



## What's **New** Offshore Technology Conference



### **LED Area Light Illuminates Hazardous Locations**

Part of a series of LED lighting products, the SafeSite Area Light has achieved Class I Div. 2 certification for use in hazardous locations. It is compact and energy efficient, delivers 79 lumens per watt (lm/W), and is available with 180-deg. (forward-throw) or 360-deg. optics. It operates at temperatures from -40°F to 149°F, and has a low T5 temperature rating. A polycarbonate lens and epoxy-polyester finish allow the luminary to resist shock, vibration, and corrosion. Various mounting options are available for ease of installation. This product is suitable for use in oil-and-gas, power generation, chemical, pharmaceutical, mining, and sewage treatment facilities.



**Dialight** Booth 4471  
[www.dialight.com](http://www.dialight.com)

### **Nonslip Surface Improves Plant Safety**

The triangular structure of Magic Grating is designed to reduce slip-and-fall accidents by providing a nonslip surface for industrial floors. It may be embossed for additional traction. The wide interval of the triangular grating reduces product weight; to keep small tools from falling through, safety nets may be installed beneath the grating. This product has received European safety standard DIN 511301 approval. Magic Grating is ideal for use in frequent spill or leakage areas where oil, wax, detergent, water, and ice may accumulate.



**Bethel Engineering Co. Ltd.**  
[www.magicgrating.com](http://www.magicgrating.com)  
Booth 11405

### **Dual-Voltage Transformer Serves Multiple Rigs**

Managing electrical needs in the oil-field is an unpredictable and maintenance-intensive undertaking. This dual-voltage transformer, designed specifically for oilfield applications, has two input taps and a voltage selector switch that allow it to be used on either 480-V or 600-V rigs. This dual-usage capability helps to reduce inventory costs. The system is built for heavy-duty portable use, and incorporates additional cushioning and anti-vibration components, upper and lower core supports, stainless steel hardware, and flexible anti-corrosion coatings. Housings and panels are powder-coated aluminum or stainless steel with all-stainless hardware. Cages have lifting eyes and fork pockets, and are stackable for easy storage; trailer-mounted options are available.



**Trystar** Booth 242  
[www.trystar.com](http://www.trystar.com)

### **Tube Fitting is Easy to Install**



The patented Integration Tube Fitting (i-Fitting) design is said to enable easier installation than conventional tube fittings. The design includes an inspection ring between the nut and fitting body. Once sufficient tightening has been achieved, this ring separates from the body, eliminating the need for additional tools.

**Superlok**  
[www.superlok.com](http://www.superlok.com)

Booth 9737

### **Wire Offers Impact Toughness for Offshore Welding**



The Innershield NR-440Ni2 is a self-shielded, flux-cored wire suitable for offshore welding. It provides low-temperature

impact toughness, and improves weldability in narrow TKY joints and poor fit-up conditions. The wire is capable of delivering a flat bead face when used in vertical-up or vertical-down welding applications, and meets H8 diffusible-hydrogen requirements over a range of humidity levels. Hermetically sealed for moisture resistance, this product is available as 5/64-in.-dia. (2.0 mm) wire on 14-lb coils.

**The Lincoln Electric Co.**  
[www.lincolnelectric.com](http://www.lincolnelectric.com)  
Booth 3721

### **Metal Bellows Accumulators Can Be Customized**

These bellows accumulators, used to store the energy of a liquid or gas, can be manufactured in small sizes with added stroke-length capability. Their edge-welded metal bellows consist of nested rippled diaphragms that can completely collapse onto themselves as well as expand to 25% of their free length. The bellows assembly can be pressurized internally or externally. The accumulators are available in 316L stainless steel, titanium, and nickel alloys. Standard diaphragm sizes range from less than 1/2 in. to over 2 ft in diameter, but may also be manufactured to customer specification. Guides and over-travel stops may be added to the assembly to protect against pressure transients.



**BellowsTech, LLC** Booth 6109  
[www.servometer.com](http://www.servometer.com)

### Wind Sensor is Undaunted by the Weather



The WindObserver is an ultrasonic wind sensor capable of continuous operation while withstanding winds up to 75 m/s and extreme weather conditions, including freezing rain. The sensor, which can

monitor both wind speed and direction, is manufactured in accordance with ISO 9001. An optional pipe base mount and interface connector are provided with the unit.

**Gill Instruments Ltd.** Booth 10056  
[www.gill.co.uk](http://www.gill.co.uk)

### Hydraulic Drives Satisfy Mobile-Equipment Needs



Available for indirect or auxiliary drives, the hydraulic Power Pump Drives are suitable for a range of engine-driven applications. They are available in four sizes, with maximum torque capacities from 413 lb-ft (560 N-m) through 4,650 lb-ft (6,300 N-m) and operating speeds from 2,100 rpm to 3,000 rpm. The pump drive is self-contained and does not require external lubrication. Internal heat exchangers can be added where required. Power take-off (PTO) clutches, pump pads, and accessories are available. Units mount to standard SAE housings and have up to eight pump-mounting faces. All pump drives are provided with flexible couplings on the input side for torsional dampening.

**WPT Power Corp.** Booth 500  
[www.wptpower.com](http://www.wptpower.com)

### System Breaks Oilfield Emulsions without Chemicals

The compact, skid-mounted Fibra-X system reduces oil-in-water (OIW) levels without the use of demulsifiers and coagulants. It uses electrical oxidation cells consisting of multiple pairs of metal electrodes. As the water being treated flows through the plates, a direct-current voltage is applied across the plates. A release of reactive oxygen, hydroxyl, and other radicals destabilizes the surface-active components to facilitate the separation. The system is available as an end-of-pipe solution to treat produced water or slop water generated during oil and gas production. In tests on produced water, OIW concentrations of 1,000 ppm were reduced to less than 25 ppm.

**Twin Filter BV** Booth 8705  
[www.twinfilter.com](http://www.twinfilter.com)

### Flameproof Enclosures Now Have Additional International Certification



The XCEX Series of bolted-flange flameproof enclosures and auxiliary devices has received the IECEx certification for use in hazardous and explosive areas. The XCEX series also meets IEC 60079-0, IEC 60079-1, IEC 61241-0, and IEC 61241-1 international standards. The enclosures are available in 81 standard sizes, all with an IP66 rating and approved for gas group IIB. They are available with window kits, conduit and cable entries, and auxiliary devices.

**Adalet** Booth 3973  
[www.adalet.com](http://www.adalet.com)

### Reels Manage Floating Hose

Designed for both offshore and shallow-harbor oil transport, these custom-designed reels efficiently handle flotation hose between ship and shore. Each floater reel is designed to customer specifications, and includes 3-in. square tubing frames gusseted at all stress points with 2-in. square tubing. Heavy-duty, 1/4-in. plate-rolled discs have curved edges to prevent hose scuffing. Reel drums are open to prevent debris entrapment, and are sized to accommodate the hose's bending radius. The rewind system uses a No. 50 chain-and-sprocket drive paired with either a hydraulic or electric motor. Four lifting eyes, a 3/4-in. air evacuation drain, a hydraulic caliper disc brake, and a pinlock are standard with all floater reels. Customers may choose a grooved male connection or a flanged connection for hose hookup.



**Hannay Reels** Booth 6719  
[www.hannay.com](http://www.hannay.com)

### Software Streamlines Fleet and Inventory Management

The TM Master Fleet Management Suite now features the Moveable Assets module. This module simplifies the process of moving components and stock between units in a fleet. Important data associated with transferring components from one unit to another (e.g., job history, connected spare parts, etc.) are copied to the new unit's record. Users can create a *pro forma* invoice for documentation of such transfers and a record of package size details. Moveable components may be categorized so that data can be filtered and received only for those units that require it.

**Tero Marine AS** Booth 7621  
[www.teromarine.no](http://www.teromarine.no)



### Composite Strengthens Corroded Piping

Maintenance teams can extend the service life of aging and deteriorated fluid-flow equipment with DuraWrap. This polymer/carbon-fiber-reinforced composite rebuilds, repairs, and reinforces pipes and tanks. The need for immediate replacement of older process equipment is thus eliminated. DuraWrap may be applied to both the interior and exterior of components.

**Enecon** Booth 6124  
[www.enecon.com](http://www.enecon.com)

### Decontamination Solution is Now Certified for Offshore Use

The Cefas-certified Zyme-Flow technology is now available for use in offshore platform and floating production, storage, and offloading (FPSO) decontamination. It removes hazardous contaminants while remaining nontoxic, as it is 100% biodegradable. The product neutralizes sulfides (e.g.,  $H_2S$ ), and minimizes hazardous effluent streams from the decontamination process.

**TriStar GES** Booth 6231  
[www.tristarges.com](http://www.tristarges.com)

### Coating Creates an Inert Surface

The pH-stable hard-surface Dursan coating is designed to improve the corrosion resistance of stainless steel, alloys, glass, and ceramics. Dursan offers reliable wear resistance while withstanding the harsh environmental conditions of oil-and-gas field applications. The coating's inert surface allows low-ppm sampling and transfer of active compounds, such as hydrogen sulfide, mercaptan, and  $SO_x$ , among others.

**SilcoTek Corp.** Booth 2248  
[www.silcotek.com](http://www.silcotek.com)

## ENGINEERING SERVICES

### Thermal Spray Coatings Provide Increased Wear Resistance



A thermal spray coating service helps to extend the life of moving equipment. The coatings metallurgically bond to a substrate, and can be applied in any sliding or abrasive wear application where maximum bond strength is required. For instance, the application of fused nickel-based coatings on pump plungers that pressurize fracking fluid increases the efficiency of shale gas production. Carbide-based coatings may be applied to the sliding surfaces in gate valves for wear and corrosion resistance. Other available coatings include tungsten carbide-cobalt chromium (WC-CoCr), and chromium carbide-nickel chromium ( $Cr_3C_2$ -NiCr) for high-temperature operation.

**Technetics Group** Booth 6401  
[www.techneticsgroup.com](http://www.techneticsgroup.com)

### Consulting Service Evaluates Oil and Gas Behavior

Process Insight is a consultancy focused on analyzing oil and gas behavior during production, seawater injection, wastewater treatment, and produced-water injection. Real-time data generated from online and field-portable tools allow operators to react quickly to process upsets, changing well conditions, production chemistry effects, and equipment malfunctions. Analysis of process fluid samples allows rapid assessment of changes in dosing regime or chemical type, and quicker process optimization. Process Insight offers advice on selection and implementation of chemical treatment programs and equipment.

**Jorin Ltd.** Booth 4920  
[www.jorin.co.uk](http://www.jorin.co.uk)

### Design and Technology Services Address Offshore Needs

Offshore field-development, drilling, and transport are among the applications served by this company's products and services. Offerings include oil- and gas-handling systems, regasification systems, emissions control systems, and pumping products. The company also manufactures floating production, storage,

and offloading facilities (FPSOs), floating storage and offloading units (FSOs), fixed and floating production platforms, piping and crane vessels, seismic vessels, drill ships, production test ships, semi-submersible rigs, jack-up rigs, shuttle tankers, and intervention vessels.

**Hamworthy plc** Booth 5123  
[www.hamworthy.com](http://www.hamworthy.com)

### Laser Cladding Provides Surface Protection



To enhance surface properties and provide better corrosion and erosion resistance, a hot-wire, laser-cladding service deposits

a layer of material onto a substrate. This process metallurgically bonds the deposit to the substrate, and reduces the heat-affected zone within the substrate material. Deposits can be applied to most solid and cored types of metal wire. This service is repeatable and produces a minimal amount of wasted filler material.

**Alabama Laser** Booth 6600  
[www.alabamalaser.com](http://www.alabamalaser.com)



## Connectors Can Handle Harsh Underwater Conditions



This company will be displaying a range of underwater connector technologies that are available for various oil and gas applications. These include electrical, optical, and hybrid connector assemblies, submersible switches, and cable systems. The products are designed to withstand the harsh conditions found in onshore, offshore, and deep-water exploration, drilling, and production applications.

**Sea Con Group**

**Booth 5255**

[www.seaconeurope.com](http://www.seaconeurope.com)

## Programmable Fieldbus Controller Enables High-Frequency Processing

Via an SD card, the 750-880 Ethernet 2.0 Programmable Fieldbus Controller (PFC) transfers device parameters, boot files, and other types of



files between controllers. This expedites large-scale programming while increasing data-logging capabilities. It has 1 MB of data memory and an SD port for up to 8 GB of additional memory. The device provides high-frequency processing — up to 1,000 instructions within 235 nanoseconds. The PFC relies on an industry-

approved TCP/IP stack and an IEC 61131-3 compatible environment. The slotted housing optimizes cooling, enabling an extended temperature range of -20°C to 60°C.

**Wago Corp.**

**Booth 127**

[www.wago.com](http://www.wago.com)

## Tablet Desiccant Facilitates Gas Dehydration

GasDry Max is an absorbent deliquescent desiccant supplied in hygroscopic tablet form. It extracts water vapor from untreated gas streams to dehydrate pressurized hydrocarbon gases such as natural gas. This product does not require sophisticated equipment; a gas dryer using GasDry Max has no moving parts, requires no power, and produces no emissions.

**Van Gas Technologies**

**Booth 6217**

[www.vangastech.com](http://www.vangastech.com)

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Stop by Stepan's Hospitality Suite  
Monday 4/2/12 5:30- 7:00pm  
@ 2012 AIChE Spring Meeting & 8th Global Congress on Process Safety  
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