



www.wiredinUSA.com



Well done is better than well said

Benjamin Franklin

Pioneer since more than 55 years of non-contact, in-line measurement, we stand for state-of-the-art solutions for your extrusion process under tight control. And when we say control, we mean control. Our experience and success in this field are the corner stone for modern, price-performance-oriented measuring systems.

When looking for impeccable control in all kinds of extruded cables, plastic/rubber tubing and hoses – Zumbach is your perfect partner. Our cost-effective ODAC®/ UMAC®/ WALLMASTER systems for OD/ID/WALL measurement and control are your optimum guarantee for best results.

Contact us – and get the future under control: askme@zumbach.ch



- Super high rate mode allows up to 15'000 measurements/s
- Up to 5 layer measurement (depending upon materials)
- Rapid die centring and production set-up



ZUMBACH Electronics

Switzerland, Argentina, Benelux, Brazil, China, France, Germany, India, Italy, Spain, Taiwan, UK, USA www.zumbach.com



EDITOR

It's celebration time for more than one reason this month. Obviously there are the 4th July celebrations which will be staged all over the US, and we are also having our own little celebration for wiredlnUSA – it is now two years since we started bringing you the news in the ezine that caters for the US wire and cable industry.

Headline news in this issue is that a fault in an underground cable was responsible for blowing manhole covers off, shooting flames four to five feet in the air, power outages and forcing evacuations from surrounding buildings in Des Moines. Residents from the Kirkwood Hotel and Elliot Apartments were allowed to return later in the day but were without power throughout the afternoon. You can read the full story on page 9.

It is also celebration time for Martin Tennie, manager of research and development and technical support for Creasorb, part of the Evonik Corporation. His technical paper 'Superabsorbent polymers as water-blocking components in cables' was awarded best presentation to Subcommittee A (cable construction and design) at the IEEE Power and Energy Society's insulated conductors committee in the Fall last year. It's all on page 26 for you to read.

Finally, please feel free to forward your copy of wiredInUSA to a colleague or friend in the industry and help us to continue to grow as we enter our third year.

David Bell Editor

GONTENT CONTENT CONTENT CONTENT CONTENT



#25

News

Editor David Bell

david@wiredinusa.com

Features Editor (USA) Dorothy Fabian

Features Editor (Europe)
Gill Watson

Editorial assistant Christian Bradley

Design/Production/ Free Subscription Hélène Phillips helene@wiredinusa.com

Sales & Marketing (International)

Jason Smith jason@wiredinusa.com +44 1926 834 684

Advertisement

Coordinator Liz Hughes

Accounts Manager Richard Babbedge

Publisher Caroline Sullens

INTRAS OFFICES

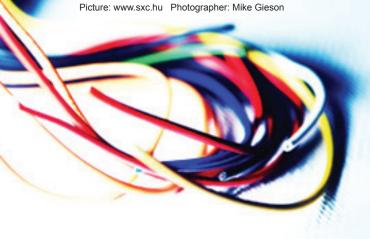
Europe:

46 Holly Walk, Leamington Spa Warwickshire CV32 4HY, UK Tel: +44 1926 334137 Fax: +44 1926 314755 Email: read@wiredinusa.com Website: www.wiredinusa.com

USA:

Danbury Corporate Center, 107 Mill Plain Road, Danbury, CT 06811, USA Tel: +1 203 794 0444 Email: doug@intras.co.uk





06 Show Diary 2013



Making the News
Industry news from the USA



Europe News
The latest news from Europe



34

Industry Trade Association Spotlight on awards, education and events



Asia & Africa News
The latest news from Asia & Africa



42

Products, Machines and Technology
The latest news from machine industries



DIARY SHOW EVENTS

2013

SEPTEMBER

17-19 September: wire SE Asia 2013
Bangkok, Thailand
Exhibition
www.wire-southeastasia.com

OCTOBER

1-3 October: wire South America São Paulo, Brazil Exhibition www.wiresa.com.br

NOVEMBER

3-5 November: Cabwire 2013
Milan, Italy
Conference
www.cabwire.com

10-13 November: IWCS Charlotte, NC, USA Conference www.iwcs.org

2014

APRIL

7-11 April: wire Düsseldorf 2014
Dusseldorf, Germany
Exhibition
www.wire.de

JUNE

16-18 June: **Guangzhou International** Guangzhou, China Exhibition www.metalchina-gz.com

SEPTEMBER

24-27 September: wire China 2014
Shanghai, China
Exhibition
www.wirechina.net

OCTOBER

28-30 October: wire India Mumbai, India Exhibition www.wire-india.com



OPTICAL FIBRES

Measurement Instruments

In line data collection, display, record and report

CIM PC software:



LIS-Glass:

Laser Interferometric Sensor

- Diameter repeatability: ±0.005µm at 50kHz
- Diameter uncertainty: ±0.15µm
- Defect detection 75kHz, event recording
- Ultra fine air line detection, 0.3µm, 400Hz
- Fibre position: ±2mm range ±0.1mm, 1kHz
- Spinning frequency profile
- Fibre no circularity measurement

NCTM:

Non Contact Tension Measurement

(Drawing force Birefringence principle)



Measurement field: 4mm Ø

± 1 gr within 10-40°C ambient



Coating Monitor 5 axes

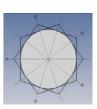
- Absolute diameter: ±0.2µm, 400Hz
- XY Positions ±0.1mm 1kHz
- 5 axes Lump & Neck: ±2µm, 3.6MHz sampling
- Coating asymmetry: 30Hz
- Internal defect detection: 800kHz (Airlines, bubbles, inclusions, delaminations...)



Others: AIR (AIRline detector)

LDS-T (Laser Diffraction Sensor for transparent product)

www.CERSA-MCI.com



Get connected

Conductors for Aerospace & Defense



LEONI has been drawing copper wire for centuries. Now after 20 years of manufacturing in the US we have one of the most comprehensive programs of conductor material for the cable industry, with world-wide availability. Bare, tin, silver and nickel-plated copper wires and stranded conductors with excellent extrusion properties as well as copper flexibles for electric and electronic components.

The Quality Connection

LEONI

MAKING TIHE NEWS

Blasts caused by fault in cable



Explosions sparked by an underground cable wire in downtown Des Moines blew manhole covers off the street before forcing evacuations and power outages for surrounding buildings.

An explosion was reported shortly before 3am, The Des Moines Register reported. Another explosion followed about ten

minutes later, less than a quarter mile from the first, with flames shooting 4 to 5 feet into the air.

The cause of the explosions was a fault in an underground cable wire, officials said. No injuries were reported.

The explosions forced police to evacuate residents at Kirkwood Hotel and Elliot Apartments, but they were allowed to return by 5am, though they remained without power through the afternoon.

Crews began repairs that forced them to take two circuits offline in the area, affecting traffic lights and several buildings, including the Riverfront YMCA and the Capital Square office building. MidAmerican Energy spokeswoman Tina Potthoff said generators were provided to the hotel and apartment building.





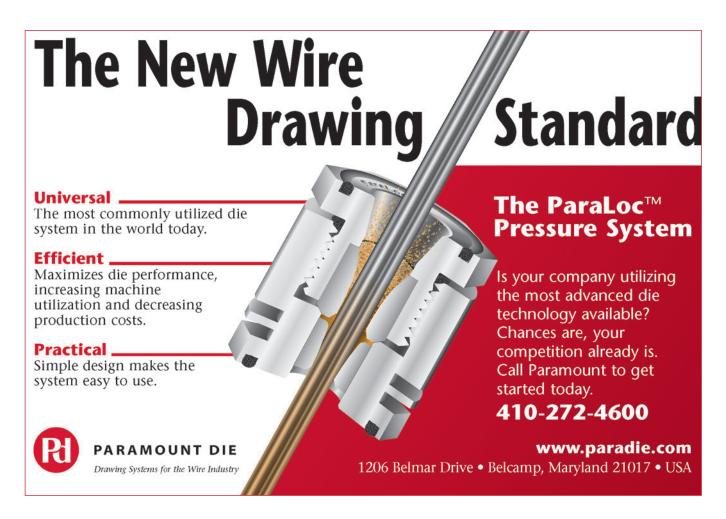
Reflecting on the desert

New Scientist has reported on a heliostat mirror installation in the Mojave Desert. The reflectors turn to track the sun's path, in a similar way to sunflowers, and the installation at the Ivanpah solar power project in California will consist of hundreds of thousands of reflectors.

The mirrors will concentrate the sun's rays onto boilers, heating the water into steam to drive the turbines. The site covers 14km² and is expected to produce at least 377MW of electricity, enough to power 140,000 homes.

Photographer Jamey Stillings said: "It is like watching the creation of a huge piece of land art, a contemporary Nazca Lines of sorts."

However, even renewable energy projects will have environmental impact and the Ivanpah project has caused controversy, not least from Native American groups objecting to impact on burial grounds. The project was also delayed while the threatened desert tortoises were relocated away from the site.





Proposed new line in New Jersey

US-based Jersey Central Power & Light (JCP&L) is proposing to build a 230kV transmission line in Monmouth County, New Jersey, to meet the growing demand for electricity and to factor redundancy into the system.

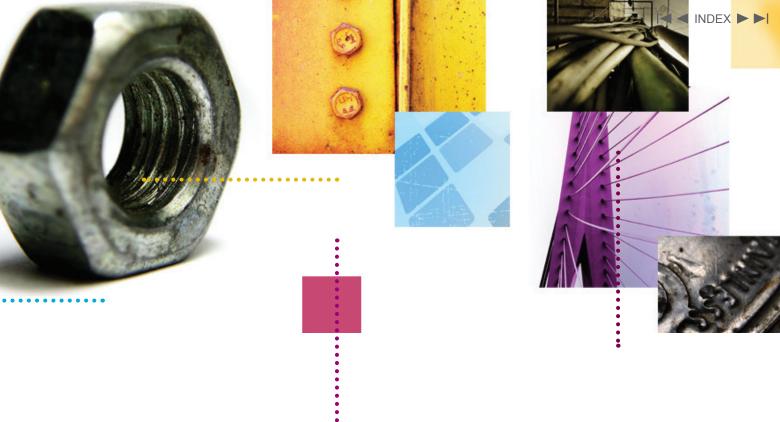
The proposed 16-mile Oceanview Reinforcement Project will cost in the region of \$44.5m and will pass through Colts Neck, Howell, Neptune, Tinton Falls, and Wall. The power line will be built as part of the company's \$200m

local infrastructure and transmission enhancement program.

JCP&L is expected to file the project petition with the New Jersey Board of Public Utilities by December 2013.

PJM Interconnection (PJM), the regional transmission organization that coordinates the movement of electricity and oversees reliability in all or part of 13 states and the District of Columbia, has said that the project should be built and in service by June 2017.

PJM's evaluation is based on existing and projected system conditions and the potential for future demand on the system.



Plastics Academy calls for posthumous recognition

The Plastics Academy is accepting nominations for posthumous induction into the Plastics Hall of Fame, the highest honor bestowed in the plastics industry. SPI, the plastics industry trade association, is cooperating with The Plastics Academy in administering the nominating process.

Nominations must be submitted by 25th October 2013. After an initial screening of the nominations by officers of The Plastics Academy, a committee of current Plastics Hall of Fame members will select up to five nominees for induction. The induction ceremony will take place during the Society of Plastics Engineers (SPE) Antec® 2014, to be held in Las Vegas.

"We encourage the nomination of those deceased individuals who contributed to the stature and growth of the plastics industry through their consistent dedication and extraordinary accomplishments," said Jay Gardiner, president of The Plastics Academy.



Bob Frimel

<u>Function:</u> US & Canada Techno-Commercial Representative

Company: THE MACHINES YVONAND SA

Main activity of company:

Complete lines for wire & cable production, OPGW equipment supplier, metal forming and laser/TIG welding benches, automated coiling and packaging equipment supplier

Number of employees: 60

Address:

Rue de l'Industrie 5 CH-1462 Yvonand Switzerland

Tel: +41 (0) 24 423 50 50

Fax: +41 (0) 24 423 50 52

Email: robert.frimel@roadrunner.com

www.the-machines.ch

If you would like to be interviewed and tell our readers your story about you and your company, please email Jason at Jason@wiredinusa.com

We aim to provide total customer satis

Bob Frimel

When was the company established? The company was established in 1986. Called THE Thomas Électronique, it was active in the development and production of electronic boards, prototypes and small series of tailor-made

machines. Its main line of business was

cables and tubes.

From 2009 it then became THE Machines Yvonand SA.

Largest contract in the company's history?

Ten Extrusion lines for irrigation pipe for a total amount of 18,000,000 Swiss Francs.

What is the company's philosophy?

THE Machines' mission is to provide total customer satisfaction through the timely delivery of quality products and services at a competitive cost.

This is achieved through the creation of a stable, cooperative and harmonious work environment which leaves the company committed to providing excellent contract manufacturing services to customers.



faction"

GOMPANY PROFILE

Additional information:

THE is owner of about 25 patents on different processes for manufacturing and transformation of plastic material.

THE Machines Yvonand SA is a dynamic company in constant expansion, building machines and complete production lines for customers worldwide.

The company has knowledge and technical expertise in the following areas:

- Irrigation pipes production lines with flat dripper
- Irrigation pipes production lines with cylindrical drippers
- Drip Tape irrigation pipes production lines
- Equipment for multilayer pipes production (composite pipes)
- Precision forming and welding of thin wall metal pipes
- Laser cutting and welding of coated and uncoated metal tapes

Specialists in high-speed production of thin wall irrigation pipes, THE Machines manage to maintain optimal quality whilst increasing production speed up to threefold compared to older generations.



Transmission line in South Dakota

US-based electricity provider Otter Tail Power Company and utility company Xcel Energy have filed an application with the South Dakota Public Utilities Commission (PUC) for permission to build a high voltage transmission line.

The Associated Press reports that the 70 mile long, 345kV power line is planned to run from a new substation, three miles west of Big Stone City in South Dakota, to an existing substation at Brookings County, about 12 miles east of Brookings. If approved, Otter and Xcel's permit will cover the southern 40-mile portion of the project from north of Gary to Brookings County. The two companies are expected to bring the power line operational by 2017.

The South Dakota PUC will hold a public meeting during July to consult local residents.

Insulated wire and cable reports

Euromonitor International's industrial reports, available from Fast Market Research in the US, aim to provide a 360-degree view of the industry.

The Insulated Wire and Cable industrial market reports offer a comprehensive guide to the size and shape of the insulated wire and cable market at national level. It provides the latest retail sales data, helping to identify the sectors that are driving growth.

It identifies the leading companies, the leading brands and offers strategic analysis of key factors influencing the market—whether new product developments, packaging innovations, economic/lifestyle influences, distribution or pricing issues. Five-year forecasts assess how the market is likely to develop, and illustrate how the market is set to change.

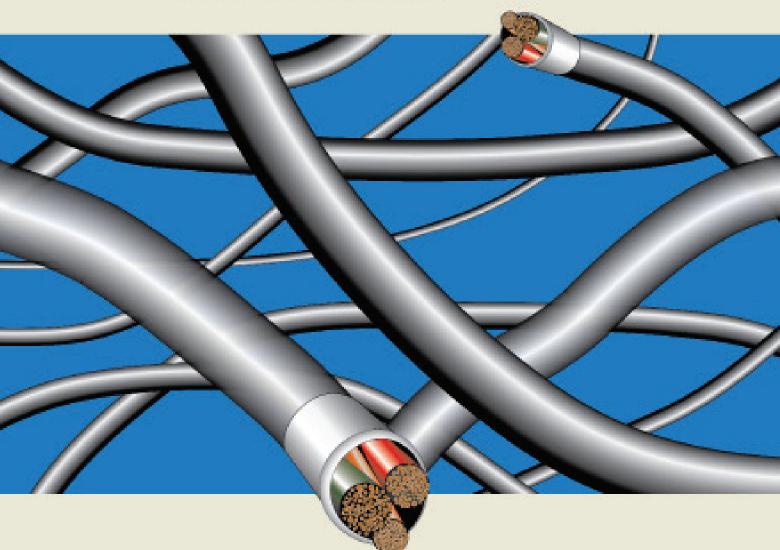
The Insulated Wire and Cable report covers optical fiber as well as other insulated wires and cables, and is currently available for Mexico, Italy, Turkey, Indonesia, South Korea and the United Kingdom.



2013 62ND IWCS

INTERNATIONAL CABLE • CONNECTIVITY SYMPOSIUM

The world's leading conference for peer reviewed technical papers and presentations on technologies and trends in wire, cable, connectivity and assemblies for the communications, data, electronics, power, industrial, automotive and aerospace industries.



NOVEMBER 10-13, 2013

CHARLOTTE CONVENTION CENTER 501S, COLLEGE ST, CHARLOTTLE, NC 28202

Allied joins top ten in QPL approval

Allied Wire and Cable meets QPL approval for manufacturing M27500 cable in accordance with WC27500-2012. QPL approved M27500 products include a wide variety of constructions in sizes ranging from 30 to 4/0 AWG.

All QPL approved manufacturers must be compliant with WC27500-2012 Rev A by 1st October 2013, but because the company has met all requirements for the standard, Allied's QPL M27500 cables are already available.

"This is a great achievement for Allied and we're really proud of it. Qualifying for approval this early was part of a great effort from our manufacturing team," said Allied Wire and Cable co-owner Tim Flynn.

Through a thorough testing and evaluation process, these products have been determined by the US Navy department to meet all necessary specifications. Buyers can procure the wire with confidence, without having to wait for additional testing or evaluation of the products.

Allied Wire and Cable is among the first ten companies to be given the QPL designation.

T.H.E. MACHINES

EXCELLENCE IN PRODUCTION TECHNOLOGY

EQUIPMENT SUPPLIER TO WIRE & CABLE MANUFACTURERS AND OPGW MANUFACTURERS



OPGW equipement



Metal band Laser cross welding



OPGW equipement



Metal forming bench and robotic laser welding arm



Vertical coiler/spooler



Automatic dual take-up

www.the-machines.ch

CONTACT OUR U. S. AND CANADA TECHNO-COMMERCIAL REPRESENTATIVE MOBILE: 440 787 6656 - Email: Robert.frimel@roadrunner.com

Plastics acquisition

Westlake Plastics Company
(WPC), a manufacturer
of extruded and
compression-molded high
performance thermoplastic
products, has announced a
change of majority ownership.



French company Actimed has invested \$6.5 million in WPC and is now the majority stakeholder in the company.

Westlake Plastics and Actimed already have a 30-year working relationship. Actimed's MTD subsidiary has served as Westlake

Plastics' exclusive European distributor. MTD will change its name to Westlake Plastics Europe under the new ownership.

With the Actimed investment, all of WPC's previous debt has been retired, and remaining funds will be reinvested in the business for capital equipment and raw materials.

Randy Altland, CEO of Westlake Plastics, will remain in this position. Michael Kirschnick, a 30-year industry veteran with experience at Wittmann Battenfeld Inc and Husky Injection Molding Systems, has recently joined the company as national sales manager. Altland said that Westlake Plastics would become a much stronger company with the new ownership team.

"We've been in a re-engineering effort the past two years, and now the business has the resources it needs to execute on critical manufacturing and invest in human resources," he said. "We have already reinforced our management team with additional customer-focused plastics industry veterans."



join the best

wire/Tube Düsseldorf: Innovations go global

Take advantage of the highest calibre expertise of the No. 1 international fair as the show goes global. Draw on international synergies from these leading trade fairs. A cycle of regional events, staged in succession around the globe, responding to local market and customer needs. Detailed information on the full programme can be found at:

www.wire.de www.tube.de

For show information: Messe Düsseldorf Morth America 150 North Michigan Avenue Sette 2920 Chicago, Tl. 60901 Tel. (312) 781-5180 Fax (312) 781-5188 E-mail: info@mdsa.com

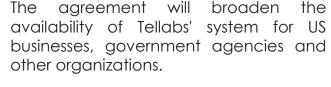
http://www.mcna.com

For hotel and travel arrangements: TII Travel, Inc. Tel. (806) 674-3476 Fax (212) 674-3477



Optical LAN distributor

Wesco Distribution has entered into an agreement to distribute Tellabs' optical LAN solution through its subsidiary, Communications Supply Corporation (CSC).



Tellabs' optical LAN is a high-tech replacement for conventional copper-based ethernet LANs, said to save businesses up to 70 percent in the cost of ownership, lower energy consumption by up to 80 percent, and reduce space needs by up to 90 percent. Tellabs' LAN combines all of a building's communications networks into one, improving security and eliminating the need for future re-cabling. It is JITC-certified for use in government networks.

"Wesco is constantly evaluating emerging technologies that can bring value to all of our customers. The Tellabs LAN solution gives our customers another option for their network requirements," said David Bemoras, group vice president of Wesco.

"We're excited to add the capabilities of Wesco to the innovation of Tellabs optical LAN, which saves customers money by reducing their capital expenses, energy consumption and space needs," said Dan Kelly, CEO and president of Tellabs.





The leading trade publications for the Wire & Cable industries

Come and see us at wire Southeast ASIA

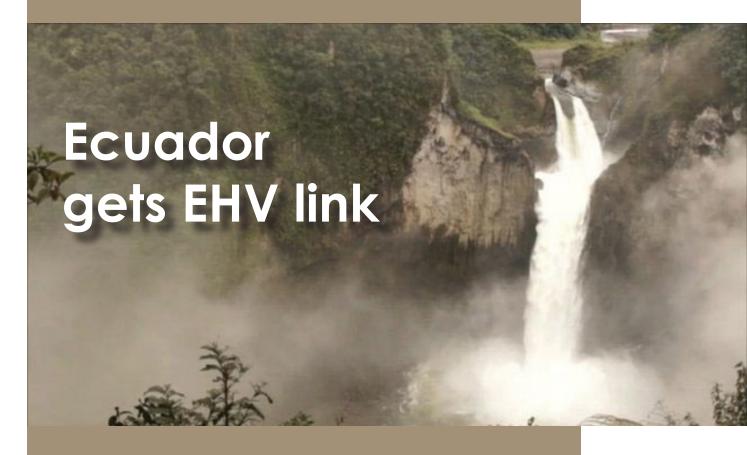
Bangkok, Thailand - September 17th - 19th



...and pick up your FREE magazines

INTERNATIONAL SALES

Tel: +44 (0)1926 334137 - sales@wiredinusa.com - eurowire@intras.co.uk - wca@intras.co.uk



China's Sinohydro Corporation has awarded Nexans the contract to supply an extra high voltage power cable link for Ecuador's 1,500MW Coca Codo Sinclair hydroelectric project.

The order is for 7km of single core 500kV XLPE insulated power cable, with a 1,600mm² copper cross section, to transmit power generated from the new dam in the Amazon Basin to the local substation, for distribution into Ecuador's power grid.

"This 500kV contract with Sinohydro is a very important development for Nexans as it is an important reference in the EHV sector with this key Chinese contractor," says Hervé Ros, manager of the Nexans land high voltage business line in China.

Nexans Yanggu New Rihui, Nexans' recently acquired power cable business of Shandong Yanggu Cables Group, strengthens the Group position in China, by serving both the Chinese market and its customers with low, medium and high voltage power cables.

The cable will be manufactured during 2013 and delivered in 2014.



Three million square feet of space. Over twenty thousand machines.

We either built the world's largest inventory, or one hell of a museum

Wire & Plastic Machinery Corp. is the world's leading reseller of high quality wire, cable, and optical fiber manufacturing equipment. We have the most comprehensive range of equipment on the planet and can provide on-demand or reconditioned solutions for any need whether it's a single machine or an entire plant. We are also the largest procurer of surplus machinery for cash or trade. Visit wireandplastic.com, or contact us at info@wireandplastic.com.



PRESENTATION AWARD

A technical paper presented by Martin Tennie, manager of R&D and technical support for the Creasorb® business of the Evonik Corporation, was awarded Best Presentation to Subcommittee A (cable construction and design).

Mr Tennie's paper, "Superabsorbent polymers as water-blocking components in cables", presented new research to determine the best ways to gauge the effectiveness of superabsorbent polymers (SAPs) as water-blocking materials.

The announcement was made at the ICC Spring 2013 meeting held in Pittsburgh. Bobby Mitra, business director at Creasorb-Nafta, accepted the award on behalf of Tennie, who presented the paper at the Fall 2012 meeting of the IEEE Power & Energy Society's insulated conductors committee.

Noting that the current body of material specifications as well as performance standards for dry water-blocked power cables focus on the rapid swelling reaction and high absorption capacity of SAPs in their "dry" state, Mr Tennie presented test results that not only reinforced the findings of a previous study demonstrating that the long-term stability of a hydrated SAP is critical to water penetration performance over the life cycle of the cable, but also pointed to the importance of the type of cross-linking agent, and the modulus of elasticity of the SAP.

Test data discussed by Mr Tennie showed that SAPs designed to optimize these properties exhibited much improved cable penetration results, compared to SAPs designed for faster swelling and high absorbency.



AccuScan 4012 Single-Axis Diameter Gauge

The AccuScan 4012 has all the powerful features of the larger AccuScan 5000 series family...but in a **compact, cost-efficient package**.

The AS4012 combines intelligent Digital Signal Processing (DSP) and specially engineered optics to give you the ultimate in single-axis measurement accuracy and repeatability. You get flexible, high-speed communication capabilities that support a range of protocols. An optional, ultra-bright display and operator interface enable you to easily view and configure measurement data.

The AS4012 is also **built to last**. Its rugged case construction to IP65 (NEMA 4) standards ensures you get reliable operation, day-in and day-out, for the most demanding applications.

Compact, accurate, and reliable...
AccuScan 4012
Get the details today!

www.betalasermike.com/WI1

Americas

Tel: +1 937 233 9935 Fax: +1 937 233 7284

Europe

Tel: +44 1628 401510 Fax: +44 1628 401511

Asia

Tel: +86 21 6113 3688 Fax: +86 21 6113 3616

- Measures product diameters from 0.1 – 12 mm (0.004 – 0.47 in)
- High-accuracy, low-drift measurements
- Accuracy to ±0.0005 mm (±0.000020 in)
- Scan rate at 1200 measurements/sec
- Connect to a host PC or PLC using RS-232, DeviceNet, Ethernet IP, Profibus, and Profinet
- Small footprint for flexible installation
- Rugged IP 65 (NEMA 4) construction

Scan QR code to learn more









Installation joint venture

Royal Boskalis Westminster NV (Boskalis) and Royal Volker Wessels Stevin NV (VolkerWessels) are to establish a cable installation joint venture. Boskalis and VolkerWessels will each hold a 50 percent stake in Visser and Smit Marine Contracting Holding BV (currently a 100 percent subsidiary of VolkerWessels), which will continue its activities under the name VSMC.

The joint venture will primarily focus on the installation of offshore power cables. Boskalis and VSMC already work together on a project basis and the two companies are enthusiastic about the collaboration.

Through this cooperation VSMC will have access to two cable-laying vessels, the Stemat Spirit and the Ndurance.

Both vessels are fitted with DP class 2 equipment with a cable turntable capacity of around 5,000 tonnes and are wholly owned by the two parent companies.

Boskalis and VSMC recently worked together developing on the Trenchformer, a multi-purpose cable trencher capable of dealing with many different types of soil and cables. The trencher is able to bury cables in water depths of up to 400m. As well as working alongside a cable-laying vessel ,the Trenchformer can be deployed independently. An extensive testing program is currently underway in the Maasvlakte industrial area and the Moerdijk, after which the Trenchformer will be deployed on projects from the summer.



600 new jobs at Polish plant

The Polish cable producer Kabel Technik Polska (KTP) expects to create around 600 new jobs at its factory in Grodzisk Wielkopolski by the end of 2013.

Kabel Technik Polska makes cables for various industrial sectors, including automotive, aviation, and renewable energy manufacturers. The company's customers include include Volkswagen, MAN, Volvo, Scania, Otis, Bombardier, ABB, Vestas and Alstom. Established in 1996, the Polish company was acquired by local car parts producer Inter Auto Groclin in March this year.



Fiji-Tonga fiber cable

The Alcatel-Lucent cable ship lle de Re will shortly be laying an 837km underwater fiber optic cable line from Fiji to Tonga. Alcatel-Lucent signed a deal with Tonga Cable Ltd in 2012 to lay the cable.

The fiber optic cable will connect Tonga to the Southern Cross cable connecting Fiji, New Zealand and Australia to the United States. The service is expected to have a total capacity of 320GB, 6,000 times more than the 50 to 55MB full capacity of Tonga's current satellite network.

The \$34 million dollar project is part of the Tongan government's aim to boost Tonga's Internet connectivity, providing a faster and cheaper network. The project is jointly funded by the Tonga Communication Corporation (TCC), the Asian Development Bank and the World Bank.



31km cable for wind farm project

nkt cables has completed a 31km continuous length submarine cable, to be used on the West of Duddon Sands (WoDS) offshore wind farm project in the UK. The project is a joint venture between Dong Energy and Scottish Power Renewables.

The wind farm, located off the coast of Cumbria and Lancashire, is designed to have a capacity of 389MW. The power will be exported to the shore via submarine export cables manufactured and supplied by nkt cables. Each cable is capable of transmitting over 200MVA and consists of a 3-core design with 1,000mm² copper conductors and integrated fiber optics. nkt cables will supply in excess of 80km of submarine export cable for the project.



Submarine logistics

nkt cables' new submarine cable logistic center at Rotterdam's deep-water port went into operation in mid-June.

The center has 9,000 tonne and 4,600 tonne capacity turntables and, equipped with nkt cable splicing technology, is designed to connect extra-long single cable length load-outs of up to 6,000 tonnes to any cable-laying vessel.

The offshore site is planned to serve ongoing European wind farm developments with high- and medium-voltage submarine cables throughout the year.



Hudson Project progress

The strategic underground and submarine power link between New York City and the New Jersey transmission grid, known as the Hudson Project, has begun commercial operation. Prysmian Group with Siemens Energy were responsible for the design, supply and installation of the 13km 345kV HVAC land and submarine transmission line.

The Hudson Project is of strategic importance for a city where energy load is constantly on the increase. It will help to replace resources that may be retired over the next few years, as well as strengthen the overall reliability of the power supply system. It is also expected to provide access to more diverse sources of power, including renewable sources.

Using its own cable-laying ship, Giulio Verne, Prysmian installed three high voltage submarine cables and two optical fiber data transmission cables under a portion of the Hudson River. The submarine cable system was buried below the river bottom at depths ranging from 10 to 15 feet using a hydro-plow machine.



From Russia with Alcatel-Lucent

Russia-based carrier Avelacom and its optical transport equipment provider partner Alcatel-Lucent will combine to extend Avelacom's 100G fiber optic network backbone from Moscow to London.

The network expansion will enable Avelacom to offer connectivity between Moscow and St Petersburg to cities in the Baltics, Scandinavia, and Western Europe en-route to London. The two companies believe that the high capacity, low-latency network will benefit Avelacom's customers in the financial services industry, and the carrier's wholesale customers within the service provider community.

Alcatel-Lucent will supply elements of its Agile optical networking portfolio.

"This is our first deployment of a low-latency 100G DWDM network in the Nordic and Baltic regions," said Luis Martinez Amago, president of Alcatel-Lucent's EMEA region, "and Avelacom will be ready to upgrade to 400G speeds down the road thanks to our latest generation of the 400G photonic service engine."



Cabling installer program

3M has introduced the 3M preferred installer program, designed to help installers at every stage of a project, from pre-sales to on-site technical support and future system upgrades.

Encompassing all of 3M's fiber optic and copper cabling solutions, the benefits available to installers who sign up for the program include project discounts, support for tender processes, pre-sales, on-site and post-installation technical support, safety stock access, 25-year warranties (subject to conditions) and access to training.

The addresses two program categories of installer: listed installer category gives installers new to 3M a chance to try the ranges without any obligation. It is also ideal for installers who use 3M on an ad-hoc basis, with the option to move to the next level, known as preferred installers. Preferred installer status requires a commitment to a number of projects per year, completion of required training, and certification to receive certain additional benefits such as project lead generation and access to 3M facilities.



Power building community

Soitec (Euronext) has installed a concentrator photovoltaic (CPV) demonstration plant in the isolated rural village of Usib near Rehoboth in central Namibia. The new 25kW installation has been connected to the grid of the national power utility, NamPower, and provides electricity for users including a rural school.

Soitec and NamPower have entered into a cooperative agreement in which Soitec has constructed and operates the CPV plant and will transfer the knowledge gained as well as operations and maintenance duties to NamPower.

Usib is an isolated rural community with a school providing education and accommodation to over 100 children from the surrounding area. The children's diet is supplemented by a community vegetable garden where Soitec's subcontractor Alensy has installed a solar water pump to ensure irrigation for up to one acre of crops. Funds from the sale of electricity generated by the power plant will be credited to the school's electricity bill.



IWMA

Taste of the Orient for IWMA members



Photographer S Kinnari

There will be an international flavor mixing with a taste of the Orient as Banakok, Thailand. plays host to wire Southeast Asia from 17th to 19th September this year.

The BITEC center in the the capital city, known as the 'city of angels', will stage the three-day show as more than 400 companies from around the globe show off their latest innovations at the much-anticipated exhibition.

The wire and cable industry remains robust in the region as ASEAN prepares for further development with major infrastructural projects

already in the pipeline. Seven national pavilions and country groups from Austria, China, Germany, Italy, Singapore, Taiwan and the USA have already secured their places at the exhibition.

Some 15 percent of companies are first-time exhibitors and organizers Messe Düsseldorf Asia are confident that visitor numbers will surpass the 2011 figures.

This event is a platform that links a targeted audience of key decision makers from Thailand and around the region with international industry leaders showcasing the latest wire and cable processing machinery and equipment, new technology and manufacturing solutions.

The IWMA is offering its members the opportunity to take part in this exhibition by taking its exclusive exhibitor package ensuring an excellent stand location and all the benefits to make exhibiting easy and effective.

For further details, call the IWMA on 01926 834680 or email info@iwma.org.

>

Heading for Milan...

Co-organizers of this year's CabWire are once again joining forces ahead of the conference at the Palazzo Turati in Milan, Italy, on Monday, 4th November.

This year's theme will be 'Innovations driving worldwide wire and cable markets' and will feature a panel of both ferrous and non-ferrous expert speakers, presenting the latest technological developments within the industry.

A number of opportunities are available for anyone wishing to attend the conference.

In the evening, there will be the opportunity to attend a gala dinner at the nearby Royal Palace overlooking the historic Duomo Piazza.

The following day, Tuesday, 5th November, there will be the opportunity to visit a local factory for a guided tour of the facility.

To find out more, simply go onto the designated website: www.cabwire.com

Full details including terms and conditions are included on the site.

You can download the relevant application form and either email or fax to the details on the form.

If you are interested in attending the conference as a delegate, details will be posted on the website shortly.



The 6th biennial world conference at the Palazzo Turati in Milan, Italy, on the 4th November 2013.

This year's theme will be "Innovations driving worldwide wire and cable markets" and will feature a panel of both ferrous and non-ferrous expert speakers, presenting papers on the latest technological developments within the industry.

For more information, visit the website, email info@iwma.org or telephone: +44 (0)1926 834680.

www.cabwire.com



ciazione Comit





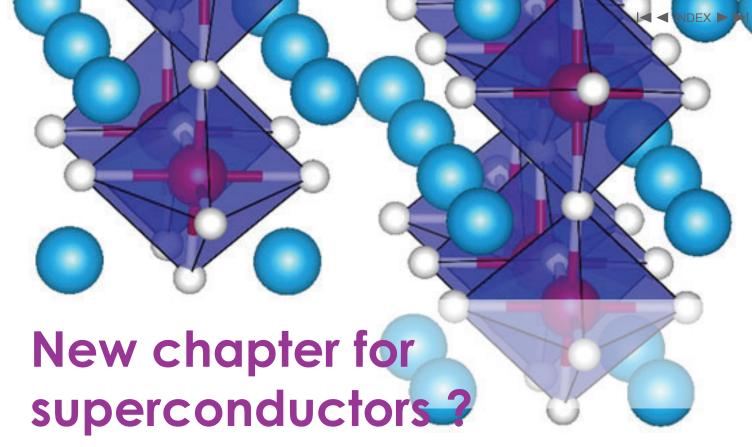






The Wire Association International, Inc.





High-temperature superconductors are among the most widely studied materials in physics, where the discovery of new compounds often provides insight into the complex physics that underlies them, as well as revealing interesting new electronic phenomena.

Seiji Yunoki and colleagues from the Computational Quantum Matter Research Team at the RIKEN Center for Emergent Matter Science may have made such a discovery through their prediction of an unconventional superconducting phase in compounds based on iridium oxide.

The high-temperature superconductors commonly investigated by scientists are often copper oxide structures consisting of stacked atomic layers, along which the superconducting electrical currents flow. The iridium oxide Sr_2IrO^4 studied by Yunoki and his colleagues has a similarly layered construction. The magnetic arrangement of

the atoms in these layers is also similar to that in copper oxides.

However, iridium is a heavier element than copper, and its outer electrons circle the atomic cores at a much greater distance. The different path of these electrons influences their magnetic, superconductive and electronic properties, including those that make iridium oxides of possible interest for electronics applications.

"A number of groups have tried to make iridium oxide superconductors," says Yunoki. "So far, they have been able to make the compound metallic, but they have not yet succeeded in making it superconducting."

The researchers now plan to assist in the search for iridium oxide superconductors, and to investigate possible applications of their compound's spin properties in electronics.



Kenya-Ethiopia transmission plan

Construction work on the 1,068km long Kenya-Ethiopia transmission line project will begin in September 2013 and is expected be completed in September 2018. The work, funded by the African Development Bank (AfDB) at a cost of \$1.26 billion, will provide cheaper power to Kenya from Ethiopia's hydro-electricity dams.

Kenya Association of Manufacturers chief executive officer Betty Maina was quoted by allAfrica as saying that the lower electricity costs would result in reduced production costs for companies and cost of living for workers. "There are many investors who want to venture into Kenya but they are put off by the high cost of electricity. As a result, they flee to neighboring countries," Maina added.

The transmission line, around 437km in Ethiopia and 631km in Kenya, will have a transfer capacity of up to 2,000MW in either direction.



Fiber optic production hike

With rapid network growth in China, local manufacturers are increasing fiber optic cable output in a move to make the sector self-sufficient. At present, most China enterprises source cables from Corning and Furukawa.

Major producer Jiangsu Zhongtian has invested \$160 million to raise its manufacturing capability to over 30 million core kilometers, as well as ear-marking \$190 million for preform development to handle about 400 tons. Chengdu Putian has set aside about \$35.8 million for the establishment of a joint venture to produce 21 million core kilometers annually. For Jiangsu Fasten Group, the plan for 2013 is to boost capacity to 5 million core kilometers per year.

Jiangsu Tongding Optic-Electronic Stock Co is expected to hit 50 million core kilometers by the end of 2013, doubling its 2012 level. The maker is building 15 new drawing towers to match the anticipated rise in demand. For a preform undertaking, it will spend \$47.7 million on a factory to start construction this year.

Global FTTx installations are expected to reach 85.5 million core kilometers by 2016, a 62 percent jump from 2010.



Wind power in Vietnam

Nearly three years after construction began, a wind power plant in the southern coastal province of Bac Lieu has been linked to the national grid. The plant, the first of its kind in the Mekong Delta and the second in Vietnam, has a capacity of 56 million kilowatts a year. Tuoi Tre newspaper quoted Pham Hoang Be, chairman of Bac Lieu, saying the plant marks the start of clean energy development in the delta.

When finally completed in June 2014, the 500-hectare wind farm will have 62 turbines on 80m towers, producing around 320 million kilowatts a year. Cong Ly Construction, Commerce and Tourism Company in Ca Mau province is building the plant, partly funded by loans from the US Export-Import Bank.

The country's first wind power plant went on stream in April 2012, in the central province of Binh Thuan, after a three year trial run. It has a capacity of 90 million kilowatts.

A study by the province has assessed that it has wind power potential of over 5,000 megawatts.



Airport contract in Malaysia

In early June, the board of directors of Sarawak Cable Berhad (SCABLE) announced that its wholly-owned subsidiary, Trenergy Infrastructure had received a Letter of Acceptance from Sarawak Energy Berhad for the proposed Tudan-Miri Airport 132kV transmission line project. The project commenced on 17th June 2013 and is expected to be completed within 15 months (September 2014).

The transmission line project is expected to contribute positively to the earnings and net assets of Sarawak Cable Group for the financial years ending 31st December 2013 and 31st December 2014.

SCABLE currently manufactures low voltage power cables and wires, and high voltage bare conductors. Low voltage power cables and wires such as single-core power cables and wires and multi-core power cables and wires are principally used in distribution lines, as well as inside homes, offices and factories. The high voltage bare conductors are typically used in overhead transmission lines and distribution lines.



Overhead transmission line in Musandam

Saudi Arabia-based power contractor Saudi National Contracting (NCC) has won a contract to build a 132kV overhead transmission line in the governorate of Musandam, Oman. The project, estimated to cost around \$98m, is part of a major infrastructure scheme being implemented in the country by the Oman government, reported the Oman Daily Observer.

NCC will construct the transmission line from Tibat in Wilayat Bukha to Khasab and extend it a further 80km to reach Dibba. It will supply electricity generated by the governorate's first natural gas-based power plant to be constructed at Tibat.

The electricity produced from the approximately 120MW power plant will be supplied to towns and villages in Dibba and Khasab, replacing diesel-based electrical generation for the first time in the governorate. In addition, 132kV grid stations will be constructed at Tibat, Khasab and Dibba.



Egypt-Saudi power grid deal

An electricity exchange pact signed by Saudi Arabia and Egypt will help the two countries meet shortages in power supply, according to Saudi water and electricity minister Abdullah Al-Hussayen. He was speaking in Riyadh after signing the agreement with his Egyptian counterpart Ahmed Mustafa Imam.

This is one among several projects for establishing a power grid between Arab countries. Egypt has already linked its power network with Jordan and Syria.

"Peak time in Saudi Arabia occurs in the noon and afternoon while in Egypt it starts after sunset," Al-Hussayen commented, adding that both countries would be able to exchange 3,000 MW during this peak period, which will help them save billions of riyals that would have been spent on building power plants.

Speaking about the Arab power grid project, Ahmed Mustafa Imam said it would connect Syria and Lebanon, Egypt and Libya with Maghreb countries, Libya and Tunisia and Egypt, Sudan and Ethiopia, and link the Arab world with Europe.



Wind farm in the Seychelles

Renewable energy company Masdar has unveiled a 6MW wind farm in the Republic of Seychelles, funded by Abu Dhabi Fund for Development. The eight-turbine Port Victoria wind farm will generate enough electricity to power around 2,100 homes, reducing annual CO₂ emissions by 5,500 tons.

Commenting on the development, Masdar CEO Sultan Ahmed Al Jaber said the new wind power project will redirect fuel savings into investments in infrastructure development, social programs and to boost economic growth.

Elsewhere Masdar is developing several other renewable projects, including a 15MW solar power plant in the Islamic Republic of Mauritania, and a 500KW solar photovoltaic power plant on the island of Vava'u in the Kingdom of Tonga.



Cut in fastener material costs

Taiwan's China Steel Corp has announced cuts in its steel wire and bar price by about \$45 per tonne during July and August. It is expected that the lower wire and bar prices may help Taiwan's screw manufacturers to cut costs and secure more export orders during the third quarter of 2013.

Taiwan's Chun Yu Group said that even if overseas buyers request the price cut on its screw products, the reduced raw material cost will still help them win more orders from overseas markets.

Tyscoons Group said CSC's price cut will force the group to reduce its wire prices, but that it will still benefit Tyscoons Group's screw product sales.



Liquid wiring

A group of graduates from London's Royal College of Art has invented Bare Paint, a conductive liquid that can be applied to almost any surface. According to Matt Johnson, one of the inventors, the original idea was to be a development on wearable technology for an art project.

Four years ago, the then-students — Johnson and fellow RCA graduates Isabel Lizardi, Bibi Nelson and Becky Pilditch — became aware of fashion designers who were making clothes containing circuits, and researchers working with biological embeds.

The four researched conductive materials, and developed Bare Paint. The water-based substance has a surface resistivity of ~55 ohms/square at 50 microns layer thickness, can be applied as ink or paint, is non-toxic and will dry at room temperature.

The development team, now a company called Bare Conductive Ltd, believes that Bare Paint allows the user to put an electrical circuit anywhere, whether building a toy, creating an interactive display on a wall, making a battery-powered Tron costume or turning a desk into a synthesizer.

Harnessing development

After acquiring the harness integration manager (HIM) from the Engineering Center Steyr, Aucotec AG, in cooperation with Intec Industrie-Technik GmbH and Co KG, developed a link of its harness design system Engineering Base (EB) Cable with Catia V5. It significantly facilitates the interaction of mechanics and electrics, allowing both sides to begin the design process in parallel and enabling them to synchronize information at any time.

Aucotec and Intec have now developed a sample project that illustrates the time saving and error saving capabilities of the new link. The core element of the solution is the shortening of the design process for wiring harnesses by allowing those involved in electrical systems and mechanical systems to start their work independently of each other. After one of any possible data synchronizations, all changes are displayed and the responsible employee in that case decides which changes are adopted. These decisions are also recorded in a traceable manner.

By means of the HIM, Catia V5 receives the electrological definitions – thus the specification of electrical components – from EB Cable. HIM transfers the wiring harness data that is processed in 3D (topology, length, protective material) back to EB Cable. The routing of the individual wires takes place there and

the 2D wiring harness conductors and follow-up documentation are generated automatically.

Nano loose tube cable range

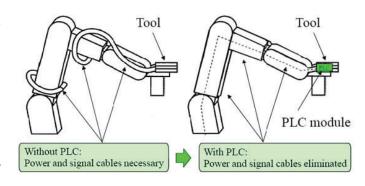
Prysmian took advantage of the ANGA COM exhibition in Cologne during June to display its new range of nano loose tube cables. The cables, part of the complete nano LT cable family offered by Prysmian group, are designed for smaller diameter and increased fiber density, allowing the introduction of 192 fibers into standard 10/12mm ducts and 96 fibers into standard 8/10 mm ducts.

Operators across Europe are adopting VDSL2 to boost copper network capacity from the last distribution point to the end user. Vectoring and bonding technology increase speeds on the last mile but, to accommodate this, the need arises for more fiber capacity from POP to DP.

In rolling out the required additional fiber capacity operators want to use existing rights of way, including ducts and micro ducts that are often already filled to their maximum capacity. The new range of nano LT cables makes it possible to realize download speeds of 30-40 Mb/s on legacy portions of the network, whilst postponing investments in civil works. Operators can invest in phases and choose to upgrade the final portion of the network at a later date.

The loose tube solutions benefit from existing Prysmian technologies. Bend-insensitive BendBrightXS fiber, makes highest densities in confined spaces possible, while Prysmian's jetting/blowing system ensures the cable is properly distributed along distances of up to 1.5km.

MHI and NCXX achieve robot wiring reduction



Two factors contribute to the reduction in wiring: the incorporation of NCXX's high-speed signal transmission device into a robot manufactured by MHI, and the two companies' joint development of new technology that suppresses external noise influence and signal distortion during power transmission.

A variety of tools – hands, sensors, cameras – are typically connected to robotic arms in factory automation applications. To remotely control such tools requires not only a power supply, but also a means of transmitting supervisory control signals. Conventionally, these needs have been met by thick power and signal cables

installed on the exterior of the robot's arm – a configuration that has impeded robot maneuvering.

The new PLC-based wiring technology developed by MHI and NCXX uses one pair of thin communication lines to simultaneously provide large-volume power supply and high-speed signal transmission.

Reducing necessary wiring makes it possible for robots to perform assembly tasks within confined, complex work areas, or to perform post-disaster recovery work in noisy locations hampered by numerous obstacles.

Silicone-free anti-capillary cable

Huber+Suhner has introduced its silicone-free Radox® anti-capillary cable to meet the automotive market's demand for barrier sealed copper cables. Inside the conductor of the new cable, a grease-like filling material prevents the capillary effect in the core. This stops liquids in the vehicle, such as oil, water or AdBlue, being conveyed through the cable and damaging the electronics and sensors at the other end.

The filling material is a compound developed in the company's own facility in Switzerland. Since it is silicone-free, it does not form foam when it comes into contact with transmission fluid. The compound can also withstand the electron beam cross-linking

process and, as a result, the cable also features an electron beam cross-linked Radox® insulating material. The cables are resistant to high and low temperatures, ozone and weathering, and have excellent abrasion resistance.

The anti-capillary cable can easily be crimped or ultrasonic welded to connect it to the connector, thus offering a more attractively priced, waterproof connectivity solution as a replacement for waterproof connectors or the over-molding of cable/plug connections.

Silicone-free Radox anti-capillary cables are already available from series production with tinned or plain copper wires with cross sections of up to 1.5mm². Larger cross sections of up to 10mm² are in development, and a hot oil resistant anti-capillary cable is also planned.

Bend-insensitive system for center cabling

Reichle and De-Massari (R&M) Middle East, Turkey and Africa, has announced an upgrade to bend-insensitive multimode fiber (BIMMF) standards across its entire range of fiber optic cables for data centers.

Jean-Pierre Labry, executive vice president of R&M Middle East, Turkey and Africa, said: "Organizations striving to be more agile are incorporating new means to offer on-demand services to their employees.



This push for greater connectivity is resulting in an increase in the number of ports in data centers which are already stretched to their limits.

"Consequently, cabling has to be densified in order to ensure these demands can be accommodated. R&M has devoted considerable attention to the pressing needs of data centers, which is why we are overhauling our range to BIMMF standards."

The company's latest solutions for data centers consist of type S MTP modules, MTP adapter plates, HD panels, MTP trunk cables and patch cords.

Commenting on the new range, Shibu Vahid, head of technical operations, R&M Middle East, Turkey and Africa, said: "R&M always incorporates a forward thinking approach in every product design. Simplified installation means a much lower risk of human error and therefore lower downtime in the long run. We have also made sure that the same systems can be extended to 40GbE standards without having to rebuild the network."

Underwater cable detection

Innovatum, a manufacturer of location, tracking and survey systems of submarine pipelines and cables, has added a Saab Seaeye Cougar XT to its ROV fleet.

"Adding a Cougar XT Compact," said managing director Terry Slater, "will bring more power to survey work when operating close inshore in the strong currents and tidal flows of the southern North Sea – without a significant increase in size of vehicle."

Designed especially for working in shallow waters and in tight situations, the low-profile Cougar XT Compact minimizes the effect of current with its reduced frame size, buoyancy and weight – and a thinner 17mm tether cable that reduces the effect of drag.



Innovatum's Cougar XT is fitted with the company's Smartrak system, high resolution imaging sonar and dual-headed scanning profiler for mean seabed level measurement. Smartrak is said to be the only system in the world that can detect



cables carrying either AC or DC current, and cables carrying no current or signal at all.

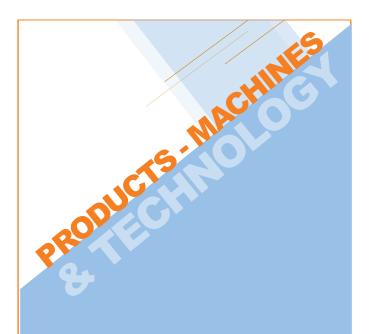
The system can undertake submarine cable surveys in the shallow water depths that are typical of offshore wind farms, interconnector power cables and coastal communications cables. The Innovatum system produces reports and charts showing accurate cable route and depth of burial. This data is required by installation contractors, owners and regulatory authorities, to ensure that the cable is properly buried and not in danger of exposure and damage.

Robust subsea connections

With the growth in marine renewable energy projects there is a growing requirement for robust power cables and connectors to withstand the harsh subsea environment.

For many tidal stream and wave energy devices, connectors must be capable of mating and breaking reliably and in complete safety under water. They must also maintain connection in a range of temperatures and sea conditions, including salt, dirty and turbid water, and at elevated pressures due to depth of submersion.

RMSpumptools high- and medium-voltage connector range has been in service with customers for over 25 years. The connectors



Make sure your new machines or products receive ALL the publicity they can get!

Send us the details and a photograph for our new Products, Machines & Technology section in wiredInUSA.

To make sure your editorial is published in the August edition – send us the details by **25**th **July**

All editorial should be sent to editor David Bell at **david@wiredinusa.com**



incorporate a patented positive latching device and oil-filled chambers with dual barriers for effective insulation. They can compensate for misalignment during connector mating, and are now available to the marine renewable sector.

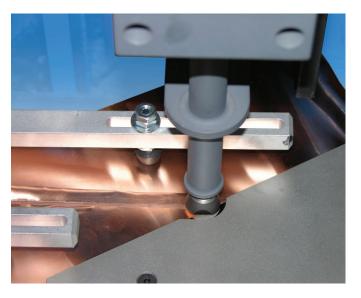
"We are extremely pleased to be able to make our range of Wet Mate connectors available to the marine renewable energy sector," said Michael Winfield, subsea business manager of RMSpumptools.

"Already well proven in the oil and gas sector, these highly robust products will provide much needed design flexibility as well as reliable operation and maintenance. Marine renewable energy has an important role to play in decarbonizing grid power supplies, and RMSpumptools is pleased to be able to offer system developers and operators an established technology to facilitate the development of the required subsea power cable networks, from individual devices through to farm-scale installations."

Ultrasonic spot welding

Sonobond's SonoWeld® 1600 ultrasonic spot welder was named among Wire Harness and Cable Connector's top products of 2012, highlighting Sonobond's ability to modify its welder to meet individual customer requirements.

Sonobond customer Lake Cable LLC encapsulates cables in metal sheathing and extrudes jackets over its complete line of control, instrumentation and power cables. As part of the production process, ultrasonic spot welding equipment has to make several line welds to join the end of one roll of sheet metal to the beginning of another, allowing continuous sheathing.



Working closely with Lake Cable, Sonobond designed the custom anvil slide assembly and welder frame that enables sheet metal to approach the machine on an angle, move under the welding tip for a series of welds, and be fed from one roll and taken

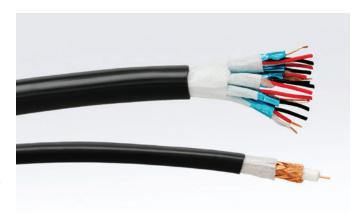
up on another roll after welding. In addition to providing a continuous cable sheathing operation, the customized SonoWeld 1600 produces joints with 90 percent of the parent material's strength.

Sonobond machines weld stranded wire-to-wire and wire-to-terminals for electrical wire harnesses and bus bars; and weld the terminals of lithium-ion batteries, foil-wound capacitors, thin aluminum or copper foil, and electrical contacts. They also have a role in the manufacture of fuses and circuit breakers, ignition modules, starter motors and photovoltaic panels.

Water resistant cables

General Cable unveiled its new line of Gepco® brand HydroBloc™ water resistant cables at the 2013 InfoComm Show in June. UL rated and in compliance with the TIA-455-82-B water penetration test, the new line of HydroBloc cables can be used for indoor or outdoor applications and in wet locations inside conduit. HydroBloc cables feature a water-blocked construction, a sunlight- and moisture-resistant jacket and a ripcord for ease of stripping in audio or control versions.

The water-blocking construction of HydroBloc cables consists of a two-ply water-blocking tape. In contrast to single ply tape, where water-blocking polymer is



attached to one side of a fiber filament tape, the two-ply tape has the water-blocking polymer sandwiched between two fiber filament tapes; this allows for increased volume of the polymer. In addition, HydroBloc cables (with the exception of coax versions) utilize water-swellable fillers for added protection. The construction results in greater swell heights to better fill voids and prevent water from migrating down the cable and disrupting the electrical characteristics should there be a cut or slit in the jacket.

The HydroBloc line is available in a variety of cable types, and in both shielded and unshielded versions.

Shipboard cable launch

General Cable launched its new line of Gepco® ABS shipboard cables at the 2013 InfoComm Show in June. UL rated and American Bureau of Shipping (ABS) approved, the new cables are said to offer quality and performance for audio,

video and data applications in marine and offshore environments.

With the required low smoke, zero halogen (LSZH) construction, the Gepco brand ABS cables are available in a wide variety of cable types to cover applications such as data or power control, microphone or line level balanced audio, general purpose audio, speaker, communications, digital audio, high definition and standard definition serial digital video, high resolution analog video, broadband and baseband analog video, networking, wireless systems, VSAT, CCTV, security cameras and general distribution.

Joe Zajac, sales and applications engineer for Gepco brand products, commented: "While designed for marine environments, Gepco brand ABS shipboard cables are manufactured with the same precision and offer the same performance and features as traditional Gepco brand cables such as TactiCel™ strong cell technology for coax cables and easy-strip foil shields for audio cables."

Pneumatic crimping

Fabco-Air's newly released 300 series power crimping tools are said to offer high force crimping with reliable precision, powered by force-multiplying air cylinders.

Quick change jaws reduce set-up time and can perform numerous manufacturing functions while improving the product quality and increasing productivity. Hand-held and bench models are available to splice wire rope and cable, crimp electrical parts, swage mechanical fasteners or clamp and hold assemblies.



Glass-sealed, fiber optic feed thru

Ametek SCP, a specialist in underwater cable and connector solutions for military and commercial applications, has developed the technology to produce a glass-sealed fiber optic feed thru (FOFT) for extreme high pressure, high temperature applications.

Ametek developed the FOFT to meet the harsh environments encountered during

drilling and completion of oil and gas wells. It has been qualified for 30,000psi and 300°C. The FOFT is currently configured for one to eight fibers in a 0.375" housing that can be welded or coupled with a standard high-pressure fitting. The FOFT has also been miniaturized to fit a high pressure, high temperature connector.

seal. The connector's robust construction also makes it highly resistant to corrosion and chemical attack. It is believed to be the only optic fiber-based feed thru in the industry to offer its combination of characteristics and performance for harsh service conditions.

This rugged, high performance fiber optic feed thru is constructed of low outgassing materials and is configurable with standard single-mode and multi-mode fibers. It conveniently interfaces with standard 3/8" high pressure fittings and is available in a variety of optional end terminations, including bare, stripped, SMA, ST, FC, APC and custom ferrules.

Ametek's process produces an hermetic seal between an optical fiber and a metal super alloy with a proprietary seal glass. The result is an extremely durable compression

Polyolefin to replace PVC

AddivantTM USA LLC has introduced new Polybond[®] polymer modifiers that allow halogen-free polyolefin compounds to replace PVC in flame retardant wire and cable.

The replacement of PVC in wire and cable insulation and jacketing is driven chiefly by regulatory changes. This has developed an increased demand for halogen-free polyolefin compounds for use in transportation, electrical and electronic, building and construction and appliance applications.

Polyolefins are the most widely used polymers, primarily due to their ease of processing, balance of mechanical properties versus cost and, with respect to the wire and cable market, good electrical properties, but they are not inherently flame retardant. Traditional formulations to make polyolefins flame retardant use halogenated flame retardants, which in turn

produce heavy smoke and toxic, corrosive gasses during combustion.

Addivant's new portfolio of linear low density polyethylene-based Polybond, used in conjunction with halogen-free flame retardants such as aluminum tri-hydroxide or magnesium hydroxide, increase the flame retardant characteristics of polyolefins while providing the physical properties required in end use applications. Polybond 3149 is a general purpose LLDPE, while Polybond 3249 and Polybond 3349 are technologically suited to applications requiring higher elongation values with reduced gel formation during mixing.

The new LLDPE-based polymer modifiers complement existing Addivant polypropylene and high-density polyethylene polymer modifiers, as well as Addivant's portfolio of wire and cable products, which include antioxidants, UV stabilizers, metal deactivators and customized, non-dusting additive blends.

US automotive analysis

Reportlinker.com has added a new market research report to its catalog. "Analysis of the North American automotive wire and cable materials market" is segmented into analyses of polyvinyl chloride (PVC), cross-linked polyethylene (XLPE),

fluoropolymers, and other materials used in the sector. Market challenges, drivers, and restraints are discussed, and revenue and unit shipment forecasts to 2019 are included at total market and segment levels.

Pricing analyses and competitive scenarios are provided for each segment, and other topics such as the value chain and the distribution structure are discussed.

The research draws several conclusions: that price will continue to dominate low temperature applications, but customers will prefer durable, cost effective solutions for high temperature ones; companies will continue to dominate as OEMs and wire and cable manufacturers increasingly opt for standardized solutions; concerns about light-weighting and the environment will gain importance, while customers slowly shift toward alternate materials; and companies will strive to differentiate themselves by using new materials and creating partnerships with wire and cable manufacturers and system integrators.

The research analyzes the North American automotive wire and cable materials market from 2009 to 2019.

Fasteners for corrosive environments

USP Structural Connectors, a MiTek Industries company, has launched a new line of Gold Coat structural fasteners. Gold Coat offers a multi-layer system to protect against corrosive environments.

The multi-layers are a standard zinc layer over a steel substrate, with an added, patented, organic polymer barrier layer. The non-reactive, organic polymer layer – the Gold Coat – provides an effective barrier to the ion exchange and electrochemical reactions that cause corrosion.

USP's patented polymer application process creates superior adhesion that bonds the Gold Coat to the zinc

galvanization, providing maximum durability throughout manufacturing, shipping, and installation. USP claims that its double barrier offers the industry's best protection against corrosion, exceeding the performance of other fasteners on the market.

"Gold Coat's double-layer protection offers resistance to corrosion that rivals stainless steel, and is by far the industry leader in the connector and fastener sector for its cost," said USP's Barry Ashwell. "Most connector and fastener companies offer zinc coating or the much more expensive option of stainless steel for protection from corrosion, but the double-barrier protection of Gold Coat offers a cost-effective alternative in highly corrosive environments."



<u>3M</u>	p33
Addivant™ USA LLC	p51
Alcatel-Lucent	p30
Allied Wire and Cable	p18
Ametek SCP	p50
Aucotec AG / Intec Industrie-Technik GmbH and Co KG	p43
Avelacom	p32
Boskalis / VSMC	p29
Sinohydro Corporation / Nexans	,p24
Evonik Corporation	
General Cable	p49
Gepco	p50
Huber+Suhner	p45
Innovatum	,p46
IWMA	,p34
Jersey Central Power & Light (JCP&L)	p12
Jiangsu Zhongtian	p38
Kabel Technik Polska (KTP)	p30
Masdar	p41
MHI	,p44
nkt cables	p31
Otter Tail Power Company	
Saudi National Contracting (NCC)	p40
Prysmian Group / Siemens Energy (Hudson Project)	p32
Prysmian	,p44
Reichle and De-Massari (R&M)	p45
Reportlinker.com	p52
RMSpumptools	
Sarawak Cable Berhad	39
Soitec	p33
Sonobond	,p48
Steel Corp	p41
The Plastics Academy	
USP Structural Connectors	
Wesco Distribution	
Westlake Plastics Company (WPC)	p20



Beta LaserMike	p27
Cersa Mci	
<u>nhol BV</u>	p10
<u>WCS</u>	p17
<u>eoni</u>	p8
Messe Düsseldorf	p21
Paramont Die	p11
Γ.H.E Machines	p19
Wire & Plastic Machinery Corp	p25
Zumbach	p2

Marketing:

Contact Jason Smith, wiredInUSA, 46 Holly Walk, Leamington Spa, Warwickshire, CV32 4HY. United Kingdom

Tel: +44 (0) 1926 834684 Email: **jason@wiredinusa.com**

News:

Contact David Bell, Editor, wiredInUSA, 46 Holly Walk, Leamington Spa, Warwickshire, CV32 4HY. United Kingdom

Tel: +44 (0) 1926 334137

Email: david@wiredinusa.com







Digital . Networking . Monthly .

wiredIn USA

David Bell, Editor, wiredInUSA, 46 Holly Walk, Leamington Spa, Warwickshire, CV32 4HY. United Kingdom Tel: +44 (0) 1926 334137 Email: david@wiredinusa.com

Target the USA market by advertising in wiredInUSA

