

The trade magazine for tube and pipe products

March 2015

# **FEME**group



Innovative Engineering. Made in Austria and Germany. Personal Attention, Service and Support. Machinery for the Tube, Bar and Wire Industry.



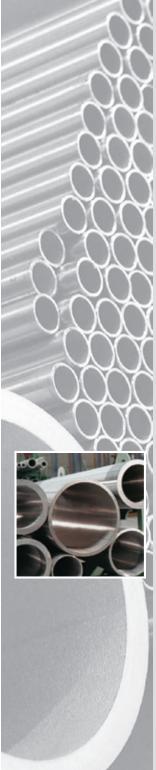


www.asmag.at

www.seuthe.com

#### **STAHLKONTOR** HAHN

#### ■ Stainless ■ Alloy ■ Carbon ■ Stainless ■ Alloy ■ Carbon ■ Stainless



### Your Master Distributor for

- Seamless Stainless Steel Tubes Stock grades: TP304/L, 316/L, 316Ti, 904L, Duplex and Super Duplex; for high-temperature services grade TP304/H, 321/H, 347/H; for heat resistant grade TP310/S
- **Seamless Unalloy/Alloy Steel Tubes** Stock grades: Grade B+C, X42, P11, P22, P5 and P91; P235GH TC1/TC2, 16Mo3, 13CrMo4-5, 10CrMo9-10, X10CrMoVNb9-1 (boiler tubes for pressure application)
- Seamless Carbon Steel Tubes Stock grades: Seamless Heavy Wall Steel Tubes, grade E355 (mechanicals); Hollow Sections, grade S355J2H (structurals); Seamless Cold-Drawn Precision and Hydraulic Steel Tubes, grade E235 and E355 (automotive, instrumentation and construction)













#### **Stahlkontor Hahn**

Division of ThyssenKrupp MetalServ GmbH Borsigstraße 2 · 40880 Ratingen · Germany Phone +49-2102-402.201 · Fax +49-2102-402.263 email: info@s-k-h.com · internet: www.s-k-h.com

## THE FIRST CHOICE for High Yield Tubulars in OIL, GAS AND CONSTRUCTION

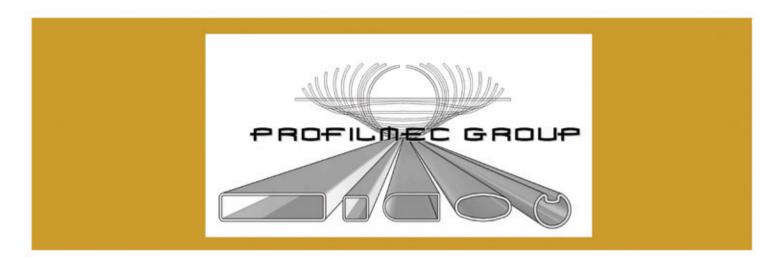


Structural High Yield Tubulars IN GRADES API 5L X52 PSL2 IN GRADES API 5L X60/X65 PSL2 Low Temperature Carbon Steel Pipe IN GRADE ASTM A333 GR 1 & 6 Seamless Carbon Steel Line Pipe IN GRADES API 5L GRB PSL2 and X42/A106 GRB/A53 GRB

**50 YEARS** 1965 - 2015



**f in www.tubedev.com** +44 (0)1236 823 551 info@tubedev.com



an industrial reality

a global production of 3.000.000 mt/day, with diameters range from 8 to 120 mm and thicknesses from 0,5 to 3 mm

synthesis of experience, competence, professionalism and technology





PROFILMEC SpA - LITA SpA S.R. 20 Dir. Torino n. 22 - 12035 Racconigi CN (ITALY) Tel. +39 0172 81 22 00 Fax +39 0172 81 22 78/81 13 38 e-mail: profcomm@profilmec.it website: www.profilmec.it



**ISPADUE** SpA Via Giotto da Bondone n. 88 33079 Sesto al Reghena PN (ITALY) Tel. + 39 0434 694 222/227 Fax + 39 0434 699 463/263 e-mail: vendite.estero@ispadue.com vendite.italy@ispadue.com website: www.ispadue.com



1961-2011

SIT SpA Via Giotto da Bondone n. 88 33079 Sesto al Reghena PN (ITALY) Tel. +39 0434 694 263 Fax +39 0434 694 265 e-mail: commerciale@sitacciai.it DIVISIONE SIDERURGICA



**ALLU'S SpA** Via Giotto da Bondone n. 79/A 33079 Sesto al Reghena PN (ITALY) Tel. +39 0434 693 552/564 Fax +39 0434 699 483 e-mail: vendite@allus.it website: www.allus.it





the materials employed are: hot rolled pickled steel (standard and special) cold rolled steel (standard and special) aluminised steel hot galvanized steel aluminium

all products can be supplied with special finishing and packaging, decided in partnership with our customer.

Profilmec Group believes in the importance of quality certification in nowadays markets. For this reason, all the companies belonging to the Group are certified in compliance with UNI EN ISO 9001 (updated ISO 9001:2000).

in 2005 Ispadue also obtained the certification ISO/TS 16949, a technical specification for the Automotive Industry. In 2007 Profilmec and Lita got the same acknowledgment.

In 2011 Profilmec and Ispadue obtained the prestigious certification **UNI EN ISO 14001**, an international standard based on voluntary participation that provides for specific requirements of Environmental Management System (SGA).

#### since 1961 higher and higher



#### **Editorial Office:**

Editor	Mr Rory McBride Email: rory@intras.co.uk
Editorial Assistant	Mr Christian Bradley Email: christian@intras.co.uk
Design & Production	Mrs Lisa Wright Email: lisa@intras.co.uk
Publisher	Ms Caroline Sullens
Founder	Mr John C Hogg

#### **Advertisement Material & Production:**

Ms Liz Hughes Email: liz@intras.co.uk Ms Andrea McIntosh Email: andrea@intras.co.uk

#### **International Advertising Sales:**

Ms Tracey Callaghan Email: tracey@intras.co.uk • Tel: +44 1926 834688

Ms Hendrike Morriss – Verkauf & Marketing (Deutschland, Osterreich, Schweiz) Email: hendrike@intras.co.uk • Tel: +44 1926 834687

Ms Giuliana Benedetto – Vendite & Marketing (Italia) Email: giuliana@intras.co.uk • Tel: +44 1926 834686

Ms Linda Li – 中国大陆, 台湾, 香港以及远东地区销售代表 Email: linda@intras.co.uk • Tel: +44 1926 834685

#### Subscriptions: www.read-tpi-com

Accounts Manager	Mrs Julie Case
and Subscriptions	Email: juliecase@intras.co.uk

#### Tube Products INTERNATIONAL is published by Intras Ltd, UK

Europe: 46 Holly Walk, Leamington Spa Warwickshire CV32 4HY, UK Tel: +44 1926 334137 Fax: +44 1926 314755 Email: tpi@intras.co.uk Website: www.intras.co.uk

#### USA: Intras USA

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

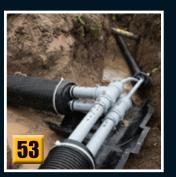
This publication and its full contents of layout, text, images, and graphics is copyright protected. No part of this publication may be reproduced in any form or by any means, electronic or mechanical including photocopying, recording or any other storage or retrieval system without the publisher's written permission. The publisher, owners, agents, printers, editors and contributors cannot be held responsible for and hereby exclude all liability whatsoever for errors, omissions or the accuracy and claims printed or inferred in the editorial or advertisements published in this, previous or subsequent editions or for any damages, costs or losses caused thereby. *Tube Products International* reserves the right to edit, reword and subedit all editorial submissions in accordance with editorial policy. *Tube Products International* expressed graphically or by text is a registered name and style trademark of Intras Ltd, UK. All matters relating to this disclaimer are governed by the laws of England.

US copies only: Tube Products International (ISSN No: 1755-7216, USPS No: 024-676) is published bi-monthly by Intras Ltd and distributed in the USA by Asendia USA, 17B S Middlesex Ave, Monroe NJ 08831. Periodicals postage paid at New Brunswick, NJ and additional mailing offices. POSTMASTER: send address changes to Tube Products INTERNATIONAL, 17B S Middlesex Ave, Monroe, NJ 08831.















© 2015 Intras Ltd, UK ISSN 1755-7216

**Tube Products INTERNATIONAL Magazine** 46 Holly Walk, Leamington Spa, Warwickshire CV32 4HY, UK Tel: +44 1926 334137 • Fax: +44 1926 314755 • Email: tpi@intras.co.uk

#### www.tubeproductsinternational.com

# Contents

## March 2015

- Business & Market News
- 22 Products & Developments
- 48 Tube Russia 2015
- **5** Plastic pipes
- **54** Made In Steel 2015
- **56** Fittings, valves, flanges and connectors
- **57** The lay of the offshore land by Cortez Subsea Ltd
- 70 Editorial Index
- 71 Catalogue
- 72 Advertisers Index









## TUDE Products INTERNATIONAL

#### The trade magazine for tube and pipe products



#### The March issue

Welcome to the latest issue of Tube Products International. In this month's issue we have features on fittings, valves, flanges and connectors (page 56) and plastic pipes, which starts on page 50. We also take a look at the Made in Steel show in Milan, Italy which runs from 20 to 22 May and Tube Russia in Moscow taking place from 8 to 11 June. Last but not least we have an excellent article from Cortez Subsea on new technology being used to lay flowlines on the seabed without causing undue disruption to the environment.

The falling price of oil has meant a tough year in several parts of the world not least the UK, with 2014 proving to be a difficult year due to rising costs and falling oil prices, although oil production actually rose by 1 per cent and billions of pounds were invested, which should hopefully stand the industry in good stead in the coming years. It is easy to forget that slumps have happened before and I am confident that profits will again start to rise but the industry will need a little help from the UK government in terms of the high levels of regulation and taxation it currently endures.

In the forthcoming May issue we have features on stainless steel tubes, construction, building and structural tubes, OCTG and pipeline products, a focus on tube and pipe production in the USA and a look at Valve World Americas 2015.

If you have any articles, stories, features or case studies that you would like to contribute

to the May issue then please feel free to contact me at rory@intras.co.uk

Enjoy the magazine.

Rory McBride Editor



## events calendar

#### 2015



26-28 March Boru (Istanbul, Turkey) International Exhibition www.borufair.com



20-22 May Made In Steel (Milan, Italy) International Exhibition

#### 2-4 June Ситипайп CityPipe



16-18 June



8-11 June Tube Russia (Moscow, Russia) International Exhibition www.metallurgy-tube-russia.com

**Guangzhou Julang** (China) International Exhibition

www.chinaexhibition.com



15-16 July Valve World Americas (Houston, USA) International Exhibition www.valveworldexpo.com



#### 15-17 September Tube Southeast Asia (Bangkok, Thailand) International Exhibition www.tube-southeastasia.com



5-10 October EMO (Milan, Italy) International Exhibition www.emo-milano.com

#### TUB©TECH

автесн

TuboTech (São Paulo, Brazil) International Exhibition www.tubotech.com.br

#### 9-12 November FabTech (Chicago, USA)

6-8 October

International Exhibition www.fabtechexpo.com

# WHERE OTHERS

## WE SEE CONNECTIONS



MIOGE | June, 23 - 26 2015 | Pavilion 1 | Expocentre | Moscow, Russia

## **BUTT WELDING FITTINGS SINCE 1971**

PRODUCT RANGE:

ELBOWS: 45° - 90° - 180 ° LR, SR, R = 2.5 D, R = 5D; EQUAL and REDUCING TEES; CONCENTRIC and ECCENTRIC REDUCERS; CAPS; SEAMLESS and WELDED CROSSES

MATERIALS:

ASME/ASTM SA/A 234 WPB - WP11 - WP22 - WP9 - WP91 - WP5 - WP12; ASME/ASTM SA/A 420 WPL6; ASME/ASTM SA/A 860 - WPHY42 - WPHY52 - WPHY60 - WPHY65 - WPHY70; MSS - SP 75 WPHY42 -WPHY52 - WPHY60 - WPHY65 - WPHY70; EN 10253 - 2; P235GH/P265GH STANDARDS:

ASME B16.9 - ASME B16.25; DIN 2605 - 2615 - 2616 - 2617; MSS - SP 25; EN 10253 - 2; MSS - SP 75

IRC SPA - Via E. Fermi, n. 7 - 29016 Cortemaggiore (PC) ITALY - Ph. (+39) 0523 839600 - irc@ircbwf.it



Õ



Technip has signed a deal with Statoil for work located to the north of Bergen, Norway

#### Technip signs subsea contract with Statoil ASA for the Gullfaks field

Technip has signed a contract with Statoil ASA for the Gullfaks Rimfaksdalen (GRD) Marine Operations Pipelay and Subsea Installation project. This project is an option to the Snøhvit  $CO_2$  Solution project awarded in 2013.

The GRD project scope consists of a subsea tie-back to a new wye piece on an existing pipeline close to the Gullfaks A platform.

The GRD template will be located 190km northwest of Bergen, Norway. The contract covers the fabrication and installation of two sections of pipe-in-pipe, a total length of around 9.5 km, with a 13 per cent chrome stainless steel production flowline. It also includes installation and tie-ins of three spools and an 8.5km umbilical, and the installation of a 280-ton template and a 110-ton manifold.

Technip's operating centre in Oslo, Norway, will execute the project. Vessels from the group fleet will install the template in 2015. The flowline will be welded at Technip's spoolbase in Orkanger, Norway, while the installation will be performed by the *Apache II*, in the first half of 2016.

The installation of the associated manifold, spools, umbilical and other subsea equipment will be performed by other vessels from Technip's fleet. First gas is planned for the second half of 2016.

The company has also been awarded a contract by Oil and Natural Gas Corporation Limited (ONGC) to build a 6 MMSCMD onshore terminal at Odalarevu in Andhra Pradesh, India, as part of the Integrated Development of Vashishta (VA) and S1 fields. These fields are located 30-35km off the Amalapuram coast in the KG Basin, off the East Coast of India, at water depths of 250 to 700m. The onshore terminal awarded to Technip is one of the critical components of the development.

Technip's scope of work for this contract includes basic design, detailed engineering, procurement, fabrication, inspection and testing, installation, precommissioning and commissioning of the new onshore terminal facilities, which will be integrated to the existing terminal.

The company's operating centre in Delhi, India, will manage and execute the project, which is scheduled to be completed in the second half of 2016.

Technip – France www.technip.com

# Constellium completes acquisition of Wise Metals

Constellium NV has completed its previously announced acquisition of Wise Metals Intermediate Holdings LLC), a private aluminium sheet producer located in Muscle Shoals, Alabama, USA. With the closing of the acquisition, Constellium now has access to 450,000 metric tons of hot mill capacity from the widest strip mill in North America. "This acquisition is a key milestone for Constellium that will allow our company to provide greater sustainable value to our customers globally," commented Pierre Vareille, CEO of Constellium. "It enhances Constellium's global footprint and offering by increasing the company's exposure to the North American market and supplementing Constellium's

leading position in Europe. Constellium expects to benefit from increased product development resources and technological capabilities, wider global reach and greater operational flexibility."

Constellium – France webmaster@constellium.com www.constellium.com

### **AS9100 certification**

Superior Tube has announced that it is now certified to AS9100, having been successfully assessed by the independent certification organisation Det Norske Veritas.

Based on the ISO 9001 series of quality management systems, AS9100 was introduced to provide a globally harmonised standard specifically for the aerospace industry. By establishing recognised procedures and controls and promoting a culture of continuous improvement, AS9100 helps to reduce and prevent errors, leading to cost reductions across the entire supply chain, including design, manufacture, maintenance and distribution.

Superior Tube's quality systems manager, Deborah Kamertz, commented, "Gaining AS9100 certification is an important step for Superior Tube and a tribute to the hard work and dedication of everyone involved in the certification process." Kevin Heaphy, global director product management and commercial systems, added, "By reinforcing stakeholder trust in the company, AS9100 will help us take advantage of new business opportunities internationally as well as supporting our strategic expansion in key aerospace segments."

Superior Tube Company, Inc – USA info@superiortube.com www.superiortube.com

# Flexenergy appoints sales manager for Scotland

UK-based pipe specialist Flexenergy has appointed Steven Rankine as area sales manager for Scotland. Mr Rankine has worked in the energy sector for more than four years, and will be responsible for introducing customers to Flexenergy's energy-efficient preinsulated products, ranging from cooling pipes to pipes for district heating schemes and solar thermal projects.

Mr Rankine commented, "Flexenergy possesses a wide range of innovative and sustainable products which, along with a very good reputation in the industry, makes for an exciting future."

Sales director Sandy Fairley added, "Steven will be playing a key role for Flexenergy as we continue to expand our business. He knows the industry and the territory well and with his keenness and determination, I'm sure he will be very successful in his new role."

Flexenergy designs, supplies and installs distribution pipework used in heating, and hot and chilled water systems across a wide variety of renewable/sustainable energy technologies, including solar, biomass CHP, geothermal, and district and community heating.

The company offers extensive pipe stocks; jointing technologies (welded and mechanical); pipe ancillaries, meters and fittings; system design; installation services; and in-house fabrication service. It is also the UK and Ireland stockist of the Flexalen pre-insulated pipe system.

Flexenergy Ltd – UK www.flexenergy.co.uk



Steven Rankine, Flexenergy's area sales manager for Scotland

## Tube Developments celebrates 50 years in business

Founded in 1965, Tube Developments Ltd has become one of the largest steel tube stockholders in Europe, and is now celebrating 50 years in business.

The company's initial aim was to provide an immediate stock supply of steel tube throughout Scotland and the North of England, servicing the shipbuilding and heavy engineering industries. The company states that it quickly developed a reputation for quality, reliability and value, and this allowed it to establish itself in the international markets covering Europe, Australia, USA, Africa, India, the Middle East and Asia.

The company still operates with the same principles and commitment to quality and service that the current chairman and founder, John Fraser, envisaged



Topsides being added to Chevron Big Foot in Texas, USA, prior to starting in the Gulf of Mexico in 2014

when he created the company. The company operates modern from near premises Glasgow, UK, and has at any one time thousands of tonnes of carbon steel pipe and tubulars in covered and controlled warehouses.

The company's reputation for supplying carbon steel pipe and high yield tubulars has seen it working on complex projects around the world, including the petrochemical, offshore/onshore oil, and construction industries. Tube Developments has an extensive customer base, and in 2013 received recognition, at a presentation ceremony in London, for its successful supply of the structural tubulars on the Jasmine Project in the central North Sea.

Following its vendor approval status for many of the leading oil and gas contractors, some of which include Saipem, Technip and Saudi Aramco, 2014 saw both Qatar Petroleum and Oman Oil & Gas Industry's Joint Supplier Registration System added to the list of registered vendor approvals. The company's QA/QC procedures and manuals are assessed and approved by each customer prior to achieving this type of status.

Tube Developments Ltd – UK info@tubedev.com www.tubedev.com

## Company expansion leads to new premises

Due to ongoing business growth at The Online Electronics Group (OEG),



OVL staff in Aberdeen: Dave Sim, sales director; Bill Priest, project coordinator; and James Padgham, operations manager

10

a second facility in Aberdeen, UK, commenced operations in 2014. The new premises are in close proximity to the group's head office, and both buildings are strategically located alongside the main road to the city centre and Aberdeen International Airport.

Online Valves Ltd (OVL) has achieved exceptional growth since the business was established in 2012 and, with the support of OEG business units in Houston (USA), Dubai (UAE), Singapore, and Perth (Australia), is planning for trends in growth to continue both in home and overseas markets.

OVL's new premises offer a combination of modern office space, and meeting

and conference, storage and workshop facilities. The building, around 4,000ft<sup>2</sup> in area, has all of the heavy lifting and handling capabilities suitable for planned expansion into stock holding.

OVL's sales director commented, "Despite being a very young company we are delighted to have outgrown the parent company building so quickly. I believe this rapid growth is due to our total commitment to providing a quality service with fast response and fast deliveries to meet the urgent requirements of the oil, gas and petrochem markets worldwide."

**Online Electronics Group** – UK sales@online-electronics.com www.online-electronics.com



World leading manufacturers of gridded tubes and thyratrons

EVTRIODE

# 60 years of engineering excellence

For over 60 years, e2v has manufactured and supplied quality industrial triodes and tetrodes for a range of applications including textile and food drying. Ranging in power output from 25kw to 530kw, our power tubes deliver outstanding performance and a long service life.

We supply an exceptional level of customer service and support, and many of the gridded tubes that we manufacture are also direct equivalents for other manufacturers' tubes, or can be used to replace them with our guidance.

## Contact us for a quote today +44 (0) 7803 150639 e2v.com/tubes

# Superior Tube and Fine Tubes appoint new global director

Superior Tube and Fine Tubes, both part of the Watermill Group, have appointed Shion Hung to the position of global director of customer programmes and business intelligence. Superior Tube, based in the USA, and Fine Tubes, based in the UK, manufacture precision tubing for critical applications across a range of global markets, including aerospace, nuclear, oil and gas and medical.

Based in the USA, Mr Hung will take the lead on building customer insights, analytics and programme functions, which will help to shape the strategic direction of both companies and enhance their execution capability. Mr Hung was platform director, access and advanced energy, for Johnson & Johnson, where he developed market forecasts, business models and new product development priorities for the medical devices market. He previously held the position of global marketing and partnerships manager for Alcoa, identifying growth opportunities and execution strategies for industries including aerospace, oil and gas, and consumer electronics. In addition to a degree in electrical engineering from Rice University, he holds an MBA and SM from MIT.

Commenting on his new appointment, Mr Hung said, "Superior Tube and Fine Tubes both have an excellent reputation for their technological capabilities across



a number of key markets, and I'm very much looking forward to helping them build on that and further extend their global presence."

Fine Tubes Ltd – UK sales@finetubes.com www.finetubes.com

Superior Tube Company – USA info@superiortube.com www.superiortube.com

Prior to taking up his new role,

## Heat exchanger tube testing

Magnetic Analysis Corp (MAC) Echomac<sup>®</sup> ultrasonic inspection systems are being used by a number of tube manufacturers who supply steel tube for heat exchanger applications. A recent installation at Ratnamani Metals & Tubes Ltd, a major steel tube producer in India, is testing welded stainless steel heat exchanger tube to meet industry standards.

The system incorporates an Echomac ultrasonic instrument with an ultrasonic rotary containing eight transducers: two for detecting longitudinal defects, two for transverse, three for wall thickness and OD/ID measurement, and one for water temperature compensation to enable dimensional measurement. This is the second system of this type that MAC has supplied to the company.

MAC has also supplied several ultrasonic test systems to Schoeller Werk GmbH & Co KG in Germany, to inspect heat exchanger tubing made of stainless steel and titanium alloys. In addition to detecting defects, the company uses these test systems to provide quick feedback to the operators on any changes taking place in the welding process. One system incorporates seven ultrasonic channels, while the other includes 14 channels. MAC also supplied a complete inlet table and outlet conveyor.

Eddy current test systems are also generally required to inspect any tubing that is to be used for fluid transmission. When using eddy current technology, care must be taken when testing 300 series welded tube. Generally, the 300 series is close to being non-magnetic, while the 400 series is much closer to being magnetic. However, where 300 series tube is being welded, the weld can become 'delta ferritic', which creates permeability noise that will interfere with an eddy current test.

This problem can be solved by 'saturating' the tube by means of a direct current coil, which MAC can supply. When this is done, the permeability becomes relatively uniform and the 'noise' is minimised. It is also possible to avoid the permeability noise by testing the product after it has been annealed.

Magnetic Analysis Corp – USA info@mac-ndt.com www.mac-ndt.com



### Caparo invests €4mn in European operations

Caparo Industries is to invest around €4mn in its UK and Polish operations. The business is planning to upgrade its facilities and equipment in order to provide higher value added products, and improve services available to customers in various sectors.

The company is a diversified manufacturer of steel and engineered products, with a portfolio that ranges from automotive and aviation components, forged parts and assemblies, carbon composites, performance braking and actuation systems and materials testing services, to steel tubes, steel wire, merchant bar and precision steel strip.

The business serves a wide variety of customers in industries from stockholding and distribution of steel products, to OEMs and off-highway vehicle manufacturers, the motorsport industry, railways, aerospace and marine. In order to better cater to market requirements, the company has approved a €2mn investment plan for its precision tube mill in the West Midlands, UK. This also includes expanding and improving its downstream distribution and customer service offering in the UK precision tube market. This is in addition to a further €2mn programme at Caparo's Polish forging business, Caparo Forging Bomet, which is already underway.

Caparo's UK investment schedule, which extends through to 2017, is currently at its first stage of implementation. It includes the establishment of new manufacturing operations and the upgrade of the business's capabilities for adding value to customers with services such as heat treatment, precision cutting, laser profiling and non-destructive testing. Caparo will also be upgrading its Flo-Coat mill in order to expand production capability and increase size range.

"The above developments are only the beginning for us," said Douglas Dawson, chief operating officer at Caparo.

"We are presently laying the foundations for future substantial investment in our UK tubular operations, which will include laser cutting, new heat treatment facilities, stainless steel production, additional manipulation cells and tube mill upgrades. The aim is to use our extensive resources and engineering skills to grow into higher value added products and services, and to become the premier supplier of tubular solutions, not only in the UK but in Europe."

Caparo Industries plc – UK enquiries@caparo.com www.caparo.com

## **IST- The Fitting-Specialist**



Our unique stock of bw fittings is one of a kind. Where all usual collegue stockists concentrate on the standard grade, sizes and thicknesses, we stock the odd or in-between sizes and thickness and odd reductions for the tees and concentric or eccentric reducers. We are not aiming for the bulk in standard items but serve our clients as an extension to the usual supplier with our unusual inventory. Check our website with stocklist and register to receive this on a regular basis. For export projects outside Europe we concentrate on small and medium size projects with emphasis on hard-to-obtain items and package-deals. In stainless WP304L, WP316L, WP321H and WP347H stocking 90° and 180° SR bends. In carbon steel WPB also 90° and 180° SR bends only and in alloy WP1, WP11, WP22, WP5, WP9 and WP9145°, 90° and 180° LR plus 90°, 180° in SR bends, concentric and eccentric reducers and (reducing)tees with reductions like 4°s.1.1/2°, 8°s.2.1/2°, 8°s.3° and 10°s.4° and also caps, stockprogram in sizes ½°-24° and wallthickness up to SCH XXS and 160, in addition to SCH100, SCH120 and SCH140, for many sizes. Also WPL3 in stock.





#### The Power is Our Stock

P.O. Box 74, NL-4760 AB Zevenbergen, The Netherlands, phone +31 168 32 67 50, info@istbv.com, www.istbv.com

## **ICoTA presents innovation award**

The Intervention & Coiled Tubing Association (ICoTA) has presented its European Chapter Innovation Award to Oilenco's OneDrift technology, in recognition of the company's dedication to technical innovation. Oilenco previously won the award in 2012 for its Soak Sleeve and Syringe system.

The company was presented with the award at the SPE ICoTA 20<sup>th</sup> Well Intervention conference held in Aberdeen, UK, with the technology impressing judges with its ability to provide a mechanical means of gauging the inside diameter of the wellbore completion in one run.

The technology aims to reduce the number of investigative runs required and is used to detect 'unforeseen' restrictions such as scaled or collapsed tubing. It can also be run in multiples to simulate a bottom hole assembly of a particular length with varying outer diameters. This removes a requirement



to manufacture bespoke dumb iron drifts from scratch for every application.

Warren Ackroyd, Oilenco managing director, collected the award, stating, "It's great to win this award and we're really pleased indeed. Most of our business is looking at bespoke designs and requirements for the customer and turning them into reality so it's great to have this award under our belt."

ICoTA chair Kelly Murray commented, "The consensus among the judging panel was that the genius of Oilenco's innovation lies in its simplicity. It seems an obvious solution but demonstrates a step change. The solution Oilenco has delivered is distinctly different to conventional drifts."

The Innovation Award recognises outstanding technical innovation or application of technology for well intervention, and previous winners include Interwell, BP Exploration and Baker Hughes.

ICoTA is a not-for-profit, memberfunded organisation active in the oil and gas industry and made up of oil and service companies. It provides a global network of professionals, engineers and technical experts across all well intervention disciplines though a series of events.

ICoTA – European chapter – UK www.icota-europe.com

## **Titanium Europe 2015**

Titanium Europe 2015 will be hosted by the International Titanium Association (ITA), 11-13 May, at the Hilton Birmingham Metropole, Birmingham, UK.

The event will provide a platform to gain insights into the European titanium industry and will serve as a networking venue for business executives. Presenters will provide outlooks on world supply and demand; illuminate developments on the lengthening global supply chain; clarify nearterm business trends driving the key commercial aerospace sector; report on the dynamics of the titanium industry in developing new industrial markets and development of innovative products; and share insights on the potential for 3D titanium additive manufacturing as a novel, game-changing technology.

Over the past decade, attendance at the ITA's North American Titanium conferences has doubled, drawing delegates from more than 30 countries.

This growth has occurred as the titanium industry's international supply chain has expanded and become more complex.

The US Conference draws over 1,000 participants annually, and the Titanium Europe 2014 conference held in Italy attracted over 400 delegates in its second consecutive year. The Birmingham, UK, venue for Titanium Europe 2015 is anticipated to draw a high number of industry professionals to discuss the dynamics of the European titanium industry. ITA is also planning a variety of industry-related tours for delegates' participation.

International Titanium Association – USA

www.titanium.org



**KRV** Fachverband der Kunststoffrohr-Industrie

## Plastic Tube: The Right Choice!

Kennedyallee 1-5 D-53175 Bonn Tel. +49 (0)228 / 91477-0 Fax +49 (0)228 / 91477-19 kunststoffrohrverband@krv.de www.krv.de



## **Barrett Steel launches BS Scotland**

Following the success of Barrett's tube division in Scotland, opened in 2013, the company has announced a major investment with the launch of Barrett Steel Scotland. The new business, based in Bathgate, West Lothian, will promote general steels to an expanding Scottish market, serving small and large steel users in a wide range of industries, from blacksmiths to major construction companies and large fabricators.

The company has ambitious growth plans, and aims to be the largest independent steel stockholder in Scotland within the next five years.

Part of Barrett Steel's company-wide continuous investment programme, the

business will complement and work in conjunction with the Bathgate-based tubes division and the energy business in Montrose.

Two new staff have already been appointed as part of the initial recruitment drive.

Ross Kidd, commercial manager of Barrett Steel Scotland, explained, "This is an exciting time at Barrett Steel Scotland. We have the backing of the Barrett Group, the UK and Ireland's largest independent steel stockholder, and we are looking to capitalise on this success north of the border, building the customer base and developing relationships. "We will offer customers a wide variety of stock and processing options, including drilling, plasma, gas and laser cutting, punching and shearing systems, tube lasering and painting, helping customers to identify opportunities and solutions for a variety of projects."

Barrett Steel consists of 42 companies operating from 30 locations across the UK, Ireland and the USA, and is divided into four divisions: general steels, engineering steel, tubes, and energy products.

Barrett Steel – UK sales@barrettsteel.com www.barrettsteel.com

## **Tubular Steel USA opens for business**

Tubular Steel USA officially opened its doors in February, to meet the growing demand for mechanical grade tubing in the southern USA. From its new plant in Centerville, Tennessee, Tubular Steel USA will service its existing customer base in the region and also focus on new business development in the USA.

Equipped with the latest shear and saw cutting equipment as well as a full tool room to service its three plants, Tubular Steel USA plans to focus on driving tubular steel innovation through capital investments and bestin-class process engineering. Tubular Steel Inc has been a growing mechanical grade tube supplier based in Toronto, Canada, for over 20 years. In 2007 the company expanded its operations with a second Toronto plant in order to further develop its tube rolling, cutting and end-finishing operations. That plant has since ballooned, creating the need for a third facility and expansion into the growing southern USA market.

Tubular Steel USA will be home to Tubular Steel Inc's 'Innovation House'. The company has used the extensive knowledge and experience of Tony Da Silva, VP of operations at Tubular Steel Inc, in order to deliver solutions to its customers. Company president Robert McKinnon commented, "Tony has an uncanny ability to visualise process flow and build operational excellence into tube manufacturing."

Combining the pair's prior experience in fabricating and knowledge of advanced high strength steels has enabled Tubular Steel Inc to help solve difficult tube fabrication problems for customers.

Tubular Steel Inc – Canada tsi@tubularsteel.ca www.tubularsteel.ca

#### **Superior Tube receives DDTC registration**

Superior Tube, a manufacturer of small-diameter precision tubing for the aerospace, nuclear, medical, and oil and gas industries, has announced the extension of its registration with the Department of State's Directorate of Defense Trade Controls (DDTC) as a manufacturer of defence-related articles for another year.

Holding this registration will enable Superior Tube to apply for any required

export licences or approvals under the terms of the International Traffic in Arms Regulations (ITAR).

Kevin Heaphy, global director product management and commercial systems, commented, "Being registered with the DDTC is an essential part of our current and future business with our defence customers.

"This registration allows us to continue

and expand our global presence in defence-related markets."

Superior Tube's manufacturing capabilities include seamless and welded tubes, straight lengths or coils, in stainless steel, nickel, titanium and zirconium.

Superior Tube Company – USA info@superiortube.com www.superiortube.com

## Ulundi project: Robor gives back

During 2012, at the request of the Ward 10 Councillor and the Deputy Mayor of the Ulundi Local Municipality in South Africa, Robor put in place plans to erect a community hall for the community of Gogo Residence.

The project started with the Buthelezi Traditional Council making the land available. Robor had the land cleared and erected a steel structure during 2013. Once the structure had been erected it became clear that the structure alone would not be usable by the community, or service the community's full needs. Robor then decided to construct a complete building around the structure, and also ensured that essential services were provided to the community.

Robor contracted with Gonal Construction to build the hall during 2014, with contributions also being made by Kansai Plascon, PPC, Jo-Jo Tanks and the Ulundi Municipality. The official handover of the building to the community by Minister Buthelezi took place on 10<sup>th</sup> December 2014.

Robor has invested in a number of socio-economic projects in recent years. Most of these investments have been in education, through bursaries and sponsoring schools within the area in which Robor operates.

In 2012 Robor financially assisted Cotlands, a non-profit early childhood development organisation, towards its operational costs.

In 2013 the company bought computer equipment and paid for Cotland's facilitators to take part in a learning programme to obtain an accredited qualification in Early Childhood Development NQF Level 4. In 2014 Robor again donated an additional amount towards Cotland's operational costs. Robor also makes contributions to underprivileged children, the aged



and various charity organisations working within its community.

Due to the continued support from Robor employees who, during the year, purchased second-hand books and raffle tickets for various hampers, the amount of R5000 was raised and handed over to the Kempton Park SPCA animal welfare organisation.

**Robor** – South Africa info@robor.co.za www.robor.co.za



## **INDUTEC: A Springboard into Africa**

With Africa's attractiveness as a business destination on the rise, the SA Industry and Technology Fair (INDUTEC) offers a cost-effective springboard into the rest of Africa.

"Africa is now rated as the second most attractive investment destination in the world and businesses are actively using INDUTEC to explore these opportunities," said John Thomson from Exhibition Management Services, organiser of the event. INDUTEC takes place from 20 to 22 May 2015, at Gallagher Convention Centre in Midrand, Johannesburg, South Africa.

Instead of making many trips to different African countries to find business opportunities, one trip to INDUTEC will provide exposure to companies from all over Africa. The event targets the manufacturing, engineering, water, petrochemical, plastics and energy sectors.

Thai-German Products Public Company Ltd (TGPRO) will exhibit at Pumps, Valves and Pipes Africa for the first time in 2015. This will also be the company's first time exhibiting in Africa.

"We decided to exhibit at PVP Africa 2015 because this event will help us introduce our company and products into the African market and will help us expand our business into Africa," says Rinlada Panpoonsub, international sales executive at TGPRO. Franklin Fuelling Systems Ltd, another first-time exhibitor at the event, is a provider of complete fuelling systems. Natasha Pratley, marketing executive at the company, commented, "We decided to exhibit at this event because it has synergy with our allied industries."

Third-time exhibitor Sera ProDos SA will launch a new chemical dosing system, and will showcase its compact dosing system. Sera ProDos offers a wide range of precision metering pumps as well as complete dosing systems with a wide variety of add-ons and accessories.

#### Exhibition Management Services – South Africa

marketing@exhibitionsafrica.com www.exhibitionsafrica.com

# MRC Global awarded five-year supplier agreement

MarkWest Energy Partners, LP has awarded a pipe, valves and fittings (PVF) supplier agreement to MRC Global Inc's USA operating company, McJunkin Red Man Corporation. Under this agreement, McJunkin Red Man will supply PVF for MarkWest's pipeline projects focused in the Marcellus and Utica regions. The agreement has a five-year term.

"We are very pleased that MarkWest is placing their trust in MRC Global to work with them to drive costs out of their complex supply chain," commented Andrew Lane, MRC Global's chairman, president and CEO.

"MarkWest is a leader of midstream services in the natural gas industry, and we are very well positioned to support their continued growth in this market. When a company like MarkWest chooses MRC Global for this type of arrangement, we take that very seriously and commit our significant supply chain and PVF expertise and best-in-class branch network toward the mutual success of the agreement."

Headquartered in Houston, Texas, USA, MRC Global distributes pipe, valves, fittings and related products and services to the energy industry, and supplies these products and services across each of the upstream, midstream and downstream sectors.

MRC Global Inc – USA www.mrcglobal.com

### **Delivering to Surgutneftegaz and Transneft**

TMK, a producer of tubular products for the oil and gas industry, has supplied a complete set of high-tech tubular products and equipment for a drill column. Surgutneftegaz will use the products to drill a well around 5,000m deep.

"By fostering customer relationship we aim to expand our offer from just topquality tailor-made tubular products to a comprehensive value proposition for oil and gas companies," said Alexander Shiryaev, TMK's CEO. "This approach is set to meet our customers' best expectations and assist our partners in tackling their biggest challenges."

The company has also won Transneft's tender for large-diameter pipes (LDP) supply. From January to April 2015, TMK will supply Transneft and its contractors with 31,583 tonnes of large-diameter pipes, which will be produced at its Volzhsky Pipe Plant and used for repair and reconstruction of Transneft's oil trunk pipelines.

TMK manufactures and supplies steel pipes for the oil and gas industry, operating 28 production sites in the USA, Russia, Canada, Romania, Oman, UAE and Kazakhstan, and two R&D centres in Russia and the USA. The largest share of TMK's sales belongs to high margin oil country tubular goods (OCTG), shipped to customers in over 80 countries.

**TMK** – Russia tmk@tmk-group.com www.tmk-group.com

## **TECNOFAP** Stainless Steel Tubes Manufacturer

Quality Assurance System in accordance with the Pressure Equipment Directive 97/23/EC (PED) Annex I, Paragraph 4.3 Certified by TÜV

- Tecnofar Spa is a family-owned company specializing in manufactured redrawn PRECISION tubes (available in bars and coils) and TIG WELDED tubes.
- Outside diameters range from 0.30 to 76.00 mm and wall thickness from 0.10 to 3.50 mm.
- This company offers high quality products, and is able to produce completely burr-free cut pieces in lengths of just a few millimeters when needed.
  - Please contact us for further details





UNI EN ISO 9001:2008 (ISO 3001:2008) N° 073SGQ03 UNI CEI EN ISO 13485:2012 (EN ISO 13485:2003) N° 073DM03

VIA DELLA BATTAGLIA, 20 - 23014 DELEBIO (SO) Ph. +39(0)342 684115 Fax +39(0)342 684500 info@tecnofar.it www.tecnofar.it

## Australian expansion

Special Piping Materials Australia has continued its growth by moving into a new purpose-built warehouse and office facility covering over 3,000m<sup>2</sup> in Bassendean, Western Australia.

The significant additional space available has allowed the company to immediately increase its stock range, with increased 'on-hand' quantities of all existing products, as well as the addition of new inventory lines of heavy wall pipes and fittings and high pressure flanges in Duplex S31803/2205 and Super Duplex S32750/2507. Ian Hutchinson, managing director of Australian operations, expressed his delight with the smooth transition to the new facility: "Our new Bassendean facility allows us to continue our significant growth shown over the past few years. It gives us well-needed space to increase inventory so we can now offer from stock items which in the past would have to be imported from overseas. The space available also allows us to continue to improve our internal processes and invest in new staff members to better service our clients' increasingly stringent needs." Special Piping Materials has also appointed a new general manager for its Singapore subsidiary. Alex Forth is relocating from the UK to Singapore, and is tasked with driving the growth of Special Piping Materials in the Southeast Asian region, while overseeing major projects.

**Special Piping Materials Ltd** – UK www.specialpipingmaterials.com

**Special Piping Materials Australia** sales@specialpipingmaterials.com.au www.specialpipingmaterials.com

#### Tubacex acquires majority stake in Prakash seamless division

Tubacex, a Spanish company specialising in the manufacture of stainless steel tubular solutions, has reached an agreement with Indian company Prakash Steelage Ltd to acquire 68 per cent of its seamless stainless steel tube division.

Prakash Steelage is a manufacturer of stainless steel tubes and pipes. The seamless stainless steel tube division employs around 250 people and has a turnover of €25mn.

According to Jesús Esmorís, CEO of

Tubacex, "The acquisition of a majority stake in the seamless stainless steel division of Prakash Steelage is a step towards strengthening our presence in growing markets. We are perfectly aware about the market situation with the oil price drop and the investment slowing down in the oil industry, but this is a strategic decision that will allow us to increase our presence in growing markets."

Shri Prakash Kanugo, chairman and managing director of Prakash Steelage, commented, "The joint venture will be mutually beneficial for Tubacex and Prakash Steelage and is expected to reinforce the growth of the stainless steel seamless tubes and pipes division."

Tubacex is a multi-national group dedicated to the manufacture of stainless steel and high-alloyed seamless tubes, mainly for the oil and gas, petrochemical and power generation industry sectors, which account for over 90 per cent of the group's sales.

Tubacex SA – Spain www.tubacex.es

## Plymouth appoints first non-family president and CEO

Plymouth Tube Co has named Mark Baker its new president and chief executive officer, the first non-family member to hold that position since the company's founding in 1924. Mr Baker joins Plymouth as Donald Van Pelt, Jr, who has served as president and CEO since 1996 and chairman of the board since 2013, prepares to retire. Mr Van Pelt will retain his role as chairman of the board.

In a statement to Plymouth employees, Mr Van Pelt remarked, "Although I will be stepping away from the daily details of the business as CEO, I will continue to be involved with the company as chairman of the board. Throughout the past seven months our search committee was thorough, relentless and successful in finding the best candidate who embodies the experience, leadership and values to carry on the Plymouth legacy."

Mr Van Pelt cited Mr Baker's experience with family business, operations, sales and marketing and corporate leadership in explaining what made him an ideal fit for the manufacturer of steel tubing and steel and titanium extruded shapes. The 90-year-old company stated in a memo announcing Mr Baker's appointment that Plymouth is committed to remaining a private, family-owned business.

Plymouth is currently in its fifth generation of family ownership, with family members active in the company either through employment or board positions.

**Plymouth Tube Co** – USA sales@plymouth.com www.plymouth.com

## Tejas leaders honoured by Houston commerce organisation

The Houston Hispanic Chamber of Commerce (HHCC) honoured Maximo A Tejeda, president and CEO of Tejas Tubular Products, Inc, with the Male Hispanic Entrepreneur of the Year award at its annual gala.

Mr Tejeda received the award for his contributions to the business community in Houston, Texas, USA.

In his Chamber interview, Mr Tejeda said, "The importance of the oil and gas industry in Houston should be emphasised in our business community.

"I should also stress that Hispanic entrepreneurs in the Houston area must vigorously pursue their business ideas and ideals to increase economic growth, jobs and wealth for our community.

"In addition, I am completely humbled by this experience and would like to thank the Tejas Tubular team for making this possible."

The awards gala was attended by an estimated 1,200 guests.

The Chamber took the opportunity to present the 2014 graduating class of the Emerging Leaders Institute (ELI).

Shawn Portales, external affairs manager at Tejas Tubular and graduate of the 2014 ELI, was recognised by the HHCC as an emerging leader at the gala.

The Emerging Leaders Institute of the Greater Houston Hispanic Chamber of Commerce Foundation identifies, develops and empowers juniors and seniors from area universities and young professionals through a leadership training programme.

Tejas Tubular Products has US manufacturing facilities in Houston, Texas; Stephenville, Texas; and New Carlisle, Indiana.

The company is a manufacturer and supplier of oil country tubular goods for the petroleum industry, and offers a complete range of OCTG products serving conventional, offshore and unconventional production projects.

Tejas product lines include petroleum production products such as casing, tubing, couplings and tubular accessories.

The company also supplies drilling products including HDD drill pipe, oilfield drill pipe, drill collars and drill string accessories.

**Tejas Tubular Products, Inc** – USA www.tejastubular.com



Your Vision, Our Future



#### Full-Body and ERW Tube Inspection System

#### **Nondestructive Phased Array Solution**

This hybrid inspection solution uses phased array technology to control the full volume, the weld seam, and the heataffected zone (HAZ) of ERW tubes and pipes, and is fully compliant with the latest API requirements for P110 and Q125 grades.

- A "hybrid" solution providing combined weld-seam and full-body inspection.
- Untested lengths as short as 5 mm.
- Multiple oblique angles.
- Special algorithms for defect sizing.
- Wide sector coverage of the weld seam and HAZ with constant amplitude (eliminates the need for weld tracking).
- Automatic radial positioning of the probe.
- Multiple inspection-mode capability using the same PA probe (45°, 60°, 70°, 45 tandem, etc.).
- Optimized detection of ID, mid-wall, and OD defects.
- Automatic weld location.

www.olympus-ims.com

# ileners &

Frost protection from Devi

#### **Pipe tracing solutions**

Water and sanitary pipes are important parts of any building, and their failure can be highly troublesome.

Devi's pipe tracing solutions make it possible to avoid sudden and unexpected damage caused by frost during the winter.

Frost protection systems are installed where there is a need to prevent water and sanitary pipes from freezing and becoming ice damaged. Temperature maintenance systems ensure that hot water or fluid pipes maintain the required temperature.

Other advantages that come from using pipe tracing include ice-free pipes, constant flow in pipes, depth reduction for underground pipes, no repair costs after a hard winter, no hardening of fatty products in pipe systems, and efficient hot water supply.

The company's pipe tracing systems consist of Devi heating cables, DEVIreg<sup>™</sup> thermostats and installation accessories.

The DEVIreg thermostats with sensors ensure that optimal results are achieved with the least possible amount of energy. The systems may be used on the inside and outside of pipes, for indoor and outdoor pipe networks as well as for pipes above and below ground. Pipe tracing systems should be installed at an early stage of construction.

Devi Electric Heating Systems – Denmark info@devi.com

www.devi.com

#### **DataLogger goes wireless**

McElroy has brought wireless capability to the DataLogger<sup>®</sup> 5 to give pipe fusion operators the ability to upload data to the DataLogger Vault, where it can be reviewed and analysed in real-time from anywhere in the world.

Fusion data can now be uploaded instantly from the field via Wi-Fi or cellular, and reviewed and analysed the same day.

Fusion operators no longer have to physically connect the DataLogger to a PC to extract the information, a process that some operators may delay for days or even weeks after the fusion joints are made, which is usually too late to easily address any potential concerns. "Data logging is being required on more and more job sites to verify pipeline integrity," said McElroy CEO Chip McElroy. "We are happy to offer tools that allow fusion operators to do this as easily and efficiently as possible."

The wireless feature takes advantage of in-field connectivity to provide benefits such as expedited workflow, real-time oversight on the job and real-time joint analysis.

McElroy launched the latest-generation DataLogger 5 and the DataLogger Vault software application to provide users with the most up-to-date quality assurance tools. The DataLogger records and documents the key parameters of the pipe fusion process. In addition to full support for Wi-Fi and cellular networks, its features include GPS stamping, barcode scanning and a 5MP camera.

The Vault is a free online application offered to anyone who rents, owns or uses a McElroy DataLogger version 3, 4 or 5.

It allows users to view and analyse joint data from almost any device, and is sorted by job site, device serial number, operator ID, machine ID or machine model.

McElroy Manufacturing, Inc – USA fusion@mcelroy.com www.mcelroy.com

#### Stainless steel seamless pipes and tubes

Suraj Ltd is a manufacturer and exporter of stainless steel seamless pipes, tubes and U-tubes in various sizes, specifications and grades.

The company has a strong presence in the global market, and serves more than 70 countries around the world.

The size range is 6 to 323.9mm OD, with 0.8 to 25mm thickness. Pipes are

available up to 12m in length; tubes up to 30m. Materials include all austenitic, ferritic, Duplex and Super Duplex stainless steels, and manufacturing is carried out according to ASTM, ASME, EN, NFA and JIS standards.

Suraj also holds certificates for quality in accordance with AD2000 Merkblatt W0 and Pressure Equipment Directives 97/23/EC from TUV Nord, and supplies products under all national and international third party inspection authorities. The company has its own laboratories for performing tests such as hydro test, eddy current, PMI, IGC, UT, RT, spectro analysis, and mechanical properties.

**Suraj Ltd** – India suraj@surajgroup.com www.surajgroup.com

### **Clamshell pipe cold cutter**

DWT has enlarged the product range of its pipe cold cutter up to 72". The clamshell pipe cold cutter has been developed for high metal removal rate, a large adjustment range and an easy setup in-situ. The portable clamshell pipe cold cutter machine for pipe cutting and bevelling avoids heat-affected zone (HAZ) in the pipe cutting process.

Designed for heavy wall pipes in heavyduty applications, the high working speed and quick set up provide fast operation on-site. The DLW-HD clamshell cutter is able to operate safely and precisely in most critical applications. A rigid frame construction in combination with high quality steel pinion gear and bearings provide a rugged combination for challenging work.

Features include cold cutters with splitframe technology for endless tubes; compact dimensions for use in confined work spaces with limited access; quick and safe clamping and adjustment for pipeline welding; and rigid pipe cold cutter for pipeline welding.

The application range of the DLW-HD is for cold cutting of pipe from 48" to 72" OD, and for wall thickness up to 100mm. The split-frame cutters can be mounted on assembled stretches of pipe. Special applications such as



DLW clamshell cutter

remote control are available for limited access in pipeline welding.

**DWT GmbH** – Germany info@dwt-gmbh.de www.dwt-gmbh.de

#### products & developments

## **Pre-assembly unit**

Leakages in hydraulic systems are often based on incorrect installations. The new Type 90 Comfort pre-assembly unit from Voss Fluid GmbH is designed to remedy this situation.

The unit offers process reliability during series assembly of cutting rings of steel and stainless steel pipes, with automatic pre-setting of the required assembly parameters. As a result, users achieve low cycle times with maximum leakage



protection, even if operating personnel frequently change.

Voss Fluid relies on advanced technology for effective fault prevention in series production cutting ring pre-assembly. The Type 90 Comfort operates with fault detection and automatic pressure settina.

Missing or incorrectly inserted cutting rings are identified before assembly

and the risks of overor under-assembly are reduced.

The application on pipes with an external diameter of 6 to 42mm is simple and efficient.

The operator tools up the pre-assembly unit with suitable wear-resistant Voss tools in accordance with the pipe to be

processed. The necessary assembly parameters are then automatically set by the Type 90 Comfort.

The unit uses technology for the automatic identification of objects. The pre-assembly unit has an RFID reader, and all tools are equipped with an RFID chip. As soon as the Type 90 Comfort unit is re-tooled, it reads the data from the relevant chip and guickly and fully automatically sets the required operating pressure. This allows cycle times of 1.8 to 2.3 seconds.

Special features of the unit allow the processing of a wide range of pipe geometries, including tight 180° bends and particularly bulky pipe runs. If required, following machine conversion by Voss, the unit can be used for the pre-assembly of BV-10 flared cones and Zako collar rings.

Voss Fluid GmbH – Germany www.voss-fluid.de

#### Pipe bends & Couplings highly wear-resistant stainless steel pipe bends stainless steel pipe bends in all common pipe dimensions from 38.0 x 1.5 mm till 204.0 x 2.0 mm; radius: 75, 250, 500, 800, 1000, 1200 and 1500 mm (AISI 304) aluminium couplings suitable for vacuum and pressure conveyors for diameter from 33.7 till 204.0 mm highly wear-resistant pipe bends: glass pipe bends and HVA-Niro<sup>®</sup> stainless steel pipe bends immediately, from stock hs-Umformtechnik GmbH D-97947 Grünsfeld Germany Phone +49 (0) 93 46 / 92 99-0 Fax +49 (0) 93 46 / 92 99-200 www.hs-umformtechnik.de Umformtechnik 24

#### Forged steel components

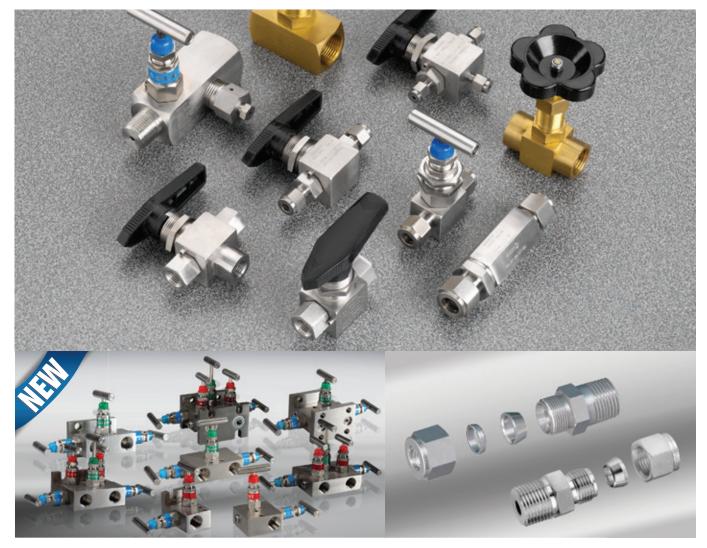
hydraulic energy.

perforated steel rod.

to develop the increase of the wall thickness of a tube. The company claims to have successfully obtained up is that it produces an axle beam in one piece.

Tecniforja – Portugal

## THE PERFECT COMBINATION FOR CRITICAL APPLICATIONS



#### **Brennan's Instrumentation Valves and Fittings**

Our line of check valves, ball valves and screwed or integral bonnet needle valves can be supplied with either single or double ferrule fitting end connections. Our NEW Manifold and Double Block & Bleed valves are compact, reduce leakage points and are designed to last.

Brennan's valves are built to withstand heavy impulse and vibration, while being easy to install. All our tube fittings are interchangeable and can be used alongside or in place of other quality brands.

Toll Free: +1 440-248-7088, www.brennaninc.com





Visit us at Hannover Messe- Hall 21, Stand B04/1

#### products & developments

# Non-corrodible heating and cooling equipment

E Braude, based in the UK, has been serving industry for over 55 years. It is primarily a process heating specialist manufacturer of non-corrodible heating

A Nautilus heat exchanger from Braude that was created specifically for a leading stainless steel manufacturer



and cooling equipment for the highly corrosive liquids typically found in pickling and similar processes in the pipe and metal-based industries.

"We are focused on the liquids and conditions other suppliers would avoid," said David Snoxhill, MD. "Our expertise is in aggressive and corrosive solutions that conventional equipment cannot withstand."

Braude has been exporting for many years, and has recently increased its efforts in the Asian markets. The company was approached by a stainless steel mill manufacturer in India who required high output 400,000 kcal/ hr heaters for its offline pickling tanks.

Braude designed and built steam heat exchangers specifically to suit the company's tanks, while meeting the challenges of its cost profile. Braude also undertook a contract in Asia to supply heat exchangers for the pretreatment line for one of the largest galvanising plants in the world.

All Braude products are manufactured from high integrity chemically inert fluoropolymers (eg Teflon<sup>TM</sup>), and are designed to ensure long life in aggressive solutions.

The product range includes tank and vessel heaters/coolers for use with steam, hot water or thermal fluids; chemical service pumps; external heating systems that are mounted outside the process tank to avoid clutter and to prevent damage by heavy workloads; and electric heaters and controllers.

E Braude (London) Ltd – UK sales@braude.co.uk www.braude.co.uk

### Flexible waveguide tubing and components

ATW Companies Inc is a supplier of precision tubing and fabricated metal components. Its range includes flexible waveguide tubing and waveguide components, manufactured by the AT Wall Company, that are suited to satellite applications and other airborne and space systems.

Products include seamless flexible waveguide, flexible twistable waveguide, flexible waveguide, and semi-flexible waveguide. In addition to tubing, the company now offers components for all these flexible waveguide types. AT Wall supplies flexible waveguides in berylliumcopper (BeCu), brass and phosphorous bronze in a wide range of sizes, from WR22 to WR650. Seamless flexible waveguide is applicable to airborne systems and space in all satellite applications.

Through the company's stocking programme, standard sizes of this tubing are shipped to customers within five days from stock. All other special waveguide sizes are made to order. The company says that its manufacturing facility in Warwick, Rhode Island, USA, is on the cutting edge of waveguide manufacturing technology.

The AT Wall Company offers extra flexible waveguides and double-ridged flexible waveguides, ensuring that the demands of difficult flexible waveguide applications are met.

**ATW Companies** – USA www.atwcompanies.com

#### **Tubing specialist**

Merinox Ltd is a stockholder and distributor of seamless stainless steel, Duplex, Super Duplex, nickel alloy and titanium tubes.

The company has warehouses in the Netherlands, the UK and Germany. Merinox specialises in seamless

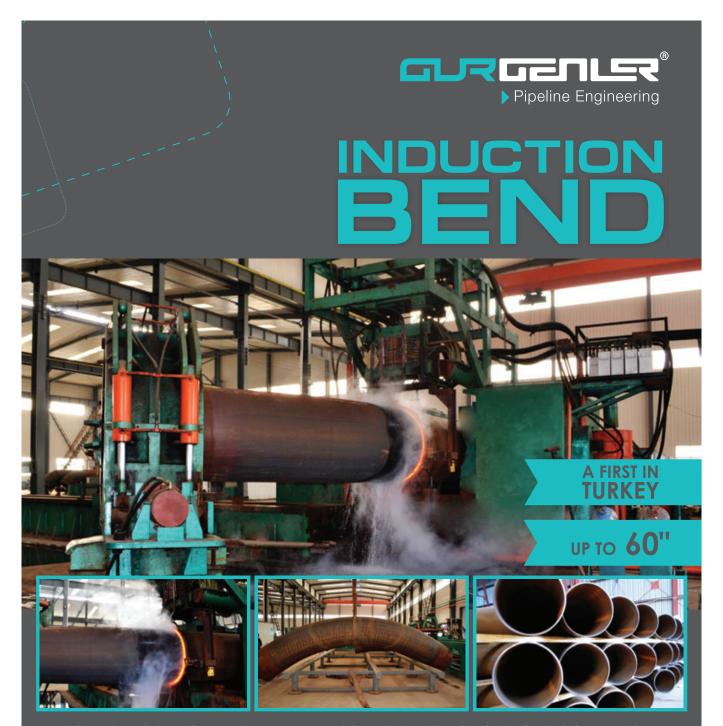
26

instrumentation and hydraulic tubing, with a stock of over two million metres and more than 5,000 items, from standard stainless steel to difficult-to-source nickel, Duplex or titanium materials.

With an increasing stock range in 6MO, Alloy 825 and Super Duplex

(UNS 32750), Merinox is suited to large-quantity offshore installations and constructions as well as smaller bespoke projects.

Merinox Ltd – UK sales@merinox.co.uk www.merinox.co.uk



Gürgenler A.Ş, breaking another new ground, invested on the pipe induction twisting machines with the highest diameter in the geography of Turkey, Africa, Middle East and Europe. It has reached to the capacity providing twisting at the qualities of all the materials up to 60" – 7D and 60mm. Goods can be manufactured from all the Longitudinally-welded or Seamless pipes.

#### MEASUREMENTS

ANSI B16.49 / DIN 2606 and special drawing

#### DIMENSIONS

1/2"-60" / DN 10 - DN 1600

#### WALL THICKNESS

SCH 5S – SCH XXS - 60mm

#### MATERIAL QUALITIES

ASTM A 234 WPA - ASTM A 234 WPB -ASTM A 234 WPC - ASTM A 420 WPL6 -WPHY 42 / 52 / 60 / 65 / 70 P235 - P265 - P245 - AE250 - ST 37 - ST35.8 ASTM A 234 WP1- WP11 - WP12 - WP22 -WP5 - WP9 - WP91 - WP92 16 Mo 3, 13 CrMo 44, 10 CrMo 9 – 10 ASTM A 403 WP 304 / 304 L / 304 H ASTM A 403 WP 321 / 321 H ASTM A 403 WP 347 / 347 H ASTM A 312 WP 316 / 316 L / 316 H/316 Ti 1.4301 / 1.4307 / 1.4541 1.4401 / 1.4404 / 1.4571 Duplex - Super Duplex - Inconel - Incoloy -Monel - Hastelloy - Titanium / Ti-Gr2

www.gurgenler.com.tr

## Upgraded high speed pipe purging system

The upgraded QuickPurge<sup>®</sup>III pipe purging system has been introduced by Huntingdon Fusion Techniques (HFT) for high speed pipe joint welding.

Using Intacal<sup>®</sup> II combined with the integrated PurgeGate<sup>®</sup> device makes it possible to safely inflate the dams with argon gas, prior to releasing it for purging the space between the dams where the weld joint is located.

It is almost impossible for the inflatable dams to burst as a result of undue pressure increase or accidental flow increase of the inflation and purging gas.

The sleeve between the dams reduces the volume to be purged by two thirds, ensuring a fast purge time down to ten parts per million of oxygen.

HFT has a jointly owned patent for the design, having originally designed it with the help of Babcock International (now Doosan Babcock) for the contract to lay a stainless steel pipeline along the south coast of England for the transport of liquid natural gas from the Isle of Grain.



QuickPurge pipe purging system from HFT Sleeve lengths for each size have been carefully calculated so that the system can be pulled around 90° elbows for the purging of connecting joints.

QuickPurgeIII systems are available for each API pipe diameter, with an expansion range to cover all internal diameters from schedule 10 to Schedule 160 and the even thicker pipe wall standards. Return on investment (ROI) charts are available, to show that the payback for each size will normally be between one and two welds, giving companies the opportunity to make significant savings on larger contracts.

The materials chosen for QuickPurgeIII are resistant to the higher weld heat present now that the dams are slightly closer to the welds, and at the same time exhibit lower outgassing rates to prevent weld contamination. For welds that are pre-heated and post-weld heat treated, HFT manufactures the special HotPurge™III matching range, for higher and longer temperature exposure requirements.

With QuickPurgell, some customers requested longer sleeves for a variety of applications because of the positioning necessary for the second dam. This option is also available for the new QuickPurgelll version.

Huntingdon Fusion Techniques – UK hft@huntingdonfusion.com www.huntingdonfusion.com

### **Power tubes**

For over 60 years e2v has been supplying customers with power tubes that provide both performance and long life.

The tubes offered by e2v range in power output from 30 to 530kW. Many of the triodes and tetrodes that the company manufactures can be used as direct equivalents for tubes created by other manufacturers, or can be used to replace them with e2v's guidance. All tubes are subjected to extensive high voltage conditioning and full functional RF/DC testing procedures, and a dedicated engineering team can provide advice on any particular tube or application.

e2v states that it strives to be more responsive to customer needs by investing effort in reducing manufacturing lead-time and improving customer service. The company offers extensive technical support throughout the supplier/customer relationship, from initial product selection through to the tubes being in operation at the customer site.

In order to meet customer requirements, e2v is committed to working in partnership with customers and developing collaborative solutions for new and existing applications.

e2v – UK www.e2v.com

## **Ultra-small diameter capillary tubing**

HandyTube Corporation is the manufacturer of Xtreme Length<sup>™</sup> seamless, stainless steel coil tubing for diverse industrial, manufacturing and research industries worldwide. The company has developed a product to support industries, such as healthcare and life sciences, that require very small diameter, extremely precise characteristics.

USD<sup>™</sup> ultra-small diameter capillary tubing is manufactured to the highest quality standards and undergoes several cleaning processes to ensure consistent, reliable performance. The capillary tubing reaches inside diameters as small as 0.076mm (0.003"), and coil lengths as long as 900m (3,000ft). Unique processes and equipment were designed, tested and re-tested to overcome the manufacturing pitfalls.

The tube manufacturing consists of three distinct operations: drawing, to

NERO

reduce the tube dimensions; cleaning, to remove drawing lubricants; and heat treatment, to reset the mechanical properties and prepare the tube for re-drawing. It is important that the tube is properly lubricated before the drawing process to promote smooth, defect-free surfaces.

The most challenging issue in developing USD capillary tubing was effectively cleaning stainless steel coil tubing in very long lengths with such small inner diameters. As length increases and inside diameter decreases, the pressure needed to push any medium through the coil tubing increases dramatically. As a result, standard cleaning methods and equipment proved ineffective in cleaning the USD high precision products.

HandyTube developed custom equipment to flush tubing at pressures upwards of 12,000 psi (827 bar). A solvent is used to remove drawing lubricants and foreign debris from the tubing. This specialised equipment allows HandyTube to process tubing in long coils, reducing setup time and increasing machine uptime.

As a comparison, to clean 3,000m of 6m-long traditional straight tubes, 500 tubes would need to be flushed individually. With proprietary processing and extremely long lengths, HandyTube can achieve the same result by flushing less than five stainless steel coils. The ability to qualitatively analyse the cleanliness of each coil allows more consistent results to be achieved.

HandyTube's processing also allows the company to produce and clean in coil form and then straighten and cut to any desired length.

HandyTube Corp – USA sales@handytube.com www.handytube.com

COMPETITIVE PRICES 5000+ STOCK ITEMS 25+ YEARS OF EXPERIENCE BEST CUSTOMER SERVICE IN THE INDUSTRY

MINIMUM ORDER CHARGE EXPENSIVE CARRIAGE CHARGES EARLY CUT OFF FOR SAME DAY DISPATCH

#### ORDER NOW AT WWW.NERO.CO.UK

T: +44 (D) 121 557 9000 F: +44 (D) 121 557 9092 E: INFO@NERO.CO.UK



✓ ✓ ✓

> TUBES PIPES BALL VALVES PIPE FITTINGS FLANGES

## Tube and pipe cleaning technology

The Compri Tube Clean System cleans tubes by shooting a special projectile with a jet of compressed air. The system can be applied to tubes with an internal diameter from 2mm up to a few hundred, and lengths of 10, 100 or even 1,000m (depending on the air capacity). It can also be applied in the presence of 90° curves, T or Y couplings or ball valves.

The system can clean tubes of all types, from those used in hydraulic systems, to air conditioners, from the food industry to pharmaceuticals. It can quickly and efficiently degrease, lubricate and disinfect using, when necessary, minimum quantities of chemical products.

It can also be used to remove production scraps (eg from cutting or welding), and can be used for product recovery in dosage tubes, or as an instrument for regular maintenance and for quality control on new tubes.

New tubes are sometimes dirtier than might be expected, and can cause contamination of the product circulating in them, as well as malfunction of the connected components. In regular maintenance, dirty tubes can lead to inefficiency of the systems, and can cause sudden production standstill.

The Compri Tube Clean System is claimed to have stronger cleaning power than techniques using compressed air or fluxing. It can be used on rigid or flexible tubes and is compatible with any material.

Alka Srl – Italy info@alka-srl.com www.alka-srl.com

# New hoses with extreme durability for the food industry

Most traditional polyester reinforced hoses have a burst pressure of 400-500psi. Using cutting edge techniques, Artel Rubber has produced a hose for the food industry that will withstand pressures of up to 2,000psi. The company manufactures and fabricates silicone and rubber tubing and hose. The company offers a broad product range of tubing, hose and fittings.

With the introduction of its automotive performance tubing, hose and fitting products, the company can meet the demands of various applications. The company offers fast delivery of orders for its core product lines. ISO 9001:2008 accreditation guarantees quality for the rail, automotive, food, pharmaceutical and defence industries.

Artel Rubber Company – UK sales@artelrubber.co.uk www.artelrubber.co.uk

# Preventing external threats to natural gas pipelines

OptaSense, an expert in distributed acoustic sensing (DAS) technology, has successfully prevented external threats to a natural gas pipeline in the Republic of Yemen, according to a case study paper presented by Total at the ADIPEC oil and gas show in Abu Dhabi, in November.

The paper notes "that since the pipeline intrusion detection system was installed, there has been a significant improvement in pipeline availability and regular LNG shipments."

The OptaSense system was originally installed as an integral part of the pipeline security operation in late 2013, on the 320km-long pipeline that runs liquefied natural gas from Marib to Balhalf in the Republic of Yemen. The pipeline had previously encountered a number of incidents that disrupted product supply. The paper adds that "no attempt at intrusion on the pipeline resulted in damage to the facilities" as a result of integrating OptaSense with other security measures.

Magnus McEwen-King, managing director at OptaSense, said, "We are extremely pleased to work with Total and its local partners to ensure the availability of their pipeline. This project demonstrates that through the implementation of OptaSense into operations, it enables pipeline operators to reduce damage resulting from third party interference to zero. Ensuring pipeline integrity and availability is essential to enabling a continuous supply of product and therefore revenue from their pipeline assets."

The project requirements were to implement a security system to allow early detection of potential threats, and to minimise the amount of new equipment installed in the field by making use of already-installed fibre optic communications cable.

OptaSense technology has applications in a number of markets, including infrastructure security where the technology is already in use to monitor 13,000km of assets, principally providing leak detection and third party intrusion detection for oil and gas pipelines.

**OptaSense** – UK www.optasense.com

### **Tubes with extreme wear resistance**

The new Hardox Tube 500 range provides the same hardness and toughness as Hardox wear plate, but in circular form. It was developed to provide performance in any application where high wear resistance in combination with a lighter product solution is beneficial.

"The new Hardox Tube 500 range completes the existing Hardox family product range," said Fredrik Mikaelsson, manager for tubes and sections at SSAB. "We have a long experience of developing wear-resistant steel tubes. The final properties are set after tube rolling and welding, which guarantees consistency as well as high hardness and toughness qualities, just like all Hardox products."

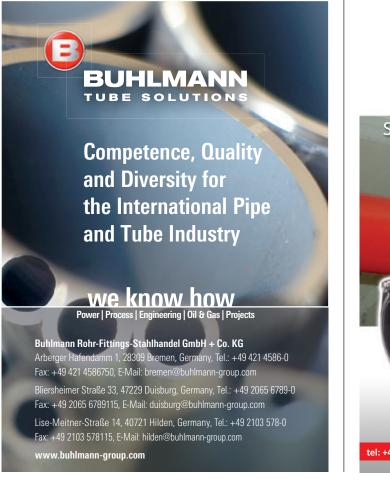
Hardox Tube 500 is suitable for transporting all types of abrasive materials, such as wet concrete, soil, gravel and ore slurry. Its extreme wear resistance allows for a lighter product with a long service life. It is claimed that using the tube can increase the competitiveness of certain products by significantly extending their service life.

The tube is available from stock in 88.9 to 133mm diameters, and different material thicknesses. Custom tubes in

thinner materials and other diameters are also available.

SSAB – Sweden info@ssab.com www.ssab.com







Say goodbye to flanging, threading, pipe grooving and welding with:

## Axilock-S

Join plain end pipe with Teekay Axilock-S Seals and locks the pipes together **Two Pipes... Two Screws... Two Minutes** 

tel: +44 (0)1494 679500

(www.teekaycouplings.com

# Understanding materials choices, their performance and selection

Lucideon, an international provider of materials development, testing and assurance, has published a new white paper, 'Understanding Materials Choices, Their Performance and Selection'.

Over the past 25 years, progress in material-driven innovations and applications has enabled the global spread of technology and improvements in capability, in every area of business and industry. Central to this progress has been the improvement in the ability to define materials in terms of their composition, structure and performance evaluation. Together with material design and processing, these have been the foundation of successful new material applications.

The white paper sets out to affirm the value of material characterisation



Aluminium precision tube made in China Cold drawn seamlesss tube Cold drawn coil tube For Seawater desalination device Power generation heat exchanger Industrial refrigerant system

WUXI HATAL ALUMINIUM CO., LTD No. 72, Zhouxin (E) Road, Binhu District, Wuxi, Jiangsu Province, 214121, China Tel: +86 510 85069506 Fax: +86 510 85061423 E-mail: sales@hatal.com.cn

www.hatal.com.cn

32

in product and process development activities in technology-based industries, whilst sustaining the quality of manufacturing output. Also included in the paper are techniques, applications and case studies relevant to a wide range of industries.

Dr Chris Pickles, consultant to Lucideon and author of the paper, commented, "Innovation in materials selection, development and application has been a feature of the acceleration in industrial achievement for many years. Lucideon has been immersed in this phenomenon, supporting the materials needs of clients throughout their developments. We continue to offer clients the unique combination of technique investment together with the skill and experience of our scientists, analysts, technologists and marketaware personnel." Through its offices and laboratories in the UK, USA and the Far East, Lucideon provides materials and assurance expertise to clients in a wide range of sectors, including healthcare, construction, ceramics and power engineering.

The company aims to improve the competitive advantage and profitability of its clients by providing them with the expertise, accurate results and objective, innovative thinking that they need to optimise their materials, products, processes, systems and businesses.

The white paper can be downloaded for free at www.lucideon.com/testing

Lucideon Ltd – UK enquiries@lucideon.com www.lucideon.com

## **Pipeline identification tape**

Silver Fox's Endurance<sup>®</sup> pipeline identification tape has been successfully tested for 6,500 hours of accelerated UV ageing.

The company recognises the importance of identification and labelling, and also understands that, once applied, the longevity of the ID tape not only saves time and money on replacements/ maintenance, but also supports possible health and safety issues, such as visible marking.

Silver Fox uses quality material and extensively and independently tests its solutions. 6,500 hours of accelerated UV is equivalent to approximately 9.75 to 13 years external use in Northern European conditions, and 5.4 to 6.5 years in tropical regions.

32 different colours were tested to monitor and measure the effect of UV on each of the colours over time. The results, even after 6,500 hours, showed that all colours were clearly visible and the adhesion of the tape was also excellent. Silver Fox has also independently tested Endurance pipe ID tape for  $H_2S$ , salt mist spray, moisture resistance, and high and low temperatures.

The company's pipeline identification tape fully complies with British Standards 1710 and 4800, which are health and safety related. BS 1710 states that all pipes must be marked with the substance transported through them and, in some cases, direction of flow. This, along with the accompanying BS 4800 colour chart, defines the colour range that needs to be used.

The pipeline ID tape also meets the international colour standard ISO14726: 'Ships and Marine Technology – Identification Colours for the Content of Piping Systems', and the ASME (ANSI) A13.1 2007 North American Pipe Marking Standard.

Silver Fox – UK sales@silverfox.co.uk www.silverfox.co.uk

#### products & developments

## Steel with high wear resistance offers design advantages

WR-Steel<sup>®</sup> by Ovako is a classification of steels designed to have superior wear resistance. Combined with Ovako's broad product programme, they offer a range of design advantages and heat treatment possibilities.

WR-Steel is offered as hot-rolled round or flat bar, special profiles and tubes, or as grinding media. Its advantages cover a comprehensive range of hardness levels and hardness intervals (350 to 650 HV), dimensions and steel grades. Boron steel is a large part of the WR-Steel offering, but it also includes grinding media and other mining solutions offering hardness and consistent composition for optimised performance in demanding applications.

"Ovako created the first boron steels in the 1960s, and the performance of WR-Steel confirms that we are still the market leaders today," said Göran Nyström, executive vice president and head of group marketing and technology at Ovako. "We understand that, in the manufacturing stage, our customers need to be able to form, shape and weld the steel to fit their product production needs. This is exactly what WR-Steel facilitates, along with subsequent quench and temper possibilities to realise the optimum wear resistance. It has greater resistance to abrasion, for prolonged surface life and greater work efficiency. And, of course, longer service life means fewer parts replacements and ultimately a cost reduction."

WR-Steel utilises optimised alloy content to allow different end-product applications. Ovako claims that its use allows product manufacturers to reduce costs, save production time and gain wear resistance advantages.

Because Ovako controls the entire steel production process, from initial melt to final rolled product, the company can, for example, with precise rolling methods enable more exacting special profiles, worked very close to near-net shape. With these production capabilities, the WR-Steel brand offers special profiles, from single bevel and arrowhead to grouser bar used in manufacturing of ground engaging tools, ploughs and buckets, all of which can facilitate new manufacturing methods.

WR-Steel is one of a series of new-attribute brands being launched by Ovako, all of which are designed to offer manufacturing advantages.

Ovako's production is based on recycled steel, and includes steel in the form of bars, tubes, rings and pre-components. The company is represented in more than 30 countries and has sales offices in Europe, North America and Asia.

**Ovako AB** – Sweden info@ovako.com www.ovako.com



## Thermoplastic coated pipes

In 1994, the Municipality of Lidingö in Stockholm County, Sweden, installed Alvenius FlowMax pipes in its drinking water system. The pipes were treated with Alvenius's TP thermoplastic coating, and were laid as an alternative to traditional piping material.

20 years later, in 2014, the FlowMax pipes were taken out of the ground for inspection, and were found to have no corrosion, no build-up of coatings, and no impact on the material. The 20-year-old pipes were described as "looking like they had been installed yesterday".

The combination of high-quality, highstrength steel with an effective surface treatment ensures the pipe systems have a very long service life. TP-coated pipes, using a method that was first introduced in 1990, are suitable for use in corrosive environments. Independent tests have shown that TP pipes meet the requirements for the toughest corrosivity category, C5-M, in a marine environment, and that the service life of undamaged TP pipes is at least 75 years. This also makes TP-coated pipes suitable for use in water and sewage systems.

Alvenius FlowMax pipes are made of high-strength Swedish steel and are spirally welded for maximum dimensional stability. The pipes have very thin walls and the highest possible internal diameter. When the pipes are coated with thermoplastic (TP), the result is pipes with very low internal friction and very low flow resistance.

This means that it is possible to use smaller pumps, or pumps with lower output, or to reduce the number of pumps or pump stations in the system.

FlowMax TP pipes are produced in outer dimensions up to 508mm, in lengths up to 6,000mm, and for water pressure up to 80 bar. The thin pipe walls make the pipes both compact and light.

Alvenius Industries – Sweden order@alvenius.se www.alvenius.com





## **Oil and gas infrastructure rehabilitation**

As pipeline infrastructures age, issues caused by external corrosion can result in integrity threats and service failures.

Regulations for developing and maintaining oil and gas pipelines are becoming increasingly stringent, requiring asset owners, engineers and contractors to provide more testing data and documentation.

Milliken Infrastructure Solutions (MIS) has combined its experts with the team from Pipe Wrap, Inc and, with the support of global engineers, scientists

and researchers, is developing not only progressive composite wrap (fibrereinforced polymer) solutions detectable by in-line inspection tools, but also in-depth repair project documentation and design applications.

MIS acquired Pipe Wrap's assets in August 2014. Utilising the experience of Pipe Wrap in the composite repair industry, MIS is able to deliver thirdparty tested and validated solutions to rehabilitate, strengthen or protect assets in the oil, gas and industrial markets. The company offers a range of practical innovations focused on exploring new materials, and installation-friendly methods to make it easier and more efficient to rehabilitate, repair and strengthen infrastructure. Products include fibre-reinforced polymer and geopolymer mortar systems, geosynthetic composite concrete mat and fabric innerduct.

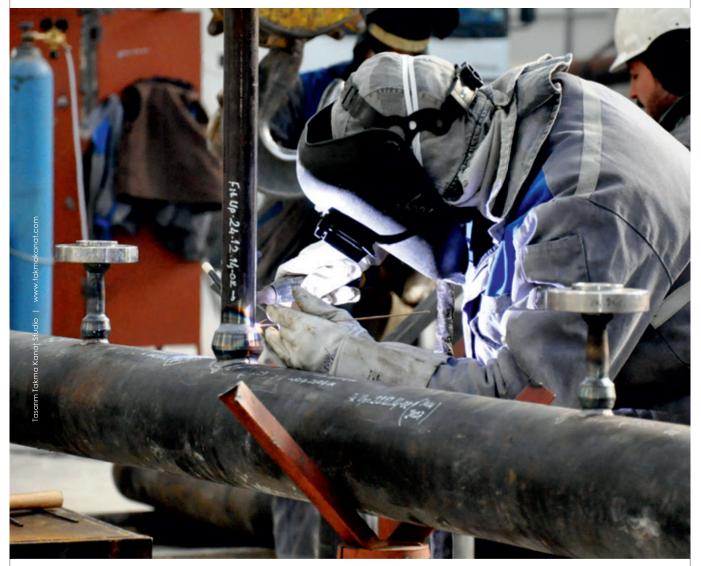
#### Milliken Infrastructure Solutions, LLC – USA

infrastructure@milliken.com www.infrastructure.milliken.com





DETAILS MAKE PERFECTION AND OUR ENGINEERING MAKES OUR DETAIL...



As the engineers of the company GGN; We started off to be a national engineering company based on sustainable safety strategy by keeping the life safety of our team mates.

Our main aim is to develop the competition and create lasting values.

With our new investment, we perform the production of pipe spools, steam boilers and equipment, extraction machines, heater unit, heat exchager groups, pressurised containers and productions of private sources in our factory of 6000 m2, established on an open area of 15,000 m2.

We also offer service in the product groups 16Mo3, P11, P22 and P91, carbon steel and stainless groups in particular.

We proudly announce that Our certification ASMES and U Stamp and Power Piping has already been completed. With our expert team of 50 people, we offer service to the leading Europian companies, the Turkish energy industry being in the first place.

Head Office Malköy Anadolu Organize Sanayi Bölgesi 12. Cad. No:1/A Sincan/Ankara/Türkiye Telephone : 0312 267 10 37 Fax : 0312 267 10 38 www.ggn.com.tr info@ggn.com.tr

Pipeline Engineering

## Associated Tube Group awarded GM supplier quality excellence award

General Motors Co (GM), one of the world's largest automakers, has awarded Associated Tube Group, a division of Samuel, Son & Co, the 2014 GM Supplier Quality Excellence Award.

Associated Tube Group (ATG) has been awarded this distinction three years in a row. 80 suppliers in the USA and Canada have achieved this distinction since the Quality Excellence Award was established by GM in 2012. The award is based on supplier performance for quality, on-time delivery, customer support, and several other criteria.

ATG states that over the past few years it has achieved performance excellence based on its supply of the GM Gen 5 direct injection drawn-over-mandrel (DOM) tubing to GM Components Holdings LLC. "It has been a tough few years for ATG to meet the substantial demand for this GM engine



#### STAINLESS STEEL 1.4301/1.4307 • 1.4401/1.4404

- Flanges
- Butt Welding Fittings
- Pipes
- Threaded Fittings
- Clamp and Din Unions and Fittings
- Valves

**Tecnica Tre** srl 36022 Cassola · VI · Italy Via L. Perosi, 56 T +39 0424 550 078 F +39 0424 550 210 exportdept@tecnicatre.it



www.tecnicatre.it

programme," said August Noto, director of global automotive sales for ATG. "But we highly value our GM relationship and our team has really pulled it together to make it happen, time and time again." The GM Gen 5 V6 and V8 are the primary engines for GM pickup trucks and large SUVs.

Lee Cotterill, quality assurance manager for ATG, commented, "Both Associated Tube Canada (ATC) and Tubos Samuel de México (TSM) are proud of what we have achieved over the past few years supplying direct injection DOM tubes for various engine platforms. We look forward to continuing its superior level of excellence and quality for the automotive industry in 2015 and beyond."

Associated Tube Group is a global supplier of stainless steel and high nickel alloy tubular products, with facilities in Markham, Canada, and Saltillo, Mexico. Founded over 50 years ago, ATG was acquired by the Samuel Group in 1975. ATG offers welded stainless steel tube and pipe in straight lengths up to 100ft, and coils up to 25,000ft. The group has expertise in over fifty grades of stainless steel and high nickel grades.



(from left) Lee Cotterill, ATG quality manager; Christopher Naegeli, GM executive director; and Paul Turpin, ATG sales manager, automotive, at the award ceremony held in Detroit, Michigan, USA

Samuel, Son & Co offers end-toend solutions in the distribution, transportation, processing and manufacturing of metals and industrial products. Originally founded in Toronto, Canada, in 1855, Samuel now operates more than 105 service centre and manufacturing locations.

Samuel, Son & Co, Ltd – Canada sales@samuel.com www.samuel.com

Associated Tube Group – Canada www.associatedtube.com

## **Pipeline monitoring solutions**

UK engineering company Syrinix has announced global shipments of its pipeline monitoring solutions to Mexico, the Middle East, Australia and California. The company, which in 2014 saw its customer base grow within UK utility companies, is now fielding interest from around the world for all three of its products.

The TrunkMinder product, which delivers high-resolution automated leak detection, location and notification in critical densely populated areas, is being shipped to Mexico, along with BurstMinder – the real-time Burst detector and locator.

First orders of the high-resolution TransientMinder, which monitors pressure and damaging water hammer, are being shipped to the Middle East, Australia and California.

Syrinix CEO James Dunning commented, "It is testament to the continued hard work of our innovative team that our products are now gaining exposure and visibility outside of our home market."

The company's TrunkMinder provides automated monitoring, including highly sensitive leak detection and location for high consequence and critical larger diameter (9"/225mm+) supply pipelines.

#### Syrinix Ltd - UK

info@syrinix.com www.syrinix.com

### products & developments

## Hydraulic pipe recovery tool

Churchill Drilling Tools, a provider of dart activated drilling tools, has launched the HyPR<sup>TM</sup> (hydraulic pipe recovery) system for the rapid recovery of stuck pipe. The tool can cut the cost of stuck pipe situations by enabling operators to get back on track more quickly.

HyPR, claimed to be the world's first hydraulic pipe recovery tool, was premiered at the Deepwater Operations Exhibition in Galveston, Texas, USA, in November. The tool was developed following extensive collaboration between Churchill Drilling Tools and deepwater and Gulf of Mexico drilling teams.

When drilling challenging wells, stuck pipe situations can be a costly interruption, incurring mobilisation wait times and uncertain recovery attempts and delays.

The HyPR tool offers a simple method to quickly recover the drill pipe and to begin side-tracking straight away. It also delivers a clean cut for operators wanting to maximise BHA recovery options.

Churchill Drilling Tools director Mike Churchill said, "Churchill has already forged a strong reputation in the Gulf of Mexico, where our dart technology has been recognised for its versatility, capability and reliability in challenging environments. What is exciting for the company is that the HyPR system is the first product conceived and developed specifically for the GOM market and we are expecting it to deliver significant time savings for operators in the region."

The HyPR system consists of a robust full-strength sub, strategically positioned in the drill string. It is severed in around an hour by launching and pumping through a HyPR jetting dart, which lands inside the sub. The dart takes only a few minutes to arrive and, with a relatively short period of pumping, will part easily under a small loading, simultaneously producing a perfect fish-neck for subsequent operations.

The expected mode of use is to set a kick-off plug, before coming out of hole with the recovered pipe. However, the system also provides jarring and internal wireline access for further recovery operations.

The tool is available in a range of sizes and connections to suit any drill string configuration. It is a natural partner to Churchill's DAV<sup>TM</sup> (dart activated valve), which can be positioned below to allow circulation to first be regained in pack-off situations. It is also compatible with a wide range of drilling jars.

The system contains no explosives or high energy sources, and no specialist equipment or personnel are required. It is particularly useful in expensive or remote locations where external assistance is more costly to mobilise.

Churchill Drilling Tools – UK info@circsub.com www.circsub.com

## join the best: worldwide



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



## **Probe for fast corrosion imaging**

Non-destructive testing technologies specialist Olympus has introduced its new Dual Linear Array probe, designed to improve the inspection of internally corroded parts such as pipes, tanks and plates.

The Dual Linear Array probe provides the inspector with several claimed advantages over conventional ultrasonic dual element transducers that are typically used with flaw detectors. The phased array solution improves productivity through features such as larger beam coverage, faster scan speed, and C-scan imaging with increased data-point density.

The pitch-catch technique used by the new probe is claimed to offer better near-surface resolution and pit detection in corrosion survey applications than standard phased array pulse-echo, improving probability of detection of critical wall thinning.



Its compact, lightweight aluminium housing provides easy handling and operation, while carbide wear plates protect the wedges for increased durability.

The probe adds a new entry-level inspection capability to the existing Olympus HydroFORM<sup>®</sup> and RexoFORM corrosion solutions, especially when combined with the OmniScan<sup>®</sup> SX.

When using the probe with an OmniScan phased array instrument, the setup and operation is simple: load the setup file and check the calibration, then inspect and record the data.

Olympus Scientific Solutions Americas, a subsidiary of Olympus Corporation, has specific responsibility for the sales and marketing of life science and industrial instrumentation in the Americas.

The company's core product line-up offers clinical, educational and research microscopes, non-destructive testing equipment, and analytical instruments.

Olympus Scientific Solutions Americas – USA info@olympus-ossa.com www.olympus-ims.com

## **Root-inhibiting drain pipe adhesive**

T Christy Enterprises has launched a drain pipe adhesive that seals joints and prevents root intrusion in underground drainage pipe.

The patent-pending Root-Ban<sup>™</sup> drain pipe adhesive contains a proprietary chemical formulation that creates a leak-proof seal.

The dual action formulation contains ingredients that seal the pipe and cause roots to avoid contact with the pipe. The roots grow around the pipe and not into the joint.

"Root intrusion is the number one cause of drainage system failure," said Laura Poston, T Christy director of marketing. "Root-Ban drain pipe adhesive creates a seal that is many times stronger than the commonly used press-fit method. The active ingredients in Root-Ban have been proven to remain active throughout the life of the drainage system. This saves time, money and – most important – the hassle of chemical and mechanical root removal or excavation and replacement of the entire drainage system."

Roots typically enter drain lines through poorly protected push-fit pipe connections, which are often not watertight. The roots quickly fill up the drainage pipe, impeding water flow and causing premature system failure.

Root-Ban is formulated to bond and seal polyethylene, HDPE and styrene

drain pipe joints. The seal is both watertight and flexible, so pipes are less susceptible to shifting and separation. This eliminates seepage or leaks that attract roots and root intrusion into joints.

The adhesive is the result of an 18-month development conducted at the company's labs.

The development effort partnered construction professionals with the company's R&D team to identify solutions for root intrusion into drainage pipe joints.

T Christy Enterprises Inc – USA customer.service@tchristy.com www.tchristy.com

## Protecting carbon steel press-fittings systems from corrosion

Carbon steel press-fitting systems are more susceptible to corrosion than stainless steel. From storing to commissioning, it is best practice to protect carbon steel pipes.

One of the characteristics of pressfitting systems is the use of pipes with reduced thickness. Compared to piping of the same material but thicker, this offers advantages such as greater manageability, lower system weight, greater capacity compared to pipes with the same external diameter, lower transport costs, and less environmental impact in both the production and moving phases.

However, the reduced thickness makes carbon steel pipes more susceptible to corrosion. As Eurotubi fittings and pipes are treated with galvanising processes to protect them from corrosion, installation and testing must be performed according to the Eurotubi Pressfitting Technical Manual.

Transport and storage must be performed properly to prevent water infiltration, the formation of condensation and the presence of dirt. Pipes must remain capped until just before installation. When the products cannot be stored in areas with controlled temperatures and humidity, the fittings and pipes must be inspected periodically. Accidental impact of the pipes and fittings should be avoided, paying particular attention to sharp surfaces, especially if made of other ferrous metal materials.

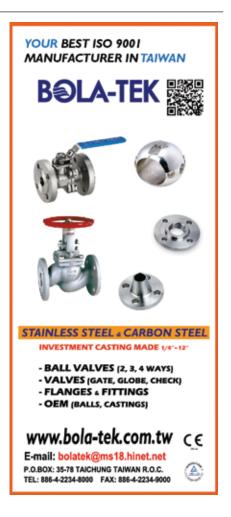
Carbon steel pipes for heating systems must be protected from external corrosive agents, such as humidity, using insulation. Precautions are taken with buried pipes where external corrosion becomes particularly aggressive. Effective insulation methods include coating with closed cell sheaths; painting; and coating with protective tape (leaving no parts uncovered). Felt banding should not be used, as it retains moisture for a long time, promoting corrosion.

The final testing phase for a carbon steel system is fundamentally important. Air and stagnant water must not be allowed to remain in the system for too long before it is completely refilled. If the system is not to be used immediately, it is best to perform the testing procedure using air or inert gas, being careful to slightly dampen the O-rings before assembly.

Carbon steel systems must maintain the closed circuit condition without any air inside. During the refilling and maintenance phases, a small amount of air could penetrate the circuit. In this case, it must be discharged through the venting valves. Special additives may also be used to neutralise oxygen, inhibiting corrosion.

If the system must be emptied and shut down for a certain period of time, Eurotubi recommends passing dried air through the pipes in order to dry them completely.

Eurotubi Europa Srl – Italy info@eurotubieuropa.it www.eurotubieuropa.it



## **Stainless steel experience**

Tecnica Tre, founded in 1996, is a stockist of stainless steel flanges, fittings and pipes. The company's warehouse holds 3,000m<sup>2</sup> of stock, semi-automatically managed with WMS and barcodes, with room for 5,000 pallets, and with automatic management of batch numbers and packing lists.

The dimensional control process and chemical analyses on materials ensure quality. The range of products includes EN and ASME flanges, EN and ASME butt welding fittings, threaded fittings, fittings and unions for the food and wine industry, and ASME welded and seamless pipes.

The company supplies a range of different sectors, and deals with companies of all sizes. Managing director Mr Scotton

commented, "The success of our business is due to two factors: good price/quality ratio and excellent service. The ample supply and assortment in our warehouse enable us to promptly satisfy requests in a market that is evolving rapidly. We are always searching for new items to add to our stock in order to meet the demands of our valued customers."

Tecnica Tre recently launched a new website that offers customers the ability to make quotations and orders, while constantly checking the stock and price levels. All purchase orders received are reviewed by sales staff prior to being released to the warehouses.

Tecnica Tre Srl – Italy info@tecnicatre.it www.tecnicatre.it

## **Raw material supplier**

NB Norder Bandstahl GmbH, part of the Glave group, is a supplier of raw material for tubes, wires, white goods, hose clips and profiles. The company supplies all forms, such as strip sheet and bars, in all stainless and acid resistant qualities.

The company has been independent for 30 years, but partners with major stainless steel producers, with logistics and slitting capacity of more than 300 tonnes per shift. NB states that increasing numbers of customers with large production quantities based on producing welded tubes, whether water pipes, construction, offshore or profiles, trust the expertise of its employees and modern machinery. The tools for the nine slitting lines are built by tool assembly robots with high precision and repeat accuracy. NB processes material from 0.05 to 10mm thickness, with almost unlimited width tolerance requirements. Precision strip, hot- and cold-rolled coils in various stainless grades, austenitic, ferritic or Duplex are available to customers from stock on short notice.

NB Norder Bandstahl's data processing system allows the company to keep customers up to date about the status of their orders.

NB Norder Bandstahl GmbH -Germanv www.glave.de

## **Pipe clamps**

Hammerschmid specialises in the industrial production of pipe clamps in small and large series, including further processing, coating, pre-assembly and packing. Its products are used in domestic plumbing applications, industrial building, wastewater treatment plants, chemical industry, paper and steel industry, waste incineration plants and power plant construction. Products include pipe clamps, round and flat steel clips, pipe carriages with accessories, pipe suspensions, special constructions and secondary supports. These products are manufactured according to customer specifications, drawings or samples, while taking into account various working standards. The company regularly includes new product groups in its delivery programme, in order to offer a broad range of goods.

Rohrbefestigungen Hammerschmid GmbH - Austria office@hammerschmid.at www.hammerschmid.at

#### SAPA PRECISION TUBING

WELDED TUBES Because welded tubes make the difference

Sapa Precision Tubing has more than 30 years of experience in offering welded tube solutions for a wide sprectrum of applications in the automotive industry;

#### STRUCTURAL APPLICATIONS

Engine cradles, drive shafts, body frames, instrument Condensers, evaporators, charge air coolers, radiators, panel beams, radiator supports, crash elements, shock manifolds, air-conditioning systems, oil coolers, ... absorbers, pistons for air-suspension systems, ...

#### **HVAC&R APPLICATIONS**



#### **ALWAYS A STEP FURTHER**

- Ultra tight tolerances and excellent workability meeting the tight package requirements of modern car design
- High strength alloys with carefully customized mechanical properties, simplifying operations and improving cost effectiveness
- Excellent corrosion resistance and high surface quality
- Clad layers for additional corrosion protection, post-braze strength or improved joint formation
- Surface enhancement through inner fins, dimples or grooves for improved heat transfer
- · Fully automated manifold production
- Shipping to over 42 countries worldwide

Website: www.sapagroup.com/weldedtubes E-Post: weldedtubes@sapagroup.com

Sapa Precision Tubing Lichtervelde Tel.: +32 51 729 754

Sapa Precision Tubing Remscheid Tel.: +49 2191 362 540

## **Corrosion resistant alloys for demanding applications**

Seamless tube and pipe solutions in corrosion resistant alloys from Sandvik are designed to provide operational benefits in demanding production environments.

Process plants, such as chemical, petrochemical, refineries, steel and pulp and paper, rely on the correct selection of seamless tube and pipe for use in coolers, condensers, boilers and heat exchangers, as well as in hydraulic and instrumentation tubing.

Sandvik states that its Duplex and Super-Duplex stainless steel tubes, such as Sandvik SAF 2507<sup>™</sup>, are used extensively in process plants worldwide.

Investment in research and development has led to the introduction of a hyper-duplex grade with greater operational and corrosion capabilities, designed to increase plant operational uptime. Sandvik SAF 2707 HD<sup>™</sup> is suitable for aggressive acidic, chloridecontaining environments and particularly chlorinated seawater.

Tubular solutions supplied by the company include seamless tube and pipe developed for process plants, chemical, petrochemical, refineries, fertiliser plants, pulp and paper mills and power generation plants for reactors, coolers, condensers, boilers and heat exchangers, and hydraulic and instrumentation tubing.

"Not only do we have the ability to supply tube and pipe both in seamless and welded options, but a complete piping system solution including, flanges, butt welded fitting, screwed and socket welded fittings and welding supplies all available from stock and competitively priced with short lead times," commented Mana Yilmaz of Sandvik Materials Technology, Turkey. In highly corrosive conditions, as found in ethylene and fertiliser plants, Sandvik composite tubes provide high resistance to pitting and crevice corrosion.

Materials such as Sandvik 3R60 Urea Grade, with low ferrite content for greater resistance to general, inter-granular and pitting and crevice corrosion, can assist in achieving higher output and reduced maintenance.

A new premium composite tube, Sanicro<sup>™</sup> 67/4L7, offers even greater resistance to stress corrosion cracking and general corrosion for black liquor recovery and other boiler applications in the pulp and paper industry.

Sandvik Materials Technology – UK sales.smtuk@sandvik.com www.smt.sandvik.com



20<sup>th</sup> - 21<sup>st</sup> - 22<sup>nd</sup> MAY 2015 fieramilano - Rho MILANO Italy THE MAIN EVENT FOR THE STEEL INDUSTRY IN SOUTHERN EUROPE



## **Quality inspection and process control** in automotive tubes

Contrôle Mesure Systèmes, a specialist in non-destructive testing methods for more than 25 years, has proposed several solutions for automotive tubes production.

Double wall seamless tubes for braking systems require quality control during the process to withstand the pressure.

А system developed by CMS continuously checks the swimmer

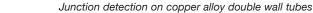
Process control for braking systems

elongation during the tube production phase to allow correction of the calibration position in the past roll, avoiding production of defective tubes and allowing increased productivity.

For junction detection on copper alloy double wall tubes for air cooling and break circuitry, eddy current instruments that inspect 12 lines simultaneously are connected to the PLC of the line, to manage a cutter for rejecting defective junctions. The systems meet quality standards such as API, ASTM and DIN.

Through its products and remote assistance, Contrôle Mesure Systèmes provides quality and productivity solutions for automotive tube applications around the world.

Contrôle Mesure Systèmes -France contactcms@cmseddyscan.com www.cmseddyscan.com





## **Spray foam and elastomeric coatings** for the oil and gas industry

Demilec, a manufacturer of spray foam insulation and polyurea products, has introduced two new products - Geolok and MaxGuard SLAM 250 - to make oil and gas pipeline construction, containment and industry processes easier, safer and more durable.

Geolok, a polyurethane spray foam, helps field workers create pipe pillows, trench breakers and rock shields during pipeline construction.

It eliminates the common practice of sandbag laying, and reduces the number of workers needed from as many as ten to only two: one to operate the spray gun and another managing the back of the rig.

The foam sprays continuously without combustion, preserves the integrity of pipelines, and has a quick and durable application process.

MaxGuard SLAM 250, an elastomeric spray coating, is often used for secondary containment, a major part of any oil and gas drilling site. The twocomponent, fast-set coating results in a durable lining that can be used to make in-ground or above-ground constructed ponds. Other uses include tank and pipe protection, concrete

and metal rehabilitation projects and abrasion resistance. MaxGuard SLAM 250 has no VOC emissions and is impact resistant.

"Demilec is actively creating innovative products to meet the unique needs of many niche industries, ranging from oil and gas to agriculture," said Paul Herrera, director of marketing at Demilec. "After much research, we created MaxGuard SLAM 250 and Geolok to improve speed, safety and durability on oil and gas job sites."

Demilec - USA

## **Pipeline construction field software**

Trimble has announced an addition to its Access<sup>™</sup> family of field software applications. Trimble Access Pipelines is designed for surveyors involved in oil and gas pipeline installation, and addresses challenges encountered by pipeline surveyors by automating common pipeline survey tasks.

The software solution saves time by simplifying attribute and inventory collection and integrating all the data into one easy-to-use data collection workflow.

Trimble Access Pipelines offers a streamlined workflow for pipe inventory collection and validation, weld mapping and as-built measurements.

The software reduces project time and redundancies by collecting pipe attribute data, recording the relationship between welds and pipes, and electronically linking the joint attributes to measured welds. Using the application, pipeline surveyors can capture the necessary data so construction can proceed without costly delays.

The complete end-to-end solution is enabled when combining Trimble Access Pipelines and Trimble Business Center. Trimble Access Pipelines can quickly generate customised reports for the tally and weld map data or the surveyed pipeline directly on the controller.

All field data can be seamlessly transferred into Trimble Business Center to produce complete deliverables including as-built plots using the Trimble Business Center Advanced Drafting module.

"One of the most time-consuming challenges pipeline surveyors face is the collection of pipe attribution detail and recording the information with weld positions," said Benoit Mallen, business area manager of oil and gas for Trimble's geospatial division. "With Trimble Access Pipelines, we have leveraged Trimble's strength in positioning technology and combined it with a workflow-specific application to create a streamlined solution that can meet the needs of geospatial professionals working in the oil and gas industry."

Trimble Access Pipelines and Trimble Business Center software version 3.30 are available now through the company's geospatial distribution channel.

A free trial of the Trimble Access Pipelines application as well as other available modules for Trimble Access are available to all existing Trimble Access users, and can be activated and installed using the Trimble Access Installation Manager.

Trimble – USA www.trimble.com



ROHRBEFESTIGUNGEN Hammerschmid GmbH



#### www.hammerschmid.at

Our company is specialised in the industrial production of pipe clamps in small and large series and in special constructions including further processing, coating, pre-assembly and packing.

Based on our internal high quality requirements we endeavour to always obtain new quality certificates for our products, having been certified according to ISO 9001 for 20 years and according to EN 1090 class 2 since 2012.

Convince yourself of the quality, flexibility and know-how by Rohrbefestigungen Hammerschmid GmbH.

If you have any further questions, please contact Jacqueline Hammerschmid.

e-mail: jacqueline.hammerschmid@hammerschmid.at

A-4614 Marchtrenk | Linzer Straße 141 phone: +43 (0)7243 / 58 222 | fax: +43 (0)7243 / 58 222-800



## Steel and polyethylene pipes and fittings

Petek Boru has been involved in the production and coating of carbon and stainless steel pipes and fittings, as well as production of polyethylene pipes and fittings, since 1979.

The company's spirally welded steel pipe production line can manufacture pipes from 219.1 to 1,626mm in diameter (8" to 64"), and 3.2 to 16mm wall thickness, via continuous on-line ultrasonic test control. Petek Boru is

experienced in the external coating of all types of steel pipes with polyethylene, fusion bonded epoxy, liquid epoxy, bitumen, varnish, primer and wire-mesh reinforced external cement mortar. For internal lining, solvent-free and coal-tar epoxy lining as well as cement mortar lining are the most-used methods.

The company has EN 10217-1, EN 12201-2 and ISO 9001- TUV SUD certifications, and can produce

according to ASTM A-53 standards. Products include HDPE 100 polyethylene pipes and fittings, chimney pipes, Victaulic pipes, Sigur-headed pipes, and threading and coupling.

The company also sells natural gas and petroleum pipes.

Petek Boru Sanayi AS – Turkey export@petekboru.com.tr www.petekboru.com.tr

## **Steel pipes from Pakistan**

BBJ Pipe Industries was incorporated in 1991, and has been registered as a public limited company since 2013. The company provides a wide range of API 5L steel line pipes, MS pipes, GI pipes in sizes  $\frac{1}{2}$ " to 12", and steel tubes and profiles from  $\frac{1}{2}$ " x  $\frac{1}{2}$ " to 6" x 6". BBJ also manufactures HDPE/ MDPE pipes and PE fittings from 20 to 450mm, as well as PE cable duct from 20 to 110mm, and PPR-C and fittings of varying sizes from 20 to 110mm.

The company has the capacity to manufacture 100,000 M ton of steel pipes per annum in various diameters, wall thicknesses, lengths and steel grades. BBJ manufactures HFW (ERW or EIW) steel line pipe, black or galvanised, conforming to API 5L, ASTM, BS or other international and national standards. Its quality management system conforms to API Q1 and ISO 9001-2008.

BBJ Pipe Industries Ltd – Pakistan info@bbj.com.pk www.bbj.com.pk



### products & developments

## GPS asset location and system information gathering

Wachs Water Services has been retained by a client to GPS the assets of several utilities under its management.

The success of the project highlights the importance of implementing a GPS programme, not only to determine asset location, but also as a method of gathering key system information.

The client sought the services of Wachs as a first phase in its efforts to have a centralised, up-to-date GIS database.

The original database contained errors and inconsistencies. The Wachs team was responsible for collecting GPS locations for over 32,000 assets spanning three utilities.

The client immediately integrated the findings into its GIS database, which was disseminated to its crews who, in turn, used the GIS in the field via tablet devices.

Wachs states that it was chosen due factors including its productivity, expertise and reputation.

Of the 32,000 assets visited by the Wachs Water Services team, nearly ten per cent had a deficiency, while 14 per cent could not be found or reached. Approximately 1,400 assets were discovered that utility management was not aware existed.

In addition to delivering asset locations, Wachs provided helpful information, including items to be repaired, the locations of several main breaks, leaks, and other information of interest.

After the completion of a Wachs Water Services GPS programme, utilities will be able to reduce system shut down time. "GPSing" system assets allows utilities to have an updated GIS, reducing the time required to shut down a system in the event of an emergency or for construction work.

An up-to-date GIS also allows crews to perform maintenance and repairs more quickly.

Additional benefits of a GPS programme include the identification of necessary work orders, retrieval of up-todate asset information, and identification of structural damage such as main breaks, large leaks and other system deficiencies.

Wachs Water Services, Inc – USA info@wachsws.com www.wachsws.com



International Trade Fair for Metallurgy, Machinery, Plant Technology and Products



The International Tube and Pipe

Trade Fair in Russia



International Trade Fair for Aluminium and Non-Ferrous Metals, Materials, Technologies and Products

### 8–11 June 2015

#### \* EXPOCENTRE

Krasnaya Presnya <sup>Mos</sup> Moscow, Russia

In co-operation with

#### www.metallurgy-tube-russia.com

Messe Düsseldorf GmbH P.O. Box 101006 \_ 40001 Düsseldorf \_ Germany Phone +49 (0) 2 11/45 60-77 00/-77 79 \_ Fax +49 (0) 2 11/45 60-85 29 WiechertC@messe-duesseldorf.de \_ WynhoffU@messe-duesseldorf.de



www.messe-duesseldorf.de

### products & developments

## Pipe-cutting reliability with split-frame technology

Rising fabrication and maintenance project activity, including works on wellhead, riser and caisson assemblies, has increased demand from construction yards, operators and duty holders for new pipe cutting technologies.

UK-based manufacturer and supplier Mirage Machines has evolved splitframe machine technology with the development of its MSF (Mirage Split-Frame) machine, which it claims improves the efficiency of pipe cutting operations on infrastructure composed of heat-resistant, stainless and Super Duplex metals.

Mirage has developed new selfsquaring capability for the fully portable MSF, reducing the risk of installation error during operations and significantly shortening the setup process, while maximising the operational run-time of its equipment.

Richard Silk, managing director of Mirage Machines, says the MSF technology has applications in every energyproducing region, and is already being shipped worldwide to meet rising demand generated by capex and opex projects in new and existing oil and gas infrastructure.

"The pipe cutting marketplace is a significant slice of the portable machine tool supply chain, yet until now the technology has not moved forward. The majority of machines in use have been based on an operational design which hasn't evolved in 30 years,"

said Mr Silk. "We designed the MSF to bring about the step change the industry needs – reducing the weight of the machine while improving its technical capability, giving operators and service companies a more reliable, durable pipe cutting tool which delivers excellent accuracy, without interruption, at any scale."

Due to global demand, the company has increased the manufacturing capability at its headquarters in the UK to deliver work-ready MSF machines across the



regions, and has focused on being able to supply from stock in the US and Australian markets.

Mirage Machines designs and manufactures technologies for applications including drilling and tapping, flange facing, hot tapping and line stopping, line boring, milling and gantry milling, orbital milling, and pipe and casing cutting.

Mirage Machines Ltd – UK www.miragemachines.com

### 

Hebei Chida specializes on manufacturing and supplying carbon steel, stainless steel, alloy steel flanges and fittings.Our products are priced competitively and will meet or exceed ASME, ANSI API, EN, BS, DIN, JPI and JIS standards.

#### Type:

Socket Weld Flange/Weld Neck Flange/Threaded Flange Plate Flange/Slip On Flange/Lap Joint Flange/Blind Flange Loose Plate Flange/Integarl Flange

#### Size:

3/8"--60"The maximum size is up to 200"

Hebei Chida also supplies customized precision machining parts and assemblies of carbon steel, stainless steel, brass, aluminum and so on. We take orders with drawing or sample.



#### HEBEI CHIDA MANUFACTURE AND TRADE CO., LTD.

Address: No. B2305 Times Ark Building. 36 GuangAn Street, Shijiazhuang, China Tel:+86-311-86219861 86219890 Fax:+86-311-86219891 E-mail:Luhw@cnchida.com Luhw634@hotmail.com Website: www.flangescn.com www.cnchida.com

## WE NEVER MISS A SHOW!

Tube Products INTERNATIONAL magazine exhibits at all the **major tube and pipe trade fairs worldwide** giving you maximum global exposure for your advertising.



www.read-tpi.com





## The international tube and pipe trade fair in Russia

## 8-11 June 2015

Despite a difficult economic environment over the past few years, the tube industry is now looking to the future with optimism thanks to the constantly improving investment climate in Russia.

Investment activities are up, the construction sector is picking up speed again, and consumption remains a strong pillar of this upswing.

The trade fair is one of the most important trading and contact platforms in Russia and for the neighbouring states. The organisers are aware of the optimism prevailing in the industry and can now already see a positive trend in exhibitor registrations. Messe Düsseldorf GmbH, Messe Düsseldorf Moscow OOO and its Russian partner Metal-Expo have secured official participations from Germany, Italy, Austria and China. The trade fair is supported by the leading international industry associations AMAFOND – Italian Association for Foundry Machines and Products, ITA, VDMA – German Engineering Association, EUnited Metallurgy – The European Metallurgical Equipment Association, CEMAFON – The European Foundry Equipment Suppliers Association, and CECOF – The European Committee of Industrial Furnace and Heating Equipment Associations, as well as by the important partner MC-CCPIT – Metallurgical Council of China Council for the Promotion of International Trade.



#### Venue

ZAO EXPOCENTR Exhibition Center, Krasnaya Presnya, Moscow, Russia centr@expocentr.ru www.expocentr.ru

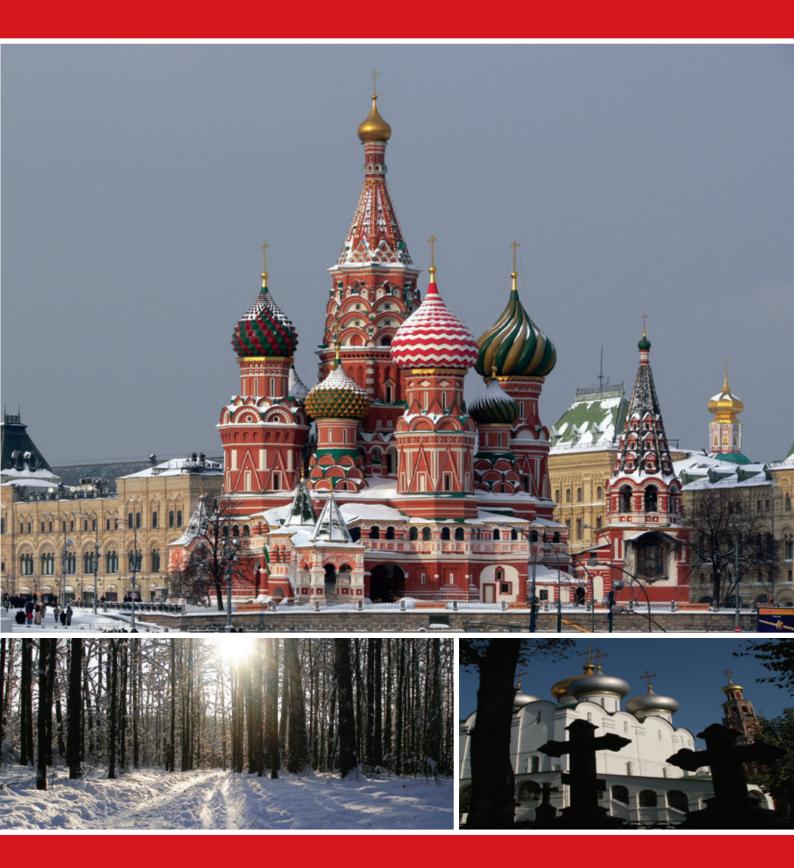
#### **Opening times**

8 June to 10 June: 10.00am to 6.00pm

11 June: 10.00am to 4.00pm

#### Organiser

Messe Düsseldorf GmbH Messeplatz, D-40474 Düsseldorf Germany Tel: +49 211 45 60 01 Fax: +49 211 45 60 668



www.metallurgy-tube-russia.com

# Plastic pipes

Plastics for heavy-duty pipe applications went from unthinkable to indispensable so quickly that it can be challenging to try to recall the many voids that were filled by the introduction of plastic pipes.

And the contributions of these lighter-weight, non-toxic, recyclable stalwarts continue into our own, intensely ecology-minded era.

Possibly there are other products for rugged industrial and residential uses that, like plastic pipes, can last in as-new condition for a quartercentury: in concrete or underground; without scaling, rust, pitting, or other corrosion; leakproof and equally accommodating of hot (CPVC) or cold (PVC) throughput. It is just very difficult to think of any.

## Large bore saddle

Plasson's Large Bore Saddle is a solution for connecting pipe diameters of 250 to 800mm, with an outlet of between 90 and 160mm.

Assembling and welding the saddle from start to finish takes around one hour. The Large Bore Saddle has a function that enables the installer to test the welding before cutting the pipe. The test gives a high degree of certainty that the installation has been done correctly, while testing quality and pressure, immediately following the installation. This avoids the risk of expensive and time-consuming mistakes resulting from tapping incorrectly welded saddles.

The advanced solution includes a single welding time for ambient temperatures between  $-10^{\circ}$ C and  $+45^{\circ}$ C, with no temperature compensation required, no need for preheating process, instant heat transfer between coil and PE to speed up and improve gap closing, and a full bore outlet SDR11 – 90, 110, 125 and 160mm.

As with all Plasson ElectroFusion solutions, the Large Bore Saddles

use a SmartFuse system to ensure a fast and easy welding process, and full traceability of the fitting and components to ensure quality control. The Large Bore Saddles are designed according to the specific needs of the end-users, keeping in mind the field conditions and limitations, ensuring a simple installation that will be safe and secure.

Plasson Ltd – Israel sales@plasson.com www.plasson.com



## **Double wall piping system**

Asahi/America has reintroduced the Poly-Flo<sup>®</sup> co-extruded double containment piping system. Available in black PE and euro grey PP-R, Poly-Flo is suitable for installations with space constraints and systems where thermal expansion and contraction are present.

Poly-Flo is a complete system that includes full pressure fittings, drainage fittings and machined fittings.



The SDR-designed system is available in 1 x  $1\frac{1}{2}$ ", 2 x 3" and 4 x 6", and operates up to 150psi at 68°F.

Because of its unitary construction, Poly-Flo pipe and fittings act like a single wall system, which helps prevent failures often seen in fabricated systems. This is especially important in installations with fluctuating temperatures, or applications such as directional drilling

where opposing forces act on the carrier and containment pipes.

Black PE Poly-Flo is suited to outside, above-ground applications because of its UV resistance, and it performs well in underground installations because of its resistance to crack propagation. Due to its high pressure rating, euro grey PP-R Poly-Flo is suitable for applications running at higher temperatures.

Water treatment facilities and chemical applications can benefit from Poly-Flo's chemical resistance. The system's low cost and easy installation also make it suitable for drainage systems, pressurised transfer lines, and industrial applications requiring up to a 4" carrier pipe.

The Poly-Flo double containment piping system is available with manual and lowpoint leak detection sensors. Joining the upgraded system only requires standard welding equipment; no special clamps or inserts are necessary. Asahi/America offers butt fusion welding equipment and weld training for all of its piping systems.

Asahi/America, Inc – USA asahi@asahi-america.com www.asahi-america.com

## Thermoplastic pipe market to reach 576 million tons by 2019

The report 'Thermoplastic Pipe Market by Polymer Types (PE, PVDF, PVC, PA, and PP) Application (Oil & Gas, Mining & Dredging and Chemicals) and Geography (APAC, Americas, Europe, Middle East and Africa) – Global Trends & Forecasts to 2019', published by MarketsandMarkets, defines and segments the thermoplastic pipe market with analysis and forecasting of volume for thermoplastic pipes. It also identifies driving and restraining factors for the thermoplastic pipe market with analysis of trends and opportunities. The market applications for thermoplastic pipe include oil and gas, municipal, mining and dredging, and chemicals. The oil and gas application of thermoplastic pipes is estimated to grow with an increasing demand for flexible pipes, umbilicals and risers. In 2013, Asia-Pacific was the largest market for thermoplastic pipe and accounted for a market share of about 40.7 per cent.

The thermoplastic pipe market is projected to grow at a CAGR of 7.8

per cent, with increasing demand in the Asia-Pacific region.

The increase in demand for municipal and chemical applications in this region is the prime driver for market growth.

The leading companies in thermoplastic pipe continuously invest in R&D to introduce new products and solutions according to market demand. Considering the demand in the market, these companies are also expanding their facilities to increase production capacity and strengthen their global networks.

MarketsandMarkets – USA sales@marketsandmarkets.com www.marketsandmarkets.com

## **Engineering plastics**

Samruddhi Engineering is a manufacturer of engineering plastic such as ABS, PP, HDPE pipes, tubes, rods, sleeves and profiles. The company has operated in this field since 1995, and has been ISO 9001:2008 certified since 1999. The company manufactures tubes and pipes with outside diameters ranging from 10 to 165mm, and thicknesses from 0.4 to 10mm. It has also developed cathode edge strips for mining and extraction industries. Applications for the company's products include tube for medical surgical tape, tube for special insulation tape, suction tubes for chemical pumps, PP lining for chemical pipe lines, ABS tube for antennae, and tubes for vacuum cleaners. The ABS cathode edge strips are used in copper, zinc, manganese, gold, silver and nickel electrolysis for cathode plate.

Samruddhi Engineering – India samktg@siddhiindia.com www.siddhiindia.com

## Silver-Line certifies another facility

The Plastic Pipe and Fittings Association (PPFA) has announced that Silver-Line Plastics, the first North American plastic pipe producer to be certified to PPFA's Sustainable Manufacturing Conformity Assessment Program for Plastic Piping Components (SM-CAP), has added its Fort Pierce, Florida, facility to the certification. All of Silver-Line's manufacturing facilities (North Carolina, Oklahoma and Florida) have now earned certification.

The programme certifies reductions in a manufacturer's year-over-year environmental footprint by careful analysis and measurement of resource use. Ricky Silver, president and CEO of Silver-Line Plastics, said, "We strongly believe in the programme PPFA has established, which encourages all manufacturers in our industry to join us in an effort to improve our environmental footprint and create efficiencies in our manufacturing processes. Having all of our facilities certified to the programme is a significant accomplishment for our company, considering that this challenging programme requires us to examine all of our resource usage and operational processes."

Certification to SM-CAP means that a facility meets the requirements set forth in PPFA's Sustainable Manufacturing Standard (SMS-01-2012). The standard establishes requirements for measuring both the existing environmental performance and the continuous improvement by manufacturers of plastic piping system components. SMS 01-2012 applies to those who manufacture plastic piping system components and to the resources used in the manufacturing process. SM-CAP creates year-to-year reductions in water

use, energy use, packaging materials waste, material conversion efficiency, and product material waste. In addition, criteria are set to promote plant safety, safe product use, continual participation in industry life cycle analysis, maintaining certification for American National Standards governing product quality and safety.

Richard Church, PPFA's executive director stated, "Our members felt PPFA needed to create a programme that challenged the industry to continue to improve the process to leave less and less of an environmental footprint."

Plastic Pipe and Fittings Association – USA www.ppfahome.org

Silver-Line Plastics Corp – USA www.slpipe.com

## Flexible insulated pipework for energy-efficient heating system

Aston Cord Energy Services, a specialist in biomass technology, was chosen by the Wildfowl & Wetlands Trust Headquarters in Slimbridge, UK, to create a new energy-efficient heating system. Aston Cord selected Flexenergy for the highly insulated and flexible pipework needed for the biomass system.

James Erskine, assistant facilities manager at the Slimbridge site, explained, "As part of a bigger strategy to reduce our carbon footprint, it was an easy decision for us to move away from a reliance on fossil fuels to renewable and sustainable biomass energy which will burn locally supplied wood-based pellets.

"Our headquarters is the largest of our nine sites nationally and we have over 150 staff located here. The new heating system will provide heat and hot water to all our core buildings – the main visitor centre, staff hostel, Scott House, the cottage and office buildings. With the help of the government-based Renewable Heat Incentive scheme, the pay-back for the new system will be in less than three and a half years. Due to the newly installed heating system we will save around 50 per cent a year on our overall heating costs including this big reduction."

Phil Bailey, installation engineer at Aston Cord Energy Services, praised Flexenergy Flexalen piping's insulation factor, adding, "The Flexalen 600 preinsulated polybutene range has both strength and flexibility coupled with a broad temperature range and water-tight thermal insulation properties. It is very simple to install with easy connection between the insulation and casing pipe, which makes it a fully welded system."

"We are very proud to be associated with such an energy efficient system on a world-renowned site," said Sandy Fairley, Flexenergy sales director. "Our pipe technology selected by Aston Cord for the new biomass system combines strength, durability and flexibility across a wide hot water temperature range when compared to conventional pipe. Its lightweight profile also makes it easier to handle, while its HDPE outer jacket gives robustness to the structure. One of the biggest concerns for this project was environmental sustainability, so the pipe technology's low thermal conductivity

and consequent heat loss became important factors in the context of optimising energy efficiency in a low carbon environment."

Flexalen preinsulated pipes use Polybutene (PB-1) as the base material for their carrier pipes, and is claimed to be the only plastic pipe system currently used in heating systems that can be fully fusion welded and operate up to 95°C.

Flexenergy designs, supplies and installs distribution pipework used in heating, and hot and chilled water systems across a wide variety of renewable/sustainable enerav technologies, including solar, biomass CHP, geothermal, district and community heating. The company is the UK and Ireland stockist of the Flexalen pre-insulated pipe system. Flexenergy offers extensive pipe stocks; jointing technologies (welded and mechanical); pipe ancillaries, meters and fittings; system design; installation services; and an in-house fabrication service.

Flexenergy Ltd – UK office@flexenergy.co.uk www.flexenergy.co.uk







#### A **NEW LEADER** IN BUTT-WELD FITTING INDUSTRY info@tecron-piping.com www.tecron-piping.com



## The 6<sup>th</sup> edition of the international steel trade fair

## 20-22 May 2015

Made in Steel addresses the whole steel industry, and involves the main industries of users, including building, transportation and power and utilities, stimulating their requests and drawing from them to innovate and receive valuable contributions.

Made in Steel takes place from 20 to 22 May at Fieramilano, Milan, Italy. It will be the 6<sup>th</sup> edition of the conference and exhibition dedicated to the international steel supply chain. Made in Steel has evolved over the years into a major event in the sector in Southern Europe.

The universal EXPO 2015 will take place at the same time, beginning on 1 May. The EXPO is to be built next to the centre where Made in Steel will be held. The two events will be connected by a specially made walkway/gallery called "Passerella Expo – Fiera". This will allow the visitors of Made in Steel to have the best of both worlds.

The 2015 edition will involve an agreement between Made in Steel and Eurometal. This sponsorship has also been agreed upon by the four branches that make up the European continental unit: Dismet – the association of European steel distributors, tubes and metal, Eassc – coordinates the European service centres, Nat Fed – which brings all the national iron and steel distributors together and lastly, STSG – which represents the European traders.

On the second day of the event, Made in Steel will host "International Steel Trade Day" which will be organised by STSG. A conference will be held inside the three-day event.



#### Venue

Fiera Milano SpA Strada Statale 33 del Sempione 28 20145 Rho – Milano info@madeinsteel.it

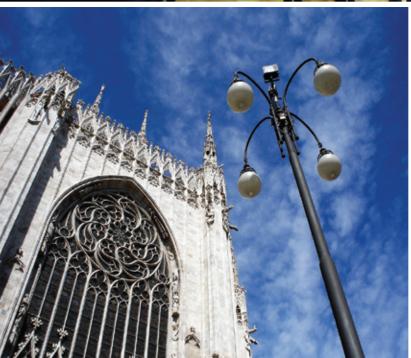
#### **Opening times**

9.30am - 6.30pm daily in halls 8 & 12

#### Organiser

Made in Steel Tel: +39 030 2548520 Fax: +39 030 2549833







## www.madeinsteel.it

## Fittings, valves, flanges and connectors

Fittings, valves, flanges and connectors are among the most useful and reliable devices known: leakand abuse-proof; pressure sensitive; adaptable to two-directional flow; compatible with and as corrosion-resistant as the tubulars that they join and render functional.

These highly engineered products are strong in relation to their size and weight, which make poor indicators of their importance to the end user. Features such as spring-loaded cores add to their responsibilities and enhance their value.

The potential of a perfectly produced tube is only realised when it becomes accessible to the great world of industries and applications, of problems overcome and solutions implemented. The ingenious and immensely practical fittings, valves, flanges and connectors reviewed here help make that happen.

## **Steel buttwelding fittings**

Starofit is a supplier of steel, alloy steel and stainless steel buttwelding fittings, providing rapid delivery to customers around the world.

The company has a permanent fittings stock of 6,500 tons, which enables it to provide prompt response to customer requests.

The holdings range from a large stock of ASME and EN/DIN standardised products, to highly specialised elbows and fittings with extreme wall thicknesses and exceptional dimensions, in carbon steel, alloy steel and stainless steel. Starofit's stock programme features more than 50,000 different dimensions and 100 material grades, and the company recently invested in its holdings of low alloy material grades, in order to offer a comprehensive stock of elbows and fittings in WP11 and WP22 from wall thickness series STD up to XXS.

The company's rigorous supplierselection process accepts only products from ISO, PED and TÜV approved manufacturers.

Starofit will exhibit at various trade fairs in Europe this year, including BORU Fair 2015 in Istanbul, Turkey; Stainless 2015 in Brno, Czech Republic; and Stainless Steel World Conference & Expo 2015 in Maastricht, Netherlands.

Starofit Klose GmbH & Co KG – Germany info@starofit.de www.starofit.de

## **Clamping technology**

The conditions and requirements in manufacturing technology are becoming increasingly complex, and include factors such as flexibility, shorter setup and production times, increase of operational safety and efficiency. At the same time, users are looking for simple and cost-effective solutions.

In the field of mechanical and hydromechanical clamping elements, Enemac offers flexible and reliable clamping technology with various power clamping systems and hydro-mechanical spring clamping systems.

The range runs from controlled clamping with torque handle ESBS/ESBT with a nominal clamping force of up to 40kN, to power clamping nut ESB with up to 200kN, and type ESD with up to 180kN. For these products, relatively low torques are converted by an internal gear ratio in high axial forces.

In the case of the power clamping screw ESS, the tightening torque is converted by a wedge clamping system in clamping forces up to 250kN. Thread sizes from M 36 to TR 100 are available.

With the 'spring clamping cylinders', a combination of disc spring and hydraulic,

clamping forces up to 350KN are available. The hydraulic supply is only required during installation and removal of these products; in operation, the axial force is kept purely mechanically, by a disc spring assembly.

This clamping technology offers an alternative to simple workholding equipment such as clamps and brackets, as well as to semi- and fully automatic clamping elements, with their elaborate power supply and control systems. Especially in the manufacturing process of steel parts in presses and punches, the clamping elements provide a high degree of safety through low hand forces during tightening of the necessary tools and equipment.

The clamping systems are suitable both for original equipment and as retrofit items.

Enemac GmbH – Germany info@enemac.de www.enemac.de



Clamping elements from Enemac

## **Butterfly valves**



Val-Matic's American-BFV<sup>®</sup> butterfly valves are engineered to provide long life and trouble-free performance.

Available in a wide range of pressure classes, the American-BFV is used in municipal, industrial and power applications.

Continuous uninterrupted seating and the Tri-Lok<sup>™</sup> seat retention system ensure seat integrity and allow for field adjustment/replacement without the need for special tools or epoxies. A ductile iron disc available in all sizes adds strength, allowing the disc to have a smaller cross section, providing improved head loss characteristics. Val-Matic American-BFV butterfly valves are available in 150B and 250B AWWA classes, with flanged end connections in sizes 3" to 144", and mechanical joint end connections in 4" to 48". Waferstyle butterfly valves are designed with ANSI 125 flanges or ISO PN10 and PN16 flanges in sizes 4" to 24".

The valves fully comply with AWWA C504 and C516, certified NSF/ANSI 61 for drinking water and NSF/ANSI 372 Certified Lead-Free.

Val-Matic Valve & Manufacturing Corp – USA valves@valmatic.com www.valmatic.com

## **Manifold instrumentation valves**

Brennan Industries, an international supplier of hydraulic fittings and adapters, has expanded its line of instrumentation valves by introducing manifold valves.

The new Brennan manifold valves will be offered in three valve configurations: two-valve manifolds, used in pressure instruments; three-valve manifolds, used in differential pressure instruments; and five-valve manifolds, normally used with differential pressure instruments where drain valves are required on the instrument side. Brennan manifolds are available in four different designs: separately mounted manifolds, direct mounting 'T' type manifolds, direct mounting 'H' type manifolds, and co-planar manifolds.

Each of the valves is designed with a pressure sealing system that offers a number of advantages.

The stem threads are rolled to reduce friction and coated with silver Teflon mixture for smooth operation. The stem plug has a swivelling design, and is hardened to provide for wear and long life. The pipe sealing system prevents blowouts of the stem and reduces gland leakage.

The manifold valves are available in a variety of materials, depending on the application, including carbon steel, stainless steel, Hastelloy 'C', Monel, Inconel and titanium.

Brennan Industries provides critical flow components, offering more than 30,000 standard and special hydraulic fittings and adapters in sizes ranging from  $1/8^{"}$  to  $2^{1}/2^{"}$ .

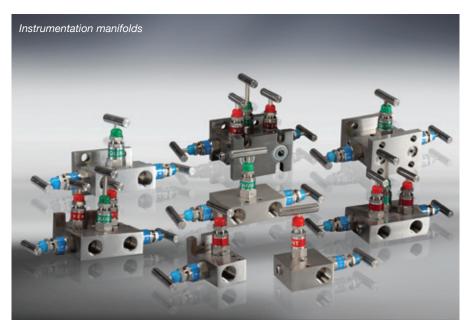
Most products are available in carbon steel, stainless steel and brass, and meet or exceed JIC, SAE and other specifications.

The company's mobile app provides easy access to the product catalogue, with a product cross-reference tool and a pressure ratings search.

The Brennan website features an online parts catalogue, configurator and a free CAD download solution.

The company's products are stocked at eight strategically located, full-service distribution centres.

Brennan Industries, Inc – USA sales@brennaninc.com www.brennaninc.com



#### Fittings

## Integral volume booster valve accessory

Siemens Industry has introduced an Integral Volume Booster accessory for the Sipart PS2 electro-pneumatic valve positioner, designed for pneumatic actuators that require high flow for fast stroking times.

The Integral Volume Booster reproduces pneumatic signals in a 1:1 ratio for applications requiring increased flow capacity, while maintaining small step accuracy and reducing piping requirements.

It couples with the Sipart PS2 valve positioner, and directs a high-volume air supply to the actuator.

This feature eliminates the complex piping and additional fittings required with external volume booster devices. Siemens Sipart PS2, used to control the final control element of pneumatic linear or part-turn actuators, has a low bleed rate, and when paired with the Internal Volume Booster, the combination provides a low bleed rate.

The Integral Volume Booster provides a Cv of 2.0, offering users the performance and accuracy needed to operate large valves and actuators.

The new valve accessory also uses an internal bypass for small step changes, which reduces overshoot and ensures accurate positioning.

Siemens Industry Inc – USA usa.800siemens.us@siemens.com www.usa.siemens.com/industry

Sipart PS2 with Integral Volume Booster from Siemens





### Made in the UK





- Gate, Globe and Check Valves
- 3 ½" to 24"
- 150lbs to 2500lbs
- Stainless Steel
- High Nickel Alloys
- Duplex
- 🔵 Titanium
- Zirconium
- Hydro & Gas Testing to 10,000 PSI
- Cryogenic & High Temp Testing (-196°C to +700°C) \_\_\_\_\_
- Emission Testing, Ultrasonic
   Degreasing
   (Oxygen Service)
- End Users
  Supplied include:
  Exxon, Shell,
  Chevron, Sinopec,
  Sasol, Ineos, Dow

100% UK Manufactured



YPS Valves Ltd Grangefield Industrial Estate, Pudsey, Leeds West Yorkshire LS28 6QW

#### WWW.**yps-valves.**CO.Uk 0113 256 7725 info@yps-valves.co.uk

## US Coast Guard acceptance for mechanical fittings

The United States Coast Guard (USCG) has issued an acceptance letter for Pyplok<sup>®</sup> mechanical fittings, approving their use in a wide range of applications on board vessels.

Pyplok mechanical fittings, available in carbon steel, stainless steel and copper nickel, are now approved for use in the following shipboard applications, as afforded by 46 CFR 50.20-50(b): machinery sea water cooling inboard of the sea valve; bilge and ballast systems; cargo oil systems; fire main/sprinkler/ foam systems; fuel and lubricating oil systems; compressed air; and hydraulic systems.

"The USCG acceptance letter is something we have been working toward and are excited to receive," said Chris Peitchinis, vice president of global business development at Pyplok manufacturer Tube-Mac Piping Technologies.

"We believe that Pyplok is the most economical and efficient way of joining pipes or tubes. The fittings are installed cold and safe without the hazards of welding. It reduces costs, enhances quality, and provides a leak-free, reliable connection."

Pyplok fittings have an 'outer O-ring seal', also called an environmental seal, that prevents sea water or other environmental elements from entering between the tubes and fitting, preventing any corrosion at the interface between the pipe and the fitting. Other features include 360° external radial swage fitting on to the tube assembly; and an inspection gauge to ensure a proper swage.

The fitting can be re-swaged multiple times. The Pyplok tool has a mechanical stop, to prevent over-swaging of the fitting. The tool is lightweight and fits in tight confined spaces.

Pyplok fittings can be installed on seamless or welded, hot or cold rolled tube. Sizes range from 1/4" to 2" OD tube, 1/4" to 2" NPS pipe, and 6 to 60mm metric tube.

Tube-Mac Piping Technologies Ltd – Canada info@tube-mac.com www.tube-mac.com

## **Clamps for demanding requirements**

With the highly flame resistant polyamide material PAV0, Stauff can produce plastic clamps for securing pipes, hoses, cables and other building components that meet the toughest relevant fire protection requirements in the European railway vehicle norm DIN EN 45545-2:2013. The material surpasses the stipulated limit values for seals, hoses, cable channels and other components in the R22 set of requirements for hazard level HL3, which apply to interior applications. The grading in category HL3 allows the use of fasteners/fixing elements according to all of the norms



covering classes of construction and operation for railway carriages.

The verification of the required material properties relevant to the classification was achieved within the scope of varying test methods, which were carried out by independent test institutes: for components that are handled in the R22 requirement set – in addition to the oxygen index, or the ascertainment of the oxygen limit value up to the material's point of combustion – the low smoke density and toxicity are of particular importance. If a material meets the R22 requirement set, it can also be used in the areas covered in requirement sets R23, R24 and R26.

PAV0 is processed using the injection moulding method. In addition to standard block clamps as per DIN 3015, special customised designs based on customer specifications or the company's own development can be created.

Walter Stauffenberg GmbH & Co KG – Germany sales@stauff.com www.stauff.com

#### Fittings

## Butt weld pipe fittings

Hebei Kairui Pipe & Fittings Corp is a manufacturer of carbon steel seamless butt weld pipe fittings as per ASTM A234 Gr WPB, ANSI B16.9, DIN 2605 and JIS B2311 standards.

The company's alloy steel and stainless steel pipe fittings include butt weld elbows,  $45^{\circ}$  and  $90^{\circ}$ , long and short radius; butt weld straight tees and reducing tees; butt weld concentric reducers and eccentric reducers; butt weld end caps; butt weld bends – 2D, 3D, 4D, 5D; and a range of flanges.

Hebei Kairui Pipe & Fittings Corp – China www.krpipefittings.com

## Flange and clamping ring connections

Eskate Rohrverbindungstechnik specialises in the production of flange and clamping ring connections as well as special bending parts.

In addition to bending technology and the manufacturing of clamping ring connections, the company sees itself as a system supplier for mechanical engineering, plant and apparatus engineering, mechanical engineering of construction, and a range of other industries.

The product range includes special bending parts out of flat, profile, special and hollow steels, tubes and edged sheets; flat flanges according to DIN 24154, series 3, 4, 5; flat flanges according to DIN 24154, series I, II (version 07/90); flanges according to factory standard or customer specification; pressure flanges PN 6, PN10, PN16; pressure flanges with reduced thickness; container and apparatus flanges according to DIN 28031 or similar; and square and rectangular flanges according to DIN 24193 or according to customer specifications.

Other products include punching, burning and laser parts; mechanical processing, including welding and surface treatments (zinc plating, painting, powder, chrome plating, radiation, etc); special clamping rings to customer specifications; and sealing rings from silicone, NBR and APTK.

Eskate Rohrverbindungstechnik GmbH – Germany info@eskate.de www.eskate.de

10TH INTERNATIONAL TUBE & PIPE TRADE FAIR FOR SOUTHEAST ASIA

### 16–18 SEPT 2015

**BITEC | BANGKOK** 

www.tube-southeastasia.com



## VISION INNOVATION TECHNOLOGY



Industry Partner:







HAILAND CONVENTION & EXHIBITION BUREAU Messe Düsseldorf / Organizer of:



Supporting Organisations:

- Design & Engineering Consulting Service Center (DECC)Thai Foundry Association
- Thai Stainless Steel Development Association (TSSDA)
- Materials Innovation Center Kasetsart University
- Thailand Iron and Steel Industry Club
- Electrical and Electronic Products Testing Center (PTEC)Electrical and Electronics Institute (EEI)
- Electrical and Electronics Institute (EEI)
  Thai Subcontracting Promotion Association (ThaiSubcon)
- Electrical Engineering Academic Association (Thailand)
- Electrical Electronics & Allied Industry Club
- Thai Electrical, Electronics and Telecommunication Industries Association
- Association of Thai Steel Industries

Messe Düsseldorf Asia Pte Ltd 3 HarbourFront Place #09-02 HarbourFront Tower Two Singapore 099254 Tel (65) 6332 9620 \_ Fax (65) 6337 4633 tube@mda.com.sg



## Expanded production for Kazakhstan oil and gas market

Flexitallic Group's gasket manufacturing joint venture in Kazakhstan has completed an investment in new production technology to meet the demands of the country's oil and gas sector. Novus Sealing Caspian (NSC) LLP, a joint venture between Kazakhstan's Yulmar Services and Flexitallic UK, has acquired and commissioned additional manufacturing equipment to increase capacity and capability after securing further supply agreements with its main customers in the North Caspian market. The €200,000 investment extends NSC's Flexpro Kammprofile gasket production capacity at its facilities in Atyrau, where it manufactures a range of static sealing products including Flexitallic's collection of spiral wound gaskets.

NSC has secured a number of significant service and supply agreements with key operators in the Kazakhstan and North Caspian markets. In accordance with Republic of Kazakhstan directives,

NSC has invested in new technology to increase its production capabilities



the company also holds CT-KZ certification, which acknowledges its commitment to supporting locally manufactured products.

Since NSC began production four years ago, the joint venture has received recognition for its sealing solution services and supply from a number of leading oil and gas operators.

Nigel E Hall, regional sales manager for Flexitallic, commented, "We have made significant progress in the past four years and this latest investment demonstrates the growing position we have in the Kazakhstan oil and gas market.

"There is massive potential in this oil and gas-rich region, which has previously had to rely on imported sealing technology; however, following the establishment of our joint venture we have not only been able to support the Republic's drive to increase in-country manufacturing, but also give operators immediate and local access to products, expertise and skills."

#### Novus Sealing Caspian LLP – Kazakhstan sales@novussealingcaspian.kz www.novussealingcaspian.com

**Flexitallic Ltd** – UK www.flexitallic.eu

## Steam jackets for valve bodies

Mitech designs, fabricates and tests its steam jackets to ANSI B16.34 – 1998.

The steam jackets are designed to keep the valve body at a set temperature.

A hot fluid such as steam is circulated around the valve body, keeping the fluid inside both warm and in a liquid state. The steam circulates in the annular space between the jacket and the vessel walls, and allows heat to be transferred through the wall of the vessel.

The company's hub end Inline Globe Control valve body is used as a base, and is modified to incorporate the steam jacket. Flange ends become integral, while the flange drilling incorporates blind tapped holes. All valves are pressure- and leaktested before and after jacketing. Jacketing considerations include flange size, full or partial coverage, types and locations of heated medium connections, materials, bonnet jackets and additional heat coverage for specific areas.

**Mitech** – South Africa enquiries@mitech.co.za www.mitech.co.za

## **Plastic pipe coupling**

Teekay Couplings has launched the Plastlock Pipe Coupling. Enabling simple, rapid and permanent joining of plain-ended plastic pipes, the product will increase the ability of engineers to specify plastic pipes in projects.

Key to the new product's capability is its patented dynamic axial restraint system, which locks plastic pipes together without the need for gluing, heat fusing, flanging or pipe inserts. The system has two pipe wall gripping rings that adapt to higher levels of load as pressure in coupled pipes increases. These rings rotate on the pipe surface under higher loads, increasing the area gripping the pipe and reinforcing the seal.

This design concept follows through into the pipe anchoring mechanism, which includes three anchor rings at staggered heights. A chamber between each ring allows the pipe wall to migrate around the area where each anchor ring engages with it. These features allow for a dynamic lock on the pipe, ensuring all rings are continuously in contact with the pipe wall, resulting in a hold that permanently locks the two pipes together.

"By simply butting two plastic pipes together and connecting them with a Teekay Plastlock Pipe Coupling, engineers can create a permanent coupling in an extremely short period of time and with a structure that is often stronger than the plastic pipes it's connecting," said Ian Webb, director at Teekay Couplings. "This should be seen as a significant new product. Plastic pipes have a multitude of potential applications in engineering."

With other methods of plastic pipe joining, heat fusion or gluing, the cure time prolongs installation and delays testing and commissioning. If cure times are not closely observed, leaks at the joints can start to appear prematurely. Hot working and fumes created by gluing also present risks.

Plastlock is designed to work with a wide range of plastics used in piping, including polyethylene, polybutylene, polypropylene, PVC-C, PVC-U and ABS. The range includes 15 different sized couplings, to fit pipes with outside diameters from 25 to 315mm.

Couplings to fit plastic pipes outside of the standard range can be manufactured to order. Plastlock is engineered to conform to WIS-4-24-01 and BS 851: 2103 standards, and minimum burst is four times working pressure.

**Teekay Couplings Ltd** – UK info@teekaycouplings.com www.teekaycouplings.com

## Alloy steel fittings supplied for chemical plant

Interservice Trading BV completed a substantial part of the Aquarius project for Shell Chemical Plant at Moerdijk, Netherlands, towards the end of 2014.

The supply consisted of seamless BW fittings in alloy steel ASTM A 234 WP22, with mostly heavy wall thickness SCH 160. It also involved all of the extra testing required by the client. All items were supplied ex IST-stock.

IST states that it is well known for its stock of special BW fittings, all from approved PED manufacturers in the EU.

Interservice Trading BV – Netherlands info@istbv.com www.istbv.com



## Solenoid valve for highpressure applications

The type 6027 solenoid valve from fluid technology specialist Bürkert is available in a new high-pressure version for pressures up to 250 bar. The new variant of the type 6027 seals the valve seat with a ceramic ball seal.

The seal is self-centring and provides reliable and long-term protection against leaks. The ball material  $(AI_2O_3)$  is resistant to abrasion, wear and chemicals.

The material used for the seat of the solenoid valve is highly temperatureresistant polyether ether ketone (PEEK).

The hardness and chemical resistance of this material fulfil the high requirements with respect to the sealing properties of the solenoid valve. The use of stainless steel and a laser-welded plunger guide tube provides high pressure resistance (five times the nominal pressure) and low leakage. The valve is offered in a direct current version. For devices with alternating current, a rectifier connector socket is included in the standard scope of delivery.

Typical applications for the universal type 6027 valve are critical gases and fluids.

The high-pressure version offers solutions for the construction of test rigs. One example for this would be filling systems for air conditioners in the automotive industry. This application is relevant, since the EU has defined new limits for the emission of climatedamaging coolants; starting in 2017, air conditioners in new cars can be filled only with coolants having a relatively low global warming potential (below 150).

In addition to test benches, the new high-pressure valve is also suitable



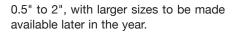
The new type 6027 solenoid valve variant for high-pressure applications up to 250 bar

for gas applications, where the use of sliding rings reduces abrasion.

Bürkert Fluid Control Systems – Germany info@burkert.de www.burkert.com

## New nozzle check valve

YPS Valves, a designer and manufacturer of valves for the hydrocarbon processing, chemical, nuclear and off-shore industries, has developed a Nozzle Check Valve. The valve is available to order in sizes from



The company says that the Nozzle Check Valve has been produced to provide customers with an alternative to swing

check valves. Managing director Rachel Wormald commented, "We have introduced this valve to our range in response to customer demand. As well as being competitively priced, they are also very efficient and easily maintained, and can be manufactured from both castings and bar material."

The first major consignment of the Nozzle Check Valve has been completed and despatched to a client in China, for liquid oxygen fluid service. YPS has also invested £120,000 on an improved dye penetrant testing facility at its manufacturing base in Leeds, West Yorkshire, UK. The new facility increases the capacity to conduct additional DPI tests with more efficiency, and is used to confirm the integrity of castings and welds.

The on-going investment in equipment has included the recent addition of a new CNC milling machine capable of producing very large high pressure valves particularly for oxygen service, which is now fully operational.

A high-capacity ultrasonic degreasing machine is also in use after being commissioned at the end of last year. The machine can degrease valves up to a 16" 900 globe valve, making it suitable for a range of applications, including oxygen service.

**YPS Valves** – UK info@yps-valves.co.uk www.yps-valves.co.uk



## Valves, fittings and flanges

There are high demands on industrial piping systems in terms of safety, durability and hygiene.

Systems from VSH are designed to provide ease of installation, time savings and safety, with short downtime. Fittings, tubes and tools are available in sizes up to 4".

VSH states that one of the major advantages of its systems is the short installation time. With the XPress system, installation can be up to ten times faster compared to welding.

In addition, there is no open flame when making the connection, and the business process can continue during the installation.

The company provides press systems for thin-walled and thick-walled tube. This press technique is quick and easy. By avoiding welding and soldering, this allows for greater safety on the building site. VSH offers a wide variety of systems that are suitable for different fluids, gas, temperature ranges and high pressures up to 560 bar.

The systems meet international quality and safety requirements.

Systems are available for applications involving compressed air, cooling water, steam, fuel or thermal oil, gas and fire protection. The XPress fittings are manufactured in the company's own modern, automated factory, with strict controls during the manufacturing process.

VSH Fittings BV – Netherlands informatie@vsh.nl www.vsh.nl



## **Instrumentation valves and tube fittings**

Avlok is an established Indian brand providing instrumentation valves, tube fittings and associated products. The company's products are ISO 9001:2008 certified and are claimed to be comparable in quality to major US/



European products. The company is a regular exporter to most countries in Asia, North and South America, and Europe.

All products are laser marked for easy identification during use and storage, saving user time and assisting in quicker assemblies.

The Avlok range includes single and double ferrule tube fittings; pipe fittings; hose assemblies and fittings; ball, check, needle and bleed valves; two-, three- and five-way manifolds; pressure gauges; quick-connect couplings; and tube clamps.

Products are available in materials such as aluminium, brass, carbon steel, Duplex, Hastelloy, Inconel, Monel, stainless steel and titanium.

AVI International – India info@avlok.com www.avlok.com

## VISIT OUR **STAND AT** MADE IN STEEL.

Milan, Italy

www.madeinsteel.it

# 

## ...AND PICK UP YOUR FREE MAGAZINES AND CDS

#### www.read-tpt.com



EFC

www.read-tpi.com



### LEADING MAGAZINES

for the tube and pipe

f E in

## The lay of the offshore land

By Cortez Subsea Ltd

The subsea pipeline market is constantly evolving thanks to new innovations in the expediting of ultradeep hydrocarbon production, exploration in emerging markets like the Arctic and increased levels of recovery from existing reserves.

According to published reports, a peak investment of US\$9.6bn is expected throughout the subsea pipeline installation market in the next three years. The growth in this area, particularly in the North Sea and Norwegian waters, reflects an increased level of productivity across brown and greenfield work, including enhanced oil recovery.

The subsea market is one of the key drivers behind the increase in production and the new technology available to lay subsea flowlines on the seabed.

Cortez Subsea, a subsea services company and technology specialist, was recently granted a UK patent for its Modular Pipelay System<sup>™</sup> (MPS), making new shallow water pipelay technology available to the North Sea market for the first time.

It is the culmination of three years of research and development and is rapidly garnering interest with operators in the UK Continental Shelf. The company has been working collaboratively with NOV Tuboscope to find a cost-effective solution and bring it to the marketplace.

"We were looking at ways to further enhance the pipelaying side of our business and came up with the concept of incorporating the already proven Zap-Lok<sup>™</sup> technology into our plans," said Alasdair Cowie, managing director of Cortez Subsea. "Zap-Lok has been used both onshore and manually offshore for many years. We saw the opportunity to make the technology readily available to the offshore market by way of automating the process."

The Cortez Subsea system is designed to compete with the traditional and reel market, as it can facilitate the storage, handling, connection and deployment of the pipeline in an S-lay configuration onto the seabed at a speed of three to five minutes per joint, which is a daily installation rate of up to five kilometres.

"We believe that this will make a large impact in some sectors of the pipelay market and through partnerships, we intend to

make this available worldwide, particularly in areas that do not have support bases or large development infrastructure," added Mr Cowie.

Traditionally, pipelines are connected offshore by welding the sections together and installing in an S-lay configuration. Recently the market has seen a huge development for deepwater using the reel lay method, whereby pipes are welded on land and reeled onto specialist vessels.

MPS has been developed specifically to reduce the cost of subsea pipelay by allowing vessels of opportunity to lay pipe as an alternative to bespoke pipelay vessels. The portable nature of the MPS allows the system to be easily transported to the location of the host vessel.

Due to the ease of installing and removing the MPS, it allows the host vessel to carry out normal functions with pipelay, thus keeping up existing utilisation and therefore reducing costs. Another large contributing factor to the cost reduction is the use of the NOV Tuboscope Zap-Lok mechanical jointing method, which is significantly faster than welding methods.

"The Zap-Lok pipe connection system is ideally suited for internal pipe coating as there is no heat affected zone; the external coating is designed such that once the joint is made there is no requirement for field joint coating, again increasing efficiency compared to a welded joint," said Mr Cowie. "These key features allow pipelay to be conducted at greatly reduced costs. In addition to the cost savings that can be achieved, there are also commercial advantages due to the project schedule not being dictated by availability of existing pipe laying assets."



#### Capacity

The Cortez MPS is designed to lay standard API 5L line pipe from 2" to 16" diameter, in water depths down to 150m. The system has also been designed to lay concrete coated pipe for diameters of 10" to 12", where enhanced on bottom stability is required.

The MPS is designed to lay pipe in a standard S-lay configuration. The length of pipe that can be laid in a single trip is vessel- and pipe-dependent, but some of the newer, larger DP vessels could accommodate in excess of 20km of 10" pipe, which is similar to modern reeled pipelay vessels. Smaller, more readily available 90m length DP MSVs could typically accommodate 10 to 12km of 10" on a single trip, or larger quantities of smaller bore pipe.

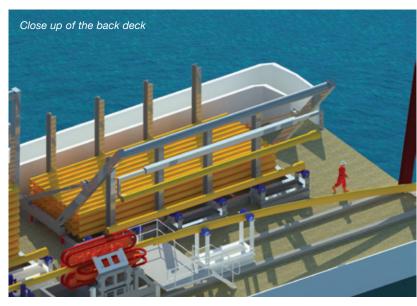
Where longer pipelines are required, the host vessel with the MPS would typically lay down the pipe, resupply with pipe, recover the pipe from the seabed and continue with the process as required. In shallower waters, or as the situation dictates, the MPS can be deployed onto DP or anchored barges.

The MPS has been designed such that it is road transportable, and the system is bolted together to speed up assembly and disassembly. Standard equipment has been used (where possible) to reduce cost and ensure availability of replacement items.

#### The components

The MPS has been designed to provide all the component parts required for pipelay in an S-lay configuration without any need for services from the host vessel, other than personnel accommodation and messing – typically 16-18 personnel.

Pipe storage racks have been developed that are adjustable in width from 5 to 8m, and each pipe rack can accommodate up to 4km of 10" pipe, depending on vessel deck strength and load carrying capability. When using concrete coated pipe, the carrying capacity is reduced due to the additional weight.



Vertical restraining posts keep the stacked pipe in place and are designed for transit and survival conditions.

The pipe handling system is a mechanised lift system that picks up the pipe from the pipe storage rack and lifts it over the vertical restraining posts and onto the pipe conveyor system. The lifting system is adjustable to cater for different pipe diameters and weights, and non-standard-length pipes. The forward storage rack pipe handling system is extended to allow pipe to be transported inboard to the 'firing line' conveyor.

A series of powered rollers, capable of handling the full range of pipe diameters, transport the pipe from the aft pipe storage rack to the forward pipe storage rack position. The forward pipe handling system transfers the pipe inboard and up onto the firing line conveyor.

The firing line conveyor is set at a height to match the Zap-Lok press and tensioner centre line. The pipe is transported aft to the Zap-Lok line up station, where it is adjusted with fine control to the exact position for the Zap-Lok press.

Prior to pipe being fed into the Zap-Lok press, the end protection caps will be removed and a close visual inspection carried out. Should there be any defects, the pipe is rejected and quarantined for further inspection.

Prior to the pipe entering the Zap-Lok press, Zapoxy is applied to the pin and bell ends of the pipe. Zapoxy is an epoxy that initially acts as a lubricant to allow the joint to be made up, and then sets such that it is no longer a lubricant. The setting time of the Zapoxy is the main limiting factor in the lay rate that can be achieved.

#### The process

The Zap-Lok press has two sets of clamps. The first clamp grips the trailing end of the pipe on the firing line, and the second grips the new pipe being fed in. Once both ends are secure, the press brings the pin end into the bell end and the longitudinal hydraulic pistons insert the pin end to the required distance.

> Pipe insertion distance and a pressure profile is measured and recorded, and this pressure profile is used as an acceptance of the joint from the onshore testing phase. Should the pressure profile not fall within the acceptance 'window' the joint would be rejected.

> In this rare event the joint would be cut out and a new end prepared on the existing 'trailing end' pipe, and the new pipe reversed back along the firing line conveyor and rejected. This pipe can have a new end prepared if required at a later stage. A new pipe joint will be brought into position and the pipelay process continued. The tensioner arrangement is project-specific, depending on product type and environmental conditions. Where concrete coating is required then a dual tensioner arrangement may be employed.

The linear separation between the Zap-Lok press and the tensioner has a direct effect on the lay rate of the system.

A longer back deck area and a greater separation between the Zap-Lok press and the tensioner will mean that there can be several connected joints between the Zap-Lok press and the tensioner, therefore allowing some of the Zapoxy curing time period to be brought offline, and the lay rate increased.

The standard MPS stinger has been designed to accommodate the largest anticipated loads, but is adjustable in length such that it can be shortened if required, depending on product and water depth. The abandonment and recovery winch is used in the same way as for traditional pipelay methods, and is used for controlled laydown and recovery of pipe.

The MPS system comes with its own electrical generators, hydraulic HPUs and compressed air supplies to run the system independently of the host vessel.

#### **Installation and removal**

"The MPS has been designed using similar sized structural components, with similar types of bolted connections. All the component parts have been design to be road or sea transportable and fit within standard freight dimensions," explained Mr Cowie.

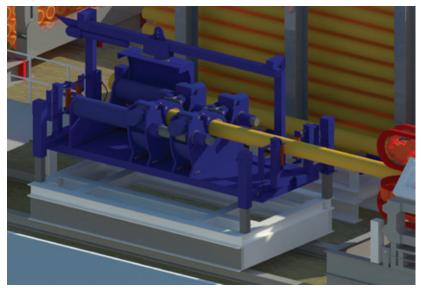
"The assembly of the component parts has also been considered and the number of connections to be made has been minimised.

"All structural foundations are based on similar sized beams, meaning that the sea-fastening design is standardised, and the overall dimensions of the foundations are designed such that they span the required number of 'hard points' on a typical deck to achieve the required values."

Cortez Subsea says that individual component items, eg pipe storage racks, can be assembled on the quayside prior to the host vessel arrival and then lifted on as assembled units. Larger items such as the Zap-Lok press, tensioner(s) and A&R winches are bolted down onto bespoke bases that form part of the MPS firing line foundation.

For demobilisation, the process is reversed with the focus on getting the vessel off hire and available for other work. The major items are stripped back to their component parts for storage or shipment.

"What makes this unique is that the mechanical interface joint is considerably quicker than the reeling process, which involves pre-welding on shore," added Mr Cowie. "It's also a safer option as there is no welding carried out offshore, so fewer personnel are required on board. You also have better control over the pipe's alignment dimensions with this system as it is cold-worked, and moreover since it is essentially a manufactured joint.



Zap-Lok pipe connection system

"Most subsea development costs are increasing, which can jeopardise future development or replacement projects. By having the equipment needed for the pipelaying task designed to be installed and operated from a vessel of opportunity rather than hiring a specialist pipelay ship, the savings to an operator are eye-catching and marginal subsea projects may be able to achieve the required financial targets to gain sanction.

"We can do the engineering analysis, carry out the work and then allow the contractor to tie the pipeline in and complete the commissioning. All you need is a DP2 vessel around 100m long.

"Three of the major international operators and numerous independents have approved the use of Zap-Lok for global subsea operations in the past two years. Operators need to make tiebacks and completions cheaper in the North Sea, and using Zap-Lok is a great solution. These organisations see the obvious advantages of the Zap-Lok technology. We are now progressing towards fabrication and trials of the first of the MPS units for operations. This is a significant step in the development of our company towards advancing technology and maximising value for the subsea market."

Cortez Subsea Ltd – UK info@cortezsubsea.com www.cortezsubsea.com

Alka Srl	30
Alvenius Industries	34
Artel Rubber Company	30
Asahi/America, Inc	51
Associated Tube Group	36
ATW Companies	26
AVI International	65
Barrett Steel	16
BBJ Pipe Industries Ltd	44
E Braude (London) Ltd	26
Brennan Industries, Inc	58
Bürkert Fluid Control Systems	64
Caparo Industries plc	13
Churchill Drilling Tools	37
Constellium	9
Contrôle Mesure Systèmes	42
Demilec	42
Devi Electric Heating Systems	22
DWT GmbH	23
e2v	28
Enemac GmbH	57
Eskate Rohrverbindungstechnik GmbH	61
Eurotubi Europa Srl	
Eurotubi Europa Srl Exhibition Management Services	
	18
Exhibition Management Services	18 12
Exhibition Management Services Fine Tubes Ltd	18 12 9, 53
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd	18 12 9, 53 29
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp	18 9, 53 29 61
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp	18 9, 53 61 28
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques	18 9, 53 61 28 14
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter	18 12 
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association	18 29 61 28 14 14 14
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV	18 9, 53 29 61 28 14 14 63 32
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV Lucideon Ltd	18 29 61 28 14 14 14 63 12
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV Lucideon Ltd Magnetic Analysis Corp	18 29 61 28 14 14 63 32 12 52
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV Lucideon Ltd Magnetic Analysis Corp MarketsandMarkets	18 12 29 61 28 14 63 14 63 12 52 52 23
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV Lucideon Ltd Magnetic Analysis Corp MarketsandMarkets McElroy Manufacturing, Inc	18 29 61 28 14 14 63 12 52 52 26
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV Lucideon Ltd Magnetic Analysis Corp MarketsandMarkets McElroy Manufacturing, Inc Merinox Ltd	18 12 29 61 28 14 14 63 12 63 
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV Lucideon Ltd Magnetic Analysis Corp MarketsandMarkets McElroy Manufacturing, Inc Merinox Ltd Milliken Infrastructure Solutions, LLC	18 29 61 28 14 14 14 12 52 52 23 26 34 46
Exhibition Management Services Fine Tubes Ltd Flexenergy Ltd HandyTube Corp Hebei Kairui Pipe & Fittings Corp Huntingdon Fusion Techniques ICoTA – European chapter International Titanium Association Interservice Trading BV Lucideon Ltd Magnetic Analysis Corp MarketsandMarkets McElroy Manufacturing, Inc Merinox Ltd Milliken Infrastructure Solutions, LLC Mirage Machines Ltd	18 12 29 61 28 14 14 14 63 62 

Novus Sealing Caspian LLP	
Olympus Scientific Solutions Americas	
Online Electronics Group	
OptaSense	
Ovako AB	
Petek Boru Sanayi AS	44
Plasson Ltd	
Plastic Pipe and Fittings Association	
Plymouth Tube Co	20
Robor	17
Rohrbefestigungen Hammerschmid GmbH	
Samruddhi Engineering	
Samuel, Son & Co, Ltd	
Sandvik Materials Technology	
Siemens Industry Inc	
Silver Fox	
Silver-Line Plastics Corp	
Special Piping Materials Australia	
Special Piping Materials Ltd	
SSAB	
Starofit Klose GmbH & Co KG	
Walter Stauffenberg GmbH & Co KG	
Superior Tube Company	
Suraj Ltd	
Syrinix Ltd	
T Christy Enterprises Inc	
Technip	
Tecnica Tre Srl	39
Tecniforja	24
Teekay Couplings Ltd	
Tejas Tubular Products, Inc	
TMK	
Trimble	
Tubacex SA	
Tube Developments Ltd	
Tube-Mac Piping Technologies Ltd	
Tubular Steel Inc	
Val-Matic Valve & Manufacturing Corp	
Voss Fluid GmbH	
VSH Fittings BV	
Wachs Water Services, Inc	
YPS Valves	

### Catalogue





## advertisers index

Przedsiębiorstwo Produkcyjne ADAMUS	Messe Düsseldorf GmbH – Tube Russia 2015 45
ASMAG Anlagenplanung und Sondermaschinenbau GmbHFront Cover	Messe Düsseldorf GmbH – Tube Southeast ASIA 2015 61
Bola-Tek Mfg Co Ltd	Nero Pipeline Connections Ltd
Brennan Industries25	Olympus NDT21
Buhlmann Rohr-Fittings-Stahlhandel GmbH & Co KG 31	P.C.E.S. Ltd
Cangzhou Beyond Metal Products Co Ltd	Harald Pihl ABBack Cover Profilmec Group – Ispadue SpA2, 3
e2v11	Qualitube Limited
ESKATE Rohrverbindungstechnik GmbHInside Back Cover	Randolph Tool Co Inc
Farrelly's Metal Polishers Ltd71	SAPA Precision Tubing Lichtervelde NV
GGN Muhendislik Dan. Celik iml Montaj San ve Tic Ltd Sti 35	Stahlkontor Hahn
Gurgenler Pipeline Engineering27	Suraj Limited17
Rohrbefestigungen Hammerschmid GmbH 43	TAG Pipe Equipment Specialists Ltd 17
Hebei Chida Manufacture and Trade Co Ltd 46	Tecnica Tre Srl
HS Umformtechnik24	Tecnofar SpA19
Interservice Trading BV 13	Tecron Piping Systems (Qingdao) Co Ltd
IRC SpA7	Teekay Couplings Ltd
D K Jones Ltd71	Tube Developments Ltd1
KRV Kunststoffrohrverband eV 15	Tube-Mac Piping Technologies Ltd63
Made In Steel 2015 41	West Space International71
Magnetic Analysis Corporation 44	Wuxi Hatal Aluminium Co Ltd 32
Messe Düsseldorf GmbH37	YPS Valves Ltd

Published by



Publishers of leading international publications for the tube & pipe and wire & cable industries worldwide

46 Holly Walk, Learnington Spa, Warwickshire CV32 4HY, UK

Tel: +44 1926 334137 Fax: +44 1926 314755 Email: tpi@intras.co.uk www.tubeproductsinternational.com www.read-tpi.com



We produce Rohrverbindungstechnik GmbH Flat flanges DIN 24154 Rohrverbindungstechnik GmbH Angle flanges DIN 24154 Flat & Angle frames **Clamping rings & Crimping rings** Laser & Water jet cuts **Spindles for stairs Tank flanges Pressure flanges** Hot & Cold bending parts



#### Germany

Phone +49 (0)57 34 6666-6 Fax +49 (0)57 34 6666-00 E-Mail: info@eskate.de 32479 Hille-Unterlübbe www.eskate.de

Mustafa Kemal Özcas Phone +90 226 813 15 06 Mobile +90 554 647 07 20 E-Mail: ko@eskate.com TR – 77100 Yalova www.eskate.com.tr

#### We band profiles Flat steel

- Angle steel
- **Round steel**
- U Profile
- T Profile
- **Double T Profile** I
- Square tubes
- **Special profiles** <

**Turkey** 

# Europe's largest stockholder of special alloys and titanium

- Daily updated stocklist online
- Full service centre in house
- Water jet cutting
- Orders are sent the same day
- More than 100 years experience





### www.haraldpihl.com

Nickel 200 201 | Monel 400 K-500 Nilo 36 42 K | Nimonic 75 80A 90 263 901 | Nilomag 77 Incoloy 330 800 825 925 A-286 DS | Inconel 600 601 625 686 718 C-22 C-276 HX-750 | Titanium Grade 1 2 3 4 5 7 9 23