over 70 years, since it was installed in the 1930s. CRL believed the internal cleaning and paint removal could be done with high-pressure water jetting and contacted N.E.T. Waterjet Ltd, a contractor based in Meigle, Perthshire, specializing in ultra high pressure water technology and diamond drilling and sawing.

“I believed it was initially feasible to use hand held high-pressure water jetting lances in the penstock’s varying diameters and gradients to remove the old paint coating and peat lying in the bottom, but there was a risk for the operators,” says N.E.T. managing director Tom Wallace. “So I looked at the possibility of adapting a robot, normally used for the hydrodemolition of concrete, and contacted Castellan, the UK agent for Conjet hydrodemolition equipment in Sweden. Castellan’s managing director Colin Jailler arranged for me to visit the Conjet factory and as soon as I saw the compact 324 Robot I knew it would work, using the optional Hammelmann blast or rotor head instead of the normal concrete hydrodemolition lance. CRL accepted my price and I ordered a Conjet 324 Robot from Castellan and it arrived on site in May.”

N.E.T. used its new Conjet 324, with optional rotor head, to remove the build up of debris, old paint coating up to 4mm thick and unexpected original mill scale, back to a clean and smooth metal surface. The company had

(continued on page 10)
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after winning the Coast Guard bid because waterjet was the only way to safely remove the lead paint with the engine crew present.

“Had they sandblasted it, they would have had to shut it down and cocoon it and create a hazardous work area,” Canonica said. “With waterjet, the big advantage is you don’t have to provide containment because it puts the lead into an aqueous state.”

By the end of the lead abatement project, AK Services had three Jet Edge diesel-powered waterjet intensifier pumps, and has since amassed an armada of waterjet pumps and waterjet cutting, surface preparation and hydro lasing systems that includes 12 Jet Edge intensifier pumps. In addition to lead and other hazardous material abatement, AK Services now provides a wide variety of mobile waterjet services, including surface preparation, coating removal, waterjet cutting, hydro lasing and hydrodemolition. It works in pressures ranging from 17,000-psi 80-gpm high-volume for hydrodemolition to 55,000-psi 4-gpm for waterjet cutting.

The company liked its Jet Edge equipment so much, it even became a Jet Edge distributor.

“Our Jet Edge pumps keep running and running,” Canonica said. “They are 30 years old and they run in top condition. They are contractor-friendly, reliable and easy to maintain. The key is keeping the hydraulic oil clean. We have 9,000 hours on one of our Jet Edge’s Cummins engines. It is a terrific engine.”

Saved from the Crash by a Crash

AK Services’ rise to the top of the waterjet industry did not come without its fair share of obstacles. Just as the company’s business began to take off, Boston’s shipyard industry came to a screeching halt, almost killing the young company, but fate intervened and several unchartered rocks off of Martha’s Vineyard became the company’s savior.

In August 1992, the QE2 was just returning from a Nova Scotia cruise when she ran aground south (continued on page 11)
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Cleaning And Repainting Glenlee Power Station In Scotland, from page 6

about 4,200m² to clean from the inner surface of the penstock in diameters from top to bottom of 3m, 2.7m, 2.4m and twin 1.8m and on varying gradients from 1:100 up to the steepest 18 degrees.

CRL removed the flange bolted expansion joints and butterfly valves in the penstock to provide N.E.T. access at several points for the Conjet 324, which was supplied with water at a pressure of 2,500 bar and flow of 25 litres/min from one of N.E.T.’s existing 250kW Hammelmann 120 high-pressure pumps. “We are working a single shift seven days a week and averaging to clean about 200m²/shift, but our best has been 320m²/shift,” says Tom Wallace. “The surface of the pipe actually gets cleaned twice as the 180mm diameter blast head is rotated full circle round the inner circumference of the pipe, then advanced 90mm by the Robot and then rotated back in the opposite direction. The sequence is repeated continuously. The Conjet Robot has been superb and worked very well and is a lot safer and about three times faster than using hand lancing. There is no fatigue for the operator and the Robot provides consistent speed and removal. It is also possible to quickly and easily change or adjust the blast head settings and forward step speed to suit the adhesion of the old paint coating.”

There is no dust from the paint removal and the waste water and debris from the Conjet Robot cleaning process flows down the penstock and is collected by CRL in a sump in the turbine house. It is then pumped into tankers for off site environmental treatment and disposal. “I am very impressed with the cleaning process and the Robot, which is doing a great job. I am also surprised at how quick it is at taking off the old coating back to the bare metal,” says CRL site manager Fran Allan. CRL is following on spraying on a two coat glass flake epoxy coating from a purpose made gantry that will travel down the inside of the pipe.

CRL is also repainting the outside of the pipe with a highways bridge specification four-coat epoxy paint system. CRL started on site in February and is on schedule to allow Scottish Power Generation to bring Glenlee Power Station back on stream in autumn 2010.

N.E.T.’s first use of a Conjet Robot has gone extremely well and the company believes there are considerable opportunities on other similar projects. “This is the first time I’ve used a Conjet Robot and can foresee a lot of further opportunities with the 324, mainly working in concrete and steel pipes and tunnels up to about 4m diameter,” says Tom Wallace.

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

N.E.T. had to clean about 4,200m² from the inner surface of the 1.8m to 3m diameter penstock with its Conjet 324 Robot working on gradients up to 18°.

Comments Solicited On Improvements To Recommended Practices

Comments are solicited regarding improvements to the WJTA-IMCA 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-IMCA 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-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.
of Cuttyhunk Island near Martha’s Vineyard, severely damaging her hull. The shipyard hired AK Services to waterjet the toxic inorganic tin surface from the ship’s hull because it was deemed the safest method for its removal.

“The bottom looked like a claw had ripped it apart,” Canonica recalled. “We had to take it down to bare steel and then the shipyard welded plates to fix it. We also cleaned the oil tanks. It was a true rescue mission for our young company.”

AK Services branched out from the shipyard industry, taking on more and more challenging construction industry projects as its reputation gradually spread across the country.

In 2003, bridge contractor Kiewit found itself in a major bind as stubborn bedrock mangled 13 of the steel footing pilings it was driving during construction of the 1.7-mile northbound Benecia Bridge, which spans the Carquinez Strait linking Benecia and Martinez, Calif.

Kiewit hired AK Services to cut out the damaged pilings to make way for replacements. (See photos in far right column.) This dangerous project required AK Services’ workers to be lowered in a basket down a 12-foot diameter caisson 150 feet below sea level. They used waterjet cutting bugs (portable waterjet cutters) on tracks held in place with suction cups to cut the 3-inch thick steel at an angle, resulting in an actual cut of 4 ½ inches. AK Services ran two shifts for nine months, cutting a total of 3,500 lineal feet of steel.

Hanford Site Radiation Cleanup

AK Services has played an important role in the massive environmental cleanup project at the U.S. Department of Energy’s Hanford Site in southeastern Washington.

Once home to nine nuclear reactors that produced plutonium for the Manhattan Project and for the nation’s Cold War nuclear arsenal, the Hanford Site is considered the most contaminated nuclear site in the U.S., and is the site of the nation’s largest environmental cleanup project.

In 2009, the Department of Energy celebrated the removal of the site’s notorious K Basin East Fuel Pool, a 120 feet L x 45 feet W x 20 feet D 1.2-million-gallon basin which was used to store 1,100 tons of highly radioactive spent nuclear fuel and radioactive sludge just 400 yards from the Columbia River. The radioactive

(continued on page 12)
waste was stored under 20 feet of water, and the basin’s concrete walls and floor had absorbed radioactivity from the water. The Department of Energy’s contractor determined that waterblasting with an underwater ultra-high pressure waterjet system would be the most effective and safest way to remove the contaminated concrete without exposing the radiation to air.

The contractor enlisted the help of AK Services, who partnered with S.A.Robotics of Colorado to develop an underwater waterblasting robotic arm to blast away the radioactive concrete surface. The robotic system used 34,000 psi waterjets to remove 7/8 inch of the pool’s concrete surface, which housed 98% of the radiation. The work was performed under vacuum, and the contaminated concrete was sucked out as it was blasted away.

In another Hanford Site project, AK Services cut several 2-foot diameter vent holes into buried tanks that are holding radioactive waste from the Manhattan Project. This challenging project required them to cut through a carbon steel shell surrounded by reinforced concrete (total cut 18 inches thick) with a 55,000 psi abrasivejet. The government required them to use slower-cutting sand for abrasive rather than garnet because sand is natural to Hanford’s desert setting.

AK Services Principal Owner Carl Franson noted that the company is currently working on yet another challenging project at the Hanford Site, cutting holes into 18-inch thick concrete tanks that also hold radioactive waste from the Manhattan Project so that the waste can be removed and vitrified for safe storage.

“The tanks have were built with a very small access riser and we are cutting a 55-inch diameter hole in the tank top to allow installation of a robotic arm to remove and transfer the waste to a vitrification plant that is under construction,” Franson explained. “We are using Jet Edge’s high-flow Permalign® cutting head powered by a Jet Edge diesel intensifier pump, and cutting at 48,000 psi. We are in the process of designing and building a specialty motion device for the project since the standard units are not compatible with the job.”

(continued on page 15)
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said Proserv typically operates the units at 10,000 to 15,000 psi. This provides sufficient power for cutting steel pipe and for removing two- to five-inch-thick concrete pipe coatings. Proserv injects abrasive slurry into the water stream beyond the pump for additional cutting power. “There’s not much we can’t cut with it,” commented Speer.

**Water abrasive effective at depths beyond 600 feet**

Speer said Proserv has used the water abrasive technique successfully in water as deep as 1,700 feet. For underwater applications, the company uses either divers or remote-operated vehicles (ROVs) to deploy the hydrodemolition tools that carry the hose and nozzle.

“The power and accuracy of the waterblasting system is amazing at various depths even beyond 600 feet,” Speer said. “It’s a technology that has become central to our overall capabilities.”

Speer gave the Jetstream waterblasting systems high marks for reliability and serviceability. “Since we switched to Jetstream in 2006, we’ve been happy with their consistent performance and reliability,” he said. “They require only about one-fifth the amount of maintenance of our previous models, and they’re much easier and quicker to service. We expect to get 10 years of service from these units.”

For more information about Jetstream of Houston, LLP, a division of Federal Signal Corporation’s (NYSE:FSS) Environmental Solutions Group, visit www.waterblast.com or call (713) 462-7000.

Photographs provided courtesy of Proserv Offshore. ■
Hazardous material removal has become one of the company’s main services because waterjet provides a safer and more environmentally friendly method for removing hazardous materials than traditional methods. In fact, when Boston’s water authority needed to have PCB-contaminated caulk removed from a pumping station, they hired AK Services.

Working under constant Environmental Protection Agency (EPA) supervision, AK Services used two specially engineered waterjet crawlers to blast away and simultaneously vacuum the contaminated caulk, which was filtered out and properly disposed.

“This was in a pumping station over our drinking water supply so there was no room for error,” Canonica said. “The caulking was still resilient even after 50 years, but the waterjet shredded it. The EPA was very pleased with the procedure.”

AK Services also has provided emergency waterjet cutting services to the petroleum industry, noted Pat Hickey, an NFPA Certified Marine Chemist and principal owner of AK Services. When a large petroleum distributor had a tank full of gasoline develop a leak in the floor, they contacted AK Services because they could safely cut holes in the floor to allow for the removal of contaminated sand under the tank.

“The tank was sitting on a 2-foot bed of sand, which was surrounded with concrete,” Hickey recalled. “This sand became saturated in gasoline and they needed access through the floor of the tank in order to remove the contaminated sand. The combustible gas indicator had readings of over 100% of the lower explosive limit (LEL) in the area under the tank floor. A.K. used the abrasive jet cutting process to safely cut six holes, 3 inches in diameter in the 3/8-inch thick floor of the tank. One of the many advantages to this process is that it is not hot work and can be performed in atmospheres where conventional ‘hot work’ processes can not be employed.”

**Freeways and Fenway**

Concrete preparation has become AK Services’ largest source of business as waterjet has become the favorable method for coating removal.

“The coatings are so sophisticated and hard that you can’t sandblast them,” Canonica explained. “The waterjet just pulverizes them and it purges the chlorides from road salt out of the concrete, while sandblasting lets the chlorides work their way back out and damage the new coatings.”

AK Services also has demonstrated that waterjet is one of the most...
remediation project’s success, Jet Edge utilized advanced filtration and ultra-high pressure seal technology capable of withstanding the harsh undersea environment. The system was designed to blast with sea water or liquefied gas. As a result, Jet Edge developed the first-known waterjet system capable of operating in water depths in excess of 5,000 feet, opening a new frontier for waterjet technology.

Chukar Waterjet provided onsite applications engineering services throughout the project, working with a subsea technology company, an offshore logistics and supply company, an offshore transportation company, BP, and an independent safety group to ensure successful completion of the project.

For more information about Jet Edge water jet systems, visit www.jetedge.com or call (800)JET-EDGE (538-3343).

For more information about Chukar Waterjet, visit www.chukarwaterjet.com, or call (888) 497-8749 or (763) 497-8749.

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Reprinted with permission from StoneAge Waterblast Tools Eblast, June 2010. For more information, visit www.stoneagetools.com or call (970)259-2869.
effective ways to prepare road surfaces for placement of Latex Modified Concrete (LMC) wear surfaces. When the LMC wear surface on Boston’s Central Artery delaminated within a year of its initial installation and had to be replaced, the project specifications originally called for preparing the surface with shot blasting, but Boston had very rainy summer that year and the steel shot was rusting on the roadway. AK Services was called in to prepare the road surface with waterjet because they could blast rain or shine. They built a custom 6-foot wide robotic waterjet system with two 6-foot arms and equipped it with waterjet spray bars from a Jet Edge Deckblaster system. They used this system to prepare the road surface for LMC on 90 percent of Boston’s Central Artery, the Logan Bridge and the Ted Williams Tunnel.

The system not only prepared the surface, but it also removed any grease and oil that had leaked from the construction equipment and purged road salt chlorides from the concrete, improving the adherence of the new LMC. It did this without kicking up hazardous silica dust and, unlike shot blast, did not leave any rust stains following a rain shower.

“The highway department found that the surface had 12 times greater adherence with UHP than with shot blast,” Canonica said.

In the winter of 2009/2010, the Boston Red Sox hired AK Services to remove 1-2 inches from the Fenway Park’s leftfield seating steps so they could be leveled and resurfaced as part of the stadium’s 2012 centennial renovation.

With only five weeks lead time, AK Services retrofitted a Jet Edge Deckblaster with a computer, spray bar and shroud so it could maneuver the lawnmower-like system along the narrow steps. With a 12-man crew and three souped-up Deckblasters, the company blasted away 8,500 square feet of surface. They strategically stationed their diesel-powered waterjet pumps under the seating area to keep the steps warm enough to prevent freezing.

This can-do attitude and resourcefulness, combined with its willingness to specially engineer equipment, has helped AK Services build a thriving business that has grown primarily by word of mouth.

“You build on your reputation,” Canonica said. “As we have successfully completed projects, the word has travelled.”

For more information, visit AK Services, Inc. at www.akservices.com or call (617) 884-9252 or (800) 356-0349. Visit Jet Edge, Inc. at www.jetedge.com, email: sales@jetedge.com, or call (763) 497-8700 or (800) JET-EDGE (538-3343).

Photographs provided courtesy of AK Services, Inc.

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StoneAge, Inc., has introduced the VE 900, a vital part of improving safety for flexible high pressure hose operations. This design is simple to operate in both the vertical and horizontal directions. The assembly can be attached to the tube face in various positions and offers a variety of hose collets to make this unit adaptable to different cleaning applications. The unit positions the flex lance manually from tube to tube and locks in place when the handles are released.

StoneAge also has available the VE 70000 which can adapt to both horizontal and vertical exchangers. The VE 70000 offers a wide range of expansion to accommodate different tube sheet sizes, and is made of stainless steel. Different sized collars are stored in the extension arm for quick access and two ergonomic handles lock the unit in place. The adapter plate offers the ability to be attached to multiple situations and by removing the arms can be used as a back out preventer plate for flanged pipes.

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A new family of Rotating Line Moles (RLM) from NLB gives users more than 40 choices to clean pipes and tubes with high-pressure water. Designed for tubes with diameters from 0.5 inches to 1.5 inches (1.27 cm to 3.81 cm), they feature operating pressures of 10,000 psi or 20,000 psi (700 bar or 1,400 bar). A variety of flows and nozzle patterns lets users create the most effective rotating action for their specific applications.

RLM nozzles polish the I.D. of tubes and pipes as they clear them of hard deposits, even around bends. They come with left-hand or right-hand threads, and wrench flats for easy attachment to a flex lance or rigid lance. A self-lubricating action minimizes wear, but parts can be replaced in the field in less than five minutes with a simple rebuild kit.

For more information, visit www.nlbcorp.com or call (248)624-5555.
The Ground Hog® is a multi-tasking stand behind machine designed to remove paint and coatings from horizontal surfaces using a hydraulically-driven motor. This highly acclaimed unit utilizes 40,000 psi of ultra-high pressure (UHP) water and can be used on virtually any surface, making it the perfect tool for surface preparation. The Ground Hog features a full vacuum recovery option that contains the debris and water within the unit; no extra pull-behinds and no additional cleanup. Simply run the machine over the unwanted lines, paint, coating, etc. The UHP gets to work immediately, eliminating the top coating, but unlike air and sandblasters, the original underlying material stays intact – no ruts or dented surfaces! This allows new surface application (like paint) to be applied just minutes after completion. The 13-horse-power engine works quickly and efficiently with highly adjustable speed controls, allowing users to customize the R.P.M. and output to any surface. The unit can be used from up to 125 feet away from the hydraulic power pack, which manages the hydraulics and the high pressure water.

Running a successful business for nearly forty years, twenty of those including water-jetting services, Riverbank Interiors founder Steve Glenn understands the impact that equipment has on a project. Glenn has made a point of keeping solid machinery as staples on his job sites.
“It’s the reliability and peace of mind,” said Steve Glenn. “I personally work in the field every day with my guys. I’ll go out there and start the job and let them take over,” he says. “With the Ground Hog I just know there won’t be problems.”

Using the Ground Hog daily for the past 16 months, Glenn can personally vouch for what it means to Riverbank Interior’s bottom line. Glenn estimates $20,000 in annual savings from time-loss prevention and minimal replacement part purchases, directly attributed to use of the Ground Hog. “It’s lightweight, easy to maneuver, and the rotor is really user-friendly; I’ve got over 2000 hours on it, and not had it go out once,” Glenn explains.

Ground Hog’s hydraulic system offers a competitive advantage over other machines, both in terms of efficacy and simplicity. “The hydraulic machine means no air hoses, more efficiency, and as much or as little R.P.M. as I need,” Glenn tells us about the unit’s adjustability. “We do a lot of interiors – schools, hospitals, asbestos removal – and it’s important for us to have control over how much concrete is removed.” Removing asbestos and other coatings from multiple surfaces like walls, ceilings, and floors used to involve Glenn employing multiple machines and technicians. But Ground Hog’s superior flexibility and performance allows him to customize the machine’s capabilities to any surface, increasing work production with limited expense.

Ground Hog’s superiority lies in its versatile and contractor-supportive attributes. Its user-friendly speed variation and hydraulic operating system both allow for more portability and time-efficiency over competitive equipment.

For more information about Ground Hog and Waterblasting Technologies, visit www.waterblastingtechnologies.com, or call (877) 464-7623.

Two International Trucks with Guzzler Liquid Ring Ace vacuum equipment for sale. Truck bodies are 1998 and 1999. Both have CAT C-10305HP@2100RPM engines, Fuller 13210C 10Speed Transmissions w/OD, Intl 1180S 18K front axle and Eaton 08454P 45K Tandem rear axle. Guzzler equipment is new/refurbished directly from Guzzler in August, 2009. Located in Phoenix, Arizona.

Price for the 1998 is $122,000.00
Price for the 1999 is $133,000.00

Please call 602-678-0851, 877-207-2774 or 602-531-0942.
Jet Edge Releases New Precision Waterjet Intensifier Pumps Brochure

Waterjet manufacturer Jet Edge, Inc., recently released a new brochure highlighting its precision waterjet intensifier pumps.

The brochure features Jet Edge’s precision waterjet intensifier pumps, which are available in a wide range of sizes from 30-200hp and capable of producing pressures from 60,000-90,000psi and flow rates of 0.65-4 gpm for waterjet cutting and surface preparation applications. Jet Edge’s waterjet intensifier pumps feature a reliable tie-rod design. This design eliminates threads on the high-pressure cylinders, end caps, and hydraulic cylinders, reducing the likelihood of cracking, and increases component life. Matched-metal components prevent galling of hydraulic components.

Hydraulic accumulators are standard on all Jet Edge waterjet pumps. This provides smoother hydraulic pressure, reduces spikes and prolongs hydraulic pump life. Hydraulic fluid is cooled and filtered, and a rugged hydraulic center section incorporates high-duty cycle-rated piston seal and wear rings. Jet Edge’s hydraulic systems have a 4,000-hour warranty.

Jet Edge waterjet pumps also feature CE/TUV design-approved attenuators which smooth pressure fluctuations and deliver a constant and steady stream of ultra-high pressure water to the cutting tool, ensuring optimal cut quality.

View the brochure as a PDF at www.jetedge.com or request a copy by email: sales@jetedge.com or telephone: (800) JET-EDGE (538-3343).

Barton Appoints Tom Riggs Regional Sales Manager

Barton Mines Company has appointed Tom Riggs as regional sales manager for the central region. Tom replaces Scott Trom, who has been promoted to market manager for the Blast Media Division. The central region territory includes AK, CO, IA, KS, MI, MA, ND, NE, NM, OK, SD.

As regional sales manager, Tom will educate the waterjet and blast media markets in the value of Barton garnet abrasives and will work to maximize customer satisfaction.

Tom has extensive experience in industries where garnet abrasives are used. He has more than 18 years of experience working with metal forming and fabrication equipment including waterjet systems.

For more information, visit www.barton.com or contact Barton Mines Company by e-mail at info@barton.com or telephone: 800-741-7756.

Whirlybird by Terydon, Inc.

For years, the Whirlybird has been a signature product designed by Terydon, Inc. Now, it is not only a centralizer, but a pipe/duct cleaner. The Whirlybird has 10-50,000 psi capabilities with variable options for user ease and precision. Costly set-up time is minimized and its robust construction limits replacement parts and unnecessary fees.

The Whirlybird may be self-propelled as needed, enabling it to enter tubes/ducts without a rope. Other system options include a camera, medium pressure and UHP swivels, and flex or rigid lancing. The assembly centers the adjustable diameter spinning nozzle head in the tube or stack to achieve uniform cleaning and thus, eliminate rubbing of the nozzle and tube wall. A quick release or fine adjust/tension screw is used to easily open or close the unit while inside the pipe. In addition, the Whirlybird is able to expand and contract in response to large and small diameters, respectively, maximizing user capabilities.

For more information, visit www.terydon.com or call (330)879-2448.
StoneAge Named 2010 Colorado Company To Watch

StoneAge, Inc., Durango, CO, was named 2010 winner of the Colorado Companies to Watch Award. StoneAge, a WJTA corporate member, was chosen from among 250 nominees and 110 finalists.

Nominees must be a second-stage company, typically past the startup phase, and face growth challenges rather than survival issues. Companies must be privately held, employ six to 99 full-time workers, have between $750,000 and $50 million in annual revenue or working capital and demonstrate the intent and capacity to grow.

The award is presented by M3 Insurance and developed by the Edward Lowe Foundation.

From left, Kerry Petranek, CEO StoneAge; John Wolgamott, president StoneAge; Ed Morlan, executive director Region 9 Economic Development District, Durango, CO; and Mike Burns, president Alpine Bank, Durango, CO.)

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Federal Signal Appoints VP, GM For Vactor And Guzzler

Federal Signal Environmental Solutions Group has appointed Sam Miceli as vice president and general manager for its Guzzler Manufacturing and Vactor Manufacturing subsidiaries, effective immediately. In this role, Miceli is primarily responsible for overseeing and cultivating the business strategies and growth initiatives for both companies. He will report directly to Mark Weber, president of Federal Signal Environmental Solutions Group.

Miceli most recently served as the plant manager for the 235,000-square-foot Guzzler/Vactor facility located in Streator, Ill. He began his career with the Federal Signal Environmental Solutions group in 1993 at the Elgin Sweeper subsidiary in Elgin, Ill., and has held various progressive manufacturing management positions within the organization over the years. He holds a Masters of Business Administration from Bradley University and a Bachelors of Science in Industrial Engineering from the University of Illinois.

“Sam’s industry knowledge, strategic and operational experience, focus and energy have been instrumental to our group’s success over the years,” Weber said. “Under Sam’s leadership, Guzzler and Vactor will continue to focus on delivering the highest performance and most reliable environmental solutions to our customers worldwide.”

“I look forward to working in my new capacity to help Guzzler and Vactor achieve ongoing success in their markets,” Miceli said.

For more information about Vactor and Guzzler, visit www.fsesg.com.
PaR Systems, Inc. Appoints Managing Director in Europe

PaR Systems, Inc. has appointed Tony White managing director, Europe, to provide senior leadership in the support of their global customers and to accelerate its growth in Europe. PaR’s commitment to this growth is demonstrated by the recent opening of their sales office near the Sellafield Nuclear Reprocessing Facility in Cumbria, United Kingdom, and the receipt of a large order for an automated crane system in support of cleanup efforts at the Chernobyl Nuclear Power Plant.

Tony joins PaR Systems with significant experience in vice president and general management roles and has a proven track record of sales, profit, and market share growth across different industries throughout the world. His experience includes financial, leadership, and general business management positions within Motorola, British Steel, Marconi Underwater Weapons, and most recently an AECOM (formerly Tyco) business involved in large and complex projects. Tony is a dynamic leader with extensive operational experience in Europe, the Middle East, and USA, as well as experience in leading and implementing growth strategies and profit improvement programs. He was recently appointed Visiting Professor of Organization and Management at Sheffield Hallam University in Sheffield, UK.

As managing director, Europe, Tony will be responsible for establishing PaR Systems’ European organization and its infrastructure in order to develop new business that ensures sustained high growth while preserving PaR’s excellence in project management, engineering, manufacturing, and service to successfully support customers’ goals. PaR is confident that Tony will provide leadership in Europe that is consistent with the company’s core values of integrity, honesty, open communications, customer focus, and employee development.

For more information on PaR Systems and its companies visit www.par.com or call (651) 484-7261.

Hydrodemolition Of Offshore Oil And Gas Facilities, from page 14

Proserv has used the water abrasive technique successfully in water as deep as 1700 feet. For underwater applications, the company uses either divers or remote-operated vehicles (ROVs) to deploy the hydro-demolition tools that carry the hose and nozzle.
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