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YEARS

EDITOR

The wire and cable industry's attention turns to Atlanta, Georgia, next month for the biennial Interwire.

Renowned for debuting new machinery and its networking, Interwire is the largest and oldest exhibition in the Americas and is featured heavily in this issue of wiredInUSA with more than 30 pages of exhibitors listing details of their involvement.

The city's Congress Center will stage the four-day convention and three-day exhibition, organized by the Wire Association International. Please feel free to call in to booth 222 to collect copies of our sister publications, EuroWire and Wire & Cable ASIA. Our coverage starts on page 42.

Whilst looking forward may be very much on the minds of everyone at Interwire, history also features in this issue with collector Mike Call of Nevada explaining his fascination with barbed wire. Mr Call, a barbed wire aficionado, talks about his interest in barbed wire ahead of the Western Collectibles Show, sponsored by the California-based Barbed Wire Collectors Association and being staged this year in Minden, Nevada. Catch the full story on page 12.

David Bell
Editor

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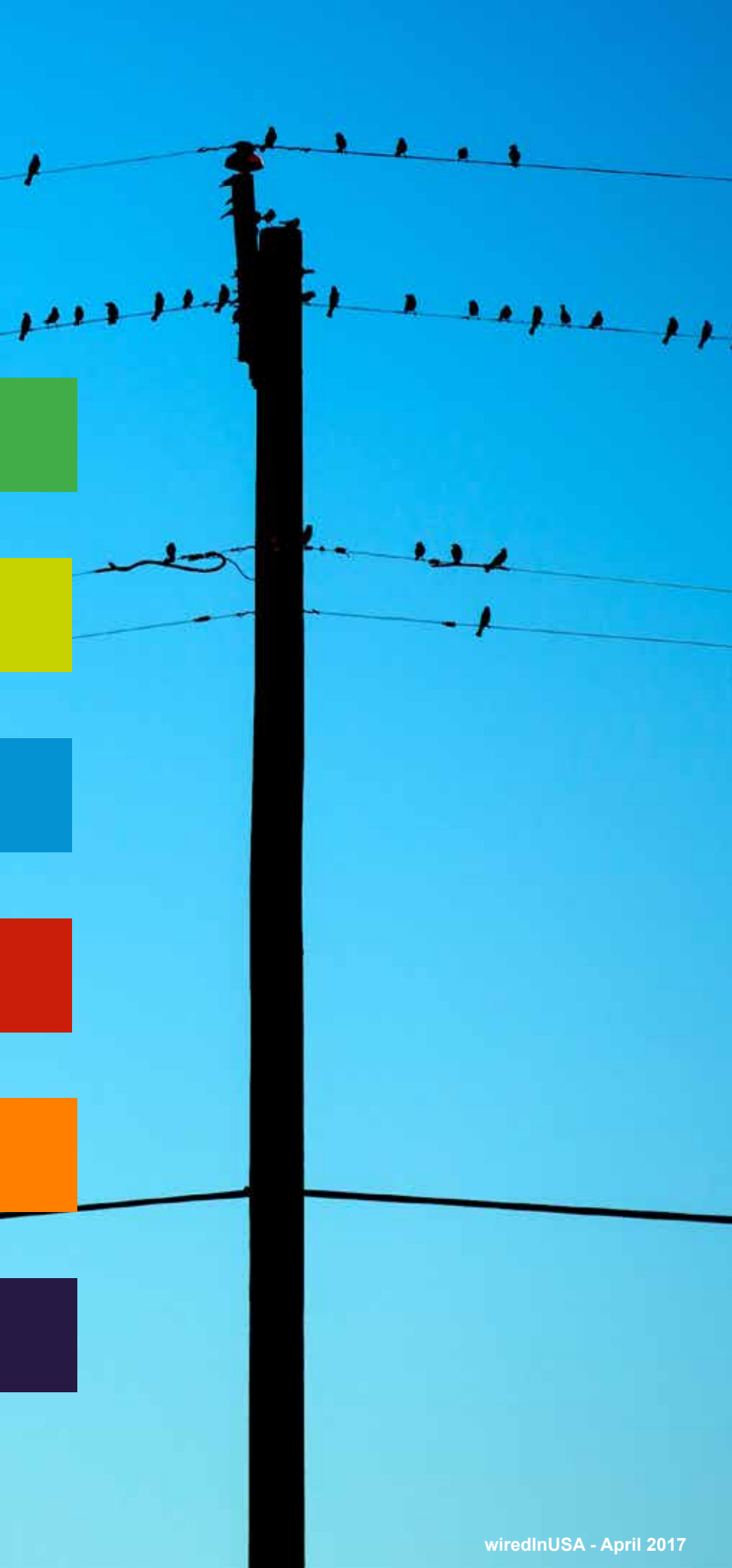
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MAKING THE NEWS

Calling on Congress

A coalition representing US manufacturing, construction, energy and environmental workers has asked congress to include electric transmission provisions in any proposed infrastructure legislation and so streamline the expansion of US electrical infrastructure.

A letter, co-signed by the American Wind Energy Association (AWEA), the National Electrical Manufacturers Association (NEMA), the Solar Energy Industries Association (SEIA), WIRES, and other groups, urged congress to promote grid investments that lessen the economic impact of electrical outages and ensure that the country's high voltage transmission system is productive and secure.

"Just like highways and bridges, transmission is infrastructure that keeps the US economy moving and growing," said Tom Kiernan, CEO of AWEA. "Investment in new transmission lines will modernize the US grid and deliver

more clean energy to population centers. This investment will also help to keep the lights on, and costs low, for American homeowners and businesses. Recognizing transmission as essential infrastructure is another way congress and the administration can keep promises of advancing all forms of energy while growing US energy independence."

"Modernizing, expanding, and protecting the electric grid is a national priority," said NEMA president and CEO Kevin Cosgriff. "Upgrading and extending the more than 200,000 miles of high voltage transmission lines in the United States is necessary in its own right to ensure that low cost and reliable electricity continues to flow to the nation's businesses, hospitals, schools, and homes."

"Modern electricity infrastructure is the missing piece of the puzzle," added Abigail Ross Hopper, SEIA's president and CEO.



Agreement to conduct sales

CTC Global has announced the signing of an agreement with General Cable which implements an expanded ACCC® licensing arrangement. Under the new agreement, General Cable has rights to manufacture, promote and sell ACCC bare overhead transmission and distribution conductor in the United States, Canada and Puerto Rico.

The agreement is said to combine “the unique strengths of both companies”, using General Cable’s century-long experience of supporting the utility market with technologically advanced products, and CTC Global’s patented ACCC conductor, utilizing proprietary carbon fiber core technology.

General Cable began working with CTC in 2004, gaining extensive experience in

manufacturing the ACCC conductors. The new agreement strengthens the long-standing relationship, with General Cable’s strategically positioned direct sales force assuming a more comprehensive role in sales and distribution.

“The expansion of more than a decade-long collaborative partnership strongly supports our strategic commitment to provide innovative solutions to fill the demand for increased capacity with enhanced reliability for a more sustainable power grid,” said Craig Snyder, vice president and general manager, General Cable Electric Utility Products. “Our relationship with CTC assures our utility customers access to the most comprehensive and leading-edge transmission products.”

Further planning for planned community

The city of Mission Viejo, California, has engaged Magellan advisors to carry out a fiber optic feasibility study. Magellan consultants will assist the city in evaluating the feasibility of developing a fiber optic network.

High speed broadband is seen as a critical infrastructure for the global digital economy, and the city of Mission Viejo recognizes the need for this infrastructure for municipal operations and economic

growth. The city and Magellan will work with municipal departments and local stakeholders to determine the community's immediate and future broadband needs.

Magellan will investigate the various options of broadband business models, guiding the Mission Viejo leadership in determining the most practical model to meet the needs of the Mission Viejo community.

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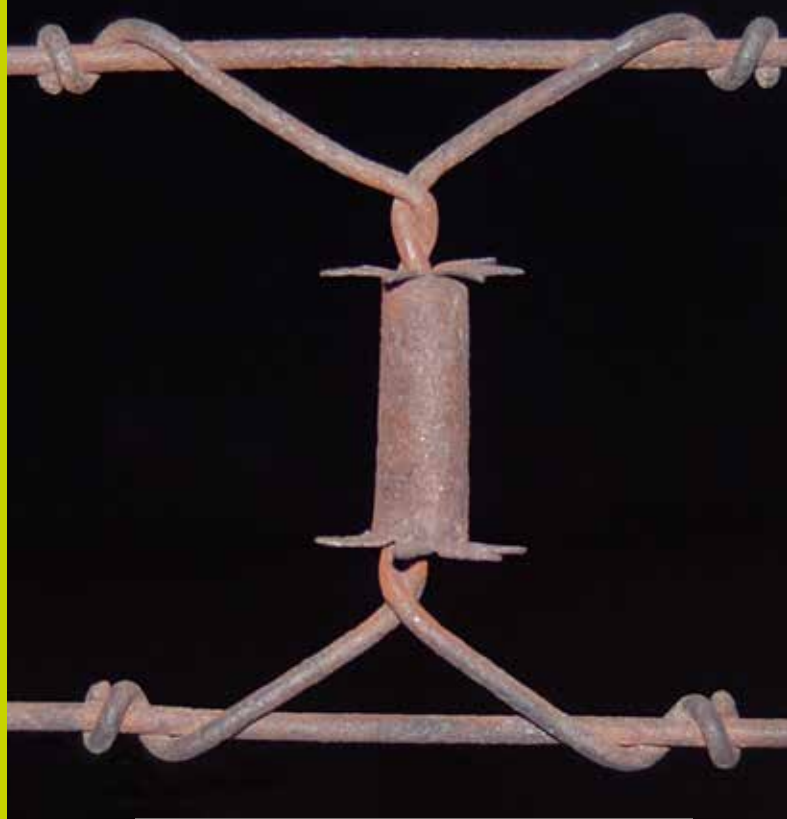
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History goes to the wire



Thomas J Barnes patent 1907.
Photograph courtesy of collectorsweekly.com

Mike Call of Nevada is a barbed wire aficionado and a member of the Antique Barbed Wire Society and the California Barbed Wire Collectors Association. Collectors share their fascination with barbed wire, and the history it represents, at gatherings such as the Western Collectibles show, sponsored by the California Barbed Wire Collectors Association and this year to be held in Minden, Nevada.

“The whole idea is to bring back history,” Call said: “We want to keep people interested in history.” Call first became interested in barbed wire after seeing a small collection at a state fair in 1969. He bought a book about it, and his passion “Took off from there.”

Barbed wire was first patented in the mid-1800s. Over 1,000 barbed wire types were

patented, but even more were made without patents. “There are some rare pieces out there that are just absolutely beautiful,” Call said. “I never cut a farmer’s fence. I always walk the fence long enough that I can find a piece.”

When barbed wire was first patented it was sold by the pound rather than by the foot, so the goal was to make wire strands that were both light and effective. Wires with elaborate and heavy barb patterns were unpopular, due to their cost, but these short-lived patterns are the most coveted by collectors.

Call has never traveled overseas to collect, but an uncle once brought back pieces from Italy and Germany. Call commented: “He had a hard time getting that briefcase on the airplane.”

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All day, every day production

Northwire is expanding its wire and cable manufacturing facility in Santa Teresa, New Mexico, and transitioning to a continuous 24/7 operation structure. The NWI Santa Teresa team will be expanded to accommodate the increase in cable assembly production. The anticipated start date was late March 2017.

Strategically positioned, NWI's facility within the Santa Teresa region is suitable for copper sourcing and for distribution to the southwest, Mexico, and central and

south America, making this geographic location rich with business opportunities.

The Santa Teresa facility, opened in 2004, provides research and development for cable products, quality testing and customer care. Northwire's partnership as a LEMO group company also offers fully integrated cable and connector solutions for engineers within the aerospace, energy, industrial and medical cable markets.



Northwire's manufacturing facility
in Santa Teresa, New Mexico

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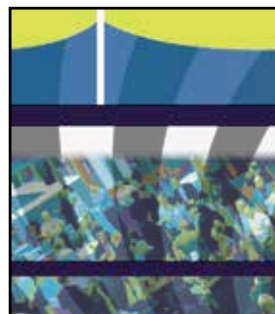
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Into Africa

Google has increased its investment in Africa by laying fiber optic cables, easing access to cheaper Android phones, and training a workforce in web-focused digital skills.

“We laid about 1,000km of fiber in Uganda and we are busy doing about 1,000km in Ghana,” said Google’s SA head Luke Mckend. “We want to make sure that we cover all the bases. We want to train people and make sure that they have the devices and are able to connect to the Internet. About one million people in Nigeria, Kenya and South Africa have been trained by Google over the past year, yet many had to complete their courses with limited Internet access due to unreliable coverage and high data prices.”

Alongside US competitors, such as Facebook, Google is seeking to boost connectivity in Africa and to open up a new market for smartphones and services.

Google’s plans to launch a satellite to extend Internet access to rural parts of sub-Saharan Africa were halted when a SpaceX rocket, connected to the initiative, blew up. Google is now running African trials for its Project Loon, which uses solar-powered balloons to connect people in rural or remote areas. The company will also provide offline versions of its training courses in different languages, including Swahili, IsiZulu and Hausa.

“Training people in digital skills has a larger economic impact than just making them more employable,” Mckend said; “They also help those around them to get online and become job creators and entrepreneurs themselves.”

Micro cabling receives recognition

The Lightwave Innovation Reviews distinguish top products and solutions available within the optical networking industry, as determined by a panel of third-party judges including industry executives and analysts, developers and journalists.

The 2017 program has recognized Corning Optical Fiber and Cable's MiniXtend cables, combining Corning's micro cabling solution with its time-saving binderless FastAccess technology. Designed for installation in microduct systems using air-assisted installation methods, the cables are up to 50 percent smaller than standard loose tube cables, and offer high fiber counts in a small footprint. FastAccess technology eliminates the use of a binder, waterblocking yarns and tapes, and is said to enable up to 70 percent faster cable access and reduced risk of buffer tube damage.

"On behalf of the Lightwave Innovation Reviews, I would like to congratulate Corning on their score," said Rob Stuehrk, Lightwave Group publisher. "The judges noted the MiniXtend cable's small diameter was particularly noteworthy and beneficial to users. One of the judges commented that duct space is rapidly vanishing, in no small part because installing new duct is becoming cost - and regulation - prohibitive. The ability to fit 144 fibers into 8.1mm bodes well for the MiniXtend cable and, of course, for the organizations that use it."

Advaris presents operations management system



Be in control with Advaris

Advaris Informationssysteme GmbH will be presenting its Advaris Cable operations management system at Interwire.

The Advaris Cable solution supports and interlinks all aspects of operation, especially design, manufacturing, quality assurance, plant maintenance, materials management, logistics and sales.

The heart of the system is a manufacturing execution system (MES) specifically developed for the requirements of wire and cable manufacturing.

“Requirements in the length-based manufacturing industry are becoming

continually higher, and there is an increasing need to react fast, and cost-effectively, to an ongoing situation. This makes it essential to have an operations management system which records and analyzes data reliably in real-time,” explained Advaris CEO Manfred Moser.

As a part of its cross-group switchover to SAP’s ERP system, US cable manufacturer Southwire has chosen to install Advaris Cable MES, and has implemented the Advaris manufacturing execution system in several of its US plants.



Condat will focus on its lubricants range at Interwire

Condat heading to Interwire at booth 1549

Condat will focus on its aluminum wire drawing lubricants range at this year's Interwire.

The use of aluminum is increasing in the electrical industry, due to its cost efficiency compared to copper and its conductivity, light weight and electromechanical properties. Aluminum wires are now used in high voltage power cable, magnet wire and in some automotive wire.

Condat's Vicafil™ TFA neat oils range is designed to offer low residues and extended operating life. Its specifically formulated additives package minimizes thermal oxidation, maintaining longer lubricant performance. Bath life is increased and maintenance costs reduced. Low viscosity Vicafil TFA 1167

and Vicafil TFA 1460 reduce lubricant consumption while offering high lubricity, with a specialized formulation that provides extended operating life without the need for maintenance additives.

For drawing both aluminum and copper wire, Condat has developed the Vicafil TAL range. These water-based lubricants also contribute to a cleaner working environment.

Finally, for aluminum wire stranding and compacting, Condat offers a range of vanishing stranding lubricants that leave very low residues while minimizing flammability and reducing VOCs. Those products are entirely compatible with subsequent plastic insulation processes, allowing perfect adhesion and no bubbling.

Energy boost

Xcel Energy will soon add seven new wind farms, a total of 1,550MW, in Minnesota, North and South Dakota and Iowa.

The new wind portfolio is a combination of owned projects and power purchase agreements, and reflects an investment of \$2.5 billion.

“This investment in renewable energy keeps bills low for customers while giving them the clean energy they want, and helping us achieve 63 percent carbon-free energy by 2030,” said Chris Clark, president, Xcel Energy-Minnesota. “Wind energy is at historically low prices right now so we’re able to reduce emissions while securing long-term cost savings for our customers.”

The projects include Freeborn Wind Energy, a 200MW project located in Freeborn County, Minnesota, and Worth and Mitchell counties, Iowa, developed by Invenergy; Foxtail Wind, a 150MW project located in Dickey County, North Dakota, developed by NextEra Energy Resources; Blazing Star 1 and 2, both 200MW projects located in Lincoln County, Minnesota, developed by Geronimo Energy; two build-own-transfer projects totaling 400MW; and two power purchase agreements totaling 400MW.

The projects are expected to enter service by 2020.



Higher education for engineers



Light Brigade is now offering a four-day, instructor-led “fiber to the antenna” course. Engineers who work on extending fiber to equipment on towers and rooftops, or for distributed antenna system applications, face unique challenges. The new course is designed to provide a thorough understanding of fiber optic technology and the best practices for integration and installation of optical components in these applications.

Using a blend of classroom and hands-on training, students will become proficient in cable preparation, splicing and testing, as well as the essential procedures for connector cleaning and inspection. Class attendees can earn the ETA International

fiber to the antenna certification by passing a skills test and a written exam given at the conclusion of the course.

“We are excited to continue to provide training opportunities for specialty applications within the fiber optic communications industry,” said Lee Kellett, general manager. “These courses give our customers the specific training they need and can take directly to the field.”

The FTTA course is currently scheduled in Las Vegas, Seattle and Washington, DC, or can be delivered directly to customer locations.

Safety concerns make developer dig deep

BC Hydro has altered its plans for proposed new substations in downtown Vancouver after a consultation process.

It will now take measures to further reduce electromagnetic field levels after hearing concerns from residents, particularly parents, regarding possible EMF levels.

“Within park boundaries and the Vancouver School Board property we will bury transmission cables deeper underground than we normally would, and will implement magnetic field shielding by encasing the cables in steel,” explained the president and CEO of BC Hydro, Jessica McDonald, in a letter to the school and park board.

“This will reduce the very low EMF levels even further (a minimum 75 percent reduction) and should alleviate the public perception of health risks from EMF.”

Independent studies will verify EMF levels once the substations are in use. The studies will be ongoing and the levels reported publicly.

BC Hydro received 219 feedback forms, of which 53 percent indicated underground substations were a good idea, most citing an efficient use of valuable land, but for those against the idea, 30 percent, the two biggest obstacles were proximity to a school and safety concerns regarding EMF.





Connecting over connectivity

US Federal Communications Commission (FCC) chairman Ajit Pai spoke in Pittsburgh on 15th March on the topic of “Bringing the benefits of the digital age to all Americans,” and laying out his four leading policy principles.

Explaining his emphasis on the importance of digital empowerment, the need for ubiquitous Internet access, the power of competitive free markets, and for “light touch” regulation, the chairman particularly focused on the necessity for government regulation not to stand in the way of innovation.

He cited his creation of the Broadband Deployment Advisory Committee as a

key first step in laying out best regulatory practices, and used a pending visit to Detroit to illustrate how local government regulation had threatened to slow roll deployment.

Pai also called for any infrastructure broadband funding to be directed through the FCC as the agency best equipped to handle the efficient allocation of funds to the communities that need it most.

These are all issues in which the FTT Council is actively engaged, and the council is looking forward to continuing to work with the FCC.



EUROPE

NEWS

A large spool of optical cable is the central focus, situated on an industrial platform with prominent yellow railings. The spool is dark with a pink label that reads 'PRYSMIAN'. The background shows a complex network of pipes and structural elements, suggesting a manufacturing or port facility.

Record fiber?

Prysmian is claiming a new world record after delivering what is probably the highest fiber count underwater optical cable ever made

Prysmian Group is claiming a new world record after delivering what is probably the highest fiber count underwater optical cable ever made.

An underwater FlexTube® cable containing 1,728 optical fibers has been successfully deployed by the Australian telecommunications provider Superloop for its TKO Express project, to provide broadband connection between the areas of Siu Sai Wan on Hong Kong Island and the data center hub of Tseung Kwan O (TKO) industrial estate on the mainland. The previous record was set in 2014, when Prysmian manufactured an underwater FlexTube cable with 720 fibers.

The base 1728f FlexTube cable was made in Calais, France, then airfreighted to Australia for additional layers of moisture barriers and aluminum tape. To ensure

that the cable would cope with the rigors of being buried up to 5m below the Hong Kong seabed, it was given double armoring layers of wrapped steel wires and finished with a final sheath. From cable design to completion took over two years.

Matt Whitlock, COO at Superloop, said: "Seeing the cable being manufactured in France, processed in two different plants in Australia, and then transported on a plane to Hong Kong was simply fantastic."

"It was a logistics challenge indeed," added Frederick Persson, CEO at Prysmian Australia. "Airfreighting a drum weighing 15 tonnes was something that we have never done before. But we mastered it, and the drum was successfully delivered to the TKO port three days before the promised date. It has [been a] great success for both companies."

Quality monitoring



UK's National Grid North Sea Link Ltd has appointed WSP Parsons Brinckerhoff to provide cable manufacturing quality and inspection services on a \$2.1 billion interconnector to link the Nordic and British markets.

National Grid North Sea Link is working with Statnett to construct what will be the world's longest subsea interconnector. When completed, it will consist of approximately 720km of HVDC cable. The interconnector, scheduled to be operational in 2021, will link Kvilldal in Norway with Blyth in the UK.

Michael Carr, assistant project manager, said: "The key to achieve this is to work alongside Prysmian to identify any potential manufacturing quality issues prior to installation, as costs to repair the cable once installed can be significant.

"WSP Parsons Brinckerhoff is keen to demonstrate [its] track record in this sector to capitalize on the ever-increasing number of interconnector projects around the world."

Continuous testing will be carried out until 2021.

Strategic divestment complete



ABB has finalized the divestment of its high voltage cables and cable accessories businesses to NKT Cables. The transaction was completed on 1st March 2017.

The sale, originally announced in September 2016, is in line with ABB's commitment to active portfolio management, a key element of its next level strategy. By combining two strong cable portfolios and maintaining access to supply through a long-term strategic partnership, a more competitive cable business on a larger scale is created under NKT Cables' ownership. As part of the strategic partnership, ABB and NKT Cables will work together on projects and research.

NKT Cables' projects business will be headed by Andreas Berthou, former SVP of ABB HV cables. Berthou has been with the company since 1999 and has extensive experience with the onshore and offshore AC/DC industry. Detlev Waimann, former head of NKT Cables' projects business, will take up a position as chief technology officer.

Research appointment



Sweden's Habia Cable has appointed Richard Andersson as associate electrical engineer to its research and development team.

Andersson has a background as a researcher at KTH Royal Institute of Technology, the largest technical university in Sweden. He holds an MSc in materials engineering and a PhD in electrospinning of polymers. His most recent experience comes from his involvement in research projects with Swedish companies within the field of electrical insulation for high voltage systems, and in conductive composites for electromagnetic interference shielding.

"With Richard's extensive previous knowledge in electrical characterization techniques, and a practical experience with development of new materials, we are sure he will contribute to our development of existing and new application areas," said Habia's research and development manager, Johanna Björling.

Software success



ElSewedy Cables Qatar has contracted InnoVites to supply its cloud-based industry software, CableERP on Microsoft Dynamics 365.

Mr Ahmed Fathy, CEO at ElSewedy Qatar, commented: "Standard ERP software doesn't support critical parts of our business processes. The InnoVites CableERP solution is built specifically for our industry, and the InnoVites team really understands our business. With the InnoVites CableERP solution on the Microsoft Cloud we now have the best of two worlds: it's the perfect combination of industry-specific apps on the innovative, cloud-based business platform of Microsoft Dynamics 365."

Mr Magdy Mansour, IT manager at ElSewedy Qatar added: "InnoVites delivers the software out of the box. No customizations are required for the industry-specific functionalities. It means that we can complete our ERP implementation project faster and at a low risk."

Fiber spread



Kazakhtelecom's general director Alim Shukenov has told the news agency Strategy2050.kz that around 60 villages in North Kazakhstan will be connected to a fiber optic network infrastructure by the end of 2017. In total, over 200 settlements in the region will be covered by the firm's fiber backbone network by 2020.

Kazakhtelecom completed work on the final section of an 11,500km fiber-based network, the National Information Superhighway (NISH), in 2008. In November 2014, the telecommunication company presented a plan to parliament for the deployment of fiber optic infrastructure to public buildings in rural areas.

Villages and towns with over 250 inhabitants are to be connected to KT's fiber network, with the operator providing broadband, IPTV and IPVPN services over the infrastructure. Kazakhtelecom is majority-owned by the state.

Acquiring expertise



Leoni has secured a two-thirds holding in Adaptricity AG. The company will provide software-supported consulting services to the Leoni group.

For example, Leoni will be in a position to deploy proprietary software that generates time series-based simulations to optimize power distribution grids by using SmartGrid technologies.

Other than expanding Adaptricity's core business, Leoni aims to establish a close relationship with its international project business. A focal area will be to transfer the acquired Adaptricity's skills to a range of leading-edge applications and market segments.

Leoni will also accumulate additional expertise in the areas of electronics, sensor technology, software and data analysis, all viewed as crucial to offering intelligent cable systems and related services.

Floating offshore needs scale



March's floating offshore wind energy event in Marseille, France, (FOWT 2017) was opened by Giles Dickson, CEO of WindEurope. His speech focused on the industry's vision to maintain European technological leadership in offshore in the coming decades. Floating offshore wind has a pipeline of projects for the commercialization of over 300MW, and with a potential for 4,000MW in European waters.

Dickson stated that Europe must deploy demonstration projects to "deliver a final message of assurance to investors" that the costs of floating offshore wind will fall as volumes increase. The industry expects a ten percent cost reduction by 2020, with a descending cost curve anticipated up to 2030.

Dickson emphasized that bringing the floating option to the market increases the chances of more offshore wind coming online, adding that the clear areas of complementarity between bottom-fix and floating technologies can only be realized with the right volumes.

Subsea maintenance contract



Energinet.dk has awarded a framework agreement to JD-Contractor A/S for the contingency repair of its subsea cables. The agreement covers all Energinet.dk subsea assets in Denmark, including the transmission systems and export cables for all Danish offshore wind farms.

The new agreement will run for a fixed period of five years. JD-Contractor has already worked with Energinet.dk for twenty years.

Rasmus Normann Andersen, CEO of JD-Contractor A/S, said: "It is a testimony to our experience in this area, and the good cooperation between Energinet.dk and JD-Contractor which, over the years, has proved to be a successful combination [with] completion of cable repairs in record time. This, despite often challenging weather conditions."



ASIA & AFRICA

NEWS



Image: www.tradearabia.com

Network growth

Tiger Cable System, a consortium formed to operate an international terrestrial cable system between the Arabian Gulf to Europe via Iraq, Iraqi Kurdistan and Turkey, has signed a partnership agreement with Bahraini company Rapid Telecom.

Tiger project manager Dr Kassim Hassani said: "We are delighted to sign the strategic partnership agreement with Rapid Telecom, which has an immediate connectivity to all telecom operators in the GCC countries."

"Once fully implemented, Tiger Cable System will provide high speed broadband and low latency connectivity from the Middle East to Europe."

Sheikh Hamad bin Khalid Al Khalifa, chairman of Rapid Telecom, said: "Forming

strategic partnerships with leading telecom operators and providers in Bahrain and the region is of utmost importance to us. This partnership with Tiger Cable System will enable us to expand our regional and international reach, as well as provide customers in Bahrain with innovative solutions that meet their business needs. We look forward to building on this partnership with Tiger, which we believe will be mutually rewarding to both companies."

Tiger's network topology is based on utilizing an existing network of operators in the region to reduce the total cost of the system and the construction time of the cable.

Art in wire



A Dubai hotel is exhibiting images created from wire.

The exhibition shows artwork created by Mira Mortada who captured the features of 15 people, some real and some imaginary, in a series of metal wire portraits.

Each portrait is created from a single piece of wire, intricately twisted to show a human face.

The exhibition's title is Ashkal, the plural of the Arabic word "shakl" meaning shapes or forms.

Mira Mortada is a Lebanese artist who started her career in Dubai working in advertising, publishing and branding.

She was art editor at Brownbook magazine before starting Ashkal Artworks, her series of framed metal wire portraits. She currently works as a freelance graphic designer and illustrator.

Tidal turbine test



In mid-February Envirotek, together with an international team of experts, successfully deployed a Schottel Instream Turbine (SIT) in the waters off the Sentosa Boardwalk in Singapore, to showcase the viability of tidal energy in the region. Envirotek, a Singapore-based clean technology investment company, aspires to lead tidal in-stream energy projects in southeast Asia.

"This demonstration is about using appropriate technologies in suitable locations to address real energy needs [in] southeast Asia. We are keen to develop projects that involve marine renewable energy — a resource that is yet to be tapped effectively in the region," said Jefferson Cheng, chairman and founder of Envirotek Pte Ltd.

Dr Michael Lochinvar Sim Abundo, MD of OceanPixel Pte Ltd, noted that ocean renewable energy is not currently in the energy mix in southeast Asia.

OceanPixel Pte Ltd, a spin-off company from the Energy Research Institute at Nanyang Technological University, Singapore, was chosen to manage the project on behalf of Envirotek Pte Ltd.

Joint cable venture



LS Cable & System Asia and its affiliate, Gaon Cable, held a joint venture signing ceremony in February 2017.

The two companies will invest around \$27 million to establish a production company, LS-Gaon Cable Myanmar (LSGM), at Myanmar's Thilawa Special Economic Zone. The power cable plant, expected to be complete by 2018, will mainly produce aerial cables for power infrastructure, and low voltage cables for buildings and houses.

LS C&S Asia plans to expand production to medium and high voltage cables through a phased investment.

Korean collaboration



Korea Electric Power Corporation (KEPCO) and GE have signed a memorandum of understanding to establish infrastructure for high voltage direct current transmission in Bitgaram Energy Valley in Naju city, South Korea.

KEPCO's CEO, Hwan Eik Cho, and Bong Soo Moon, its EVP and chief power grid officer, joined the signing ceremony with Jeff Immelt, chairman and CEO at GE, and Chris Khang, CEO for GE Korea.

The companies have agreed to cooperate on localizing the latest HVDC technology. Bitgaram Energy Valley will be further leveraged as the HVDC test bed with investments in digital grid applications and big data analysis. To support this initiative, GE has opened an office in Naju.

Hwan Eik Cho, CEO of KEPCO, said: "We are pleased to establish this HVDC infrastructure at Bitgaram Energy Valley through joint investment with GE," adding: "This investment will contribute to the development of Korea's HVDC technology, while the Energy Valley leaps to become a global hub for new energy businesses. GE's continued investment in Korea will support the growth of local companies in the future."

Wire industry on show



Iran Wire, organized by the Iranian Aria Group conference and exhibition development company, will take place in Tehran from 5th to 8th December 2017.

This year sees the fourth Iran Wire exhibition, said to be the only exhibition in Iran covering “the entire spectrum of wires, cables, tubes, pipes, profiles and related industries”. Messe Düsseldorf has responsibility for international exhibitor promotion and handling, exhibitor registration, stand design and overall operations.

Full location and travel details can be found on the Iran Wire website.

Iranian renewables



Iran's energy ministry has inaugurated a 55MW wind farm in the town of Takestan, in Qazvin province. Qazvin has the capacity to produce 4,000MW of combined wind and solar electricity.

“Iranian MAPNA group of companies has invested over \$92 million for the project, and the wind farm will be able to supply 15 percent of Iran's electricity,” an Iranian energy ministry official was quoted as saying.

Iranian energy minister Hamid Chitchian said that the new wind farm has 22 turbines, and that his country has already approved three billion dollars of foreign investments in Iran's renewable energy resources.

Securing sales



Canadian Solar Inc has secured power purchase agreements for an aggregate 80MW AC of solar power projects with the Solar Energy Corporation of India (SECI), a public sector undertaking of the government of India. Canadian Solar was awarded these projects under a 450MW solar capacity tender in the state of Maharashtra, through a competitive auction process. The projects are scheduled to begin operations by late 2017 and will generate solar electricity for SECI for the next 25 years.

“We are pleased to secure our first 80MW AC of solar power projects with SECI, a bankable and reputable off-taker operating under the government of India. This investment adds to our India pipeline that stands at 110MW AC and represents a significant milestone for Canadian Solar in one of world’s fastest growing renewables markets,” commented Dr Shawn Qu, chairman and chief executive officer of Canadian Solar.

New production in Egypt



Egypt's minister of communications and information technology, Yasser Elkady, has held talks with Yangtze Optical Fibre and Cable Joint Stock Limited Company (YOFC) regarding the final steps for establishing production of optical fiber cables.

Elkady stressed the importance of developing telecommunication infrastructure, and of responding to the current increase in domestic demand for optical fiber cables.

YOFC Group (a partner of Huawei Global) is believed to own the largest world market share of optical fiber cables, and is one of China's largest investment entities. YOFC is to choose one of Egypt's technological zones for its new plant because of the Egyptian administration's willingness and desire to develop and grow the country's mature telecommunications sector.

The Information Technology Industry Development Agency (ITIDA) has held a series of intensive meetings with YOFC to discuss the technical requirements of the plant, and to advise on the appropriate location of the plant in a new technological zone.

A world map is shown in a light gray color, centered on the Atlantic Ocean. A horizontal orange band is overlaid across the middle of the map, containing the main title text.

Products, Machines & Technology

4K cables

Belden Inc has launched its new 4K ultra-high-definition (UHD) media cables, 2183P (plenum) and 2183R (riser).

The cables are specifically designed to deliver 4K content over HDBaseT up to 100m.

“Belden conducted extensive HDBaseT testing in its Belden Engineering center to better understand which cable characteristics best support the higher bandwidth needs of 4K video,” said Michael Saber, director of marketing — broadcast AV. “The cable was designed to support HDBaseT 5Play, but it is interoperable with various equipment brands.”



▲ The new cables from Belden

Space-saving Belden 4K UHD cables are up to 25 percent smaller than other HDBaseT cabling solutions, and “Built with a durable, corrugated foil shield and a helical drain, the 4K UHD media product family is extremely flexible, and designed to be installer-friendly,” added Galen Gareis, principal product engineer.

4K UHD cables use Belden’s bonded-pair technology for electrical performance and resistance to the rigors of AV installation.

The cable is rated to withstand 45 pounds of pull tension, compared to a typical 25 pounds for similar networking cables. The single overall foil shield provides 100 percent protection from noise interference and saves significant termination time, eliminating the need to terminate individually shielded pairs or a braid.

The media cables can be terminated using the Belden REVConnect modular shielded plugs and jacks, and combining REVConnect with the 2183 cable is proven to increase first pass yields and reduce the potential for rework. REVConnect assures the installer that the termination is properly made and reliable.

Stainless specialists

Alloy Wire, a manufacturer of round, flat, shaped and profile wire, has reported a major increase in demand for high quality European or DFARS compliant stainless steel.

Alloy Wire International (AWI) has received new orders from clients in aerospace, nuclear, marine, petrochemical and spring makers, with many citing the firm’s product quality, and ability to deliver anywhere in the world within a few weeks, as crucial to their purchasing decisions.

“Stainless steel is very special to us,” explained Natalie Baker, sales executive at AWI. “We produce an extensive range of grades, from stainless steel 302 to Duplex stainless steel, and our expansive stock levels mean we can provide it in any quantity from ¼kg to 50kg in just two weeks.

“Our manufacturing capability is equally impressive, and we are more than happy to produce wire as small as 0.025mm (that’s two times smaller than a human hair) and as large as 21mm.”

AWI is AS9100 aerospace and defense accredited.

Single solution

TPC Wire & Cable Corp (TPC) has announced a new single-cable solution

to its servo motor encoder cable range. Where traditional methods require three separate encoder cables, one for managing power with a second and third for signal and data, TPC's Trex-Onics® High-Flex encoder cable converges these roles into one cable designed to withstand the harsh use and constant flexing and pulling associated with servo motor applications.

Power for the controller is combined with twisted pairs suitable for managing data and signal, resulting in a product that can simplify inventory management, installation and maintenance.

Trex-Onics High-Flex encoder cable is compatible with multiple interfaces for encoders including EnDat, Hiperface® and synchronous serial interface (SSI).

Furthermore, whereas TPC typically develops cable in its signature yellow, the new encoder cable is presented in green RAL6018, the industry's color code indicative of feedback.

The cable is said to pair well with TPC's M23 connectors to create a complete connectorized assembly that arrives ready to install.

Trex-Onics High-Flex encoder cable is built to withstand harsh industrial environments.

Pairs used for analog and digital signals are protected with braid and foil to promote maximum flex-life and signal integrity.

A heavy-duty tinned copper braid serves as a shield against EM/RF noise and interference, and a specially compounded thermoplastic polyurethane (TPU) jacket serves as a first line of defense against abrasion, flexing, oil, and other hazards associated with dynamic applications.

Wire drawing roller

Sjogren Industries has announced the launch of its latest customized solution for the wire and cable industry, the static dancer roll (SDR).

The patent pending SDR is designed to replace the conventional dancer roller or tuner roller on wire drawing machines.

With the conventional roller the combination of high heat, draw lube contamination, and general wear causes wire surface scratching and ball bearing seizure. Frequent required maintenance means extended periods of downtime on the factory floor.

With SDR, Sjogren intends a customizable solution that extends machine life and increases productivity. Maintenance costs are reduced while wire quality is improved. Initial trial data indicates that SDR shows little to no wear after two and a half years of operation. If wear becomes apparent, a simple rod adjustment (taking less than a minute) will provide a new surface with no line downtime.

SDR is one of several new products that Sjogren Industries plans to introduce to the market during 2017.

Cable gets pushed around

Recently launched CableM8 is a new cable distribution cart from Lake Cable.

Customized for the security market, the CableM8 is equipped to carry large gauge cable reels, but is said to move through any door and pivot easily in areas with limited space.

Built for durability, CableM8 enables installers to pull up to 6,000 feet of cable

while loading up to four eco-friendly bags and two reels or boxes.



▲ The new distribution cart from Lake Cable

With many installers expressing a wish to minimize on-site waste that comes from cardboard boxes, the system's CableM8 bags offer an effective alternative.

The shrink-wrap packaging can be packed into an empty bag for recycling, leaving up to 30 times less waste post-installation.

Testing subsea spares

C-Kore Systems has delivered two C-Kore units to Statoil.

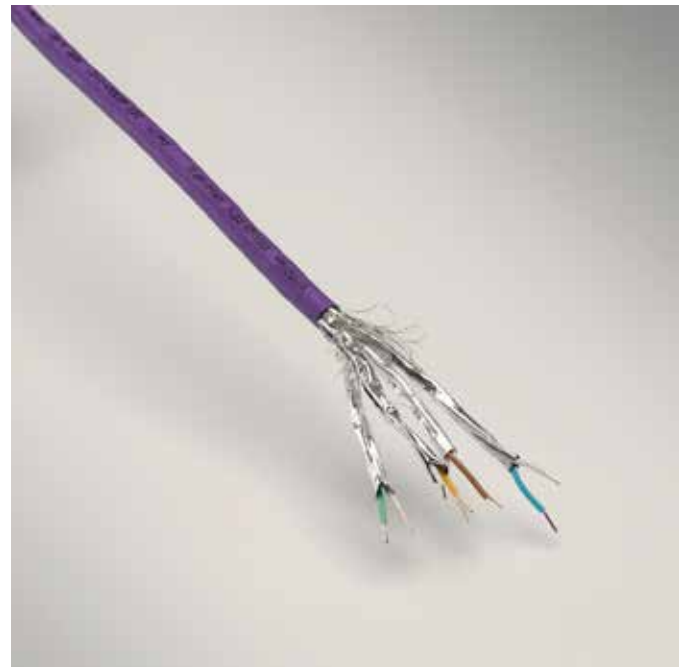
The C-Kore subsea testing tools are used on both fault-finding and construction campaigns to confirm the insulation resistance and continuity of spare electrical cables located on the seabed, and provide quick and accurate readings.

Tim Overfield, managing director of C-Kore commented: "With our C-Kore subsea testing tools we offer our customers a new option when it comes to testing their equipment subsea. They no longer have to work with down-lines, which are cumbersome to deploy and often give inaccurate readings.

"We always hear from customers how pleased they are with our C-Kore units because they are so easy to use, saving them a lot of money in the end."

Material improvement

Borealis and Borouge have launched the first azodicarbonamide-free (ADCA-free) material for use as a blowing agent in foamed communication cables.



▲ ADCA-free material solution for physically foamed data cables. Photograph courtesy of Borealis

The ADCA-free grade HE4883 was developed in partnership with Brand-Rex Ltd, a developer of cabling solutions for network infrastructure and industrial applications, and is expected to be in demand for higher category communication cables.

The 2016 Cisco® Global Cloud Index has forecast a tripling of global data center IP traffic over the next five years, with an overall compound annual growth rate of 27 percent in the years 2015 to 2020.

Factors contributing to rising data volumes include growth in the number of hyperscale data centers, and the increasing popularity of cloud computing.

By moving towards higher category data cables, global communication networks can better respond to these trends.

In the meantime, the European Chemical Agency (ECHA) has classified ADCA, commonly used as a blowing agent for foamed communication cables, as a substance of very high concern due to its respiratory sensitizing properties.

The launch of grade HE4883 addresses both issues by offering an ADCA-free material solution for physically foamed data cables up to category 8.

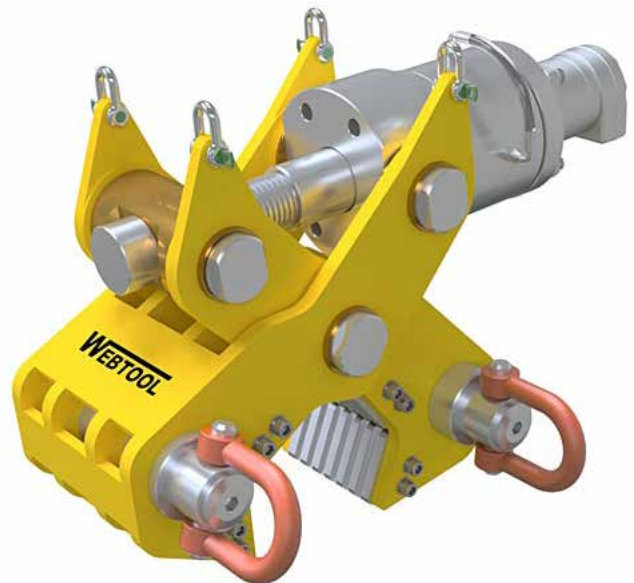
The material has the same benefits as its predecessor, HE4873, previously the leading foamed data grade for category 7 cables in data centers, but offers advantages that include a consistent, formulated compound; superior concentricity and homogeneous cell structure to support higher frequency transmission characteristics; and greater cell homogeneity and uniformity for increased resilience to higher twisting speeds and jacketing line speed without risking crush damage to cables.

Making a grab for cable

Allspeeds, which specializes in emergency disconnect tools for offshore, military and aerospace applications, has launched a new tool under its Webtool brand.

The cable retrieval tool (CRT200), developed in consultation with international certification body and classification society DNVGL, allows the safe and controlled recovery of damaged cable and umbilicals of up to 8" (203mm) diameter.

Current methods of recovering umbilicals for repair or replacement are time consuming and expensive, as they involve trenching the seabed around the cable or umbilical to allow a double choke sling to be attached using an ROV.



▲ Webtool cable gripper for safer recovery of damaged umbilicals

The hydraulically operated Webtool CRT200 gripper offers a quicker and safer method of retrieval and with improved handling.

The gripper, guided by an ROV, can be lowered onto the end of the cable without preliminary clearing of the area.

The mechanically locked gripping action ensures the umbilical cannot escape during retrieval, and an internal clutch mechanism prevents damage through overtightening.

The cable can be recovered to a reeler or spooler on the surface vessel. Made from

corrosion-resistant materials, the cable gripper weighs approximately 500kg and has a lifting capacity of 20 tons.

It is available with hydraulic hotstab or torque bucket interface options.

“Working in consultation with DNVGL, we’ve designed the CRT200 gripper to provide offshore contractors with a highly effective way of recovering umbilical and cable from any water depth.

“By gripping the end of the cable it is easier to handle once on board the vessel,” explained Keith Elliot, engineering director at Allspeeds Ltd.

Economy range

TE Connectivity (TE) has added new cable assemblies to its Micro-MaTch product range.

The new assemblies provide a cost-effective solution for general purpose applications where resistance to high temperatures, high levels of vibration, or to extended durability cycles are not required.

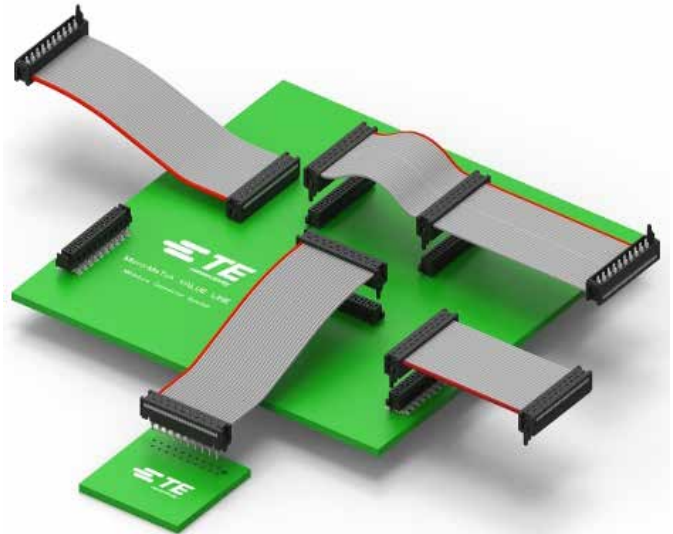
The assemblies are suitable for use in environments where temperatures stay within the -30°C to $+80^{\circ}\text{C}$ range.

TE’s Micro-MaTch value-line cable assemblies are available, from stock, with between 4 and 20 positions and in standard lengths of 7.5cm, 15cm and 20cm (2.95”, 5.91”, and 7.87”).

The assemblies incorporate a keyed interface to prevent mismatching and ensure a long operating life.

A range of receptacles in various configurations offers enhanced versatility, while the easy-connect system saves on

assembly times. The new assemblies feature connectors with a PBT housing and nickel-tin plated contacts. The cable has tinned copper conductors insulated with PVC.



▲ Addition to the Micro-MaTch product range

Micro-MaTch value-line cable assemblies are intended for use in areas such as intelligent buildings, lighting, HVAC, various industrial fields and consumer electronics.

Typical applications include security equipment, robotics, CCTV, TV set-top boxes, AV equipment and electronic voting machines.

INTERWIRE

TRADE EXPOSITION



**Global Ferrous
Rod & Wire
Symposium**



S CENTER

Interwire 2017 and The WAI's 87th Annual Convention

Convention: May 8-11, 2017 | Exhibits: May 9-11, 2017

Introduced in 1981, Interwire is the largest and longest-running wire and cable marketplace in the Americas. Hosted biennially, Interwire is an international trade event that includes exhibiting companies, speakers, and visitors from more than 50 countries.

When industry professionals look for new wire and cable technology, supplies and equipment they choose Interwire, the benchmark for wire business in the Americas.

Global Ferrous Rod & Wire Symposium

Running concurrently with Interwire, this “conference within a conference” is a technical program about rod and wire processes for the ferrous segment.

WAI's 87th Annual Convention: May 8-11. Exhibits: May 9-11. Atlanta, Georgia, USA

Company	Booth	Company	Booth
Accuracy Technical Services LLC	555	CardConnect	765
Ace Metal Inc	851	Carris Reels Inc	1341
Advaris GmbH	552	Cavallero Plastics	141
AESA SA	965	Ceeco Bartell Products, Bartell Machinery Systems	723
AFI Systems LLC	110	Cemanco LC	1511
Agape Industrial Inc	1000	CERSA-MCI	701
AIM Inc	1111	Chase/NEPTCO	1304
AITMAC Inc	323	Chemetall	1301
All Wire Forming Machinery Inc	1762	Cheng I Wire Machinery Co Ltd	1166
Amacoil Inc	812	Chengdu Centran Industrial Co Ltd	205
America Bybon Corp	1602	Chhaperia International Company	1361
American and Efird LLC	1517	China Council for International Trade	1611
American Kuhne	1556	China Council for International Trade	1614
Appleton Manufacturing	118	China Council for International Trade	1615
ATE Applicaziomio Termo Electroniche Srl	1173	China Council for International Trade	1616
AW Machinery LLC	1700	China Council for International Trade	1617
Aztech Lubricants LLC	854	China Council for International Trade	1623
B & H Tool Co Inc	551	China Council for International Trade	1706
Balloffet Die Corp	1300	China Council for International Trade	1710
Baum's Castorine Co Inc	1839	China Council for International Trade	1712
Beacon Reel Company	1364	Cimteq	1607
Bechem Lubrication Technology LLC	1267	Clifford Machines and Technology	1727
Beijing Orient Pengsheng Co Ltd	113	Clinton Instrument Co	1001
Bekaert	759	CM Furnaces Inc	755
Beneke Wire Company	311	CMEC International Exhibition Ltd	1311
Bergandi Machinery Co	801	CMEC International Exhibition Ltd	1323
Beta LaserMike (An NDC Technologies Brand)	1031	CN Wire Corp	1523
Blachford Corp	605	Cobre Y Aleaciones Escocia AS	117
Black Sea Technology Inc	1159	Commission Brokers Inc	719
Bloom Engineering Company Inc	700	Condat	1549
BMS Birlesik Metal San Ve Tic AS	964	Confex Technology Ltd	671
Boockmann GmbH/The Slover Group	359	Conneaut Industries Inc	1610
Breen Color Concentrates Inc	1806	CTS – Cincinnati Thermal Spray Inc	264
Cable Consultants Corp	241	Davis-Standard LLC	1023
Calmec Precision Limited	559	DEM SpA	1457

Company	Booth	Company	Booth
Die Quip Corp	1101	Häfner & Krullmann GmbH	570
Dino-Lite Scopes (BigC)	119	Hangzhou Dongxing Telecommunication	
Domeks Makine Ltd Sti	1241	Material Co	246
Dongguan Dewei Wire Co	1605	Hangzhou JR Exhibition Co Ltd	511
Dynamex Corp	1357	Hangzhou JR Exhibition Co Ltd	1522
Ebner Furnaces Inc	1506	Hangzhou Juli Insulation Co Ltd	800
Elecomtape Global Inc	1711	Heany Industries Inc	818
Electron Beam Technologies Inc	213	Heatbath/DuBois Chemicals	717
Electronic Drives & Controls Inc	553	Houghton Industrial Inc	753
Enercon Industries	211	Howar Equipment Inc	523
Enkotec Co Inc	132	Huestis Industrial	541
ERA Wire Inc	1154	ICE Wire Line Equipment Inc	1164
Esteves Group USA	1004	Ideal Welding Systems	1211
Etan Products Inc	1306	iiM AG measurement and engineering	1065
Eurobend GmbH	365	InnoVites	1606
Eurolls SpA	1819	Integrated Control Technologies	858
EuroWire Magazine	222	International Wire & Cable Symposium	226
EVG Inc	251	International Wire & Machinery Association	500
Fabritex Inc	816	International Wire Group Inc	611
Facts Inc	228	IP Automation Inc	1719
Fenn LLC	711	Iron Tiger Manufacturing Inc	1469
Fil-Tec Inc	116	Isabellenhutte Co	1600
Filtertech	1150	Jiangsu Kemaite Technology	
Fine International Corp	451	Development Co Ltd	1564
Fisk Alloy Inc	1835	Jianyin Hygrade Electromechanica	
Flymca & Flyro	1713	Technology Co Ltd	258
FMS USA Inc	430	Joe Snee Associates/PWM	1358
Foerster Industries Inc	405	Joe Tools	1651
Fort Wayne Wire Die Inc	1331	Jouhsen-Bundgens Inc	353
FSP-One Inc	1504	Jun-En Enterprise Corporation	271
Fuhr GmbH & Co KG	1064	Kablosan Turkey-FBC Yayincilik Ltd Sti	1843
Gem Gravure Co Inc	805	Kabmak Muh Ve Mak San	1151
George Evans Corp	810	Kalmark Integrated Systems Ltd	1010
GMP Slovakia sro	1841	Kar-El Demir Tel San Ve Tic Ltd Sti	133
Granite Falls Furnace	1562	Keir Manufacturing Co	802
Guill Tool & Engineering Co	705	Keystone Steel & Wire Co	242

Company	Booth	Company	Booth
King Steel Corp	866	OMCG North America Inc	1350
Kinrei of America	651	Ozyasar Tel Ve Galvanizieme	1059
Lämneå Bruk AB	850	P & R Specialty Inc	351
LaserLinc Inc	332	P/A Industries	333
Leggett & Platt Wire Group	1242	Paramount Die Co	1539
Leoni Wire Inc	522	Parkway-Kew Corp	432
Lloyd & Bouvier Inc	1531	Phifer Wire Inc	751
Lukas Anlagenbau GmbH	1656	Pioneer Machinery USA	317
M & M Industries Co Ltd	140	Pittsfield Plastics Eng Inc	423
Madem Reels	122	Plas-Ties Co	111
Madison Steel Inc	401	Pourtier & Sefic of America	1011
Magnetic Technologies Ltd	310	Precision Die Technologies Inc	210
Maillefer Extrusion Oy	531	Precision Process Inc	864
Mathiasen Machinery Inc	1100	Premier Wire Die	1825
Melos GmbH/Inhol BV	959	PrintSafe	1452
The Meltech Company	673	Progress Maschinen & Automation AG	1808
Metal Link Inc	665	Promostar Srl	233
Metal Resource Solutions Inc	767	Properzi International Inc	741
Metalloid Corporation	331	Q8 Oils	771
MFL Group	1219	QED Wire Lines Inc	853
MGS Manufacturing Inc	1240	Qual-Fab Inc	1067
Micro Products Co	431	Queins Machines	1305
Microdia USA	823	Raajratna Stainless Wire Inc	231
Mid-South Wire	260	RAD-CON Inc	1051
Milacron Canterbury Engineering/Genca	1140	Radyne Corp	151
Morgan-Koch Corp	1451	Rainbow Rubber and Plastics	1458
Mossberg Associates Inc	1468	Rautomead Ltd	232
Mossberg Industries Inc	250	Reel Options by Vandor Corp	650
Nano-Diamond America Inc	461	Reel Power Wire & Cable	1753
Nantong Yingjie Metal Products Co	1855	Reel Power Wire & Cable	1851
Nation Grinding Inc	1662	Refractron Technologies Corp	1707
Niagara Composites Industries Inc	1053	Richards Apex Inc	341
Niehoff Endex North America Inc	841	Roblon A/S	859
Nylene Canada Inc	400	Rockford Manufacturing Group FELM	1807
Oden Technologies Inc	1829	Rosendahl Nextrom	951
OMA USA Inc	1657	Roteq Machinery Inc	1631

Company	Booth	Company	Booth
S&E Specialty Polymers	330	Teknor Apex	305
SACO AEI Polymers	216	Tektapes	217
SAMP USA Inc	1227	Tensor Machinery Ltd	659
Sanxin Wire Die Inc	459	Thermoplastics Engineering Corp	1747
Sarkuysan SA	811	Tilos Group	1360
Schlatter North America	1123	Traxit North America LLC	450
Schnell SpA	1812	Troester GmbH & Co	1165
Shanghai Sehong New Materials Co Ltd	1503	Tubular Products Co	1351
Shanghai EverSpring Ceramic Co Ltd	1849	Ulbrich Stainless Steels & Special Metals Inc	1817
Shanghai HOSN Machinery Technology Co Ltd	831	United Wire Co Inc	1158
Shenyang Jingong Cable Material Co Ltd	501	Upcast OY	123
Sikora International Corp	730	Vinston US Corp	417
Sivaco Wire Group	505	W Gillies Technologies LLC	550
Sjogren Industries Inc	814	WAFIOS Machinery Corp	1005
Skaltek Inc	504	Weber & Scher Mfg Co Inc	1530
Sonoco	641	Windak Inc	1641
Star Materials Co Ltd	865	wire 2018/Messe Düsseldorf North America	1303
Steel Cable Reels	316	Wire and Cable ASIA magazine	222
Stolberger Inc DBA Wardwell Braiding	1510	Wire & Cable Technology International	240
Subec AB	1508	Wire & Plastic Machinery Corp	1131
Supermac Industries Ltd	223	wiredinUSA magazine	222
Supreme Superabrasives Co Ltd	301	Wire Lab Co	1259
Suzhou Nanda Metal Technology Co Ltd	1501	Wire Machine Systems Inc	1251
Sweed Machinery Ltd	558	Wire World	1827
Sylvin Technologies Inc	150	wired up	1515
T & T Marketing Inc	1265	Witels Albert USA Ltd	1307
Takikawa	455	Woodburn Diamond Die Inc	804
Tantec Est Inc	1507	WTM Srl	871
Tapeformers Ltd	1500	Yield Management Corp	1845
Taubensee Steel Wire & Co	441	Zhejiang Baichuan Conductor Technology Co Ltd	244
Taymer International Inc	950	Zumbach Electronic Corp	1540
Technical Development Corporation	230		
Tecnofil SA	652		
Tecvil	254		
Teknikor	411		

**AIM Inc
Booth 1111**

AIM will present automated work cell solutions: Input wire from straight and cut or coil and form, weld and systematically arrange the finished parts. During the past few years, the company has developed new benders and accessories that it will unveil at Interwire.

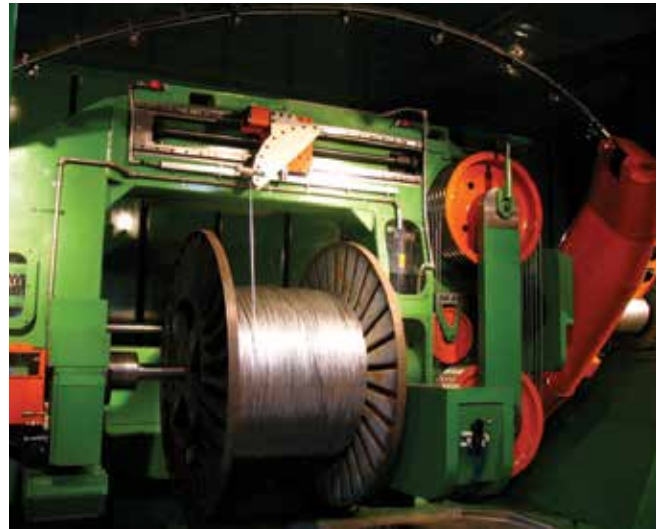
From its patented hybrid forming solution, the versatile Synchro AFM line is capable of fast output and low-cost maintenance. The newest innovation in wire bending, upgraded and updated 2D and 3D CNC wire bending solutions, are complete with single and double bending head machines with Fanuc robotics integration and complete automated systems.

In all instances, wire can be fed directly from a coil, straightened, bent and cut using a software package that provides flexibility and simplicity in programming and is offered in all “universal languages.”

AIM Inc – USA
Website: www.aimmachines.com

**Bartell Machinery Systems
Booth 723**

Bartell will focus on innovation by featuring its advanced wire and cable production systems. These systems are aimed at improving production efficiencies while producing high quality products. These



▲ 1,800mm roll form strander

systems include:

- High-speed side loading roll form strander, up to 300mm²
- Modularized roll form unit, producing 240mm² compact aluminum at 200m/min
- Backtwist high-speed data cable twinning
- High performance OPGW strander
- High-speed strip armoring lines, with 300mm² wide coil width
- High-speed 2,200mm single twist roll form strander, up to 500mm²

Bartell Machinery Systems LLC – USA
Website: www.bartellmachinery.com

**Beneke Wire
Booth 311**

Beneke Wire is in its 49th year of continuous operation, producing high quality wire in all aluminum alloys from 1.58mm to 25.4mm diameter. Custom engineering goes into every coil of wire for cold heading quality, screw machine stock and wire with special

finishes. Beneke's special heat-treating process can also eliminate many costly secondary operations.



▲ Custom engineering from Beneke Wire

Beneke's special finishes can help control tool wear, head ovality and surface defects, resulting in improved production, higher yield and reduced scrap and disposal problems.

Beneke Wire Company – USA
Website: www.benekewire.com

**Beta LaserMike/NDC
Technologies
Booth 1031**

NDC Technologies, a global provider of precision measurement and process control solutions, will exhibit the latest Beta LaserMike products for in-process dimensional monitoring and automated quality cable testing at Interwire.

These products deliver higher accuracies, production efficiencies and savings

for profit-minded wire and cable manufacturers.

NDC will be introducing the latest addition to the AccuScan 6000 Series four-axis diameter gauge family: the AccuScan 6050. Like the AccuScan 6012 gauge which was released previously, the AccuScan 6050 provides comprehensive measurement coverage around the product's circumference to instantly detect changes in product diameter.



▲ The A6012 6050 from NDC Technologies

The AccuScan 6050 measures products up to 50mm, while the AccuScan 6012 measures products up to 12mm. Both gauges deliver fast scan rates at 9,600 scans/sec, high ovality accuracy up to 100 per cent and high flaw-detection accuracy with 25 per cent improvement over three-axis gauges.

Flexible communications allow for easy integration into production environments.

NDC will also exhibit its innovative LayScan measurement system to accurately and

consistently measure the lay length of twisted pairs in data communication cables, such as Cat 5e/6/6a/7a/8 products. 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.

Also on display will be the DCM ES-2G bench-top system for testing Cat 5e/6/6a/7/7a/8 cables up to 2.2 GHz. An automated four-pair switching platform enables operators to perform cable testing in less than three minutes. Easy-to-use testing software offers complete test management and reporting capabilities.

NDC will also debut the latest BenchMike off-line diameter and ovality measurement system for sample/part inspection with enhanced features and functions.

In addition, NDC will preview the recent version of the InControl™ process visualization and control system with intuitive graphical user interface and advanced, productivity-enhancing features.

Other products on display include:

- High-speed AccuScan 5000 series two-axis diameter and ovality gauges
- LN series three-axis lump and neckdown detectors
- CenterScan eccentricity measurement system
- Preheaters and Spark Testers
- CapScan capacitance measurement system

- SRL Pro structural return loss prediction software
- LaserSpeed® length and speed measurement system

NDC Technologies – USA

Website: www.ndc.com/betalasermike

Blachford Corporation Booth 605



▲ Specialty chemical supplier Blachford

Blachford Corporation is a wire lubricant and specialty chemical supplier. Based in the USA and Canada, 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 programs tailored to the exacting technical specifications of individual wire drawing processes.

In 2011, Blachford developed and introduced a technical advancement with its Low Dust Dry Wire Drawing Lubricants. The first generation of these

Candor Sweden AB Booth 651

low dust lubricants were sodium-based formulations that were designed to be more cohesive and adherent to the wire than standard products. Low dust lubricants are less likely to produce nuisance dust when exiting the die (feathering) or when cooled on the wire and bent around a capstan prior to the next die box, improving housekeeping both on the machine and in the facility.

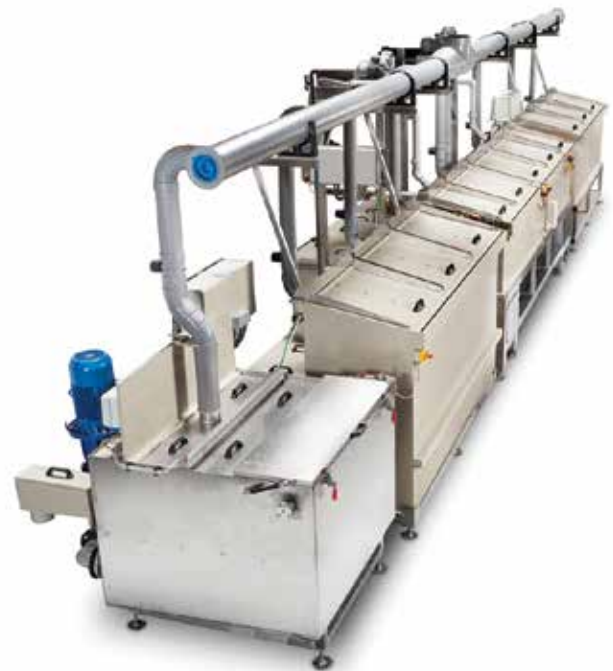
The low dust lubricants have enabled many customers to realise significant benefits including lower observable dust creation, lower lubricant consumption, longer die life and higher drawing speeds.

After the successful implementation of its low dust sodium lubricants, Blachford began working to develop low dust lubricants that were calcium-based.

In 2016, Blachford introduced its newest innovation – Low Dust Calcium Lubricants. These new beaded low dust calcium lubricants are designed to reduce dust generation during handling and use through greater wire adherence and lubricant cohesion, as compared to standard wire drawing lubricant powders.

Initial testing indicates that these new beaded products build a beneficial lubricant film, retain that film better than standard products and give improved drawing performance over standard calcium lubricant powders.

Blachford Corporation – USA
Website: www.blachford.com



▲ Wire plating plant from Candor

Candor, founded in 1946, specializes in wire cleaning and plating plants and is a supplier of chemicals for various applications.

The company will present the latest developments of the Copperjet, a high-speed copper coating plant, chemical or electrolytic, for high quality welding wires.

The plant will copper coat the wire at high speeds up to 25-30m/s with best possible cleaning and coating quality.

A modular design makes it possible to satisfy a wide range of quality demands and applications for CO₂, MIG, FCW and SAW welding wires but also stainless steel welding wires with ultrasonic or electrolytic

cleaning. The Copperjet is available with optional Candojet HW hot water spray pre-cleaning, high current density spray pickling, and Copperjet copper coating, with looping of the wire or straight wire pass line with Copperjet technology.

The company will also present its technology for wire plating plants for both ferrous and non-ferrous wires.

Candor offers single- and multi-wire cleaning and plating lines for ferrous and non-ferrous wires for various applications such as:

- Welding wire cleaning and copper coating
- Ultrasonic and electrolytic wire cleaning for round and shaped wires
- Candojet HW – hot water wire cleaning for round and shaped wires
- Single- and multi-wire electrolytic plating plants for wires such as tinning, coppering, nickel plating, silver plating and galvanising for all sorts of wire materials.

Candor Sweden AB – Sweden
Website: www.candorsweden.com

Clinton Instrument Company Booth 1001

Clinton Instrument Company, specialist in spark test technology for the wire and cable industry and inventor of the high frequency sine wave spark tester, is returning to Interwire, to keep up its record of taking part in every one of the exhibitions since its inception.

The company will be exhibiting its latest B-series full line of DC spark testers. DC testers excel at testing fine wire with delicate insulation, and group testing of multiple conductors as well as large wires requiring test voltages up to 50kVDC. These new designs combine the latest in control technology with the robust and reliable DC spark testing platform.

These new DC spark testers share the same new features as the rest of the B-series equipment, including a split electrode design for easy string up and digital signal processor (DSP) based voltage regulation and fault detection.

The fault detection circuit has been upgraded and test voltage is now monitored directly from the electrode, instead of a transformer winding. The fault circuitry can differentiate between four types of fault conditions: simple pinholes, a series of closely spaced pinholes, direct metal contact from the center conductor to the electrode, and gross lengths of bare wire.

The new “RC” controller comes fixed to the unit, but can be detached and mounted remotely up to 60m away from the test module/electrode.

It has a large alphanumeric display/user interface and can be rotated in its bracket to accommodate different viewing angles.

The display makes configuration of the equipment easy; all configuration

parameters can be changed directly from the front panel menu structure. Once configured, the system can be passcode protected.

In cases where a local display is not required, or centralised process control is desired, the equipment can be configured and controlled directly from PLCs or computers using Modbus RTU (RS-485 full duplex).

Optional communication protocols include Ethernet/IP, Profinet, Profibus, Modbus TCP and analog communications, making the equipment compatible with previous Clinton equipment with analog control.

When simple control output is all that is required, there are four sets of relay contacts that provide information without requiring advanced programming.

These include “High Voltage ON” signals to alert operators of the presence of high voltage, a fault relay which actuates when a fault is detected, a “Voltage Watchdog” which will change state when the test voltage has risen above or dropped below a preset level, and a “Bare Wire Alarm” which will signal when long lengths of bare wire are detected.

Clinton will also exhibit and demonstrate the STCAL automatic spark tester calibration system. The STCAL system will calibrate high frequency AC, mains frequency AC, and DC spark testers to all major specifications.

Calibration is automatically performed and documented on all of Clinton’s new B-series spark testers and selected A-series models.

Manual or assisted calibration can be performed on older Clinton units as well as equipment manufactured by others.

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

**Davis-Standard
Booth 1023**



▲ Demonstrations will be staged at the Davis-Standard booth

Davis-Standard will demonstrate a running wire and cable take-up along with capstan and extruder technology.

The 2,200mm take-up being shown is part of Davis-Standard’s line of traversing and collapsible take-ups and pay-offs.

These designs offer a smaller overall footprint and enhanced operator

ergonomics. Davis-Standard will also feature a caterpillar capstan and HPE extruder.

The take-ups and pay-offs integrate simplified engineering and cost efficiency. Machine sizes range from 1,250mm to 5,000mm (48" to 195") with the greatest concentration within the 1,800mm to 2,500mm (70" to 98") size range.

Each is available with a North American standard controls platform, which includes a Yaskawa A-1000 AC drive and Allen-Bradley/Rockwell components encompassing servo drive, PLC (programmable logic controller) and HMI (human machine interface).

For international projects, machines are equipped with a Siemens AC drive, PLC and HMI with a Mitsubishi servo drive. Technology is available as "stand-alone" (running in torque control) with a dancer or with an accumulator.

Also being shown is a caterpillar capstan and an HPE extruder.

The capstan being shown features multiple independently loaded pressure tracks.

Davis-Standard supplies multi-pass, linear and belt wrap capstans for the full range of wire and cable applications.

The HPE offers a compact design and is one of the industry's most widely used extruders. It is known for a fast delivery and rugged design that is energy efficient and

easy to maintain. Advantages for wire and cable application include increased torque capacity for high viscosity resins and custom options.

In addition, Davis-Standard will be discussing its new cut and feed machine. Designed for efficiency, this unit facilitates timely transfers from one take-up to the other, while minimising operator involvement.

This expedites the take-up reel change process during insulation and enables wire and cable manufacturers to boost outputs.

The ability to address market demand in terms of performance and cost efficiency is just one aspect of Davis-Standard's Global Advantage™ in wire and cable. Another is the company's experience in supplying extruders and associated wire and cable equipment for more than 70 years.

Applications include aerial cable, building wire, coaxial and composite cable, video pair cable, tray cable, CATV, THHM and THWN wire, among others.

Davis-Standard LLC – USA

Website: www.davis-standard.com

DEM SpA
Booth 1457

DEM SpA will present its newest solutions for wire cold rolling that make a difference

when compared to traditional production processes.

The list of technologies supplied by DEM includes:

- Flat wire rolling lines
- Profile wire rolling lines
- High-speed lines for reinforcing wire
- Cassettes for rolling and compacting
- Micro rolling cassettes used in drawing lines
- Auxiliary equipment: turks heads, rolling stands, payoffs, take-ups, wire cut-offs, bars collecting systems, profile measurement units and ancillaries



▲ New solutions on show from DEM

Through its partner company Eurodraw Wire Equipment, manufacturing equipment, process lines and complete plants for the steel wire industry are part of the DEM Group of products.

The company designs and builds a wide range of cabling and stranding machines for the production of steel wire ropes, PC wire and PC strand lines, and auxiliary equipment.

DEM SpA – Italy

Website: www.demgroup.com

Enkotec Booth 231



▲ High performance machinery for nail production

At the Enkotec stand, staff will be able to present the company's program of high-performance machinery for nail production and to introduce visitors to its extensive service concept, including service agreements for optimum production.

Apart from its high-speed rotary nail manufacturing machines, Enkotec's product program includes highly efficient thread rolling machines, paper, wire and plastic collators, and cleaning, conveying and packaging equipment, supplied as stand-alone units or in in-line systems.

The nail manufacturing machinery features a large number of advantages, such as high capacity, low production costs, high uniform nail quality, easy maintenance, high process stability, automated manufacturing, clean and low-noise production, all ensuring a cost-effective production process and a competitive end result.

Enkotec has exclusive rights to sell and service Bausmann's wire coil and plastic strip collators and Vibron's nail cleaning systems worldwide.

These strategic cooperation agreements enable the company to supply total in-line nail manufacturing systems from wire to finished nails in a box, giving the market the possibility to make 'one-stop shopping' when it comes to nail manufacturing.

Enkotec offers an extensive, worldwide after-sales program, including quick supplies of spare parts and technical support at all levels. Booth staff will be available to discuss with customers how the company can offer help with maintaining production efficiency and product quality on existing machines.

Many customers already benefit from service agreements, including continuous support and consultancy assistance.

Enkotec A/S – Denmark
Website: www.enkotec.com

**Gauder Group
Booth 1011**

For 25 years, Gauder Group Inc, the North American branch of the Gauder Group, has built knowledge, experience and ability to serve the wire and cable industry.

Pourtier and Setic, the French members of the group, are experienced in designing and manufacturing rotating machines for ferrous and non-ferrous cable, offering a wide range of twisting/stranding solutions to cable makers. In the USA, the product range is marketed under "Pourtier & Setic of America".



▲ A high-speed tangential tapping head from Pourtier

Pourtier: The line of equipment includes rigid and planetary stranders, single twist cablers and drum twisters for producing all types of power cable (low, medium, high and extra high voltage underground, overhead conductors and submarine/umbilical), as well as signal/instrumentation and large communication cable.

Pourtier recently extended its range with tubular stranders, skip stranders and bow cablers.

On the booth will be a high-speed tangential tapping head.

Setic: Double twist bunchers/cablers for low and medium voltage power cable and the automotive industry, as well as a complete range of machines for the production of all types of data and special cables with enhanced performances.

The company's offer is strengthened to include small single twist cablers and large double twist cablers/stranders.

On the booth will be a large double twist strander/cabler (a Setic TC1250), as well

as an all-in-one vertical and flexible triple twist patented twinner (a Setic VTT560F).

On top of this, Gauder sa, the Belgium-based member of the group, provides resale (or second-hand) equipment from all over the world.

Gauder can set up ready-to-manufacture solutions for the production of wires, conductors, cables, ropes or steel products from its 1,000-plus stock of second-hand machines.

The company is not only a supplier of used machines but also a key player in reconditioning – with specific know-how in lead extruders refurbishing, as well as complete plant reselling. The company also markets new Mapré extrusion lines.

For cable producers looking for an alternative between new machines made in Europe (with higher cost) and second-hand machines, the Gauder Group created Daloo.

This is the “medium-cost” member of the group, and the logical extension of the group’s global offer. Its complete stranding lines and accessories for the production of power and communication cables are designed and made in China following the group’s methods and strict quality criteria.

With long experience in North America, the Gauder Group Inc represents the C2S – Services & Bows division of the Gauder Group, acting as an overall

efficiency booster to restore wire and cable production lines’ productivity and product quality.

C2S is being assigned spare parts and high technology bows (including the exclusive and patented “GreenBow2” enabling energy savings), upgrades and maintenance projects as well as transfer and restart operations of complete lines, for all brands. The team of 55+ technicians includes ex-Lesmo and ex-Cortinovis engineers.

Gauder Group – Belgium
Website: www.gaudergroup.com

Gimax Group Srl Booth 241



▲ A range of machinery is on offer from Gimax

Interwire continues to be an important venue for Gimax – this year it continues to highlight its range of wire drawing equipment, with specific emphasis on the various special applications that have been handled over the past two years.

From copper-based brazing wires, aluminum welding alloys, cobalt flux cored wire to titanium fine wire and stainless steel...these are some of the special applications that Gimax drawing

equipment has handled over the past two years.

The machinery used has been both the TRS wet drawbenches (spray type, not immersed) as well as the TRD dry drawbenches (with both vertically and horizontally mounted capstans).

All these drawbenches are non-slip with individual motors for each capstan, dancer arms to finely tune the speed of each capstan, liquid-cooled capstan and die boxes, rotating standard or pressure dies, and both wire diameter and individual die wear control in real time, as well as a host of other options, from skin pass blocks to double decks to different types of take-up (single block driven coilers, reel take-up, static drum or stem coilers, etc).

The high productivity of these lines does not depend solely on the line speed (which can even be in excess of 6,000 feet/minute or 30 meters/second) but also on the reduced maintenance costs, ease when threading wire through machines, accessibility to all components, etc.

The design of the units is such that a Gimax drawbench will adapt easily to both ferrous and non-ferrous wires.

Machinery for the ferrous and non-ferrous wire industry includes descaling, pickling, dry drawing and wet drawing benches, chemical coppering tanks, and shaving and peeling lines for wire processing machinery; and respooling, coiling and

rewinding, drum packing, and packaging machinery for wire handling machinery.

Gimax Group Srl – Italy

Website: www.gimaxgroup.com

Häfner & Krullmann Booth 570



▲ Häfner's KCS spools have proven themselves on the market for many years

One of Europe's largest manufacturers of plastic spool drums, Häfner & Krullmann will be displaying its new utility spools at Interwire, allowing users to store, transport and save space at the same time.

These new spools fit exactly onto a Euro pallet and save space and money. They are made of high quality materials, which use resources sparingly.

Häfner is well known in the USA as producer of spools and reels for bare wires and welding wires and for automatic winding.

Häfner & Krullmann – Germany

Website: www.hafner-spools.com

iiM AG Booth 1065



▲ Next generation of cable measurement from iiM

iiM AG offers a complete range of sample preparation equipment and standard-conform offline cable measurement devices for geometric measurements of cable cross-sections.

The trade fair highlight for iiM AG is the next generation of VCPX5 cable measuring devices.

The version VCPX5-16, which has been in series production since the start of 2016, is more than just a facelift and offers some noteworthy technological further developments.

For instance, improved optical systems, especially for medium and large measuring fields (M,L) lead to higher resolutions and reduced measurement uncertainties.

The new, compactly integrated light/light control system provides 'intelligent' light, which offers an optimum, homogeneous light source.

The VCPX5-16 can now be supplied on request as an XL version with a measuring

field of up to 200 x 200mm. Besides the further development of the VCPX5, the software VCPEasy 2.0 was created as the continuation of its easy and secure operating concept.

This is not a functional reduction of the measuring and evaluation software FMC-3, but rather a simplification by focusing on the core tasks of production-related measuring.

In addition, the operation is better coordinated to the use of the touchscreen on the VCPX5. Higher-level CAQ systems (Aesa CIQ, ProCable 3, Advaris) can also be connected via VCPEasy.

In addition to the cable measuring device VCPX5-16 including the software VCPEasy 2.0, the sample cutters ORC 65 and ORC 80 will be presented at the trade fair.

iiM AG – Germany

Website: www.cable-measurement.com

Inosym Booth 1503

Inosym has been supplying reels to the wire and cable industry for 17 years and to over 65 countries.

Specializing in steel and plastic reels that are manufactured to European and US standards.

Inosym can offer reels to meet the varying needs of modern manufacturing plants.

Inosym is committed to providing customers with high quality reels and bobbins at competitive prices.

The company's reels were developed to provide cable and wire manufacturers with a product that was realistically priced and of high quality.

Product examples include:

- ABS plastic reels from 250mm to 1,000mm for insulating, group twinners, stranding, bunching and jacketing.
- MF (metal flange) pressed metal process reels come in sizes from 100 to 1,250mm and are made from high-quality steel plate and tube. Applications include universal take-up and payoff reels, bunching, stranding, insulating and jacketing.
- SM (semi machined) double-wall high-speed reels come in sizes from 315 to 1,250mm and are made of high-quality steel plate and tube. Applications include drawing, bunching, stranding and insulating.
- FM (fully machined) steel high-speed reels in sizes ranging from 100 to 1,000mm and are manufactured from high-quality steel plate and tube. Applications include high-speed single-wire drawing, high-speed multi-wire drawing, bunching and enamelled wire coating.
- SD (steel drum reels) are large steel process and shipping drums available in sizes ranging from 800 to 4,500mm. SD steel drum reel options include flat-sided flanges, corrugated flanges and break-down reels. Applications include

drum twisting, stranding, insulating and jacketing.

- With more than 40,000m² of production space, Inosym can provide customers with rapid delivery of both large and small reel orders.

Inosym Ltd – New Zealand

Website: www.inosym.com

IWCS Booth 226

IWCS is a non-profit corporation that provides an international forum for the exchange of information among suppliers, manufacturers and users of technological developments in wires, cables and interconnects for voice, data and video signal transmission.

Through a conference venue, IWCS is responsible for assembling a program covering materials, processes, products and applications.

IWCS Inc - USA

Website: www.iwcs.org

Keir Manufacturing Booth 802

Keir Manufacturing Inc is a US-based manufacturer of high-purity 99.8 per cent alumina ceramic guides, the Frontiersman™ 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 is claimed to last longer than other brands due to the rugged ceramic insert lining the wire path. This equates to over a 25 per cent reduction in compressed air usage and an operating life of years versus months.

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™ design functions at lower power consumption and higher TPM with improved wire quality and a further reduction in bow breakage. Up to 40 percent less energy (AMPS) is used along with a decrease in wire scrapped.

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

Lämneå Bruk AB Booth 850



▲ Lämneå – specialist in the design and manufacture of machines for the industry

Lämneå Bruk AB specializes in the design and manufacture of machines for the wire industry and in order to meet every need it builds customized machines to individual requirements.

The company supplies a wide range of high quality machines with the latest designs and technology.

Its journey in the wire drawing industry started more than 100 years ago, giving a large amount of experience which is incorporated in the design of its machines and equipment.

This experience has also taught the company how important service and support is in the business.

In order to meet every need, Lämneå

supplies pay-off systems, mechanical cleaning equipment, drawing machines and take-up units for stainless, solid welding and low/high carbon wire industries. For tubular wire or flux core wire it supplies strip rewind lines, strip payoffs, and forming – filling – closing machines.

Lämneå Bruk AB – Sweden

Website: www.lamnea.se

Madem Reels Booth 122



▲ *Wooden reels from Madem*

Madem Reels will begin manufacturing wooden reels in the USA this year, and exhibiting at a number of shows throughout 2017, including:

Interwire in May; wire Bangkok in September; and wire South America, IWCS and Wire & Cable India, all in October.

Madem Reels – Brazil

Website: www.madem.com

Mathiasen Machinery Booth 1100

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.

Consignments, warehousing, appraisals and liquidation services are also offered. MMI has buyers seeking all types of good quality used wire and cable machinery. The booth will display photos of a wide variety of second hand machinery.

Customers are encouraged to bring their surplus machinery lists and photos for evaluation.

Mathiasen Machinery Inc – USA

Website: www.mathiasen-machinery.com

Maschinenfabrik Niehoff GmbH & Co KG Booth 841

Maschinenfabrik Niehoff, a manufacturer of machinery engineered for the wire and cable industry, and its subsidiary Niehoff Endex North America Inc, will be exhibiting production equipment of the latest generation.

The equipment on the stand covering 2,400ft² (more than 220m²) represents more than 60 years' experience and is designed

to support wire and cable manufacturers in improving production efficiency and reducing energy consumption and manufacturing costs.

Another strength of the Niehoff Group is its comprehensive service range, which includes the reliable supply of original Niehoff wear and spare parts, remote diagnostic capabilities, machinery inspection, refurbishment and maintenance measures as well as machine maintenance and operator training courses.

The Niehoff Group, with nearly 800 employees worldwide, is composed of its headquarters, five manufacturing subsidiaries (in Brazil, the USA, the Czech Republic, India and China) and sales and service centers in Japan, Singapore and Russia.

Niehoff Endex North America Inc (NENA), a wholly owned subsidiary of the Niehoff Group with manufacturing and engineering capabilities, is responsible for the sales, supply and service of the entire Niehoff product range in the USA, Canada and Mexico.

NENA also specializes in the engineering and supply of customized North American electrical controls which meet UL and CSA approvals and consist of all North American made brands and components for the full range of Niehoff equipment.

NENA was founded in 1999 by the grouping of Niehoff of America Inc and

Endex, formerly Bekaert Engineering of North America.

Maschinenfabrik Niehoff
GmbH & Co KG – Germany
Website: www.niehoff.de

Proton Products International Booth 1530



▲ Accuracy and reliability from Proton Products

Proton Products International has launched its new, smart, compact InteliSENS SL/SLR Mini Series sensors. These laser doppler speed sensors provide accurate, reliable, non-contact speed and length measurement of moving cable and wire products.

The compact InteliSENS SL/SLR Mini Series has a small footprint and provides a direct replacement for conventional encoders. The installation is simple, and the sensors' compact size also permits speed and length measurements from parts of the process that were previously unobtainable.

The InteliSENS SL/SLR Mini Series sensors are solid-state devices with no moving parts, for maintenance-free operation. Their non-contact measurement technique

provides accuracy better than 0.05 per cent, typically 0.02 per cent with CE-MID certified versions available.

The sensors come standard with intelligent, easy-to-integrate capabilities that feature a broad range of embedded process interfaces. These include Ethernet, RS-232 and WiFi communications as standard, with optional Profibus, Profinet, DeviceNet and Industrial Protocol IP that can be substituted for the Ethernet communications interface.

The InteliSENS SL and SLR Mini Series sensors are suitable for numerous applications involving the measurement and control of speed and length to help deliver a multitude of benefits across the industries they serve.

Proton Products International – UK
Website: www.protonproducts.com

PWM Ltd
Booth 1358

PWM will exhibit its new CP180 portable cold welder and two of its best-selling cold welding machines at Interwire. The products will be presented by Joe Snee Associates Inc.

PWM's new CP180 is a small air/hydraulic cold welder contained in a handy carry pack. The 400mm x 400mm x 400mm unit weighs just 16kg and can be easily moved to the work area when required. The powerful, user-friendly machine produces



▲ The new CP180 portable cold welder from PWM

strong, high-quality welds and enables even an untrained operator to join non-ferrous wire, strip and profile up to 1.8mm (0.071") without effort.

The electro/pneumatic EP500 rod welder is low energy, safe and easy to operate.

It offers manufacturers an economical method of welding copper rod 5mm to 12.5mm (0.197" to 12.5") and aluminum rod 5mm to 15mm (0.197" to 0.59"), without heat, flux or fillers.

The smaller heavy-duty M101 is a versatile, low maintenance manual machine that can be used on a workbench or supplied with a trolley, enabling the operator to wheel it directly to the work area. The M101 produces strong reliable welds on copper

wire 1mm to 3.6mm (0.039" to 0.141") and aluminum 1mm to 5mm (0.039" to 0.197").

PWM will also be exhibiting its hand-held cold welders, and two larger manual models that can be used on a workbench or with a trolley. Video demonstrations of all PWM's products can be viewed on the company's website.

PWM's comprehensive range includes manual and powered cold welding machines for wire sizes 0.1mm (0.0039") to 30mm (1.181"). Machines and dies, standard or custom made to suit round or profile wire and rod, are precision engineered in the company's own workshops, ensuring total quality control and accountability.

New PWM cold welders and dies are available only from PWM or its authorized distributors.

PWM Ltd – UK
Website: www.pwmltd.co.uk

**QED Wire Lines
Booth 853**

QED supplies all new process lines with remote monitoring and control of the equipment's key functions.

The networked control panels are now further enhanced with software and hardware for communicating directly with a local area network. QED's Siemens-based PLC controls incorporate WinCC

Sm@rtServer software and a wireless modem for seamless LAN integration. The package includes a pre-configured laptop computer that is ready for remote access and data logging.

Networked: All of QED's touchscreens (HMIs) are networked for instant control and monitoring of all the equipment from any point on the line. A simple CAT5 cable connection provides the same information to your network.

Remote troubleshooting: The remote access capability permits troubleshooting from anywhere in the world. Additionally its software has status screens indicating all inputs and outputs to simplify maintenance and operations.

Data logging: All temperatures and pressures are graphed for easy visualization of the process trends. Alarms are logged along with the time and date of the incident.

This valuable data is critical for product quality assurance and standards compliance such as ISO 9001.

Siemens PLCs: QED has selected Siemens for its PLC and HMI requirements.

Mobile devices: An LT network with Sm@rt Client app provides communication to mobile devices for real-time monitoring of the equipment and for alarm notifications.

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

Queins & Stolberger Booth 1305



▲ *Just one of the machines on display from Queins/
Stolberger*

A new direct taper made and delivered by Queins/Stolberger has successfully gone into production at a customer's plant. The specially designed tape brake for extremely sensitive application, with fully automatic adjustment and tension control, includes completely ceramic bearings which allow even a taping with highly sensitive fleece.

The company will deliver further machines to long-time overseas customers in the second and third quarters of 2017. Among them are belt capstans with special chains for extremely sensitive conductors and take-up and pay-off for 50t reel weight in a special bridge-type design.

Queins Machines GmbH – Germany
Website: www.queins.com

Stolberger KMB-Maschinenfabrik GmbH –
Germany
Website: www.stolberger.com

Rad-Con Booth 1051



Rad-Con International Inc designs and manufactures Bell-type furnaces for spheroidize annealing of wire rod for the production of cold heading quality wires (CHQ).

Many of the largest fastener manufacturers are using Rad-Con equipment, taking advantage of patented technology for surface quality control using 100 per cent hydrogen protective atmosphere.

Rad-Con is head quartered in the USA with manufacturing locations in North America and Asia, to serve the world's cold-forming companies.

The company specializes in one type of furnace Bell-type, one type of process annealing, and has very specific knowledge in spheroidizing while producing a clean surface that is free of decarburization.

Rad-Con International Inc – USA
Website: www.rad-con.com

Rautomead Booth 232

Continuous casting technology specialist Rautomead Limited's graphite furnace technology is particularly suited for production of high purity, high quality oxygen-free copper wire rods and copper alloy wire rods (copper silver, copper magnesium, copper tin), 3,000-30,000 TPA.

This technology produces high quality CuOF 8mm diameter wire rod. This material benefits manufacturers of enameled wire, LAN cables and fine wires. The upward casting equipment may be used to manufacture rods of all diameters between 8mm and 30mm diameter and is suitable feedstock for wire drawing and continuous rotary extrusion processes.

End use applications include: superfine wire, automotive wires, contact wire and trolley wires for high speed trains, data communication cables, CTC and transformer strips as well as enameled wires.

Rautomead managing director Brian Frame will also be presenting a paper at the technical symposium which runs alongside the Interwire exhibition.

This paper will highlight Rautomead's recent R&D activities with respect to developing a casting capability for new high performance alloys, particularly focused on automotive signal cabling, lightweighting and improved alloy

tolerancing. This has resulted in new product offerings from Rautomead specifically designed for these applications.

Rautomead Ltd – UK

Website: www.rautomead.com

Roblon A/S Booth 859



Roblon is a supplier of high performance fiber solutions for optical fiber cables (OFC) and a manufacturer of cable machinery for OFC. Offering a wide range of E-glass, flexible strength members, binder yarn, ripcords and water-swellable yarns, Roblon can supply most of the products used in OFC designs. However, by using its special technologies and know-how, it is also able to supply materials for many different custom-made cable designs.

Recently, Roblon introduced a new family of water-swellable yarns, including very fine yarns for fully dry cable designs by using new innovative chemistries. Roblon Binder Yarn ULS is made of high grade polyester and is used for high-speed binding of SZ-stranded optical fibers and tapes. With a shrinkage level less than 0.6 per cent, Roblon Binder Yarn ULS is suitable

for micro- and mini cables with weight optimised wall thickness of tubes.

Roblon yarn servers and concentric binders are well-known and installed globally. Recently, the company introduced the low tension concentric binder suitable for micro- and mini cables.

Roblon A/S – Denmark
Website: www.roblon.com

**RosendahlNextrom
Booth 951**



▲ Rosendahl RH-W metal tape forming and welding line for HV power cables

The RosendahlNextrom team from the Hickory, North Carolina, office will be on site to show visitors solutions in ribbon and loose tube production for fiber optic cables.

In particular, the high-performance loose tube line has been equipped with a special RX5 crosshead, which makes for low maintenance and easy operation.

Its accuracy and high centricity help to achieve utmost reproducibility.

The HV power cable line RH-W is a tandem metal sheathing and jacketing line that covers product diameters from 40 to 200mm.

Over the past year the company has also placed particular focus on the manufacturing of silicone insulation and the processing of high-temperature materials as well as fluoropolymers.

Their material properties have inspired the development teams to reach even more ambitious goals.

In North America, Rosendahl and Nextrom work closely with their representatives F Camarena Inc and J J Lowe Associates Inc. For fibre optic cable solutions, partner Finoptics Inc has been in the cable and wire business for many years.

RosendahlNextrom – Austria
Website: www.rosendahlnextrom.com

**Shenyang Jinggong Enterprise
Booth 501**

Shenyang Jinggong Enterprise, a waterblocking tape manufacturer in China, has exported its tapes all over the world since 2004.

Jinggong G Tapes are often the first choice of customers.

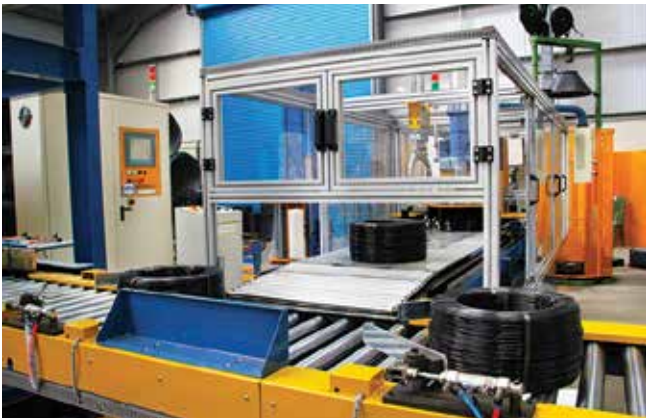
The company produces:

- semi-conductive waterblocking tape
- non-conductive waterblocking tape

- semi-conductive tape
- waterblocking yarn
- bedding barrier and woven tape

Shenyang Jinggong Enterprise – China
 Website: www.jinggong-tapes.com

Simpacks Booth 317



▲ The new coiler from Simpacks

Simpacks' newly redesigned dual head automatic coiler can coil 18 AWG up to 8 AWG solid or strand building wire, as well as coiling flat wire and cable. The coiler is capable of producing four to six 100m-long coils per minute. Change time is less than two seconds.

The new automatic coiler, strap and coil holders are available for all steel wire packaging on 22 to 34kg coils, including two/four straps as an option.

A new automatic coiler and strap is available for all hose/armor cable packaging solutions, including two/four straps on coil.

Simpacks – USA
 Website: www.simpacks.com

Supermac Booth 223

Manufacturing machinery since 1974, Supermac has been updating the technology on a regular basis.

The company is ISO certified and its products have been approved for the CE Mark, enabling it to export to the European market.

Supermac has previously exported machinery to Dubai, Abu Dhabi, Sharjah, Ras Al Khaimah, Oman, Nigeria, Uganda, Kenya, Bangladesh, Sri Lanka, Saudi Arabia, Doha, Qatar, Egypt, Lebanon and Jordan, and is now looking to cater for demand from the American continent.

Supermac manufactures extruders up to 175mm, cross heads for cable diameter to 200mm, payoff and take-up to 4,500mm and CCV lines for low voltage/medium voltage to 132kVA.

It has recently developed high-speed dual take-ups for 1,000mm bobbin, incorporating it into a high-speed insulating line up to 1,000m/min.

Supermac Industries (India) Ltd – India
 Website: www.supermacindia.com

Tensor Machinery Booth 659

Tensor Machinery has announced two new appointments that reflect a growing customer base and continued success for the company.

Ken Luterbach has been promoted to sales director and Carlo Pucci has been hired as a machine designer.

“Ken Luterbach did an outstanding job in his previous capacity as sales manager and has earned the promotion to the position of sales director,” said Robert Kepes, president. “Likewise, we are also very happy to welcome Carlo Pucci to our research and development machine design technical team.”

Mr Kepes said the past year was a good one for Tensor and that he looks forward to this year with great anticipation.

“We recently increased our workforce by 20 percent and completed an upgrade and renovation to our head office,” he said. “This positions us well for what we expect to be a great year for the company as we gear up for increased volumes in 2017.”

He added that innovation and quality enhances life for everyone, and that Tensor Machinery plays a part by providing an advanced approach to designing and building equipment.

“We will continue to work closely with our suppliers and sub-contractors,” he said, “and together we will enhance the reputation for quality that Tensor has been known for over the years.”

Tensor Machinery – Canada
Website: www.tensorfiber.com

Traxit International Booth 450

Traxit International provides a complete range of products and solutions to suit all needs and applications.

Founded 1881 in Schwelm, Germany, Traxit has grown into a large player in the wire-drawing business.

Its products are distributed by proprietary companies, agents and representatives in over 150 countries in order to provide clients with the perfect technical solution and the necessary know-how.

With its committed team of experts and over 200 different formulations, it can help you to find the ideal lubricant for any task required.

Traxit claims it is a forward-thinking, dynamic and eco-conscious company that uses its vast experience to look ahead and remain at the cutting edge of wire-drawing technology.

Traxit International GmbH – Germany
Website: www.traxit.com

Troester GmbH Booth 1165



▲ New developments from Troester will be on display at Interwire

In 1892, the German engineer Paul Troester started building machines which could process unvulcanized rubber and gutta-percha. 125 years later, Troester is now well known as an extrusion partner and a supplier of machines and lines for the cable manufacturing industry.

At Interwire, the company will present a variety of information and new developments in the field of CCV lines and VCV lines for XLPE and rubber cables, one-step silane lines for LV and MV cable applications, as well as high-speed insulation lines and sheathing lines.

Technical solutions for CV tube components, heavy duty cable jacketing and submarine cable equipment will also be introduced. Troester will also be representing its subsidiary, X-Compound, which supplies compounding plants for cable compounds such as PVC, HFFR, XLPE, semi-conductive material and special applications.

Troester GmbH & Co KG – Germany
Website: www.troester.de

Wire & Plastic Machinery Booth 1131



▲ Just one of the many machines available from Wire & Plastic Machinery

Wire & Plastic Machinery Corporation is a reseller of high quality second-hand wire, cable and optical fiber manufacturing equipment for wire drawing, stranding, bunching, cabling, braiding, extrusion and other cable making needs.

Machines are offered as individual components to complete lines and can be delivered immediately from eight US locations or completely reconditioned by an in-house engineering team. Wire & Plastic Machinery has a comprehensive range of over 30,000 machines in stock for all aspects of non-ferrous wire and cable production. At Interwire, the company will be showcasing pictures, video and an interactive presentation of its inventory offering within an 1,800ft² area. It will also be presenting a virtual reality tour through its warehouses.

Beverages and snacks will be available within the expansive area, and an enclosed meeting room will be available for detailed private project discussions. Booth visitors will have access to web-enabled stations for a live product search with detailed specifications and pictures.

Experienced personnel will be available to assist in selecting the most suitable equipment for the application and process.

Wire & Plastic Machinery – USA

Website: www.wireandplastic.com

**WTM Srl
Booth 871**

Interwire has, over the years, been a successful exhibition for WTM. The company has seen the attitude of visitors change from simple curiosity to customers that consider the company to be a sure and reliable partner who can help in solving problems in the taping and the single twist technologies.

WTM has widely improved its expertise, making available on the market products able to satisfy innovative, advanced and sophisticated productions, of both taping lines for any kind of special cable, and single twisting lines for the highest CAT LAN-cables and the most precise and flexible cables for robotic applications.

The particularly sensible and reactive systems used to control in real time the tension on the different situations allow WTM's lines to be widely used from the most worldwide qualified producer of special cables. The company cooperates with its customers to tailor its machines to their specific requests and, at the same time, to propose improvements for systematic enhancement of performance in quality and in quantity of output.

These characteristics are extended thanks to the capacity of WTM to integrate its machines with existing equipment, giving the customer full control through a unique interface.

WTM Srl – Italy

Website: www.wtmachinery.com

**Zhuzhou UKO Precision Carbide
Co Ltd
Booth 511-10**

Zhuzhou UKO Precision Carbide Co Ltd is a manufacturer of tungsten carbide rollers and dies for the wire and cable industry. The main products are tungsten carbide cold rolls, roller holders, TC descaling and straightening rollers, TC wire drawing dies, PCD dies, coating dies, gripper dies, cutters and punchers.

The company uses advanced equipment, such as a deoxidisation furnace controlled by computer, high temperature molybdenum carbide furnace, automatic-press sintering furnace, slow-feeding NC wire-cut machine, precision EDM shaping machine, CNC machining center and quality test equipment. The company is ISO9001-2008 registered. The company exports tungsten carbide products to more than 20 countries in North America, South America, Europe and Southeast Asia.

Zhuzhou UKO Precision Carbide Co Ltd – China

Website: www.ukowiretools.com

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The collage features three main magazine covers: **eurowire** (The international magazine for the wire & cable industry), **Wire & Cable ASIA** (Published in English and Chinese languages), and **wiredIn USA** (Digital Networking Monthly). Below the covers are two world maps showing exhibition locations. The left map highlights Europe and North America, while the right map highlights Europe. A red ribbon graphic is overlaid on the bottom right of the collage.

SEE US AT ...

- eurowire: STAINLESS STEEL WORLD (Maastricht, The Netherlands), WIRE EXPO (Nashville, TN, USA), INTERWIRE (Atlanta, GA, USA), WIRE DÜSSELDORF METAV CABWIRE (Düsseldorf, Germany), AMI CABLES (Cologne, Germany)
- Wire & Cable ASIA: STAINLESS STEEL WORLD (Maastricht, The Netherlands), AMI CABLES (Cologne, Germany), WIRE DÜSSELDORF METAV CABWIRE (Düsseldorf, Germany)
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