

# READ WATCH SHARE

#### www.wiredinUSA.com



\$185m submarine cable linking Brazil to Europe



#### Time at Indy.

## The fastest way to lead your wire plant ahead.



#### WAI's next wire & cable adventure will take just two days in Circle City.

Safety and Continuous Improvement Segments || Networking || Joint AIST Technical Session Exhibits || Machinery Roundtable || Equipment Forum || Mobile Classroom to General Cable

WAI's Operations Summit & Wire Expo 2014 will help you focus on intense, peer-driven crosstalk about today's plant management best practices. Safety and equipment forums round out the program.

Save time, money, and put revolutionary ideas into action immediately to drive your operation forward. Register now: www.wirenet.org.

Tech fact: Transformation-induced plasticity (TRIP)-aided steel has been recognized as one of the important advanced high strength steels (AHSS) for the crashworthy components of the automobile. Check out the AISTech-WAI Joint Session: "Metallurgy of Wire Rod" for this and other new developments.

Indiana Convention Center Indianapolis, Indiana | | May 6-7, 2014



Co-located with AISTech 2014 Free access to AISTech 2014 exhibits with WAI registration badge.

Sponsors: Platinum: Wire & Plastic Machinery || Gold: Leggett & Platt Inc. | Southwire Co. || Silver: Carris Reels Inc. Lloyd & Bouvier | Nexans | SAMP | Windak || Bronze: BASF | ExxonMobil Chemical | Chemson | RichardsApex Inc. Also: Baum's Castorine Co. | Commission Brokers Inc. | Leoni Wire | Sonoco



1570 Boston Post Road | P.O. Box 578 | Guilford, CT 06437-0578 USA | Telephone: (001) 203-453-2777 | Fax: (001) 203-453-8384 | www.wirenet.org

# #33 EDITOR

The largest exhibition in the wire and cable industry calendar is just over a month away now, with wire 2014 being staged in Düsseldorf, Germany, from 7<sup>th</sup> to 11<sup>th</sup> April.

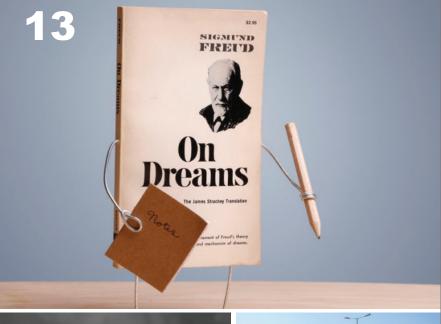
It is hardly surprising that a large section of wiredInUSA is devoted to the fair, with more than 1,300 exhibitors displaying the latest machines and technology to an anticipated 38,000 visitors and decision makers from around the world.

You can catch up with some of the American businesses heading to Germany in our special section on page 44. And if you are attending the show, feel free to stop by our booth 11D28 to say hello to members of the team and collect the latest issue of wiredInUSA on CD.

Another highlight in this issue is that the Brazilian government is investing some \$185m for an undersea fiber optic telecommunication link with Europe to increase security and reduce Internet costs. You can find the story on page 9.

David Bell Editor





06

**SHOW DIARY** 2014 and 2015

09

MAKING THE NEWS
Industry news from the USA







30

EUROPE NEWS

The latest news from Europe

36

INDUSTRY TRADE ASSOCIATION

Spotlight on awards, education and events

38

**ASIA & AFRICA NEWS** 

The latest news from Asia & Africa

44

WIRE DÜSSELDORF 7<sup>th</sup> - 11<sup>th</sup> April 2014

**62** 

PRODUCTS, MACHINES AND TECHNOLOGY

The latest news from machine industries



## DIARY SHOW EVENTS

2014

#### APRIL

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

#### MAY

6-7 May: Wire Expo 2014
Indianapolis, Indiana, USA
Exhibition
www.wirenet.org

14-15 May: National Electric Wire Processing Expo
Milwaukee, Wisconsin, USA
Exhibition
www.epishows.com

14-17 May: Lamiera Bologna, Italy Exhibition www.lamiera.net

#### JUNE

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

17-18 June: Polymers in Cables
Philadelphia, Pennsylvania, USA
Conference
www.amiplastics-na.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

#### **NOVEMBER**

TBA: IWCS
Rhode Island, USA
Conference and table top exhibition
www.iwcs.org

2015

#### APRIL

28-30 April: Interwire 2015 Atlanta, Georgia, USA Exhibition www.wirenet.org



#### **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**

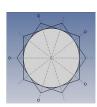
- Absolute diameter: ±0.2µm, 400Hz
- XY Positions ±0.1mm 1kHz
- 5 axes Lump & Neck: ±2µm, 3.6MHz sampling
- Coating asymmetry: 30Hz
- Internal defect detection: 800kHz (Airlines, bubbles, inclusions, delaminations...)



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 TIHENES

#### **Undersea to Europe**

The Brazilian government is anticipating that a future undersea fiber optic telecommunication link with Europe will increase security and reduce consumers' internet costs.

Construction of the submarine cable will begin in July, under a joint venture led by Brazil's Telebras and Spain's IslaLink Submarine Cables. The project is expected to cost \$185m.

"This new submarine cable provides a direct connection to the European continent, decreasing latency. It is expected that this will result in cost reductions," the coordinator of the submarine cabling project at Telebras, Ronald Valladão, told Deutsche Welle Brazil, adding that the savings to consumers could be as much as 15 percent.

Currently there is one aging and limited cable connecting Brazil to Europe, Atlantis II, almost exclusively used as a telephony link. Four submarine cables connect Brazil to the United States.

The new cable will link Portugal to the city of Fortaleza in the northeast of Brazil. The project was announced following reports that the National Security Agency in the United States had been spying on Brazil's telecommunications - the plan is to build links to carry Internet traffic between South America and Europe, bypassing the US.

Telebras maintains that the motivation for the undersea link was economic, with the added bonus of security, stressing that the cable project would have been built regardless of the NSA spying revelations.

## Fasteners acquisition

Fasteners manufacturer Semblex Corporation has announced its acquisition by Jinhap Co Ltd of South Korea.

Jinhap supplies fasteners, cold formed and machined special products to the global automotive industry. Founded in 1978, Jinhap is a 100 percent family owned company with annual revenues of approximately \$425m and employs over 1,200 people. The company has four manufacturing plants in South Korea and two plants in China (increasing to four during 2014).

The sale of Semblex, mandated by US tax regulations, follows a comprehensive effort by the previous owners, Haerther Trust, and company management to explore future ownership opportunities that would enable Semblex to continue its current business direction. The transition of ownership to Jinhap is believed to accomplish those objectives and brings long term stability to the business. No changes are planned to the Semblex organization or to the company's existing relationships with its bank, suppliers, product licensors, or other strategic alliance partners, including Agrati Group, a major European fastener company.

### 30 years in fiber

Fiber optic cable and accessories manufacturer AFL is celebrating its 30 year anniversary throughout 2014. AFL began operations in 1984 in Spartanburg, South Carolina where it manufactured optical ground wire for transmission lines. Through a combination of steady growth and acquisition AFL can now offer solutions for telecom, broadband, enterprise and electric utility to the oil and gas, mining and transportation sectors.

AFL is taking its celebrations into communities. Through its community outreach program, AFL associates are building a Habitat for Humanity home in Greer. The project, which will begin 1st March 2014 and continue until mid-June, will be built entirely by AFL associates, friends and family.

During April, AFL locations around the world will participate in the 30 Days of Service, giving back to their communities by participating in an ACT (AFL community team) service project, Take Root tree planting or other outreach initiative. In the fall, associates and their families will enjoy a family festival in recognition of their efforts over the years.

AFL started as a joint venture and in 2005 became wholly owned by Fujikura Ltd of Japan.

# 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

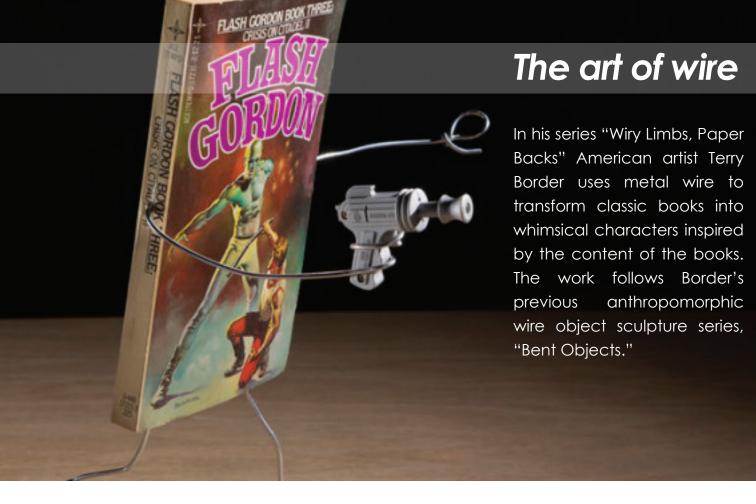


- Super high rate mode allows up to 15'000 measurements/s
- Up to 5 layer measurement (depending upon materials)
- Rapid die centring and production set-up

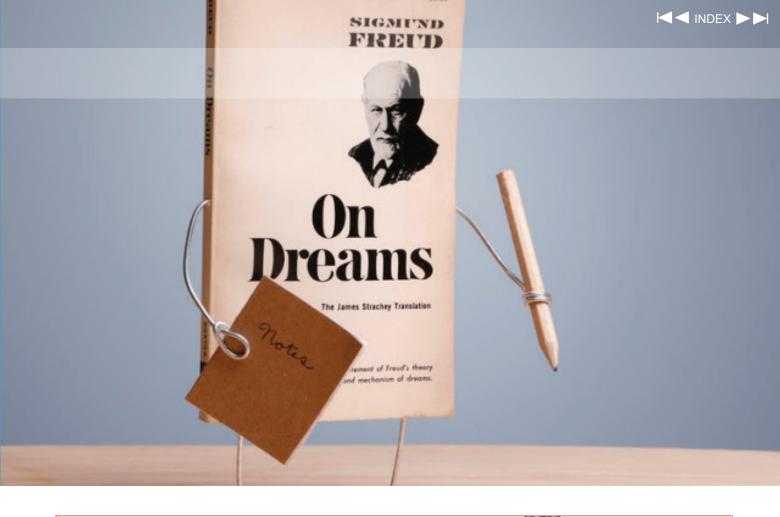


#### **ZUMBACH Electronics**

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











Beta LaserMike has appointed Desmond Goh as channel manager for Asia. Mr Goh will be responsible for managing and expanding sales channel operations for Beta LaserMike's measurement and control solutions.

"Desmond's deep understanding of channel management in southeast Asia, combined with his extensive business-to-business industrial sales and marketing background, makes for a powerful addition to Beta LaserMike's sales management team," said Stuart Manser, director of Asia sales for Beta LaserMike.

Mr Goh has over 12 years of business development and sales channel management experience in southeast Asia, with more than eight of those years in sales and marketing of sensor and control products. Most recently he was regional sales manager for Snap-on Tools, but he also has sales and management experience with RS Components, Schneider Electric, Carlo Gavazzi Automation, and Honeywell.





#### 2014 63RD IWCS CALL FOR PAPERS

**SUBMISSION DEADLINE APRIL 18, 2014** 

ASSEMBLIES

ASSEMBLIES

APPLICATION NETWORK PEER

CONNECTIVIT

PEER REVIEW

RHODE ISLAND
CONVENTION CENTER
I SABIN ST, PROVIDENCE, RI 02903
NOVEMBER 9-12, 2014

THE PREMIER TECHNOLOGY EVENT FOR THE CABLE AND CONNECTIVITY INDUSTRY



# New to the board

Omni Cable, an ESOP (employee stock ownership plan) company has appointed Dominic J Pileggi to its board of directors.

Mr Pileggi recently retired as chairman of Thomas & Betts Corporation, a position he held since January 2006. In addition to his chair responsibilities, Dominic has held other management positions at Thomas & Betts, including president, electrical products (2000-2003), chief operating officer (2003-2004), and CEO (2004-2012). Mr Pileggi also currently serves on the board of directors at ViaSystems and Acuity Brands.

Jeff Siegfried, president and chief executive officer of Omni Cable, said: "We are fortunate to have Dominic join our board and lend his experience and knowledge to our business. Dominic's mentorship will help develop our executive team and add deep insight into the markets that we serve." Pileggi has been appointed to serve on Omni Cable's compensation committee and will serve as lead director of its board.



# 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 North America 150 North Michigan Avenue Seitz 2920 Tol.capp. 11 60901 Tol. (312) 781-5180 Fax (312) 781-5188 E-mail: info@mdna.com

http://www.mcne.com

For hotel and travel arrangements: TIL Travel, Inc. Tel. (866) 674-3476 Fax (212) 676-3477





# **Expanding** reel estate

"We're outgrowing the space," said CEO Eric Hannay, so Hannay Reels is to extend its Westerlo, NY manufacturing complex by adding a larger steel and aluminum production facility. The \$800,000 project will incorporate a new production site, a drive-through delivery dock and a ten-ton crane to make raw material deliveries faster and easier.

The company receives two or three deliveries of tens of thousands of pounds

of steel and aluminum materials from regional suppliers every week.

Eric Hannay said sales of 85,000 reels during 2013 gave them the confidence to move forward with the expansion. The company anticipates sales of about 92,400 reels this year.

Construction is expected to begin in April 2014 and to be completed by August.

#### IN PRINT · ON-LINE · CD ROM · APPS



#### Leading magazines for the wire industries

www.read-eurowire.com / www.read-wca.com







Carey Realty Investments, based in Columbus, will invest \$10 million in the custom-built 355,000ft<sup>2</sup> facility, expected to be complete in late 2014.

"The Columbus region's proximity to key automotive customers provides a strategic location to continue to grow our operations," said Bick Marshall, vice president, Sumitomo Electric Wiring Systems Inc North America. "Consolidating all of our existing Marysville-based associates under one roof will create much greater efficiencies, and be beneficial to our workforce, our customers and our community."

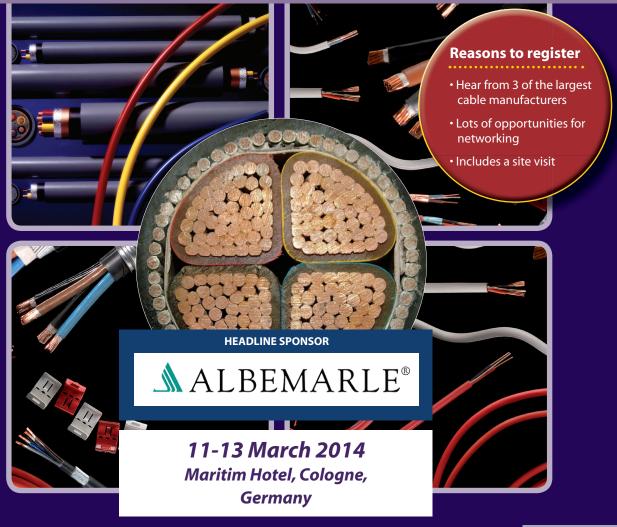
# Wiring manufacturer plans consolidation in Ohio

Sumitomo Electric Wiring System
Inc, a designer and manufacturer
of electronic systems for
the automotive industry, will
consolidate the company's four
Marysville, Ohio locations into a
single new facility. The move will
create 15 new jobs.

Owned by Japan-based Sumitomo Electric Industries Ltd and Sumitomo Wiring Systems, the firm's 15 extra jobs will be within the new testing facility to be added to Sumitomo's Columbus region operations. The company's four existing Ohio facilities, all located in Marysville, focus on customer service, development and repacking capabilities.



The international conference and exhibition for the plastic cable industry



Images courtesy of: ExxonMobil and Prysmian Group UK

\* + 19% German VAT

#### **SPECIAL OFFER**: Save €150\* if you register before 7th February 2014

















Also sponsored by:





# Medical elastomers advance

Minnesota Wire, a producer of cable assemblies for medical devices, has replaced the standard thermoplastic vulcanizate (TPV) elastomers with new styrenic thermoplastic elastomer (TPE-S) compounds from Teknor Apex Company. Minnesota Wire believes that the compounds, a series within Teknor Apex's Medalist® provide product range, improved performance (both initially and after autoclaving), superior processing, and an enhanced look and feel to the end product.

"We've tested the new Medalist compounds and found them to have better tensile and elongation properties than TPVs before autoclaving and to retain more of these properties after multiple autoclave cycles an important advantage in the many medical devices





# Southwire acquisition

Cubs Acquisition Corporation, a wholly owned subsidiary of Southwire Company, has successfully completed its previously announced tender offer for all outstanding shares of common stock of Coleman Cable Inc.

The offer expired on 10<sup>th</sup> February 2014 and following consummation of the offer, Southwire expected to complete the acquisition of Coleman through a merger. Upon completion of the merger, Coleman will become a wholly owned subsidiary of Southwire.

Stuart Thorn, CEO and president of Southwire, said: "Our team is looking forward to working together with Coleman to solidify our position at the forefront of the wire and cable industry, and continue providing world-class service to our customers. We are very excited to welcome our Coleman colleagues to the Southwire family and are motivated by the possibilities in front of us."

# General Cable results

General Cable Corporation has reported its results for the fourth quarter ended 31<sup>st</sup> December 2013. Excluding certain items, the company's reported earnings per share were \$0.27 and reported operating income was \$65 million.

Highlights include strong fourth quarter operating performance in all three segments, with near-record high volume in aerial transmission cable shipments in North America and Brazil. Submarine turnkey project business stabilization has continued and an operating cash flow of \$61 million exceeded expectations.

Gregory B Kenny, president and chief executive officer of General Cable, commented: "We are pleased to report a strong fourth quarter as adjusted operating income in North America and ROW exceeded our expectations. In North America, the performance of our electric utility and aluminum construction products businesses improved following a difficult third quarter.

"In ROW, our fourth quarter results reflect the benefit of aerial transmission product shipments in Brazil and infrastructure spending in Venezuela as well as the benefit of initiatives launched earlier this year to improve our inventory and service levels throughout central America. We are also encouraged by the continuing stability in Europe and Med where our submarine turnkey project business delivered another strong quarter. Overall, I am proud of the progress we made in 2013 as our associates' continuous focus on safety, quality, manufacturing and logistic costs, customer service and working capital management enabled us to overcome an uneven and challenging operating environment."

# Less waste - easier handling

General Cable has announced further measures to reduce the company's environmental footprint, in addition to existing comprehensive recycling and conservation programs.

Cardboard box packaging will be eliminated for Carol® brand portable cord products. Existing plastic spools that need to be contained within a box will be replaced by a durable, recyclable high-density polyethylene reel made from heavily recycled material. The reels will be stackable directly onto a pallet.

General Cable's new sturdier reels will include plastic wrap with labels

applied directly to the wrap, allowing a distributor to see the product where previously it was concealed within the box. Additionally, the new reels will ensure safer handling for all throughout the supply chain, with a standardized arbor hole on all reels to ease handling and pulling by contractors.

The reels will be stacked and shipped on pallets as before, and there will be little change in quantities or weights on each pallet.

General Cable is currently transitioning to the new reels and has cross-referenced part numbers for ease of ordering.







# ENGINEERING APPOINTMENT

Plastic extrusion-tooling manufacturer B&H Tool Company LLC (B&H) has appointed Scott Cameron as its new engineering manager. Before joining B&H, Mr Cameron worked in the irrigation tubing industry. He brings with him eighteen years of customer experience in extrusion processing, tooling design and manufacturing.

"Scott's experience in both engineering and manufacturing environments is a positive link to the growth opportunities we have for B&H Tool this year," said Peter Neville, president of B&H.

Mr Cameron holds a BS degree in mechanical engineering technology from Arizona State University and is a certified quality engineer (CQE). He will lead B&H's engineering function in tooling design and manufacturing and participate in the design and development of extrusion tooling solutions for customer applications. He will work directly with John Ulcej, director of engineering and manufacturing for new product development.

"It will be of great value to our customers contacting us to have someone who understands their issues and needs from their perspective," Mr Ulcej commented.



# Duties imposed on Indian rods

In early February Reuters reported that the US commerce department had set preliminary duties of up to 120 percent on imports of steel threaded rods from India. The report said the rods had been "dumped" in the US market at prices 8.63 percent to 119.87 percent below fair market value.

In 2013, imports of steel threaded rods from India were valued at an estimated \$19 million.

A final decision on duties is expected by July 2014 and will be subject to a ruling by the US international trade commission on whether the imports injure, or threaten to injure, domestic producers.

The United States has also launched a challenge to the domestic content requirements in India's solar program, claiming they discriminate against US companies.

# Streamlined website

S&E Specialty Polymers LLC has revamped its website to offer a streamlined and efficient method for accessing full technical information on the company's range of custom plastic compounds, concentrates and services. The site has been designed for easy navigation through products and services, as well as end markets and specific industries.

To coincide with the website launch, the company has introduced a blog and a Twitter account to keep its customers and interested parties fully informed on company and industry news and events.

"As we expand our capacity and our capabilities, we knew that we needed a more modern website to best reach out to new and potential customers," said Duane Shooltz, president of S&E. "We are very proud of the new site and think that it will not only help us attract new customers, but also help serve our existing customers even better than we already do."



# Frederich is the new sales director

Miltec UV Corporation has announced the appointment of Frederick Beu as its new global sales and marketing director. Fred has wide experience in growing market segments, having spent the last seven years developing new marketing strategies at Dynasplint.

Bob Blandford, president of Miltec said of the new appointment: "Fred will be responsible for all sales throughout the world for all Miltec products... He will also establish new sales strategies and programs to allow us to target key accounts and markets with the ultimate goal of growing our sales."

# Metal Clad appointment

RSCC Wire & Cable LLC has named Christopher Venice as its new vice president, sales, RSCC Wire & Cable, Down Hole Metal Clad, reporting to Graeme Young, vice president/general manager of the seament.

Mr Venice will be responsible for overall sales growth for the Down Hole Metal Clad business, which manufactures the Perma-TEC<sup>TM</sup> lines of specialized downhole instrument cables for the oil and gas industry. He has held several positions within the Marmon Engineered Wire & Cable Group, most recently as vice president of new operations and supply chain infrastructure. He holds an MBA from the University of New Haven.





#### Third refinery wiring contract

Indian producer Reliance Industries Ltd has awarded a major contract to Leoni for wiring at Jamnagar, thought to be the world's largest oil and gas refinery.

Reliance has commissioned Leoni to supply the third expansion stage of its Gujarat refinery with instrumentation and field bus cable for measurement and control equipment. Leoni previously equipped the first two construction phases of the refinery plant with specialized cables from Leoni's facility in Stolberg, Germany.

Leoni will manufacture half of the ordered products at its plant in Pune, while 80 percent of the contract will be manufactured and delivered before the end of 2014.

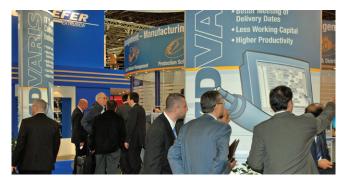


#### Bulgaria building a border

A planned 30km fence at the border between Bulgaria and Turkey will require 600km razor wire, 12,000 posts, 4,000m³ concrete and 30km chain-link fencing. The fence was planned last autumn as a measure against illegal border crossings of people seeking asylum in Bulgaria.

Discrepancies in the original cost estimates have prompted the Bulgarian prime minister, Plamen Oresharski, to order a full financial audit of the project. "Each eventual misuse of money for the construction of the border fence will be considered marauding," minister of defence Naydenov told Bulgaria's public broadcaster, BNT. "There will be no compromise."

According to Naydenov the construction will be completed this spring. The project attracted criticism from the EU and the UN, insisting that the planned measure for limiting the access of refugees to Bulgaria violates international law.



#### Data management partnership

Cortaillod Advaris and **AFSA** are joining forces to fulfill the specific data management needs of the wire and cable industry. The product ranges of the two companies are largely complementary, and this cooperation and combination of skills, knowledge and products is expected to result in providing a complete, integrated and professional solution, exactly suited to this specific market. Both companies will offer the combined solutions to their respective customers.

Advaris software is based on a highly flexible modular system incorporating specific functions, starting from the cable design to the billing, through manufacturing execution system, resource planning and production orders management. It is said to combine the advantages of individual development with those of a standard software package.

AESA Cortaillod provides a comprehensive range of test systems and a data capture and management system for the cable industry. Central database and evaluation functions help to enhance the quality management and production performance.



#### Laboratory granted certification

Alstom has obtained ISO/IEC 17025 certification from the accreditation body Accredia for its center of excellence high voltage equipment testing laboratory in Noventa di Piave, Italy. The certification for the research and development laboratory is claimed to be the first in Italy to obtain the accreditation.

The laboratory will supply independent testing services and internationally valid certification for products that lead to improving HVDC transmission lines.

The test chamber, which has been a part of the Noventa di Piave plant since 1973, conducts electrical, heating and mechanical tests of energy transmission and distribution equipment, as well as components used in supergrids. At the new laboratory, tests include industrial frequency voltage tests up to 640kV root mean square (rms), atmospheric impulse tests up to 1.8MV, maneuver impulse tests up to 1.2MV, and radio interference voltage (RIV) tests up to 640kV rms.



#### Wire rope workshop

The international marine contractors association (IMCA) wire rope work group will hold the fourth in its current series of wire rope workshops on 18<sup>th</sup> March 2014 at the Radisson Blu Hotel at Amsterdam Airport.

The series, entitled "Optimum system design for high value subsea construction ropes", has proved very successful. IMCA's technical director, Jane Bugler, commented: "Over 90 [delegates] attended the last workshop in Amsterdam in October, which focused on the lubrication of high value subsea construction ropes; others have looked at high value wire rope issues, and at non-destructive testing."

The March event will embrace the operators' view of current and future system requirements; the system designer's approach for wire rope interaction (storage, routing, winches, sheaves and active heave systems); rope qualification methods for specific systems; fully integrated monitoring systems and interaction with rope systems; and multi-fail and parallel winch systems in deep water.



#### Reinforcing Norway's network

Norway's power supply network will be reinforced by a major new 420kV connection between Mongstad and Kollsnes. Crossing two fjords, Hjeltefjorden and Lurefjorden, Nexans will install what is believed to be the world's longest and deepest deployment of XLPE insulated submarine cables in a contract for the utility BKK Nett AS, worth around €78 million.

BKK Nett AS is building the new connection to reinforce the power grid in the west of the country. The new power line is essential to ensure security of supply for the forecast growth in consumption by residents, businesses and industrial consumers in the Bergen region, which is an important growth area. It will also provide additional capacity for the grid connection of new generation resources.

The total length of the new 420kV Mongstad to Kollsnes connection will be around 30km. On land, overhead lines will carry the power, but the majority of the route will demand submarine cables.



#### KTS gets Swedish parent

UK's Yorkshire-based KTS Wire has been acquired by a supplier of advanced spring wire products. The Morley-based company's management team, led by managing director Steve Longbottom, will remain in place following the company's sale to Sweden's Suzuki Garphyttan AB, part of the Suzuki Garphyttan Group.

KTS Wire manufactures plain carbon, alloy, rolled and shaped wires, using raw and recycled materials. It exports to a number of countries, including France, Greece, Poland, Nigeria, Turkey, Lebanon and the USA.



#### Power to the grid

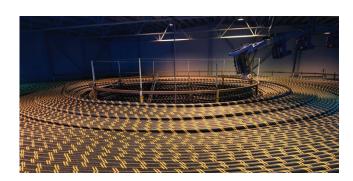
Canadian Hydro-Québec has placed an order with ABB for \$60m to replace major components of the ultra-high voltage transmission system that supplies clean electricity from North to South Quebec. ABB will be responsible for upgrading two Static Var Compensators (SVC) at the Albanel substation, located about 500km north of Montreal.

The substation is said to provide fast-acting reactive power compensation for the 735kV power transmission network. The upgrades will be completed by 2016.

SVCs are said to be part of the company's family of FACTS (flexible alternating current transmission systems) technologies that improve the capacity and flexibility of power transmission systems.

According to ABB, SVCs are helpful during fluctuations in the voltage and current of an electric grid, allowing more electricity to flow through the transmission system while maintaining network safety and stability.

FACTS solutions have been developed to allow more electricity to reach consumers through the existing transmission network.



#### New UK cables contracts

Dudgeon Offshore Wind Ltd, a joint venture backed by Norwegian companies Statoil and Statkraft, has signed a \$55m contract with ABB for a new AC power cable system to connect the wind farm, 32km off the Norfolk coast, with the national grid.

The 400MW Dudgeon offshore wind farm is one of the largest to be built in British waters. Subsea cables will connect the wind farm to the land, and an underground cable will connect to a purpose-built substation at Necton, where the power will be fed into the national grid. Two 132kV three-core AC submarine cables, of 42km each, will be laid along the seabed.

ABB's announcement was made the same day as the offshore wind industry services provider CWind revealed it had won a contract to support CT Offshore in the installation of 63 of the 161 inter-array cables at the 576MW Gwynt y Môr wind farm off the North Wales coast. Colin Urquhart, operations director at CWind, explained that the contract follows other similar work: "Over the last few years we have provided cable pulling and repair support at several UK offshore wind farms, including Barrow, Greater Gabbard, Lincs, Ormonde, Thanet, Walney 1 and West of Duddon Sands."

# >





#### IWMA standing proud at wire 2014

The IWMA is again proud to be a main international industry partner of the wire 2014 exhibition in Düsseldorf from 7<sup>th</sup> to 11<sup>th</sup> April, and will have its usual stand number **11D26 in hall 11**, ready to provide members an extensive range of services, for those exhibiting and visiting the event.

Members are welcome to visit the stand for some welcome refreshments and a discussion with board members and staff about how membership can assist their business in the global market.

The IWMA stand will also offer members a comprehensive office service, with Internet, telephone, printing and photocopying facilities available, as well as a meeting room for those requiring a quieter environment for business discussions.

Members attending the exhibition are also invited to the prestigious reception and dinner, which will take place in the Süd Room 2 at the Messe Düsseldorf Congress Centre on Tuesday, 8th April 2014 from 6.15pm, enabling guests to come directly from the exhibition floor. Business attire will therefore be the dress code for the evening.

This event will be marked by a pre-dinner cocktail reception followed by a four-course dinner with wines. Every IWMA member organization can order up to two free tickets for the dinner and purchase additional tickets, subject to availability.

However, ticket applications will be on a first-come, first-served basis and members are invited to book by contacting the IWMA at <a href="mailto:info@iwma.org">info@iwma.org</a> for a form.





Proud industry partner of wire 2014

Visit us on stand 11D-26

Members benefit from:

- CONFERENCES, EDUCATIONAL SEMINARS AND EVENTS providing an international forum for the exchange of technological advances
- **EXCELLENT REFERENCE SOURCES** from an extensive library of past papers
- **PROMOTIONAL OPPORTUNITIES** through "Wire & Cable News" newsletter and wirefirst.com
- FUNDING FOR NEW SKILLS AND EXPERIENCE through both the Educational Trust Fund and Travel Award scheme
- Website: www.iwma.org
- Email: info@iwma.org
- **Tel**: +44 1926 834680





# Solar station power

Delhi Metro has become the country's first mass transit system to install solar power plants on the roofs of its stations. The first 500KW roof top solar power plant is under construction at Dwarka Sector 21 metro station and is expected to be functional within six months.

A power purchase agreement (PPA) for the plant was signed between Delhi Metro Rail Corporation (DMRC) and the developer, a multinational firm engaged in the installation and production of solar power worldwide, in the presence of DMRC's managing director, Mangu Singh and other officials.

DMRC will pay for the units generated by the plant while the capital investment is provided

by the developer. The power produced will meet the power requirements of the station.

"After the installation of this roof top plant, Delhi Metro will also explore the possibility of installing more such plants at its stations, depots, parking lots as well as residential complexes," said executive director of corporate communication, Anuj Dayal.

In 2011, DMRC was certified by the UN as the first metro rail and rail-based system in the world to earn carbon credits for reducing greenhouse gas emissions.



# Cleanenergy in major expansion

Hindustan Cleanenergy Ltd, part of Hindustan Power Projects Ltd, is undertaking a major expansion plan. The company is aiming for an installed capacity of over 500MW of solar power generation by the end of 2014, increasing to 1,000MW by 2016.

Of the 350MW installed to date about 120MW solar capacity is at overseas locations in Germany, Italy, the UK and Japan. In the expansion process now underway, about 100MW capacity is at an advanced stage of implementation and will be added shortly. Of this, around 50MW is in Gujarat and the rest in other states, including Madhya Pradesh, explained Rajya Wardhan Ghei, chief executive officer of Hindustan Cleanenergy.



## Utility-scale solar for Rwanda

Work has begun on the construction of East Africa's first utility-scale solar PV plant. The 8.5MW plant, which, once complete, will generate 8 percent of Rwanda's electricity, is being built on land belonging to Agahozo-Shalom youth village.

The Rwandan government's own objective is for a five-fold increase in renewable sources of power by 2017. The solar field will feed electricity into the national grid under a 25-year power purchase agreement with the Rwanda energy, water and sanitation authority (EWSA) and is expected to be operational before the end of the year.

The \$24 million project was announced by Yosef Abramowitz, the president of Gigawatt Global Coöperatief, which arranged for its financing.

Agahozo-Shalom youth village is leasing the land, and some of the fees generated will be used to help fund the charity's ongoing activities. The village was built to take care of orphans of the 1994 genocide against the Tutsi. It was founded by the late Anne Heyman, who died in January following a horse riding accident.



# Fastener exports down in 2013

Jiaxing's fastener exports declined 6.59 percent to \$900 million during 2013, accounting for 4 percent of the city's total export value.

Europe and the US have previously been Jiaxing's main fastener markets. However, exports to these markets declined 4.5 percent to \$390 million, representing 44 percent of the total fastener exports (exports to the US dropped 9 percent to \$210 million, while exports to the EU increased 1 percent to \$180 million).

Exports to the emerging markets increased, with some strong growth to developed countries. Jiaxing's fastener exports to Russia, Brazil, India, South Africa, and ASEAN amounted to \$200 million, accounting for 22 percent of the total fastener exports. Exports to Japan, Germany, Italy, the Netherlands, Sweden and Singapore rose 11 percent, 7 percent, 7 percent, 12 percent, 33 percent and 10 percent, respectively.

Fastener export prices varied. The average export price for steel or iron fasteners decreased 4 percent to \$1,309 per ton. The price for copper fasteners increased 11 percent to \$11,106 per ton and for aluminum fasteners grew 5 percent to \$2,471 per ton.



# South-east Asia's longest undersea cable

Prysmian Group has completed operations for the construction and execution of a submarine power cable link to connect Phu Quoc Island to the national power grid in Vietnam.

Phu Quoc Island is situated 45km west of Ha Tien town, Kien Giang province in southern Vietnam. The submarine cable link will play a major role in the province's 2020 socio-economic development plan aimed at making Phu Quoc Island into a special administrative-economic zone by the end of the decade. The Phu Quoc link is the first submarine power cable link installed by a utility company in Vietnam, and at 56km is south-east Asia's longest undersea cable system.

The Phu Quoc cable connection comprises three 630mm<sup>2</sup> 110kV copper, single wire armored XLPE insulated submarine cables, installed by the Prysmian cable laying vessel "Cable Enterprise". Prysmian completed the project ahead of schedule, after only two months, and just in time to begin operation on the occasion of the 2014 Lunar New Year holiday.



#### FIIs invest in cable

The cable manufacturer Shilpi Cable is issuing equity shares on a preferential basis to two foreign institutional investors – Aspire Emerging Fund and Highbluesky Emerging Market Fund.

Aspire, a sub-account of Vaibhav Investments Ltd, will pick up a 5.33 percent stake, with Highbluesky taking a 9.9 percent interest in the company.

At an EGM, held by Shilpi Cable on 24<sup>th</sup> January, the company announced it will also issue shares to Leman Diversified Fund and Dayos International Fund.

Shilpi Cable, part of the Shilpi group, manufactures RF cables and a range of cables used in the telecommunications, automotive and energy sectors.



## **JFE integration**

JFE Steel Corporation and JFE Bars & Shapes Corporation of Japan are planning to integrate their bar and wire rod businesses from April 2014.

At present the JFE Steel Group has two separate bar and wire rod units, one at JFE Steel and the other at JFE Bars & Shapes (an electric steelmaking business). The company claims that integration "will strengthen sales in overseas markets including Asia and North America, where increased demand is envisioned for high-quality steel, mainly for automobiles and construction machinery".

It is hoped that, by integration, the JFE Group will be more competitive against other domestic and overseas producers.



### **Network expansion**

Seacom has revealed its intention to invest in terrestrial backhaul and additional subsea connectivity in line with its commitment to provide customers with resilient services and promote further growth of the continent's telecoms infrastructure.

Seacom has upgraded its South African backhaul networks, linking its west and east coast cable assets through activation of multiple wavelengths between Johannesburg and Cape Town, coupled with upgrades of the network platforms that support its services to major cable interconnection hubs in Yzterfontein and Mtunzini. In addition, Seacom has acquired additional west coast subsea capacity to meet demand from both its transmission and IP/MPLS customers.

Officials said strong adoption of Seacom's MPLS and IP transit services had also prompted the company to upgrade its IP/MPLS network across Africa, Europe and Asia.

Seacom is in the final stages of negotiating contracts with vendors for the rollout of an enhanced services platform, intended to keep Seacom at the forefront of African data connectivity.

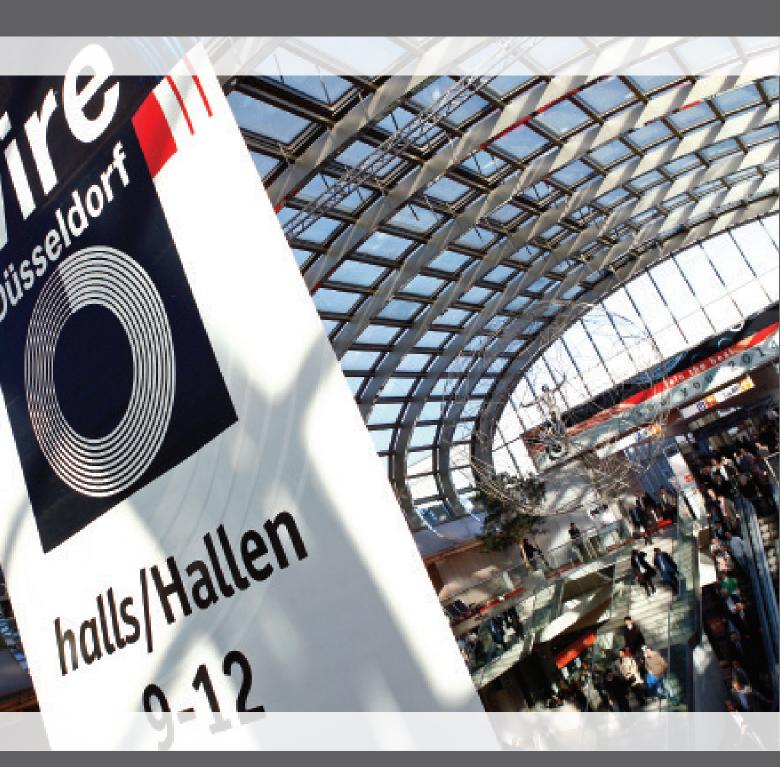


## **Undersea from Tripoli**

Alcatel-Lucent has signed a turnkey contract with the Libyan International Telecommunication Company (LITC) to build a 1,000km undersea cable system linking Libya's capital, Tripoli, to Benghazi.

The system is designed to play a critical role in the reconstruction of Libya's telecom infrastructure, improving connectivity and providing communication reliability for business, public sector and consumer applications, particularly at when global demand for broadband services continues to grow. Based on Alcatel-Lucent's 100G technology and a cable optimized with coherent submarine fiber, the system will ultimately carry capacity in excess of 10Tbit/s per fiber pair and is expected to be completed in mid-2015.

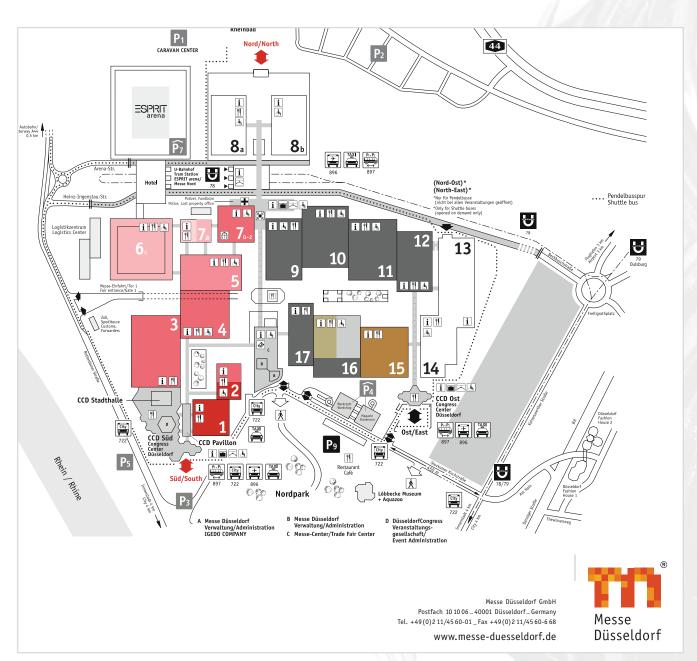
Dr Mohmoud Aujali, chairman of LITC, said: "Broadband connectivity is a major growth opportunity for the foreseeable future, and the development of a robust telecommunication infrastructure is vital. With the help of Alcatel-Lucent, our new submarine cable system promises a significant contribution to the overall developments that are being undertaken to improve standard of living for Libyans."



# wire Düsseldorf

Düsseldorf, Germany

The No. 1 trade fair for the wire and cable industry! Meet the international world of experts, the specialists, the innovators and the global market leaders in the industry.





www.wire.de

Halls Hallen 9-12, 16, 17

Wire, Cable and Fibre Optic Machinery,
Wire and Cable Production and Trade

Wire and Cable Production and Trade/ Draht-, Kabel- und Glasfasermaschinen, Draht- und Kabelproduktion und -handel

Hall Halle 15

Fastener Technology / Umformtechnik

Hall Halle 16

Mesh Welding Machinery / Gitterschweißmaschinen

Hall Halle 16

Springmaking /
Federfertigungstechnik

# Aphabetical list of exhibitors

Please visit www.wire.de or email info@wire.de (Exhibitors list correct at time of going live)

Download the wire Düsseldorf 2014 brochure here

#### AIM Inc

Booth: 11A25

AIM will demonstrate the latest innovations in wire bending technology and automation. Modular, fast and dependable equipment powered with the latest technology suitable for companies that grow with their markets.

AIM Inc - USA

Website: www.aimmachines.com

-----

#### **Aztech Lubricants**

Booth: 09F20

Aztech Lubricants is a global provider of wire drawing and lubricant solutions. With over 125 years of cumulative expertise, it excels at providing a full line of calcium, sodium and potassium stearate-based drawing powders, RP oil, drawing oils and precoats.

Its key name brands will be showcased at this year's show, including EZDraw, EZClean and EZCoat. Additionally, Aztech offers a complete line of AZWipe spiral brushes. It has manufacturing and distribution capabilities in the USA, South America and Asia.

Aztech Lubricants – USA Website: www.aztechlube.com

-----

#### Beta LaserMike

Booth: 11D72

BetaLaserMike, aglobal provider of precision measurement and control solutions, will

showcase several new offerings from its product lineup.



AccuScan 5000 from Beta LaserMike

The company will feature its solutions for in-process dimensional monitoring and control, as well as for automated cable testing. Among these will be the ultra-fast AccuScan 5000 Series gauges, 3-axis LN3040 lump and neckdown detector, Excess Fibre Length (EFL) measurement system, and the recently patented LayScan lay length measurement system.

Highlights include its newest products, such as:

Ultra-fast AccuScan 5000 Series: These dual-axis gauges perform high-speed diameter and ovality measurements at 2,400 scans per second per axis and provide the fastest single-scan accuracy in the industry. The improvements in the single-scan calibration algorithm ensure each scan is highly accurate and reliable. The high-speed tolerance checking option permits the early and precise detection of lumps and necks to eliminate costly

product waste. The STAC (stranded, twisted, armoured and corrugated) logic software option provides accurate max/min OD or enveloped readings at a higher rate, allowing for faster process control of complex cable constructions. AccuScan gauges effectively measure transparent, translucent and opaque products up to 80mm in diameter. All gauges offer highly flexible communications including RS-232, Ethernet/IP, Ethernet TCP/IP, DeviceNet, Profibus, Profinet, CANOpen, analogue and digital.

LN30403-axis lump and neckdown detector: The new LN3040 quickly and reliably spots product flaws before they become costly production problems. Fast-sensing and processing technology instantly detects sudden changes in the product diameter to effectively catch the smallest of flaws. The LN3040 measures product diameters up to 40mm and detects flaw height down to 0.05mm at line speeds up to 3,000m/min. It is designed with a user-friendly operator interface, accepts a range of inputs, and provides highly flexible communications such as RS-232, Ethernet/IP, DeviceNet, Profibus, and Profinet.

LayScan lay length measurement system: The latest version of LayScan solves scrap, costly rework, and productivity loss problems due to manual, time-consuming lay length measurement methods and crosstalk performance issues from lay variations. LayScan enables manufacturers to simultaneously measure four pairs at the cabler and twinner to confirm the accuracy of twisted-pair cable construction during production. A data acquisition and control system effectively collects and processes

each lay length and allows off-line analysis tools such as trend charts, statistical analysis or FFT analysis to readily observe, measure and report systematic lay variations. The LayScan system measures lay lengths up to 25.4mm at speeds up to 152.4m/min with 0.025mm accuracy.

EFL measurement system: Beta LaserMike's latest EFL measurement system enables manufacturers to efficiently, accurately and reliably produce loose tube fibre and fibre ribbon cable. It does this by effectively controlling the excess fibre length to make sure the fibre-to-jacket ratio of product meets exact production specifications. This eliminates time-consuming costly techniques such as cutting cable, and exposing and cleaning cable fibres to measure product and calculate the excess fibre length-to-jacket ratio. The EFL measurement system integrates Beta LaserMike's LaserSpeed® length and speed gauges and EFLTrak<sup>TM</sup> software.

In addition to its in-process measurement systems, Beta LaserMike will present its line of DCM automated cable testing solutions. The company offers both bench-top and fully integrated turnkey solutions for accurately and reliably testing LAN/data, telecom, coaxial, and aerospace/defence cables. DCM cable testing systems enable cable makers to test more cable faster for higher quality results.

Beta	Lase	erMike –	USA	
Web	site:	www.be	talaserm	ike.com

-----

#### **Blachford**

Booth: 09D14-01

Blachford has been supplying the global wire drawing industry and many of the world's largest wire drawing companies since the 1950s with cost effective, meticulously researched, and innovative wire drawing lubricant programmes that are tailored to the exacting technical specifications of its customers' processes.



Blachford has been supplying the wire industry since the 1950s

Blachford is known for being an innovator and solutions provider, and for continuous research of new technologies that aid in the production of wire.

The company's reputation for developing lubricant products and programmes that precisely match its customers' technical process requirements is well earned because new lubricant product design is one of its core competencies.

Its field engineers and experienced research and development team work closely with customers to fully understand each application's technical requirements. Then, working together, the customer's field engineers and Blachford's R&D team

design products and programmes that meet the specific goals.

The company is dedicated in its commitment to ISO 9001 approved product quality. Dr John Blachford, the owner, is well known throughout the chemical industry for his promotion of Responsible Care® and the necessity for his companies to act as responsible corporate citizens. The team is committed to working with its customers to ensure optimum product performance and to use its products in a responsible way.

Whether working to develop products that impart specific finished wire characteristics, or to enable customers to produce more quality tons faster and less expensively, Blachford's unique combination of data-driven product design and customer-focused approach helps to give its customers a competitive edge.

Blachford – USA Website: www.blachford.com

-----

#### **Clinton Instrument Company**

Booth: 09E38

The Clinton Instrument Company introduces an addition to the STCAL spark test calibration system: the SM sensitivity module. This equipment checks the spark tester's fault detection sensitivity and assures compliance with EN50356 (IEC/CEI 62230).

The unit utilises a rotating spark gap that controls arc duration and gap distance. When the test is initiated, the SM produces a

specific number of controlled faults, which the spark tester must correctly identify to meet the norm.



The SM sensitivity module from Clinton Instrument Company

Once the procedure begins, the SM completes the specified number of faults without additional operator input. The sensitivity module works with high frequency, power mains frequency, and DC spark testers of any manufacturer.

The SM is compact and portable, making it easy to check spark testers while they are installed on the wire line. The operator simply selects the type of spark tester to be checked and will then have visual confirmation via a front panel digital display of the detection current and number of faults produced.

The SM is offered as an accessory to the STCAL spark test voltage calibration system, which performs voltage calibrations of the most common spark test units including AC (mains and high frequency) and DC equipment, easily calibrating spark test voltages up to 30KV AC and 40KV DC.

The operator interface is a Windows 8 tablet computer that controls the process and can download the Calibration Certificate to a memory stick through the onboard USB port. The certificate can then be printed and kept for historical use in any computer.

Combined use of the STCAL spark test calibration system and SM sensitivity module assures the operator that the spark tester complies with all known specifications.

Clinton Instrument Company – USA Website: www.cicsparkers.com

#### Die Quip

Booth: 09D06-01

The goal of making more wire per die is easily reached with a Die Quip die finishing machine. As a global manufacturer, the company has established a line of machines to grind, polish and size dies in a quick, efficient, accurate process eliminating operator error and guesswork.



The MGF-200 Die Saver from Die Quip

Better dies pull more wire and cause less production problems so Die Quip designed stand-alone machines for finishing dies in all sizes, and for larger production runs it can build work cells to keep maximum efficiency and eliminate downtime from size changeovers. Its approach to a modern die shop brings huge benefits to the whole production process by implementing a workflow system that sets procedures and incorporates training to maximise each machine's capabilities.

The company has designed many extensive training options and on-site consultations that teach operators how to use its equipment, choose diamond tooling for maximum results and different methods of making dies. Technicians can spend time in customer facilities designing a programme customised to meet production needs and provide reference materials such as the exclusive die training handbook.

Die Quip supports its customers through installation, training and troubleshooting for the life of the machine.

Die Quip – USA

Website: www.diequip.com

-----

#### Fiber-Line

Booth: 09E70

Fiber-Line will exhibit featured products and technologies. The company utilises its processing and coating technology expertise to add performance to high performance fibres like aramid (Kevlar®), PBO, polyester, fibreglass, and carbon. The fibres provide greater differentiation and productivity improvements – enabling thinner, stronger and lighter products.

The company offers an extensive line of strength members, ripcords, binders, fillers, FRP, FRP upjacketing, extruded products and performance-enhancing coatings. Showcased at this show will be a new line of strength members, SyntheticWire™ for ropes, cords and cables. These products create a more stable cable that lasts longer and has a reduced failure rate.

Fiber-Line Inc – USA

Website: www.fiber-line.com

-----

#### **Gem Gravure**

Booth: 16A31

GEM Gravure is the exclusive distributor for KBA-Metronic product identification equipment in the United States and



PTFE inks from GEM Gravure

Canada. As such, GEM staff will join KBA-Metronic staff as co-exhibitors. A visit to the stand will be an opportunity to see the latest in continuous ink jet printers well suited for wire and cable applications.

It will also be a chance to discuss the latest ink innovations from GEM. The new high temperature ink jet inks for marking BKG7761 Black Ink and GNG7765 green ink are growing in popularity. They are used for marking FEP, ETFE and PTFE prior to sintering. This type of printing has historically been done with contact markers without the option of variable information, or serialisation.

Anothernewink offering from GEM, BLG 1866, is an aqua coloured ink for all colours of wire. It provides exceptional adhesion to a variety of jacketing materials. A sister ink to WTG 1860 white wire harness ink, the new blue ink's popularity has grown rapidly.

GEM Gravure Co Inc – USA Website: www.gemgravure.com

**Huestis Industrial** 

Booth: 09F05-01



Stephen Bettencourt, left, and Howard Fancher, of Huestis, at a previous Düsseldorf exhibition

Huestis Industrial manufactures high quality machines and ancillary equipment for the wire and cable industry. It will exhibit the company's latest technology as well as standard models of Huestis Air Miser air wipes, and cable jacket strippers, as well as literature of all of its machines and product lines. Stand personnel will be able to handle all requests and enquiries.

Huestis Industrial Inc – USA
Website: www.huestisindustrial.com

#### InfoSight

Booth: 06G21

InfoSight addresses many marking challenges for the wire, pipe, tube and steel industries – helping manufacturers reduce costs, increase product traceability and eliminate errors.

It is now possible to track the entire wire production process with one barcoded tag – from beginning to end – without re-attachment and without re-identification after the pickling and/or annealing process.

#### Barcoding provides:

- Improved traceability of each piece back to the parent material
- Automatic data collection during processing
- Error proofing and tracking
- Inventory accuracy and improved efficiency in taking inventory
- Improved shipping accuracy
- Field identification

Plastic and paper tags used in the past had the potential to make the inventory process easier with their ability to hold barcoded information, virtually eliminating human error. These tags were able to survive the process of pickling for periods of up to 90 minutes. However, when it came to the process of annealing, at temperatures of 1,400°F (760°C) or greater, these tags would vanish in a puff of smoke. Applying tags after the annealing process meant a wait of several days until the coils cooled. This opened the door to more potential for human error.



Early metal tags survived through the annealing process, but in some cases would not withstand the pickling. They required noisy stamping machines that were difficult and expensive to maintain.

One of the tags produced by InfoSight

Barcoding systems for metal tags were not suitable for all industrial applications. This meant the use of manual inventory control, which again meant the risk of human error.

InfoSight created the first non-contact, laser-markable tag system in 1995. The next step in the process was developing tags that would survive the many different annealing and pickling processes utilised by the world's wire manufacturers. InfoSight developed the Pic-Anneal® laser printable tag. The Pic-Anneal® tag has a two-hour resistance to acid baths of 20% H<sub>2</sub>SO<sub>4</sub> at 180°F (82°C) and 24% HCL at 100°F (38°C). It also withstands 1,400°F heat for 48 hours and 1,800°F (1,000°C) for two hours.

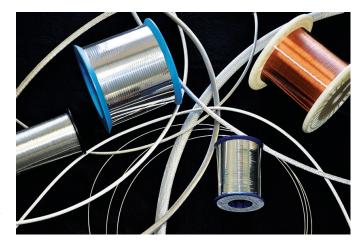
The Pic-Anneal® Laser-Marked tags measure 3" wide and a slot or hole is punched near the top for easy attaching to wire coils. The tags are marked with a  $\mathrm{CO}_2$  laser, resulting in black print across the white surface. The barcodes printed on the tags are readable by standard barcode readers.

InfoSight supplies a full selection of metal tags – all designed to withstand harsh manufacturing environments. These can be custom size and pre-print metal tags to cover most customer specifications. InfoSight also offers a line of laser printers which allow customers to print their own metal tags and to change their layout and barcodes, as needed.

InfoSight Corp – USA Website: www.infosight.com

#### **IWG High Performance Conductors**

Booth: 09B56



On display from IWG High Performance Conductors

IWG High Performance Conductors will be displaying high performance and high temperature conductor applications: silver and nickel-plated copper and high strength copper alloy conductors (tensile flex, RoHS compliant 35 EF, 80EF, CS95), bare and tinned copper wire.

Also on show will be single end, bobbin wound, flat wire, stranded and rope-lay constructions, lightweight/tight tolerance constructions, used in aerospace, space, medical electronics, defence, industrial markets, tinsel wire and thermocouple alloys.

MinVasive components in the medical product line include micro-diameter, hybrid, polyimide, thermoplastics and fluoropolymers tubing.

# IWG High Perfomance Conductors – USA Website: www.iwghpc.com

-----

#### **KEIR Manufacturing**

Booth: 10C63

Keir Manufacturing Inc is an Americanbased manufacturer of high-purity 99.8 per cent Alumina ceramic guides, the Frontiersman<sup>TM</sup> line of air wipes, and composite flyer bows serving the global wire and cable industry.

The company is dedicated to making products that enable manufacturing processes to run more efficiently and productively through the application of leading edge materials. Its solutions are focused on continuous process improvement, energy savings, and longer operating life.

Keir's patented SureShot and SplitShot air wipes provide an effective drying method that does not depend on high-volume air consumption. The efficient design yields effective drying using a very low volume of compressed air and lasts longer due to the rugged ceramic insert lining the wire path. This equates to over 25 per cent reduction in compressed air usage and an operating life of years versus months.



A split shot air wipe from Keir

Keir's triaxially braided composite Standard and BackBone™ flyer bow constructions have greater durability than layered/laminated designs allowing them to take more hits and endure higher stress, yielding increased operating life and less machine downtime.

The more aerodynamic BackBone<sup>™</sup> design functions at lower power consumption and higher TPM with improved wire quality and a further reduction in bow breakage. Up to 40 per cent less energy (AMPS) is used along with a decrease in wire scrapped.

Keir Manufacturing Inc – USA Website: www.keirmfg.com

- - - - - - - - - - - - - - -

#### **Madem Group**

Booth: 12E08

Headquartered in Brazil, Madem Group has forests, saw mills and manufacturing plants in Brazil, Spain and Bahrain, producing more than 400 containers/trucks of knock down reels per month.

The company has 65 years' experience and more than 400 employees.

Madem Group – Brazil

Website: www.madem.com.br

-----

#### **Mathiasen Machinery**

Booth: 12A52

Mathiasen Machinery buys and sells used wire and cable machinery internationally. Machinery is purchased for inventory or it can be sold on an exclusive basis. MMI has interest in locating individual machines, complete lines or entire plants.



A wide range of photographs of second hand machinery will be on the Mathiasen Machinery stand

Consignments, warehousing, appraisals and liquidation services are also offered. MMI has buyers seeking all types of good

quality used wire and cable machinery, serving the domestic and international ferrous and non-ferrous wire machinery markets.

Its stand will display photographs of a wide variety of second hand machinery. Customers are asked to bring their surplus machinery list and photos for evaluation.

Mathiasen Machinery Inc – USA Website: www.mathiasen-machinery.com

-----

#### **Paramount Die**

Booth: 10D37

Paramount Die is more than just a die company with its sales engineers averaging over 20 years of experience in the wire industry. In addition to helping its customers with their die needs, Paramount also offers expertise in all areas of the wire drawing process.

Several wire industry trends have dramatically shaped the company's development over the past ten years. Perhaps the most dramatic has been the ever-growing trend for wire drawers to outsource their finished die requirements.

As this has caused wire drawers to become somewhat more dependent on die suppliers, great pressure has been placed on the company to increase capacity for die finishing, to reduce finished die costs, and to improve lead times.

Paramount has been able to reduce die costs by standardising on cost-effective carbide inserts and by increasing quality and capacity through automation. It is Paramount Die Company - USA working to take the human factor out of the manufacturing process.

Many of its highly automated machines now run on "lights out operation" meaning that they will continue to produce product as long as there is raw material being fed into the system. This not only improves the production output, but also the quality (eliminating the human error aspect). Paramount's highly automated production equipment combines high volume speed and efficiency with superior accuracy and repeatability. Average lead times have been reduced from three weeks to just less than five days by investing heavily in finished inventory.

As the company continues to grow domestically and globally as a high quality, high volume producer of carbide drawing dies, it becomes very important for it to continually invest in new manufacturing and innovative technology.

It is leading the way on another industry trend, "eco-friendly products". Paramount is a leader supplying eco-friendly products to the wire industry. Its die design allows the carbide insert to be easily recycled and many of its customers worldwide participate in this programme.

It will exhibit a full line of wire drawing dies and related equipment. Products featured will be the TR-Series carbide drawing inserts, the new "T" series inserts for PC wire, extrusion dies, stranding dies, shape dies, polycrystalline diamond dies, ParaLoc pressure, non-pressure holders, and ParaLoc accessories.

## Website: www.paradie.com

#### **Phenix Technologies**

Booth: 12B27



Test systems and component from Phenix Technologies

Phenix Technologies is a manufacturer of high voltage, high current and high power test systems and components.

Its wide range of electrical testing equipment is used for testing cables, circuit breakers, motors, reclosers, rubber goods/protective gear, switchgear, transformers and more. All of the major components of the test systems are produced in its 70,000ft<sup>2</sup> modern manufacturing facility and headquarters, located in Accident, Maryland, USA.

All aspects of electrical and mechanical design, software design and production are performed and controlled by an ISO9001 certified quality programme. Phenix's engineers offer a unique blend of theoretical knowledge and practical experience that is vital to the development of custom solutions for industry leaders.

As members of worldwide professional and technical organisations, its engineers offer innovative solutions for any project. The service and calibration department assists customers during and after installation, traveling to over 100 countries.

Phenix offers a wide range of testing solutions for utilities, transformer and motor manufacturers/repair shops, cable manufacturers, independent testing companies, and original equipment manufacturers.

From portable test sets to over 1,000,000 volt custom test systems, Phenix's product line includes:

AC dielectric test equipment; AC/ DC kilovoltmeters: AC/DC hipot/ meaohmmeters; circuit breaker test equipment; DC dielectric test equipment; electrical protective rubber goods test equipment; cable testing equipment; tangent delta bridges; insulation analysers; liquid dielectric test sets; motor test systems; partial discharge and RIV measurement equipment; resonant test systems; recloser test systems; transformer test equipment; and variable voltage transformers and power supplies.

Additional sales offices are located in Atlanta, Georgia; Basel, Switzerland; and Taipei, Taiwan. In addition, Phenix Technologies' representatives are located across the US, and in more than 50 countries.

Phenix Technologies – USA Website: www.phenixtech.com

\_\_\_\_\_

#### **QED Wire Lines**

Booth: 12A25

QED specialises in equipment for heat-treating, cleaning and coating of steel wire. Custom designed and built, the high-speed lines are for galvanising, Galfan®, patenting, annealing and oil tempering processes. Combining innovative design concepts with 30 years practical experience, QED has developed a range of products and equipment that is both technologically advanced and ruggedly dependable.



QED mark 4 immersion burners on a high carbon line

With a view to improved efficiency and to minimise environmental impact, the company has developed the dual loop pressure control combustion system. This system maintains a steady output and close air-gas ratio. This patented combustion

control system is used on all the company's multiple burner furnaces.

QED has recently upgraded its proven fluidbed technology with proportional, closed-loop feedback and mass flow controls. The Siemens PLC-based system provides much higher thermal efficiency and lower fuel costs than previous systems. Its fluidbeds operate from DV=120 to DV=240 and from 1.5t/h to 8t/h production.

The latest development in galvanising furnaces is the advanced recuperative technology mark 4 immersion burner. This burner offers dramatically higher combustion efficiency from a double pass pre-heat design with extended heat-transfer area. Constructed of stainless and high nickel alloy steels, this modularly constructed burner offers an extended operating lifespan and reduced maintenance.

In addition to the fuel savings, the new burner runs with a cooler skin temperature, providing a more pleasant working and maintenance environment.

The company also supplies the latest development in HighTurbulence® pickling and galvanising technology. The multiple stage cleaning systems have high turbulence acid that greatly accelerates the pickling process. Computer control, nitrogen wiping in galvanising and Galfan offers significant savings and accurate coating weights.

QED Wire Lines – Canada Website: www.qedwire.com

\_\_\_\_\_

#### Rad-Con

Booth: 09D06-03

Rad-Con specialises in the annealing production process, and is a manufacturer of new bell-type annealing furnace equipment, and a provider of systems that help existing annealing facilities operate better.

#### The product range includes:

Convection bell-type annealing furnaces; 100 per cent hydrogen protective atmosphere; spheroidise annealing (SA) of hot-rolled wire rod; quality surface, clean and decarb-free.

Anneal: Furnace for annealing of drawn wires in batch: low and medium carbon steel wires; copper and copper alloy wires; aluminium cable on reels.

Rad-Con Inc – USA

Website: www.rad-con.com

- - - - - - - - - - - - - - - -

#### Reelex

Booth: 09F06

Reelex Packaging Solutions will publicly debut several new innovative packaging and equipment concepts representing the future of wire and cable packaging. Known as the preferred packaging method for LAN and coaxial cables for more than 40 years, Reelex packaging is a patented method of winding flexible products into a figure-eight coil featuring tangle and twist-free payout.

This packaging method has become the standard for major wire and cable manufacturers around the globe and is quickly being adopted as the package of choice for products such as fibre optics, building wire, plastic tubing and more.



The new SlingPack™ from Reelex

The company manufactures a range of Reelex coiling, packaging and ancillary equipment, including the new RS1 variable-traverse coiling machine and the new MMPO all-in-one offline delivery system. The RS1 is a new entry-level Reelex machine designed for small manufacturers, distributors and speciality projects and is equipped with a variable-width traverse capable of winding everything from fibre optics to pneumatic hose.

Designed for, but not limited to, use with the RS1 is the new MMPO delivery system – a low-cost all-in-one delivery option featuring motorised payoff, dancer, buffer, anti-reverse and footage counter on one frame.

Reelex will have video demos on display as well as examples of the latest in cable packaging innovation, including the new SlingPack<sup>TM</sup> package—combining low-cost, low-waste, and easy handling. Also on display at its booth will be examples of the ProFlex<sup>TM</sup> shrink package, a demonstration of the new G2 control system, and other innovations.

Reelex Packaging Solutions Inc – USA Website: www.reelex.com

-----

#### **Rockford Manufacturing Group**

Booths: 15D35 and 15F24

Rockford Manufacturing Group (RMG), Fastener Engineers and Lewis Machine's integrated in-line wire processing solutions are the epitome of lean manufacturing.

Customers quickly realise reduced inventory, improved productivity, greater flexibility and most importantly, reduced total cost.



The Model 200 from RMG

The Lewis 1SHVF straightening and cutting machine will be on display, along with the newest member of the in-line wire drawer family, the Model 200. This unit is capable of drawing a wire diameter range of 0.4mm to 2.5mm with a maximum 20 per cent area reduction. Also on display on stand 15F24 will be the Model 910 Spacesaver inline wire drawer.

The in-line wire processing equipment is being used by many manufacturing processes including fastener production, nail making, wire bending, concrete products, steel bar processing, welded wire products, screw machine parts and wire straightening and cutting.

RMG is the only OEM for Fastener Engineers, Lewis Machine and G C Patterson equipment and a good source for all tooling, spare parts and technical service requirements.

Rockford Manufacturing Group – USA Website: www.rmgfelm.com

-----

#### **SPX Precision Components**

Booth: 09F09-01

The Fenn Division of SPX Precision Components will once again exhibit at wire 2014, as part of the North American Pavilion.

A manufacturer of metal forming machinery, Fenn has been established for over 100 years. Now part of SPX, a Fortune 500 company, Fenn continues to maintain a solid reputation built on decades of process knowledge and machine engineering.

Fenn's extensive product range includes rolling mills, wire flattening and shaping lines, power and friction driven turks heads, drawbenches, swaging machines, torin spring coilers and a complementary range of ancillary equipment.

The products produced with Fenn machines serve a wide range of markets, including renewable energy, materials research, aerospace, oil and well screens, agriculture, automotive, medical, superconducting technology, power transmission and military.

Fenn recognizes the growing need of the industries served for a total, metal forming solution. In this regard, it is proud to be uniquely positioned to offer technical processes and engineering expertise to supply the ideal machine, designed and built to grow businesses.

SPX Precision Components, Fenn Division – USA Website: www.spx.com

-----

#### **Teknor Apex**

Booth: 09F05/03

A new low-smoke, flame-retardant thermoplastic elastomer (TPE) compound enables manufacturers of power and other flexible cords for appliances and consumer electronics to produce non-PVC insulation and jacketing that does not contain phthalate plasticisers or halogen additives. It was announced by Teknor Apex Company.

Halguard® E 59001 halogen-free, flameretardant (HFFR) compound is designed for flexible cords that meet UL 62 requirements and for appliance wire that complies with UL 758. In addition to appliance wire, potential uses include power cords for computers, HDMI cables for televisions, wiring for device chargers and USB connectors, and other electronics applications.

Typical Properties of Halguard® E 59001 Compound

Property	Value	Test Wethod
Hurdress, Shere A	88	A811M D-2140
Specific granty	1.12	ASTM D-792
Terrelle strength, pd (HPa)	2.100	ASTIM D-638
Dongston, %	530	ASTM D-638
Flecuesi modulus, psi (MFs)	18,100 (T/25)	ASTIN D-798
Brittle point, *C	-19	AGTIM D-740
Volume resistivity at 25 °C, D-are	4.83 X	ASTRI DIONA
Dielectric sonstant at 1 MHz	2.88	ASTIM D-150
Orospalion factor at 1 MHz.	1.15-2	A811M (1-160
Onygon Index, % O <sub>2</sub>	30	ASTM D-2660
Deformation at 158 °C. %	1.0	UL-1581
Oil resistance, 166 hrs. of Immersion at 60 °C	Complies	UL-42
Sunight resistance, 720 hrs. weatherometer exposure	Complies	UL-1581

Typical properties of the new compound

The new compound enables cables to meet the requirements of UL VW-1 and Cable flame tests as well as the IEC 61034 smoke test. When tested in accordance with UL 1581, Halguard E 59001 meets deformation and heat shock requirements at 150°C, compared to 121°C for PVC. As a TPE-based formulation, Halguard E 59001 is inherently elastic, eliminating need for plasticiser.

"Halguard E 59001 is based on proprietary polymer chemistry that yields a better balance of properties than standard HFFR cable compounds based on polyolefins," said Mike Patel, industry manager for Teknor Apex.

"At the same time, our new compound exhibits mechanical and electrical performance comparable to that of PVC while meeting the needs of wire and cable manufacturers who require an alternative to halogenated, plasticised materials."

Teknor Apex Company – USA Website: www.teknorapex.com

\_\_\_\_\_

#### **Wire Association International**

Booth: 11B25

The Wire Association International will feature information and a floor plan for Interwire, the largest wire and cable show in the Americas, to be held April 28th to 30th 2015, in Atlanta, Georgia, USA. Also, a range of the association's publications, products services, including Wire Journal International: the WJI 2014 Reference Guide: and its India publication, Wire Bulltin; as well as association technical books, reports and DVDs. Also, news about the WAI's 2014 International Technical Conference as well as information for WAI membership opportunities, its chapter network and WAI's Internet site. Details will also be available on the association's Operations Summit and Wire Expo, to be held May 6th and 7th, in Indianapolis, Indiana.

Wire Association International – USA Website: www.wirenet.org





READ WATCH SHARE

# EASIER QUICKER NO PAPER

Unique, original-content news and information for the domestic US wire and cable market

Every month, wiredInUSA is ....

- mailed electronically to a specified wire and cable audience

- delivered direct to your email inbox

- available to read online

It's FREE... so pass it on to colleagues!

Register online at

## www.wiredinUSA.com

America's new online magazine for wire and cable



#### Low-cost multi-fiber connector

Fujitsu Laboratories Ltd and Furukawa Electric Co Ltd have collaborated to develop a new multi-fiber optical connector to join and align multiple optical fibers for optical interconnects.

The conventional method of connecting optical fibers is an expensive process, requiring high-precision polishing to align the tips of the fibers. Fujitsu Laboratories and Furukawa Electric have developed a connector that can accommodate different lengths of optical fiber and which, with a spring mechanism that obviates the need for the polishing process, will cut the costs of connecting optical fibers by a half.

This new connector is said to achieve performance on a par with conventional connectors while simplifying the task of installing high capacity optical interconnects. It is anticipated that the technology will increase data transmission speed between boards, so increasing overall server performance.

#### High-speed copper?

Korea's KT Corporation has developed a technology to enable copper telephone cables to provide Internet service at speeds "never before accomplished".

The company exhibited its technology during the Mobile World Congress at the end of February.

Many old buildings still use copper telephone cables with optical cable or unshielded twisted pair (UTP) cables to provide an Internet service, but services through copper wire using VDSL (very high bit-rate DSL) are limited to 100Mbps.

KT has announced its FTTH-G solution, said to provide a two-way service of at least 200Mbps using a pair of telephone lines. KT said download speeds can be much faster than 200Mbps. For example, download speed can be 300Mbps if the upload speed is reduced to 100Mbps.



Models show KT's FTTH-G technology at the company's booth during the Mobile World Congress in Barcelona. Photograph courtesy of KT

KT's FTTH-G solution saves building owners the cost of replacing copper wires with more advanced cables, the company said, and it will run a pilot project for the technology in some older apartment buildings in Gangnam district to demonstrate the service.

"We will further enhance FTTH-G and create a technology that provides at least 300Mbps Internet speed next year," said a KT official. "We will utilize various types of wires and enable old buildings to provide Internet at gigabytes-per-second speeds."

#### Metal-cored welding wire

ESAB's Coreweld 46 LS metal-cored welding wire is designed for high-speed thin plate welding to a minimum thickness of 1mm. It is said to out-perform solid MAG welding wire in terms of both weld quality and productivity. Coreweld 46 LS can be used in mechanized and robotic welding and fabrication processes.

Coreweld 46 LS can also be used for the manual welding of thicker plates. The wide operating parameter box makes the welding arc easy to control, and to produce welds with perfect profiles. Stable welding starts at just below 200A. Welds produced with Coreweld 46 LS have no, or very little, silica on the weld surface so post-weld cleaning requirements before coating or painting is substantially reduced.

The new welding wire operates at low arc voltage and, combined with high travel speeds, low heat input results. Lower heat reduces the risk of workpiece deformation, as experienced when welding thinner plates by the conventional MIG/MAG process.

Coreweld 46 LS does not require pulsed power source technology and, when switching from solid wire, in most cases there is no need to change the positioning of the welding gun. Conversion time is limited to the optimization of welding parameters.

Coreweld 46 LS is available in 1.2mm, 1.4mm and 1.6mm diameters and packaged in 225kg bulk drums.

#### Optic cable that doesn't mind the bend

Energy and data supply systems manufacturer igus has developed a

new optical fiber cable, called Chainflex CFLG.2LB, said to be suitable for all bus systems. This dual-core optical fiber bus cable is designed specifically for energy chain applications, where extremely small bending radii and high cycle life are expected without loss of data.

The fibers are designed to reduce the minimum bend radius from the traditional 10x the outside diameter of the jacketed cable to 5x, or only 40mm. Matched length of the fiber optic cores and the aramid strain and torsion relief have allowed over 8.5 million double strokes for energy chains in a 38mm test set-up.

"This Chainflex optical fiber cable reduces the bending radii by more than 50 percent on standard bus cables and by more than 65 percent in comparison to the previous dual-core cables," said Justin Leonard of igus UK. "Copper bus cables are traditionally used in energy chain application; in contrast, Chainflex CFLG.2LB cables are lighter, allow higher data rates, smaller bend radii, longer cable lengths, better EMC safety and show lower damping."

The abrasion-resistant TPE outer jacket compound protects against mechanical damage and is oil and chemical resistant. The cable is PVC- and halogen-free and, when dynamically moved, suitable for temperatures between –40°C and +60°C.

#### **Sorting sorted**

General Inspection (Gi) has redesigned and improved its Gi-100, creating the Gi-100DT for sorting and inspecting flat parts. A dial table style glass top keeps parts stable, which allows for better image analysis,

data capturing and precision. The Gi-100DT is primarily used for sorting parts with a greater than 2:1 (length to diameter) ratio at up to 1,000 parts per minute (though most parts average around 400 parts per minute).

Multiple sensors can be added to the Gi-100DT, including eddy current, multiple vision stations with Gi specialty lenses, and laser topography. Eddy current ensures checking for metallurgical defects such as cracks, missing plating or hardness variations. Vision stations can detect defects such as chips in the ID, missing internal threads and even damaged threads on deep threaded holes, nylon ring presence, chips in grooves, cracks, missing or damaged weld projections and missing crimp. The latest sensor, laser topography, shows a 3D profile of the parts and can take measurements and detect chips, dents and flatness.

#### Tangle-free cable

Philatron Wire and Cable has introduced a new compact cable, Flexy™, that will extend over 20 times its original length, retract to its original size, and never tangle while in use.



Tangle-free from Philatron. Photo courtesy of Philatron

"We've had to pay very close attention to the changing marketplace, listen to challenges our industry is faced with, to not only meet, but exceed the needs of our customers," said Phil Ramos Jr, founder and CEO of Philatron Wire and Cable. The result is the new Flexy extension cord, suitable for construction equipment, automotive and home use (vacuum cleaners, hair dryers, curling irons, flat irons). Flexy can be used indoors or out.

## Hybrid fiber/power cable system for small cell devices

TE Connectivity has revealed its latest solution to simplify installation, powering, and communication with small cells and other network access devices. By combining power and optical fiber communications into one system, TE's powered fiber cable eliminates the complexity of small cell installation and allows small cell devices to be placed precisely where needed for maximum 4G coverage.

The system incorporates everything needed to power and communicate with a small cell – including the power supply, a hybrid cable, and a remote powering unit that corrects for DC line loss to eliminate the need for electrical design calculations.

"Our customers have told us that installing small cells is complicated because power isn't often readily available where the small cell is needed," explained Mark Hesling, vice president of global product management at TE Connectivity.

"Coordinating electricians in and out of buildings is expensive, and negotiating with building owners is complex. Te's powered fiber cable systems will speed up deployment and lower installation costs of small cells and other network access devices."

#### Wireless inspection

AFL took the opportunity of the BICSI winter conference and Photonics West in early February to introduce a new addition its fiber inspection family, FOCIS WiFi, offering wireless connection of an inspection probe to a customer's Android or IOS phone or tablet.

FOCIS WiFi allows field installation and maintenance personnel to view images, save and verify standards compliance using a free app on their own devices. AFL's pass/fail analysis, combined with the processing power of a phone or tablet, provides a pass/fail indication in less than a second.

"Demonstrations at BICSI and Photonics West were well received," said Lee Kellett, director of product marketing for AFL's test and inspection division. "Field and maintenance personnel usually wait several seconds for inspection equipment to evaluate the connector against the standard and report pass or fail."

AFL introduced the FOCIS system in 2012 and in early 2013 introduced FOCIS Pro, a system which combines a palm-sized touchscreen tablet, DFD1 digital FiberScope and AFL SimpleView PRO analysis software to provide the inspection and analysis power of current laptop and probe solutions.

#### Magnet wire stripper

The latest magnet wire stripper from the Eraser company, RT2S, strips fine magnet wire from 48 to 28 gauge through the use of rotating fiberglass stripping wheels.

Eraser's cone-shaped fiberglass wheel is designed to make close stripping possible on all types of components and film insulations. The use of fiberglass wheels, rather than blades, allows for friction to whisk away the insulation without causing damage to the conductor. An adjustable strip length stop allows for consistent strip lengths.

Eraser offers a range of fiberglass stripping wheels depending on wire size. A wheel dresser can be used to help prolong the life of the fiberglass stripping wheels.

The RT2S comes equipped with a dust take-off port for environmental health and safety.

#### Testing times for low voltage cable

General Cable's Ultrol® 60+ low voltage safety-related class 1E 60-year-life cable has completed third party environmental qualification testing with one-year post-DBE submergence. With adherence to ASME NQA-1 and US NRC 10CFR50 appendix B requirements, the completion of this extensive testing confirms conformance of Ultrol 60+ to advanced, passive GEN III+ and legacy 40-year reactor profiles.

Kinectrics, General Cable's choice for testing and product qualification, has completed thermal and radiation aging and design basis events (DBE) proving a 60+ year service life, including cable resistance to one year's submergence test in hot boric acid solution. The testing demonstrates that Ultrol 60+ cables meet prior industry standards, as well as GEN III+ reactor profile requirements.

"The nuclear industry has been developing and improving reactor technology for more than five decades. Because every reactor design has a unique DBE profile, General Cable's integrated test program was designed to prove that its cables could withstand the worst possible environment or outcome out of numerous possibilities.



Ultrol® 60+ low voltage safety-related class 1E 60-year-life cable from General Cable

"With documented performance at higher radiation and temperature levels, we are reasonably assured that Ultrol 60+ low voltage cables will continue to perform their intended function under extreme environments," said Koksal Tonyali, director, product engineering and development, specialty cables, General Cable North America.

#### New fiber product

OFS has introduced AllWave®+ zero water peak (ZWP) single-mode optical fiber, a full spectrum fiber for FTTx, metro, and backhaul networks.

AllWave+ fiber offers the same specifications as OFS AllWave fiber, but has extra features including 40 percent smaller bend radius, 50 percent lower bend loss, and 33 percent

improved polarization mode dispersion (PMD), whilst maintaining a 9.2 micron nominal mode field diameter to minimize splice loss to existing single-mode fibers.

AllWave+ fiber is a combination ITU-T G.652.D and G.657.A1 compliant fiber designed to prevent network disruptions from inadvertent fiber bending that can occur in closures or terminals, and enables smaller cable packaging to help ease cable handling and lower cable installation costs.

"Service providers are deploying more applications such as FTTx, FTTH, mobile backhaul, and metro CWDM, operating at longer bend-sensitive wavelengths between 1,490 to 1,625 nm to meet higher bandwidth demands and grow revenues. As bending sensitivity increases, AllWave+ fiber increases reliability by helping to prevent bend-induced service and enabling faster, outages, compact installations by helping to further shrink micro-cables and enclosures," explained Peter Spehr, executive director sales and marketing, EMEA cable and connectivity, adding: "AllWave+ enables consistently low loss splices for our customers when matched either to itself. AllWave fiber, or other quality G.652.D fibers. This helps eliminate splice remakes in the field, and speeds network testina."

#### Optical module reaches 150m

Panduit Corp's Signature Core™ fiber optic cabling system has enabled Cisco's 40G BiDi optical modules to reach 150m, to date the only multimode fiber that allows Cisco to achieve this capability. Using the Signature Core system with Cisco's 40G BiDi

optical modules gives data center network architects and managers a new option for deploying 40G Ethernet in addition to 40GBASE-SR4.

Signature Core is designed for reach and design flexibility, compensating for both modal and chromatic dispersion to provide verified optical performance and signal integrity beyond 10/40/100 Gb/s Ethernet and 8/16 Gb/s fiber channel standards requirements.

Cisco has launched a new 40G Ethernet bidirectional optical module, BiDi, in addition to the 40G Ethernet QSFP+ optical modules. The 40G BiDi optical module supports 40G Ethernet over one pair of multimode fiber while allowing 40G Ethernet to be deployed using the same infrastructure as 10G Ethernet (10GBASE-SR). The 40G BiDi conforms to the QSFP+ multi-source agreement (MSA).

The BiDi modules are said to reduce the cost of deploying 40G Ethernet by over 60 percent versus 40GBASE-SR modules, and do not require expensive components for their infrastructure to migrate to 40G Ethernet. The Signature Core system provides a lower cost alternative to the more expensive single mode fiber 40GBASE-LR links within the data center.

# 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 April edition – send us the details by **25**th **March**.

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



You can now get all the latest news daily by becoming our friend on Facebook or following us on Twitter





Like us on Facebook



Advaris / AESA Cortaillod	p32
<u>AFL</u>	p10,66
AIM Inc	p46
Alcatel-Lucent	p43
Alstom	p33
Aztech Lubricants	p46
B&H Tool Company LLC	p27
Beta LaserMike	p14, 46
Blachford	p48
Canadian Hydro-Québec	p35
Clinton Instrument Company	p48
Die Quip	p49
Dudgeon Offshore Wind Ltd	p35
<u>Eraser</u>	<u>p66</u>
ESAB	p64
Fiber-Line	p50
<u>Fujitsu Laboratories Ltd /</u>	
Furukawa Electric Co Ltd	p63
Gem Gravure	p50
General Cable Corporation	p25, 26, 66
General Inspection (Gi)	p64
Hindustan Cleanenergy Ltd	p40
<u>Huestis Industrial</u>	p51
InfoSight	p51
Interchange Ltd	p39
IWG High Performance Conductor	<u>rs p52</u>
<u>IWMA</u>	p36
JFE Steel Corporation	p42
KEIR Manufacturing	p53
KT Corporation	p63
KTS Wire	p34
Madem Group	p54

Miltec UV Corporation	p29
Minnesota Wire	p22
<u>Vexans</u>	p34
OFS	р6 <u>7</u>
Omni Cable	p16
Paramount Die	p54
Phenix Technologies	p55
Philatron Wire and Cable	p6!
Prysmian Group	p4´
QED Wire Lines	p56
Rad-Con	p57
Reelex	p57
Reliance Industries Ltd	p3 <sup>2</sup>
Rockford Manufacturing Group	p58
RSCC Wire & Cable LLC	p29
&E Specialty Polymers LLC	p28
Seacom	p43
Semblex Corporation	p1(
Shilpi Cable	p42
ignature Core	p67
Southwire	p24
SPX Precision Components	p59
Sumitomo Electrical	p22
E Connectivity	p6!
eknor Apex	p59
he International Marine Contractors	
Association (IMCA)	р33
Vire Association International	p6(



Mathiasen Machinery

AMI Plastics	p21
EuroWire magazine / WCA magazine	p19
Cersa Mci	p7
Inhol BV	p12
IWCS	p15
<u>Leoni</u>	p8
Messe Düsseldorf	p17
Paramount Die	p13
Wire Expo	p2
Zumbach	p11

## **Marketing:**

A A A I DI . .

Contact Jason Smith, wiredInUSA, 46 Holly Walk, Leamington Spa, Warwickshire, CV32 4HY. United Kingdom Tel: +44 (0) 1926 834684

Email: <u>jason@wiredinusa.com</u>

#### 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





# wiredinUSA, EuroWire and Wire & Cable ASIA The leading magazines for the wire and cable industries

Download your media packs today and benefit from an international coverage



www.read-eurowire.com

www.read-wca.com

www.wiredinusa.com