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# 

The San Francisco 49ers are, without doubt, one of THE names on the American football scene. They have a pretty impressive set of numbers in terms of Super Bowl victories - including five between 1981 and 1994. And they have a date in Super Bowl XLVII this month against the Baltimore Ravens on the 3<sup>rd</sup>.

Whilst notable that the coaches of both sides are brothers - the first time brothers have coached against each other in NFL history – the 49ers' home at Candlestick Park can also boast a similarly astounding set of figures.

Electrical work is currently being undertaken at the Santa Clara, California, stadium which will see 16,000 lighting fixtures, 11,900 electrical outlets, 5,500 fire alarms, 500 miles of low watt fiber optic cable, 900 wireless access points and a spectacular 320 miles of cable and wire laid during the work. That's enough wire to link California to Nebraska.

And staying on the numbers theme, the back-up generator to the stadium is large enough to power 4,000 homes. The full story is on page 9 of this issue of wiredInUSA.

**David Bell** Editor

# 

Picture: www.sxc.hu Photographer: Mike Gieson



Show Diary From the USA

Making the News Industry news from the USA

The latest news from Europe







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Industry Trade Association Spotlight on awards, education and events

> Asia & Africa News The latest news from Asia & Africa

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# **DIARY SHORE**

### 2013

#### MARCH

7 March: **AMI Cables Conference** Cologne, Germany Conference <u>www.amiplastics.com</u>

#### APRIL

23-25 April: **Interwire 2013** Atlanta, Georgia, USA Exhibition <u>www.wirenet.org</u>

#### JUNE

16-18 June: Guangzhou Wire and Tube Guangzhou, China Exhibition www.julang.com.cn

25-28 June: wire Russia 2013 Moscow, Russia Exhibition www.wire-russia.com

#### SEPTEMBER

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

#### OCTOBER

1-3 October: **wire South America** São Paulo, Brazil Exhibition <u>www.tubotech-online.de</u>

#### NOVEMBER

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

## OPTICAL FIBRES Measurement Instruments

LIS-G:

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NCTM :

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Birefringence principle Non Contact Tension Measurement 0-400 grams ±1gram, 1 kHz ± 1 gr within 10-40℃ ambient

CM5:

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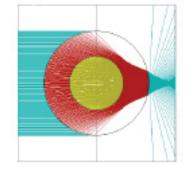
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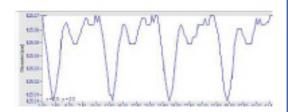
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## **Electrifying statistics from 49ers**

Electrical work on the San Francisco 49ers' new stadium in Santa Clara is being carried out by Cupertino Electric, overseen by Jim Medefesser who admits: "It's not the biggest project we've ever done, but I still drive in every day and say, 'Wow!'

The stadium will use enough wire to link California and Nebraska and have a backup generator that could supply enough power for 4,000 homes.

And The Wire Association International, Inc.

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When complete, the Cupertino Electric team will have installed 16,000 lighting fixtures; 320 miles of cable and wire housing conduit; 11,900 electrical outlets; 5,500 fire alarms; 500 miles of low watt fiber optic cable; and 900 wireless access points.

Of course, once the stadium's complete the only tally of interest will be the final score.



## New Jersey Link

installation of the high-voltage direct current (HVDC) converter

in 2019. Led by transmission developer Trans-Elect with equity

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## WAI's 2013 president

The Wire Association International (WAI) has appointed Richard R Miller as president of the association for a one-year term that began on 1<sup>st</sup> January. He will serve as chairman of the board of directors and as the 59<sup>th</sup> president of the association.

Miller has been involved with an association-wide initiative to increase WAI membership, which has resulted in hundreds of new members representing both industry manufacturers and suppliers. "If you work in the wire and cable industry, you should have a willingness to support your industry association and help grow WAI membership. It's about participating in your profession," he believes. A WAI member since 1996, Miller has served on the association's board of directors, its executive committee, and on multiple committees including member relations, conference programming, and paper awards.

Miller is senior vice president at Southwire Company, where he began his career 37 years ago. He has been instrumental in developing the nationally recognized 12 for Life program – a partnership between Southwire Company and the Carroll County School System – to reduce the high school drop-out rate by allowing at-risk students to work in a manufacturing plant designed for students while earning credit toward a high school diploma.

Other notable accomplishments include receiving the 1994 Southwire H A Case Technological Achievement award and the 1998 Southwire D B Cofer Enterprise award. Miller has a BSc in industrial engineering technology and holds several Southwire patents.

## Football fiber

Brazilian state-owned telecom company Telebras has completed the deployment of 70 percent of the fiber optic network in the six cities that will host FIFA's Confederations Cup, due to start in June 2013.

Telebras was awarded the task of providing the infrastructure for the deployment of metropolitan fiber optic networks, satellite links and radio systems in all the cities hosting the tournament – Belo Horizonte, Brasília, Fortaleza, Recife, Rio de Janeiro and Salvador.



The telecom infrastructure has to be in place by April 2013 in all six cities. The telecom infrastructure for the six other cities that will host the 2014 World Cup will be ready by November 2013, said sports ministry sources.

The fiber optic network, including all 12 cities, will cover a distance of 2,000km. The government has also taken initiatives to create a Telebras subsidiary to provide telecommunications services to FIFA during the two tournaments. This will be called Telebras Copa.



## Februa meeti

The American Wire Producers Association (AWPA) will hold its next annual meeting from 18<sup>th</sup> to 20<sup>th</sup> February, at the Hilton Bonnet Creek, Orlando.

The three-day event will include an afternoon of open committee meetings (membership, PC strand, and stainless) as well as executive committee and government relations advisory committee meetings. Business meetings will include the election of directors and officers, and a discussion of the projects that AWPA will take up, on behalf of its members, during the coming year.

Cocktail and beach parties, a golf tournament, awards dinner and a spouse/quest program will offer light relief from the general sessions, planned to cover the economy, and the current legislative and regulatory environment. Janet Kopenhaver, AWPA director of government affairs, will brief delegates on developments since the 2012 elections, and what to expect from Congress in 2013.

The 2013 program will also include the popular 'panel of industry experts' that will address global rod supply. Executives from a wire company, US carbon and stainless rod mills, and a trading company will provide insight into the current rod market and the supply and demand issues that face the wire industry.

Further details and registration are available at the American Wire Producers Association website.

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## Miltec employee news

## Early call to conference

The FTTH Conference and Expo is said to be the largest event of the year for the North American FTTH industry, and in 2013 will be held from 30<sup>th</sup> September to 3<sup>rd</sup> October, at the Tampa Convention Center in Florida. Hotel accommodation will be available at the nearby Tampa Marriott Waterside Hotel and Marina.

The event will include a three-day program of FTTH learning sessions, including presentations, workshops,

keynote addresses, and industry panel discussions covering technology, deployment, business operations, and marketing of all-fiber broadband networks. The conference offers the most comprehensive exhibition in the industry where future customers from across North America and beyond come to find the latest FTTH products and solutions.

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## North American **FTTH investment**

Annual direct investment in fiber to the of North American households. The home (FTTH) networks will reach \$4.7 billion by 2017 and total investment in aggressive deployment of its all-fiber FTTH over the next five years will be \$18 billion, according to a market analysis 1,000 smaller operators, mostly local from RVA LLC.

The report, "North American fiber to the home and advanced broadband review and forecast to 2017", predicts that annual revenues derived by FTTH providers from ultra-high bandwidth applications and services beyond voice, video and Internet will reach \$4 billion by 2017, or \$9 billion cumulatively over the next five years.

are capable of providing broadband speeds of one gigabit and beyond, are now available to more than a fifth

build-out has been led by Verizon's FiOS service in the US, while nearly telephone companies and municipalities, are now providing services to their customers over all-fiber networks.

"This report backs up what we've been seeing and hearing from the market in recent months - that Americans and Canadians want their broadband providers to take it to the next level and deliver the gigabit speeds to homes and businesses that will soon be necessary for economic advancement, Fiber to the home networks, which overall competitiveness and rising living standards," said Heather Burnett Gold, president of the FTTH Council Americas.

> Register online at www.wiredinUSA.com



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### China team additions

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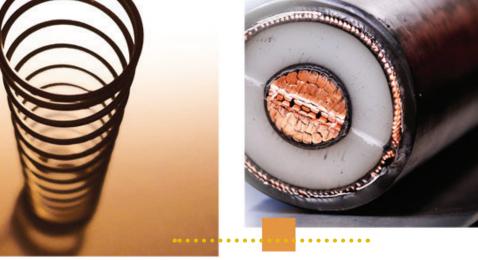




#### The international conference and exhibition for the plastic cable industry









#### Canadian transmission contract

SaskPower has selected Valard Construction to build 300km of 230kV transmission line between Island Falls and Key Lake in northern Saskatchewan. The project scope will include foundation construction, installation of around 900 transmission towers, wire stringing and all related project management.

To minimize the environmental impact, the route of the new line will parallel an existing SaskPower transmission line. Valard has begun engineering activities and the project is expected to be complete in spring 2015.

#### US fastener imports/ exports

US fastener imports and exports declined during November 2012. Imports of fasteners dropped 11 percent to \$353,681,686, while exports of US fasteners dropped 5 percent to \$279,726,102.

The top five consumers of US fasteners during the month were Canada (down 4.7 percent month-on-month to \$90.8 million); Mexico (down 10 percent to \$85.6 million); UK (down 7.4 percent to \$11.9 million); mainland China (up 19.2 percent to \$11.05 million); and France (down 15 percent to \$7.45 million).

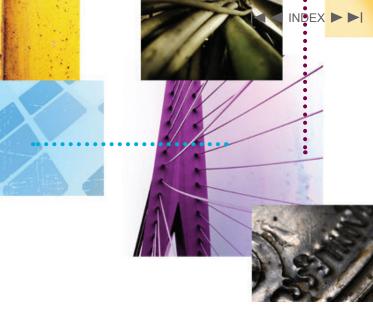
The top five exporters to the US in the same period were Taiwan (down 16 percent to \$99.6 million); China (up 1.7 percent to \$80 million); Japan (down 15 percent to \$60.3 million); Germany (down 5.5 percent to \$21.47 million); and Canada (down 16 percent to \$19.4 million).

#### American re-brand

After more than 20 years in America, and after several recent major machine installations in the US, a Gauder Group Inc subsidiary will now promote the sales of its Pourtier and Setic product range under the name Pourtier & Setic of America. The product line includes Pourtier's rigid stranders and drum twisters for producing low-, medium-, and high-voltage cable and conductor, as well as Setic's large and small double twist bunchers, and a comprehensive line of machines for the production of LAN and special cable.

For the used machines market, USA and Canada sales are managed by the subsidiary, Gauder America, with a joint venture agreement with Lloyd & Bouvier.

After a successful 2012, Pourtier & Setic of America is reaffirming its commitment to the North American wire and cable industry.



### Fiber cable restored

A fiber optic cable damaged by a fire beneath a viaduct near Honolulu International Airport has been restored by Hawaiian Telecom engineers. Damage to the cable had resulted in the loss of voice, data and television services to around 10,000 users on Oahu and Kauai.

The company had restored service to the affected customers by rerouting network traffic as well as repairing the fiber optic cable, the company said.

The Honolulu Star-Advertiser reported that a parallel line used by Oceanic Time Warner Cable was also damaged by the fire, causing some 15,000 customers to experience a loss of channels on digital cable, but service was restored within a few hours.

# Fiber-optic cable working in Cuba

A fiber-optic cable between Cuba and Venezuela, built to speed up Cuba's access to the Internet but long delayed amid reports of corruption during construction, appears to have finally entered commercial use for island-bound traffic.\*

The speed of Cuba's commercial internet connections increased in mid-January, indicating that the island is using the cable and not relying on its three much slower satellite links, reported Doug Madory of Renesys, a US company that monitors the Internet.

The new speeds are still slow, compared with those available in other countries. Chile is accustomed to speeds three times faster than the best recorded in Cuba, commented Jose Remon, a former Cuban telecommunications official now living in Miami.

The subsea ALBA-1 fiber optic cable from Venezuela to Cuba was designed to expand on the satellite connections, which gave Cuba the slowest and most expensive access to the Internet in all of Latin America. The \$70 million project, financed by Venezuela, was repeatedly delayed and involved in a corruption scandal that resulted in the imprisonment of several managers. It was declared operational in 2011, but there has not yet been any evidence that the cable was in commercial use.

\* Havana confirmed on  $24^{th}$  January that the ALBA-1 cable is working, but will not improve residents' access to the Internet. A brief note from ETECSA, the government's telecommunications monopoly, said that the 1,000-mile cable "has been operative since August of 2012, initially carrying voice traffic corresponding to international telephone calls."

# Wind projects in Quebec



EDF Energies Nouvelles subsidiary, EDFEN Canada, has commenced commercial operations at wind installations, Massif du Sud and Lac Alfred Wind Project, have a combined capacity of 300MW and have cost \$700m to develop.

EDF EN Canada's COO, Al Kurzenhauser, credits the completion of the projects to the combined efforts of the company's partners -REpower, CER, and Borea.

expected to purchase the power purchase agreement. Operations of the projects will be undertaken by the operations company, EDF Renewable Services Canada.

EDF EN Canada project development director Alex Couture added, "Throughout the 20-year contract with Hydro-Quebec, the municipalities concerned combined annual contribution of over \$600,000."



## 25 Allied years

Family-owned Allied Wire & Cable will celebrate 25 years in business with a year-long schedule of interactive activities and promotions to thank customers and honor company milestones.

Founded in the Flynn family basement in Wayne, Pennsylvania in 1988, Allied Wire & Cable was a small company where the owners made sales calls, ordered materials, re-spooled wire by hand, packed, and shipped the products themselves. Allied weathered the challenges of creating a business from modest beginnings and overcame some tough economic times to become one of the fastest growing wire and cable companies in the United States.

In 2013, with locations across the country, sales and stocking locations in Pennsylvania, New Hampshire, Florida, Wisconsin, and Nevada, and customers around the world, Allied Wire & Cable is proud to celebrate the progress of a quarter century.

"We started this company in our parents' basement with no money, but a lot of optimism. Now we're a one hundred million dollar company with multiple locations and close to two hundred people working with us," said co-owner and president of Allied Wire & Cable, Tim Flynn. "It has been an exciting ride and it isn't over yet. Can't wait to see what the next 25 years brings us."

## Spacer cable system for energy pipeline

The L'Anse Warden Electric Company has used a Hendrix standard spacer cable system in Michigan's Upper Peninsula. The company wanted to reduce road traffic transporting biomass to its electric power generation station, so installed an above ground pipeline to pump material from an access point to the plant. The distribution wiring solution required sufficient clearance to allow employees to conduct maintenance activities on the pipeline.

L'Anse Warden found that a standard spacer cable system, coupled with underground residential distribution (URD) cable, provided the required clearance while also allowing the use of existing poles, thus saving significantly on overall costs.

The system was supplied by Hendrix Aerial Cable & Systems.

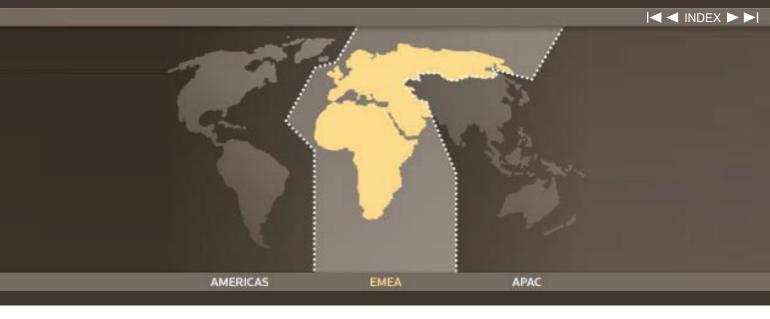
## **Extrusion dies** acquisition

Exco Technologies Limited has completed the acquisition of BE & H Extrusion Dies Inc, an extrusion die manufacturer located in Texas which services the south-central region of the United States.

The acquisition, to be known as as Exco Texas, secures an experienced workforce and a strong presence for Exco in an important geographic market segment. The acquisition is expected to increase Exco's extrusion group sales by approximately 5 percent with the expectation of further growth as Exco develops the Texas business over the coming years. The operating results are expected to be accretive in the first year of operation.

Exco currently services the North American extrusion tooling market from plants in Ontario and Michigan. The acquisition of Exco Texas, in addition to increasing the company's presence in the south-central region of the United States, will provide additional and much needed capacity to the aroup in order to meet demand for extrusion dies as the US recovery takes shape.





## New technical director for EMEA region

William O'Connell has been appointed as technical director, EMEA region, for CommScope's Enterprise Solutions division. Based in Dublin, William will be responsible for driving technical support for enterprise customers throughout Europe, the Middle East and Africa and ensuring they gain full benefit from CommScope's Enterprise portfolio.

As an industry expert who has worked in data and telecommunications for over 30 years, William brings a wealth of capability and knowledge to CommScope, having successfully driven growth and technical business development with leading network and telecommunications service providers worldwide. Prior to joining CommScope, William was MD of solutions at Kendington where he built datacenters and enterprise networks within the Irish market.

**EUROPE NEWS** 

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William also worked at OFS, where he assumed the role of marketing and sales director for EMEA for three years.

O'Connell commented: "CommScope's technical team has evolved into a commercially aware group where solutions are designed not just for their technical superiority, but because they are the most cost effective solution to meet a client's needs. We need more than very smart engineers, we need engineers that can understand our client's business, identify inefficiencies, recommend solutions and design the most cost effective system to minimize capital and operating costs. I am looking forward to working with the team and supporting the increasing importance of CommScope's IT infrastructure."





#### **Russian fasteners** harmonized

The federal agency for technical regulation and metrology, together with hardware association RosMetiz, has issued new national standards for fasteners, fully harmonized with the standards published by the International Standards Organization.

As part of the 2012 TC 229 national standardization program eleven new fastener standards have been issued based on ISO standards 7045, 7048, 7046-1 and -2, 1207, 1580, 2009, 2010, 7047, 7049 and 7050. The new standards are expected to assist Russian testing enterprises to adapt metrology conditions within the territory of the Russian Federation in line with WTO rules.



Rollout boosted by agreement

An agreement reached between the UK's Country, Land & Business Association (CLA) and the National Farmers Union (NFU) should ensure the faster rollout of broadband network cables. A new package of advisory wayleave payment rates and terms has been agreed, meaning infrastructure providers will find some of the barriers to deployment removed.

Some landowners had raised concerns about the amount of compensation they would be paid for allowing access to their land for the construction of new networks, but a compromise has been reached, allowing countryside broadband projects to forge ahead.

Harry Cotterell, president of the CLA, said the importance of good rural broadband, "cannot be over-emphasized. It is essential for business, whether starting up or expanding, essential for education and research and an important communication tool for all rural communities," he stated.

"We are confident this wayleaves package will help secure consent for a broadband infrastructure to be rolled out to the final third of the country who still suffer with chronically poor broadband."



**Rosendahl and Nextrom** presentation

Rosendahl gave two presentations at the technical symposium at the 61<sup>st</sup> IWCS conference in November 2012. The first, entitled "Latest developments in FOC production equipment", demonstrated that trends in fiber optic cable manufacturing are all connected with the general optimization of each step of the production process. In order to improve the performance of the cable, and to reduce the costs of the final product, many technologies and devices have been invented to reduce optical loss, increase production speed and allow more flexibility in the manufacturing process.

The company's second presentation, "Process and technology developments for fluor-polymer foam and specialty materials processing for data, aerospace and medical cable", covered the growing for fluor-polymer demand and engineering plastic insulated wires in a wide area of applications, including data-, coaxial-, micro-coaxial and aerospace applications, and how this will drive the demand for advanced processing equipment, new process technology and materials.



#### Motorized cable reels for port

Cavotec has won three orders for motorized cable reels for installation on ship-to-shore (STS) cranes and rail-mounted gantry (RMG) cranes at DP World's new container terminal at Jebel Ali Port in the United Arab Emirates.

ZPMC, a port equipment manufacturer, and TGPC, a regional leader in the design and construction of cranes, have ordered the equipment, which will be used to power 19 STS and 50 RMG cranes at Jebel Ali Port's new Terminal 3 container handling facility.

Under the Terminal 3 project, DP World is currently developing 1,600m of guay wall and 70 hectares of yard space for the new container terminal within the existing port area. When complete, the facility is expected to handle 4,000,000 twenty-foot equivalent units (TEU) every year. Jebel Ali Port is currently equipped with 22 berths and 79 cranes catering for the world's largest container vessels.

Cavotec equipment already serves container berths at Jebel Ali, and several other DP World applications worldwide.



#### **Plant power?**

Researchers at the University of East Anglia (UEA) in the UK are artificially replicating photosynthesis and exploring the possibilities of generating hydrogen from the process. The resulting hydrogen can then be used as an emission-free fuel to power vehicles or generate electricity.

UEA school of chemistry and school of biological sciences lead researcher Professor Julea Butt said: "During plant photosynthesis, fuels are made naturally from the energy in sunlight. We will build a system for artificial photosynthesis by placing tiny solar panels on microbes. These will harness sunlight and drive the production of hydrogen, from which the technologies to release energy on demand are well advanced."

The £800,000 project will be funded by the Biotechnology and Biological Sciences Research Council with collaboration from researchers at the universities of Leeds and Cambridge.



#### **Cables for cranes**

ABB has contracted Prysmian Group to supply 11,000m of its Protolon (iQ) cabling system, to be installed in 28 port cranes currently under construction by the subcontractor, Künz. The port cranes will operate in the Port of Rotterdam, as part of expansion works that will allow the Maersk shipping line to enhance its operating company APM-Terminals' container handling facilities.

Protolon (iQ) cable systems are designed to provide detection and monitoring of mechanical stress of flexible and reel cables using embedded sensors. measurement techniques and dedicated software tools.

Launched in 2009, Protolon (iQ) received Industry Award 2012 Germany's (Industriepreis 2012) for the group's ongoing research and development.



#### German connections

TenneT and Mitsubishi Corporation have closed on their partnership with respect to two German offshore high-voltage cable projects, BorWin1 and BorWin2. Mitsubishi's voting interest will be 49 percent with an aggregate maximum equity commitment of €240 million. Both partners have also signed a contract for investment in two more offshore projects, HelWin2 and DolWin2, in which Mitsubishi also will acquire a 49 percent voting interest for a maximum equity investment of €336 million.

The planned high-voltage cables will connect a number of offshore wind farms in the German North Sea to the onshore electricity grid and will have a combined total capacity of 2.8GW, representing almost 30 percent of the total anticipated by the German government for offshore wind in the North Seq.

TenneT is currently operating two, and working on a further eight, projects to connect wind farms in the German North Sea. These essential infrastructure projects amount to a transport capacity of 5.3GW of renewable electricity, equivalent to the typical consumption by 5 million households.



#### **Boost for Iceland**

Ciena<sup>®</sup> Corporation, a network specialist, and Farice, a provider of international capacity between Iceland to mainland Europe, have jointly announced an upgrade to the submarine cable system DANICE, that connects Iceland with Denmark. The upgrade will become operational in early 2013, significantly increasing the total capacity of the submarine cable and providing sufficient bandwidth to support the rapidly growing Icelandic data center industry.

Farice selected Ciena's 6500 Packet-Optical Platform for the 2,295km-lona DANICE submarine cable system.

Scalable to 8.8Tb/s of total capacity on a single fiber, Farice's upgraded submarine cable will address the bandwidth demands imposed by European companies' increasing use of Iceland as a base for data centers.

In addition to upgrading one of two submarine cables, the deployment also includes a unique GeoMesh network solution, incorporating optical bypass technology to simplify the end-to-end network design from the cable landing station in the south of Iceland to Farice's points of presence (PoP) in Reykjavík and Keflavik Airport.





#### CabWire World Conference – Call for Papers



ACIMAF, CET, IWCEA, the IWMA and WAI - joint organizers of the CabWire World Conference 2013 in Milan, Italy - are inviting authors to submit an abstract to help define its 2013 conference program. Both technical and practical topics are welcome.

This one-and-a-half-day wire and cable conference in Italy, 4<sup>th</sup>-5<sup>th</sup> November 2013, will provide an international platform for trade industry information exchange on innovations driving the worldwide wire and cable markets.

#### Accepted authors receive:

- complimentary meeting registration
- a copy of the conference proceedings materials
- access to the conference sessions, tabletop exhibits, and reception
- industry exposure

Why not share your expertise, your current research findings, and your viewpoint with your industry colleagues at CabWire World Conference 2013?

The abstract deadline for the conference is 15<sup>th</sup> May 2013 and the acceptance notification will be sent out on 12<sup>th</sup> June. Manuscript deadline is 3<sup>rd</sup> September.

#### A B S T R A C T S U B M I S S I O N & PAPERS

In order for the CabWire World Conference 2013 organizers to properly assess the scope and content of your proposed technical article, please submit a 75 word abstract.

Accepted speakers will receive an Author's Guide with details about manuscript and presentation preparation via e-mail. Only original papers not previously published will be accepted for Wire Association International paper awards and possible publication in *Wire Journal International*.

#### **Please complete the following information and send to:**

Marc Murray, Director of Education & Member Services The Wire Association International, Inc. 1570 Boston Post Rd., P.O. Box 578 Guilford, CT 06437-0578 USA Tel.: (001) 203-453-2777 | Fax: (001) 203-453-8384 E-mail: mmurray@wirenet.org

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#### Abstract (75 word maximum)

Please type your abstract in English on this form. If you need additional space, please use a separate page.





**—DEADLINES**—

Abstract **Deadline**: 15 May 2013

Acceptance Notification: 12 June 2013

#### Manuscript **Deadline**: **3 September 2013**

country and area code)



# ASIA&AFRICA NEWS

viredInUSA - February 201

## Borouge set to grow 700%

2.97 Borouge

Borouge, a provider of innovative, value creating plastics solutions to the wire and cable industry, and beyond, has announced its intention to expand production capacity under the "Borouge 3" project to reach 4.5 million tonnes by the end of 2013.

As reported by AMEinfo, investment in the expansion project, planned to be fully operational by mid-2014, will reach \$4.5 billion and once completed, Borouge is expected to have the world's largest integrated single-site polyolefins plant in the world.

The announcement was made by officials of the company at a press conference, held on the sidelines of Arabplast 2013 in Dubai. The company also announced that it had recorded annual sales of \$3 billion in 2011 and it expects to grow its production

**ASIA / AFRICA NEWS** 



capacity by 700 percent over four years (2010-2014).

Mr Hussain Sultan Lootah, senior vice president, Middle East Africa at Borouge, said: "This robust business growth represents broad customer recognition of our technology leadership and the value we create to their businesses."

Talking about Borouge's cable solutions, Mr Hazeem Al Suwaidi, vice president, sales Middle East, added: "Borouge is a global leader in providing innovative solutions for the wire and cable industry. With the Borouge 3 coming on stream in 2014 and the opening of [the] Borouge Innovation Centre, Borouge will continue to develop and produce high quality productivity solutions that enable cable makers to manufacture quality cables according to the highest industry standards while maximizing production output."



#### Subsea to Taiwan

China Unicom has announced that the first undersea fiber optic cable to link the Chinese mainland with Taiwan has been installed. Cable laying work began in November 2012 to connect Fuzhou, capital of east China's Fujian province, and the city of Danshuei in Taiwan.

The 270km cable will enhance cross-strait communication and release both sides from reliance on international fiber optic cables, said Chang Xiaobing, board chairman of China Unicom.

The project was initiated by Chinese mainland telecoms companies China Mobile, China Unicom and China Telecom, as well as the Taiwan-based ChungHwa Telecom, FarEasTone, Taiwan Mobile and Taiwan International Gateway Corporation.



## 50MW solar project in Gansu

Trina Solar has obtained approval from the Gansu provincial development and reform commission to develop a 50MW grid-connected solar power plant project in Wuwei, Gansu. The project will support economic stimulus in a region challenged by semi-desert conditions. The Wuwei municipality is well suited for solar energy production for sale to other regions as well as supplying local needs.

"We are delighted to have been granted the rights to develop this solar project in Wuwei, Gansu province," said Mr Jifan Gao, chairman and CEO of Trina Solar. "This project will bring...job opportunities to the Wuwei region of Gansu [and] renewable energy which is vital to the overall economic development of the region."

Trina Solar has a history of promoting PV energy. In 2003 the company completed the construction of 40 standalone power stations in Tibet, to provide electricity to the Chamdo region.



### Cable for Liberia

The Liberia Telecommunications Corporation (LIBTELCO) has launched Liberia's first post-war Internet service. The Africa Coast to Europe (ACE) communication cable is a planned 17,000km submarine fiber optic cable system that will connect around 25 countries along the west coast of Africa, including Liberia.

The cable will provide broadband interconnection to global telecommunications and ICT networks. When it becomes operational, the submarine cable is expected to provide the fastest telecommunication services to mobile phones and the Internet.

The ACE will also enhance post-war Liberia development, helping create new business and career opportunities in technology, providing greater access to global markets for Liberian goods and services, giving Liberians improved access to news and information, and better access to banking systems and international financial institutions.

The ACE cable was initiated by LIBTELCO, and facilitated by the Liberia Telecommunications Authority (LTA).



#### Taipei network plan

Taiwan Intelligent Fiber Optic Network Consortium (Taifo), a joint venture established in 2012 specifically to establish a fiber optic network around Taipei City, says it has completed the planning stage of a 105km backbone fiber optic network, 500km of regional fiber optic system, and 1,000km of fiber optic sub-systems.

Taifo signed a contract with the Taipei City government in early 2012 to deploy a citywide fiber optic network and operate fiber optic Internet access services for 25 years. Taifo will finish planning the 6,000km FTTx connections in March 2013, and will then start first-phase establishment of the fiber optic network. The eventual goal is a network of 8,000km to cover 80 percent of the city.



#### Iran, top producer in Middle East?

Iran is said to rank first in the Middle East, and 14<sup>th</sup> in the world, in terms of power generation.

Hamayoun Hayeri said that Iran is the largest exporter and importer of electricity in the Middle East and is exchanging power with most countries in the region, including Armenia, Pakistan, Turkmenistan, Turkey, Azerbaijan, Nakhchivan, Iraq and Afghanistan.

Mr Hayeri, managing director of Iran Power Generation and Transmission Company, also added that Iran's power exports and imports are set to increase to 15 billion MW by the end of the current Iranian calendar year (20<sup>th</sup> March 2013). The Iranian official also pointed out that 99 percent of the equipment required for power generation, transfer and distribution is domestically designed and produced.

Energy minister Majid Namjou said that the country's electricity exports to neighboring countries have increased by about 34 percent since the beginning of the current Iranian calendar year (20<sup>th</sup> March 2012). Iran plans to boost its electricity generation capacity to reach 73 gigawatts by 2015.



## China plans large-scale wind development

The report of the 18<sup>th</sup> CPC National Congress states that, "China is determined to promote the revolution of energy generation and consumption, to control the total consumption of energy, to improve energy conservation, and to support the development of energy conservation and the low carbon industry as well as renewable energy in order to ensure the safety of national energy."

In November 2012, Longyuan Wind Power completed a 150MW offshore wind demonstration project in Rudong, Jiangsu Province. This is China's largest offshore wind farm to realize grid integration. In 2010, Shanghai Donghai Bridge Offshore Wind Farm realized the grid connection of its Phase I project of 100MW installed capacity with 34 sets of wind turbines. The wind farm developer has applied to the National Energy Administration for Phase II of its project of achieving 100MW installed capacity with 26 sets of wind turbines, including one 5MW wind turbine, the largest in Asia.



## First Thunderbolt certification

Sumitomo Electric Industries Ltd is the first company to be granted certification from Intel Corporation for the optical Thunderbolt cable and has started mass production. Based on Intel's Thunderbolt technology, this new optical Thunderbolt cable enables long distance data transmission. Sumitomo Electric developed the cable and began shipment of sample products in April 2012.

All Thunderbolt products must undergo a certification process to ensure optimal operation and end-user experience. The officially certified products are expected to provide highly reliable data transmission at 10Gbps speed.

The optical Thunderbolt cable is an active optical cable that enables transmission up to 30 meters to connect Thunderbolt devices together. The optical Thunderbolt cable is the same diameter as the conventional metal Thunderbolt cable (4.2mm). Sumitomo Electric's special optical fiber makes the cable robust and durable for everyday use, offering high bending performance even when pinched at 180 degrees or knotted. Thsc Ttfftr 1-



## World's biggest offshore wind farm planned

In July 2013, Japan will begin work on an ambitious wind farm project 16 kilometers off the Fukushima coast. The planned wind farm is expected to become the world's largest and produce 1 gigawatt of power when completed in 2020.

The 143 wind turbines, each 200 meters high, will be built on buoyant steel frames stabilized with ballast and anchored to the continental shelf.

The project is part of Japan's national plan to increase renewable energy resources following the nuclear disaster at Fukushima. After the earthquake, Japan shut down its 54 nuclear reactors, but had to restart two reactors due to power shortages.

There were objections to the project by local people, who expressed concerns over possible impact on the fishing industry, which was also hit by the nuclear disaster, but Ishihara is sure the farm can become a 'marine pasture' that will attract fish.

## LACROSSE DONATION

Fairfield University's first division men's lacrosse team has new helmets, courtesy of 1986 Fairfield graduate Edward Planeta Jr, vice president of Acme Wire Products Co Inc.

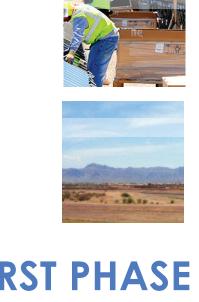
Though Planeta never played lacrosse, he is familiar with the sport because his company manufactures precision wire components, including safety equipment and face masks for lacrosse, football and other sports.

"Acme Wire Products is proud to be the primary face mask provider to the largest lacrosse helmet manufacturer on the market," Planeta said, "and I wanted to recognize the Fairfield University lacrosse team through this donation."

Planeta said the value of the donation exceeded \$10,000. Helmets are one of the most necessary, yet most costly, pieces of equipment and will become the property of the school.

Since 1998, the precision wire components fabricator has donated over 200 helmets to Connecticut and Rhode Island high school lacrosse and football teams, and manufactured more than 1.5 million face masks.

Acme Wire Products also manufactures wire products for other applications, including hospital equipment, food processing machinery, telecommunication equipment and material handling systems and customized guarding using steel and stainless steel wire and sheet metal.



## FIRST PHASE **OF ARIZONA SOLAR PROJECT**

Sempra US Gas & Power has completed construction of Mesquite Solar 1, the first 150MW phase of the company's Mesquite Solar complex in Arlington, 40 miles west of Phoenix.

Construction began in June 2011 and employed more than 450 workers. The power will be sold to Pacific Gas & Electric under a 20-year contract. Future phases planned at the solar complex could produce up to 700MW, making it one of North America's largest solar power installations.



The photovoltaic solar energy project is now operational and ranks among the largest in the US, generating electricity to power about 56,000 homes.

"We are pleased to continue the momentum of our solar program with the completion of Mesquite Solar 1 and will now focus on the development of the remaining 4,000 acre complex," said Jeffrey W Martin, president and chief executive officer of Sempra US Gas & Power.

"Arizona continues to lead the nation in the production of clean, renewable solar energy," said Arizona governor, Jan Brewer. "Projects like...Mesquite Solar 1 not only create clean energy, they also generate quality jobs for Arizonans. I am thrilled to see our great state at the forefront of this promising industry."

Mr Lampert



Gregory B Kenny

## Lampert the lead path

Gregory J Lampert is to assume responsibility for all General Cable Corporation's operations in Canada, the United States, Mexico, the Caribbean, central and South America, with immediate effect.

Mr Lampert joined General Cable in 1998 and has held leadership roles in nearly every aspect of the business. He holds a Bachelor of Science degree in chemical engineering from the University of Cincinnati and an MBA with concentrations in strategy, finance and marketing from the University of Chicago. He is a member of the board of directors of Xtek Inc, a manufacturer of specialized goods for the steel and aluminum industries.

> General Cable CEO, Gregory B Kenny, commented: "I have worked closely with Greg over the last 15 years. He has an in-depth knowledge of our major product lines and functional disciplines. As a member of the global operating committee for the last five years, Greg has helped set strategy and played a key role in the acquisition and integration of Alcan Cable North America and Prestolite Wire.

> "Together, these acquisitions represent more than \$800 million of annual revenue. I am confident under Greg's leadership, we will further advance our strategy of bringing more complex products to rapidly industrializing countries while increasing regional intra-company trade which will enhance our ability to provide seamless customer service."

## FluoroFoam® Masterbatch Pellets

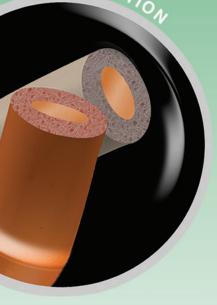
 Chemically Foamable up to 50% • Extends FEP Usage While Enhancing Electrical Performance



**UL Recognized** -U.S. Patent No. 7,968,613 Plenum (CMP) Cable - QMTM2 European Patent No. EP 2 176 326 B1



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## Writing the e-book on the RF path

CommScope engineers and technical directors have collaborated on an extensive e-book, "Understanding the RF path."

The book reports on complicated technical issues from the wireless communications industry, informing wireless engineers, business and marketing professionals about the state and evolution of wireless networks and infrastructure.

Topics covered in the book include the history and evolution of wireless communications; cell site construction and network planning; technology basics of antennas, remote radio heads, transmission lines and other RF path components; solutions for co-siting, passive intermodulation (PIM), network reliability and site monitoring; and specific applications such as distributed antenna systems, back-up power, microwave backhaul and network protection.

A self-paced, online course is available through the CommScope Infrastructure Academy.

## Seabras-1 route surveys begin

Seaborn Networks says that its contractor, Alcatel-Lucent Submarine Networks, has launched marine route survey activities in the United States and Brazil ahead of deployment of the Seabras-1 undersea cable project. The submarine fiber optic network is expected to link the two countries with a capacity of 32Tbps.

In addition to connecting São Paolo to New York, Seabras-1 also will have a branch that lands in Fortaleza, Brazil. Alcatel-Lucent revealed last October that it had won the contract to build the network, including the provision of the company's 1620 Light Manager (LM) submarine line terminal equipment.

"We are pleased to announce this important milestone as part of the overall implementation of Seabras-1," said Larry Schwartz, CEO of Seaborn Networks. "Together with the permit acquisition work currently underway and the completion of the cable route study, the marine surveys represent excellent progress as we maintain the schedule for Seabras-1 to enter service in the first quarter of 2015."

## Canadian acquisition

IEWC Canada has finalized an asset sale agreement to acquire its competitor Delco Wire and Cable Ltd of Concord, ON. Founded in 1974, Delco is a UL and CSA certified stocking distributor of wire, cable and provider of specialized services.

Delco Wire has been especially strong in the development and marketing of high-end digital audio and video cable.

With a diverse group of product specialists and locations in Toronto, Tampa and Calgary, Delco has provided products and service to its customers for over 38 years. Delco's Roger Caynor will join IEWC as vice-president of the audio and broadcast market.

"Delco's strengths in the audio and broadcast markets will be leveraged by IEWC's strong global footprint and excellent customer service a trait our customers are well accustomed to," says Caynor.

"The two companies have very similar business models, as well as supporting products and services. I am certain the Delco brand will be bolstered in the coming years and am excited about the future opportunities [for] our customers...as we become a part of the IEWC team."

#### **Data-rich cables**

Corning Cable Systems LLC, part of space and convenient to pack and Corning Incorporated's telecommunications segment, introduced its optical cables at optical fiber allows the glass-based cables the International Consumer Electronics to be as durable as comparable copper Show (CES), in Las Vegas in January. cables. Optical Cables by Corning are compatible with Thunderbolt<sup>™</sup> and USB 3.0, the two fastest computer and peripheral connectivity Fusion splicer for optic fiber protocols.

With copper connectivity at its length limits be the world's smallest, lightest and most and new applications driving increased bandwidth usage, USB 3 Optical<sup>™</sup> and Thunderbolt Optical Cables by Corning are described as "significantly extending" the data transmission range past the length limits of copper-based cables. The cables are said to be significantly longer (USB 3 optical cables up to 30m, and Thunderbolt tray can be placed on top of the transit optical cables up to 100m) 50 percent smaller, 80 percent lighter, yet stronger than comparable copper cables.

"Users can create, move and manage their data in a much more flexible, efficient and durable manner with this new technology. Video can be live edited from across a football field; a music library can be downloaded 40 percent faster; and devices can be quickly accessed and connected with this much smaller and lighter cable when the capabilities of Wi-Fi and Bluetooth just aren't enough," said Mike Bell, senior vice president and general manager, optical connectivity solutions.

The light weight and flexibility of the cables also make them easy to route in the work transport. Corning ClearCurve<sup>®</sup> VSDN<sup>®</sup>

AFL has developed what it believes to portable fusion splicer. At just 4.76" x 6.38 " x 2.24", the Fujikura 12S fusion splicer is designed to increase efficiency in the field. With its fully ruggedized chassis, the 12S is protected from shock, dust and moisture while its transit case offers multiple options to optimize available workspace. The work case or used independently, and for maximum portability the 12S fusion splicer can be detached completely.



include a Li-ion battery that offers three (35 ft-lbf) at  $-60^{\circ}\text{F}$ . times more power than older versions, yielding up to 100 splice cycles; a 4.5" high-resolution LCD monitor, three times Green reels larger than previous screens with no glare underdirectsunlight; electrodelifeextended Madem Group has declared itself a totally up to 3,000 splices; and 20 percent faster tube heating and splicing.

#### Welding wire for robotics

Lincoln Electric has introduced Metalshield<sup>®</sup> The wire is designed to produce H4 diffusible hydrogen weld deposits as required in structural and heavy fabrication applications that require tensile strength of 550MPa (80ksi).



Enhanced silicon island management minimizes slag and eases slag removal, while deoxidizing agents minimize weld clean up. In addition to low spatter and optimal arc stability, low-alloy wire offers is 3.2mm in diameter, which is 1mm thinner

The Fujikura 12S fusion splicer retains its two- low temperature impact properties with camera observation system. New features Charpy V-Notch test results exceeding 40 J

green integrated company. In addition to PEFC certification in Spain and Bahrain, Madem now has FSC certification in Brazil. Madem can now offer green wooden drums from all its plants in Brazil, Spain and Bahrain.

MC®-80Ni1 low-alloy, metal-cored wire. Apart from the green certifications, all Madem drums are made with kiln dried, heat-treated renewable pine, sourced from Brazil, Germany, Austria and Canada.

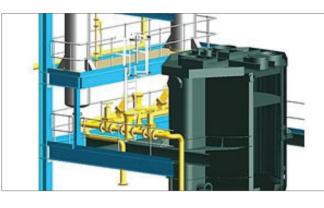
#### Thin Thunderbolt

Sumitomo Electric Industries Ltd has begun sample product shipments of a thin Thunderbolt cable with a diameter of around 25 percent smaller than the conventional Thunderbolt cable.

Sumitomo Electric has developed Thunderbolt cable using Intel's technical specifications. The company launched its first Thunderbolt cable in April 2012 and started mass production of its optical Thunderbolt cable in December 2012. The newly developed thin Thunderbolt cable than the conventional cable, and is said to "We are working hard to offer our customers" provide highly reliable data transmission at a high speed of 10 Gbps.

#### Legrand goes 3D

Legrand's Swifts IEC cable ladder, IEC cable tray, Salamandre distribution trunking and Cablofil wire mesh cable tray systems industries." have been integrated into Aveva PDMS 3D design software.



Suitable for rugged applications, AFL's indoor/outdoor low-smoke zero-halogen breakout cables feature a durable zerohalogen, UV- and fungal-resistant outer jacket compliant with both IEC and UL standards. The cables are available with between two and 24 fibers with variable sub-cable dimensions that support specific termination and routing requirements. Sub-cables can be specified at 2mm, 2.4mm or 2.9mm diameters and include AFL's 900µm tight buffer. Additional strength members are applied to support wedgestyle industrial termination schemes.

Matt Crunden, marketing manager for Legrand's cable management division, said: "This has been done with the dual intention of increasing specifications and placing our products in the right shop windows in recognition of the industry's shift to building information modelling (BIM)."

Aveva's PDMS 3D design software is said to deliver maximum productivity and capability on all types of plant projects, from the smallest upgrade to new build projects of unlimited size and complexity.

Bruce Douglas, Aveva's senior vice-president, EDS strategy and marketing, said:

greater access to industry standard PDMS, components directly within allowing them to use standard databases rather than being forced to create their own catalogues. This integration is further evidence of why PDMS is widely considered the most configurable 3D plant design solution for the process plant and power

#### **Breakout cables**

"Generally installed in areas where EcoCable offers space savings of up to 47 ventilation is of concern, AFL's line-up percent compared to traditional PVC of LSZH fiber optic cables is suitable for control cable. For example, a 22 AWG PVC inclusion in applications spanning from the campus network to heavy industrial installations," explained Doug Baker, commercial manager for AFL's enterprise EcoCable is suitable for use in NFPA79 cable systems.

smoke rated while exceeding the stringent cable. requirements of Telcordia GR-409-CORE issue 2, ICEA-S-104-696, and further compliant to directive 2002/95/EC (RoHS).

#### **Eco range grows**

additions to its range of environment-



Utilizing the 100 percent recyclable MPPE insulation found in EcoWire, EcoCable and EcoFlex are designed to be up to 65 up to 91 percent lower outgassing than and True Sequential Footage<sup>™</sup>. traditional PVC cable. The two control cables are non-halogenic and contain no XHHW-2 can be used in conduit or other heavy metal pigments, allowing them to recognized raceways for service, feeder, meet RoHS and WEEE requirements.

insulated cable has a diameter of 0.502 inches (12.75mm). The equivalent EcoCable has a diameter of 0.219 inches (5.56 mm). applications and is RoHS and REACH compliant. Its temperature range of -50°C Cables are UL-1666 riser and UL-1685 low to +105° exceeds that of standard PVC

EcoFlex is a UL AWM 21819 and CSA rated flexible control cable available in sizes ranging from 28 AWG (0.09mm<sup>2</sup>) to 10 AWG (5.32mm<sup>2</sup>), offering space savings of up to 32 percent compared to PVC. Alpha Wire has unveiled the latest With an 8x flexing bend radius and rated for more than 1 million flex cycles, EcoFlex friendly products, EcoCable and EcoFlex. is suitable for use in NFPA 79 applications and is RoHS and REACH compliant. Its temperature range is -40°C to +105°C static, and -5°C to +105°C while flexing.

#### Slipwire<sup>®</sup> copper XHHW-2

Manufacturer of copper electrical building wire and cable, Cerro Wire LLC, has announced that it now carries XHHW-2 cross-linked polyethylene (XLP) insulated percent lighter and 47 percent smaller, with copper conductors with a SLiPWire<sup>®</sup> jacket

and branch circuit applications, and

is suited to industrial applications where Air-blown cable insulation resilience and resistance to moisture and heat are required.

XHHW-2 can be used in wet or dry locations at temperatures up to 90°C. The XHHW-2 insulated copper conductors are available in sizes from 14 AWG to 750 MCM, with outer dimensions ranging from 0.120" to 1.136". Sizes 1/0 and larger are rated for cable tray (CT) use. The product is available in reels of 1,000, 2,000, 2,500, or 5,000 feet.



SLiPWire XHHW is manufactured using Cerrowire's self-lubricating polymer (SLP®) technology, for installation without a pulling lubricant. SLiPWire XHHW-2 also features true sequential footage, guaranteed by Cerrowire to be accurate to ±0.5 percent on reels of 1,000 feet, and longer for sizes 1 AWG and over.



Companies AFL and Dura-Line have joined forces to develop an air-blown fiber optic system, eABF™ cabling (Enterprise air-blown fiber). Designed to provide an easily integrated optical fiber network communications infrastructure, eABF is said to have one of the highest fiber density solutions in the air-blown fiber market.

"The eABF approach to structured cabling technology has the potential to change the industry by eliminating the initial high cost typically associated with traditional air-blown fiber systems," commented Stephen Martin, AFL product manager. "By removing this initial installation cost barrier, network designers will realize that the eABF solution can be their primary network pathway infrastructure."

The core of the eABE solution is the cable and duct. The cable has a low-friction high-drag jacketing system that enables the cable to move along the duct at a faster speed. Fiber types include single-mode, OM2, OM3 and OM4 employing bend insensitive fiber technology, and in fiber counts up to 48.

All eABF products incorporate a lowribbed inner surface contact, and ultra-low friction Silicore® lining for low drag, high-velocity cable jetting channel within the duct. The eABF cableduct combination also allows for installations up to 1,000 feet without using air.

#### Cable alliance

General Cable and Dow Flectrical & Telecommunications have introduced BICC<sup>®</sup> brand EmPowr<sup>®</sup> Link+, an enhanced water tree-retardant cross-linked polyethylene (TRXLPE) insulated medium-voltage cable.

EmPowr Link+ underground mediumvoltage cable is said to provide longer service life and the potential for a lower total system cost.

EmPowr Link+ utilizes the Dow Endurance™

that help reduce electrical stress and enables easier accessory installation over a broader temperature range. These components, combined with exceptional material processing and cable manufacturing capabilities, deliver a mediumvoltage cable designed to provide extended cable life over existing TRXLPE cables.



"Backed by the General Cable-Dow HFDC-4202 EC insulation compound, which Inside alliance, EmPowr Link+ delivers offers enhanced dielectric performance reliable power that allows our utility with improved water tree-retardant customers to lower operating costs and technology, and is coupled with advanced ensure an expected system lifespan in conductor and insulation shield technologies excess of 40 years," said Jay Lahman, vice president and general manager of General measurement of the crimp pull strength Cable's electrical utility business.

#### Wire crimp tester

Molex Incorporated's new hand-held wire crimp pull-force tester delivers digital pull-force readings to verify crimp quality.

It will operate on a wide range of crimped terminals and wires, providing consistent verification of crimp pull force and reducing potential quality issues. "Our hand-held wire crimp pull-force tester can be used in any situation requiring a portable solution to verify crimp quality," said Bob Grenke, product manager, Molex.



The hand-held wire crimp pull-force tester from Molex comes standard with both a wheel-type clamp featuring multiple slot sizes for wire diameters up to 6.35mm and a clamp-style holder for open-barrel products.

The manual hand-cycle lever automatically grips the wire, providing an accurate

on a wide range of wire sizes and terminals including crimped, soldered or solderless. It comes with multiple power plugs and a digital output that displays measurement settings in pound force (lbf), kilogram force (kgf) and Newton (N), making it ideal for global use. It is supplied with AC rechargeable adapters for 120V and 230V AC power supplies and a calibration certificate (NIST).

#### Make sure your new machine or product receives all the publicity it can get!

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To make sure your editorial is published in the March edition send us the details by 22<sup>nd</sup> February

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