

# Tube Products

www.read-tpi.com

## INTERNATIONAL

The trade magazine for tube and pipe products

September 2015



**MAXVALUE  
INDUSTRIES**

Visit us at

**TUBOTECH**

Stand 208



- TUBES AND PIPES
- VALVES, FITTINGS
- FLANGES

- STAINLESS STEEL
- CARBON STEEL
- ALLOY STEEL

Add: Unit 1302, East Tower,  
The Ninth Zhongshan,  
No.2, Xinglin Str.,  
Dalian, China, 116001  
Tel: 86-411-39870222/  
39870299/82812887  
Fax: 86-411-82821131  
E-mail: info@maxvalue.net  
<http://www.maxvalue.net>



PEERAD 2000-W6  
No.01 202 CHIQ-05 0176



No.320247-US



# **VASS**

## **PIPE & STEEL CO., INC.**

- **America's Industry Leader in Wholesale Distribution of Carbon Steel Pipe**
- **Premium Import and Domestic Steel In Seamless, ERW and DSAW (API, ASTM, A53)**
- **One Call, One Source, One Solution**

Corporate Headquarters - Mineola, NY (800) 272-8277  
Houston, TX (888) 839-8277

[www.vasspipe.com](http://www.vasspipe.com)  
Baton Rouge, LA (225) 755-8277



# CSM TUBE

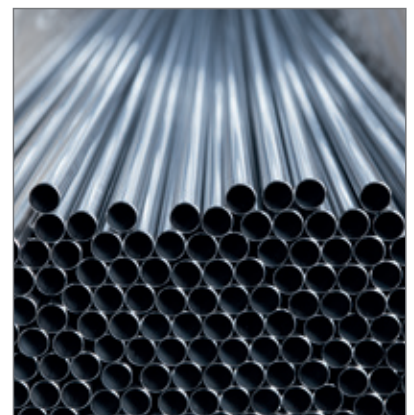
The tailored Tube specialist

- STAINLESS STEEL WELDED TUBE
- AISI 300 SERIES AND HIGH NICKEL CONTENT ALLOYS
- OUTSIDE DIAMETER FROM 4,00 mm TO 28,00 mm
- THICKNESS FROM 0,30 mm TO 1,50 mm
- SUPPLIED IN COILS OR STRAIGHT LENGTH
- AS WELDED OR BRIGHT HEAT TREATED
- REFERENCE STANDARD EN 10217/7
- AD-W2/PED/ASTM/ASME REQUIREMENTS FULLFILLED
- TUBE FOR:
  - HEAT EXCHANGERS
  - HEATING ELEMENTS
  - AUTOMOTIVE
  - FOOD INDUSTRY

**Tubotech 2015**

- 06/08 October -  
**SÃO PAULO**  
Brasile

Stand: RUA 200/202



## CSM Tube

Via del Lavoro, 60  
31013 Cimavilla di Codognè (TV)  
ITALY  
Phone +39 0438 470 100  
Fax +39 0438 470 606  
info@csmtube.com  
[www.csmtube.com](http://www.csmtube.com)

## CSM Tube do Brasil Ltda

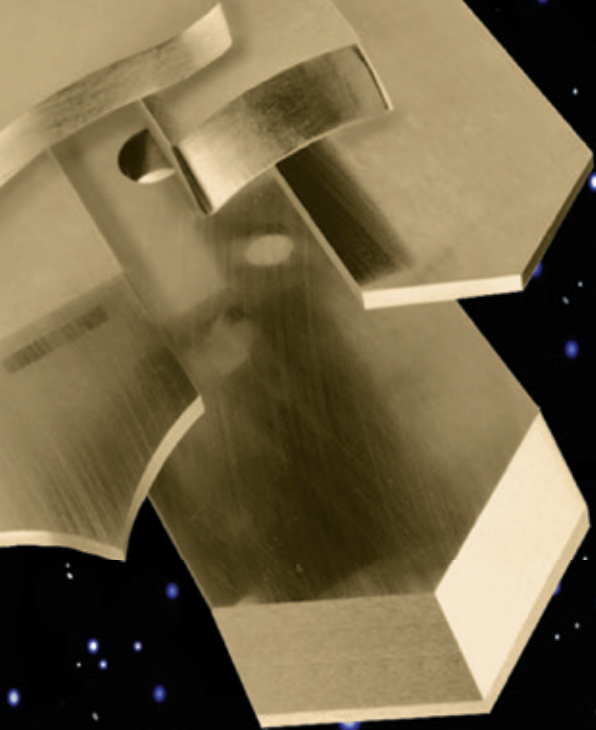
Rua Fortunato José Deltreggia, 120  
13347-441 - Park Comercial  
Indiatuba - SP  
BRASIL  
Tel. +55 19 3500-4488  
info@csmtube.com  
[www.csmtube.com](http://www.csmtube.com)

## CSM Tube USA Inc.

1601 Lunt Avenue  
Elk Grove Village  
ILLINOIS - 60007  
Phone +1 847 640 6447  
Fax +1 866 342 1139  
info@csmtube.com  
[www.csmtube.com](http://www.csmtube.com)



**CSM GROUP**



**We've been  
giving  
businesses  
like yours  
The Edge  
for more  
than  
40  
years**

### **SUPPLYING THE WORLD**

- **VERTICAL AND HORIZONTAL TUBE CUT-OFF BLADES**
- **ROLL FORM BLADES**
- **PINKING WHEELS**
- **SLITTER WHEELS**
- **SHEAR BLADES**
- **SCALLOP CUTTERS**
- **PERFORATORS**
- **TRIM BLADES**



**Randolph Tool Co. Inc.**

750 WALES DR. S.E. HARTVILLE, OH 44632 U.S.A.  
PH. (330) 877-4923 FX. (330) 877-4924  
e-mail: [info@RandolphTool.com](mailto:info@RandolphTool.com)  
website: [www.RandolphToolCo.com](http://www.RandolphToolCo.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



**TUBE DEVELOPMENTS LTD**

International but Independent



[www.tubedev.com](http://www.tubedev.com)

+44 (0) 1236 823 551    [info@tubedev.com](mailto:info@tubedev.com)

## 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

Verkauf & Marketing  
(Deutschland, Osterreich, Schweiz)  
Email: germansales@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](http://www.read-tpi-com)

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

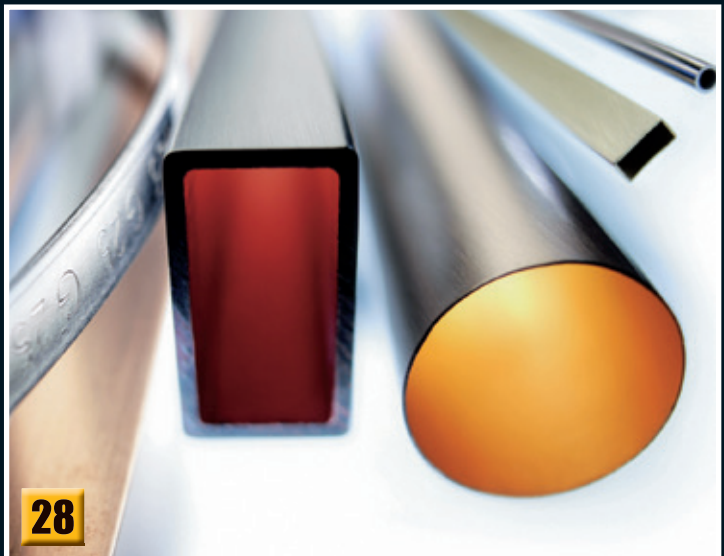
## Tube Products INTERNATIONAL is published by Intras Ltd, UK

**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](http://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.



 INTRAS LIMITED  
**INTRAS**

© 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](mailto:tpi@intras.co.uk)



# Contents

September 2015

- 8** Business & Market News
- 26** Products & Developments
- 46** FABTECH 2015
- 48** Tubotech 2015
- 50** Oil & Gas Tubes and Pipes
- 57** Horn – A tool manufacturer with API certification
- 59** Editorial Index
- 60** Advertisers Index



# Tube Products

INTERNATIONAL

The trade magazine for tube and pipe products



## The September issue

Welcome to the latest issue of Tube Products INTERNATIONAL.

By now I am sure many readers have their stands booked for next year's spectacular Tube Düsseldorf exhibition. After making such a significant effort and investment my advice would be to make the most of the show by backing it up with editorial and marketing coverage in the magazine.

It makes sense to let people know about the new products you will be exhibiting and, just as importantly, where your stand will be located. This is a huge show and people often do not have time to see every hall – never mind every exhibitor – so getting your name seen and your products at the forefront of visitors' minds as they arrive is vital.

By featuring in the pages of Tube Products INTERNATIONAL (which is the official media partner of Messe Düsseldorf, the organisers of the tube show) you can maximise your exposure and attract the attention of our readers before they even arrive. Both our January and March issues will be sent to Germany so feel free to submit some preview editorial or an advert in January too to really help reinforce your message.

In the November issue we have features on aerospace tubes; fittings, valves, flanges and connectors; refrigeration and HVAC tubes; and mechanical tubing. We also take a look at Stainless Steel World 2015. If you would like to submit editorial for any of these features please feel free to contact me at: [rory@intras.co.uk](mailto:rory@intras.co.uk)

I hope you enjoy the magazine.

**Rory McBride**  
Editor



# events calendar

## 2015



**16-18 September**

**Tube SE Asia** (Bangkok, Thailand)  
International Exhibition  
[www.tube-southeastasia.com](http://www.tube-southeastasia.com)



**5-10 October**

**EMO** (Milan, Italy)  
International Exhibition  
[www.emo-milano.com](http://www.emo-milano.com)



**6-8 October**

**Tubotech** (São Paulo, Brazil)  
International Exhibition  
[www.tubotech-online.com](http://www.tubotech-online.com)



**9-12 November**

**FABTECH** (Chicago, USA)  
International Exhibition  
[www.fabtechexpo.com](http://www.fabtechexpo.com)



**17-19 November**

**Stainless Steel World** (Maastricht, Netherlands)  
International Exhibition  
[www.stainless-steel-world.net](http://www.stainless-steel-world.net)



**17-20 November**

**TOLexpo** (Paris, France)  
International Exhibition  
[www.tolexpo.com](http://www.tolexpo.com)

## 2016



**23-27 February**

**METAV** (Düsseldorf, Germany)  
International Exhibition  
[www.metav.com](http://www.metav.com)



**22-24 March**

**FABTECH Canada** (Toronto, Canada)  
International Exhibition  
[www.fabtechcanada.com](http://www.fabtechcanada.com)



**4-8 April**

**Tube Düsseldorf** (Germany)  
International Exhibition  
[www.tube.de](http://www.tube.de)



# WHERE OTHERS SEE LIMITS

IRCCOMUNICAZIONE.IT



## WE SEE CONNECTIONS



New agent for Brazil: HUBERG DO BRASIL

P. + (55) (21) 3083-4818 - F. + (55) (21) 3083-5058 - [www.huberg.com.br](http://www.huberg.com.br) - [comercial@huberg.com.br](mailto:comercial@huberg.com.br)

## 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](mailto:irc@ircbwf.it)

# IRC<sup>SPA</sup>

[www.ircbwf.it](http://www.ircbwf.it)



# business & market news

The Valve World Expo in 2010

## Valve World Expos around the world

Valve World Expo, the international trade fair and convention for industrial valves and fittings, is a biennial event that has been held in Düsseldorf since 2010. It showcases a sector of industry that warrants good potential growth in the future.

Valves and fittings are used in a wide variety of different industries. They ensure safety in the oil and gas industry, channel liquids and gases in the chemical industry, regulate incoming and outgoing water and ensure a free flow of liquid in the drinks industry.

December 2014 was the third time that Valve World Expo was held in Düsseldorf. To meet the rising demand among exhibitors, a further exhibition

hall was added to the event. 665 companies from 40 countries occupied a total space of around 18,000m<sup>2</sup>.

The event was held in parallel with the Pump Summit, where about 30 exhibitors from Italy, UK, Germany, China and the USA showcased innovative technologies, components and systems for pumps and seals.

The next Valve World Expo will be held in Düsseldorf from 29 November to 1 December 2016.

After two successful events, Valve World Expo Americas was held for the third time in Houston, USA, in July. 150 exhibitors from the USA, Asia, Canada, India, Mexico and Europe presented

the latest technologies, components and systems from the wide-ranging area of industrial valves and fittings.

Valve World Expo Asia will be held in Suzhou, China, on 23 and 24 September 2015.

Experts from around the world will meet at the Suzhou International Expo Centre to learn about new industrial valves and fittings for use in oil and gas, the petrochemical industry, power generation and process engineering. The trade fair and the accompanying conference will be closely related in content.

**Messe Düsseldorf GmbH** – Germany  
[www.valveworldexpo.com](http://www.valveworldexpo.com)  
[www.valveworldexpoamericas.com](http://www.valveworldexpoamericas.com)

# GRP surface protection for gas connection pipe

Two pipelines, each 30m in length and with a diameter of 800mm, have been successfully installed using the pipe jacking method. To protect the corrosion resistance layer of PE, the pipes were coated with the BWB system.

The BWB system ('Berolina Wickelrohr Beschichtung' – Berolina spirally wound pipe coating) is a glass fibre reinforced plastic (GRP) coating that prevents mechanical damage to the corrosion protection layer during trenchless installation methods.

The system was applied to five gas pipes, each with an individual length of 12m, in the plant of BKP Berolina Polyester GmbH & Co KG in Velten near Berlin, Germany. The 5mm-thick coating is made of resin-impregnated glass fibres, which were tangentially and

axially applied around the PE-sheathed steel pipe in a winding process.

The styrene-free vinyl ester resin (VE) used for this application is particularly environmentally compatible and is cured by UV light. All pipes were coated after the shortest possible lead time. A 20-tonne overhead crane loaded the pipes onto specially widened low-loaders, and they were delivered directly to the construction site.

The pipe jacking method was chosen due to the circumstances on site. The connecting pipe lines for a newly re-built compressor station lay directly under the B 197 federal trunk road. A 25m-long and 5m-wide start pit with a depth of 4m was excavated for the pipe jacking.

After the first 12m-long pipe had been successfully pressed into the ground, the second pipe could be welded on. The weld was insulated by applying PE adhesive tape and then covering it by means of handmade laminate (glass fibre mats in conjunction with resin) and curing on-site using UV light.



Curing of the GRP surface protection

In the third step, the contractor Vorwerk divided a 12m-long GRP coated steel pipe into two 6m-long pieces. One of these pieces was welded onto the 24m-long pipe section already in the ground, and the weld was re-insulated and covered. This procedure was repeated for the second pipe line.

The chosen pipe jacking method allowed traffic on the B 197 between Waltersdorf and Bohnsdorf to be maintained without restrictions. Based on the soils report, jacking the steel pipes with an unprotected outer PE coating was classified as too risky.

Since 1997 BKP Berolina has coated more than 100,000m of steel pipes with this special impact-resistant GRP coating. The gas network operator opted for the BWB system due to this experience and the characteristic values.

**BKP Berolina Polyester GmbH & Co KG** – Germany  
 info@bkp-berolina.de  
 www.bkp-berolina.de



Gas pipes with (left) and without BWB surface protection

## Tube and pipe producer of the year

TMK IPSCO was recognised as Tube and Pipe Producer of the year for 2014 at *American Metal Market (AMM)* magazine's sixth annual Awards for Steel Excellence banquet in June.

In accepting the award, TMK president and CEO David Mitch said, "This is certainly excellent recognition for our record-setting performances for safety, productivity, value-added products and shipments in 2014."

Presenting the award, *AMM* editor-in-chief Bristol Voss said, "The winners

represent the best companies in the global steel industry, embodying innovation and ingenuity.

"To be named a winner truly signifies excellence in products, processes and people."

TMK is a global manufacturer and supplier of steel pipes for the oil and gas industry, operating more than 30 production sites in the USA, Russia, Canada, Romania, Oman, UAE and Kazakhstan, and two R&D centres in Russia and the USA. In 2014, TMK's

pipe shipments totalled 4.4mn tonnes. The largest share of TMK's sales belongs to high margin oil country tubular goods, shipped to customers in more than 80 countries.

TMK delivers its products along with an extensive package of services in heat treating, protective coating, premium connections threading, warehousing and pipe repairing.

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

## Pipeline inspection technology roadshow

Precision measurement specialist Optical Metrology Services (OMS) hosted a dedicated pipeline inspection technology roadshow at the Subsea UK headquarters in Aberdeen, UK, in July. The event saw the launch of the company's latest innovation for inline inspection.

As well as receiving a preview of the new tool from OMS – described as an industry-first for real-time integrity inspection – attendees had the chance to find out more about the company's range of technology and how it can help increase project efficiency. This technology includes pipeline fit-up solutions, as well as a portfolio of inspection tools and software.

Providing an opportunity to engage directly with the OMS team, the event also covered the company's latest project news and announcements, including an introduction to the new weld analysis software. This powerful program collects and analyses, then presents a report to the user, enabling in-line, real-time qualification of the weld.



*The North Sea seen from Aberdeen*

David Gray, marketing and communications manager at OMS, commenting before the event, said, "Hosting the industry's first pipe inspection roadshow to profile our market-leading technology portfolio is hugely exciting for the OMS team, not least because we will be unveiling our new innovation for weld inspection for the first time.

"The event has been designed to provide an opportunity to update the industry on the latest developments in pipeline inspection. The real-time inspection of pipes has a key role to play in the industry's future."

**Optical Metrology Services – UK**  
info@omsmeasure.com  
www.omsmeasure.com

## Bibby delivers subsea projects to Asia Pacific

Bibby Offshore's Asian division, Bibby Offshore Singapore (BOS), has expanded its foothold in the Southeast Asian oil and gas sector by securing significant contracts in the first half of 2015.

Drawing on its international fleet of subsea support vessels and work class ROVs, the past six months have seen the division being appointed to perform ROV pipeline inspection, remedial and project management work for companies including Moattama Gas Transportation Company (MGTC) offshore Myanmar, and Singapore-based Seascope, a Mermaid Subsea Services company.

Most recently, in April 2015 BOS completed work for Indian-based Larsen & Toubro, a technology, engineering,

construction, manufacturing and financial services company that appointed BOS to perform ROV inspection work on its Yetagun D Platform offshore Myanmar. The project involved a cathodic protection survey, anode survey and flooded member inspection in water depths of up to 110m.

Peter Hughes, managing director at BOS, commented, "We are committed to supporting the continued development of the region's energy sector, and provide efficient and successful delivery of subsea projects to the Asia Pacific region and India.

"We strive to be seen as a leading supplier of specialist ROV equipment and experienced personnel, and look



*Peter Hughes, managing director at Bibby Offshore Singapore*

to further position Bibby Offshore Singapore as the partner of choice."

**Bibby Offshore Ltd – UK**  
info@bibbyoffshore.com  
www.bibbyoffshore.com



We are proud to  
give our head to  
your success

Tel: +90 262 724 92 92

[info@kartalbombe.com.tr](mailto:info@kartalbombe.com.tr)

[www.kartalbombe.com.tr](http://www.kartalbombe.com.tr)



# Contech Engineered Solutions helps build 9/11 site

Contech Engineered Solutions has supplied a new stormwater detention system to Liberty Park, an elevated public park under construction in the new World Trade Center in New York City.

*Contech Engineered Solutions' DuroMaxx installation at Liberty Park*



Liberty Park will have a capacity of 750 people, and will sit 25ft above Liberty Street, overlooking the National September 11 Memorial & Museum.

The park will feature a 20ft-high 'living wall', and the St Nicholas Church, destroyed in the September 11 attacks, will be rebuilt in the park.

A stormwater detention system was needed to meet NYC Department of Environmental Protection stormwater regulations, which call for the reduction of the quantity of stormwater runoff leaving a site by temporarily storing the runoff that exceeds the site's allowable discharge rate, and releasing it slowly over time.

Since the park will sit on the roof of the Vehicular Security Center, it is imperative the detention system is watertight.

Contech consulted with engineers at the Port Authority of New York & New

Jersey, who specified a stormwater detention system made from 197 linear feet of DuroMaxx® steel reinforced polyethylene (SRPE) that will provide approximately 2,500ft<sup>3</sup> of stormwater storage. DuroMaxx achieves a level of watertight joint performance that is claimed to set it apart from conventional pipe products.

Contech also consulted with the contractor Oliveira Contracting Inc to construct a custom hold down system to prevent the tanks from floating while being backfilled with cellular concrete.

"This was not a typical detention system. The watertight requirements and the hold down system required special consideration," said Tom Slabe, president of Contech's treatment segment.

"Everyone at Contech is proud our products are being used to rebuild such an important site."

Construction of the park is expected to be completed in early 2017.

**Contech Engineered Solutions – USA**  
[www.conteches.com](http://www.conteches.com)

## International companies confirm quality of Centravis products

Centravis, a provider of solutions in the seamless stainless steel tubes segment, has received approval from LyondellBasell and Chicago Bridge & Iron Company (CB&I).

Providing products and services around the world, Centravis sees product certification by credible enterprises as a sign of its quality and reliability.

"Public endorsement from the world's leading manufacturers and developers confirms that our products meet

highest international standards, and strengthens our position in the international market," said Centravis sales director Vyacheslav Erkes.

LyondellBasell, the world's third largest independent chemical company, engages in manufacturing a wide range of goods and products from food packaging to clean fuels, durable textiles, medical supplies, building materials and automotive components.

CB&I is a large international con-

glomerate involved in the design and construction of the production, transportation, storage and processing of oil and gas. Its global expertise allows it to implement large-scale projects, even in the most difficult of conditions.

Centravis products have passed certification by ADCO, ADMA-OPCO and ZADCO – all key oil companies in the UAE.

**Centravis – Ukraine**  
[www.centravis.com](http://www.centravis.com)

# Contracts awarded for Browse FLNG project

Technip Samsung Consortium has been awarded two contracts by Shell for the Browse floating liquefied natural gas (FLNG) project in Australia, operated by Woodside.

The Browse project covers the realisation and installation of three FLNG units to develop the Brecknock, Calliance and Torosa fields in the Browse Basin, 425km north of Broome, Western Australia. The project will capitalise on Shell's FLNG experience, as well as on Woodside's offshore and subsea development expertise.

The first contract awarded to Technip Samsung Consortium covers the front-end engineering design (FEED) elements of the Browse FLNG project, taking into account the composition of the gas, local weather conditions and factors specific to each of the three fields.

The second contract covers the engineering, procurement, construction and installation of the three FLNG units of the Browse project. This contract is subject to the final investment decision from the client at the end of the FEED.

The Browse project will benefit from insights brought together by both Shell and Technip Samsung Consortium from the design and construction of Shell's Prelude FLNG facility, and aims at maximising the replication of Prelude FLNG for the three FLNG units of the Browse project.

Nicoletta Giadrossi, president of Technip's 'Region A' (Western Europe, Africa and India), stated, "We are proud to have been awarded this contract which will associate the know-how and expertise gained on Prelude FLNG by our teams, while reinforcing our partnership with Samsung Heavy Industries."



A gas platform off Western Australia

Nello Uccelletti, president onshore/offshore of Technip, commented, "While FLNG represents a breakthrough in the industry, Technip's teams worldwide have played a key role in this technology since its inception by bringing together our unique combination of expertise in subsea developments and liquefaction facilities."

**Technip** – France  
www.technip.com

## IST- The Fitting-Specialist



Our unique stock of bw fittings is one of a kind. Where all usual colleague 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 WP91 45°, 90° and 180°LR plus 90°, 180° in SR bends, concentric and eccentric reducers and (reducing)tees with reductions like 4"x1.1/2", 8"x2.1/2", 8"x3" and 10"x4" and also caps, stockprogram in sizes 1/2"-24" and wallthickness up to SCH XXS and 160, in addition to SCH100, SCH120 and SCH140 for many sizes. Also WPL3 in stock.



**INTERSERVICE TRADING**

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

**The Power is Our Stock**

## Automated warehouse at core of new distribution centre

Pipe Center has opened a new distribution centre in Measham, Derbyshire, UK, the newest and most technologically advanced distribution operation in the supply chain of parent company Wolseley UK.

The 142,000ft<sup>2</sup> facility has given Pipe Center the ability to provide next-day delivery across its entire network, and has created more than 50 new jobs.

At its heart is a bespoke, 3,332-location KASTOunicompact 4.0 automated warehouse, built in Germany and supplied through Kasto Ltd. The cassette-type tube storage system provides dynamic goods-to-man presentation for efficient picking, which reduces the amount of manual handling required.

The warehouse structure, which required the installation of 182 drive piles to provide deep foundations, has boosted storage capacity by 20 per cent compared with the previous operation, which relied on storage of long stock using a mixture of cantilever racking and bulk stacking. There was also a separate section for small parts and an area for pallet storage.

The Kasto system has reduced the distance warehouse operatives

have to move when picking, speeding the consolidation of orders. The warehouse design also increases the height used for storage of Pipe Center's stock keeping units.

The Kasto control interfaces with the Measham centre's HighJump warehouse management system, which offers tracking and traceability of inventory, further maximising efficiency.

The resulting optimised storage and picking coupled with improved stock management allows an even broader range of products to be stored and delivered to the branch network.

The portfolio includes Bondloc, Geberit, Ideal Stelrad, Spirax Sarco and Marla Tube Fittings.

The 3,332 cassettes, each 7m long, are arranged in 78 blocks horizontally and 22 rows vertically to a height of 12m on both sides of a central area, along which a picking crane travels on rails.



*A view of the KASTOunicompact 4.0 automated warehouse for pipe and other materials at the Measham distribution centre*

Some locations are not filled due to the presence of building columns.

The crane travels with two cassettes, weighing up to 4,150kg each, between the store locations and three input/output stations, extracting and/or returning material at up to 160m/min longitudinally and 40m/min vertically. These motions are performed simultaneously for maximum productivity, while cassette pulling and return speed is up to 80m/min.

Andy Wighton, managing director of Pipe Center, and Climate Center, commented, "We have created one of the most dynamic and advanced distribution centres in the industry that will help us achieve customer service excellence. Measham DC is ideally placed geographically and fits with our supply chain strategy to operate as efficiently as possible. It optimises our distribution capability for Pipe Center and Climate Center so we can offer our customers next-day delivery, and accommodates our exciting growth ambitions for the next ten to 15 years."

**Pipe Center – UK**  
[www.pipecenter.co.uk](http://www.pipecenter.co.uk)

**Kasto Ltd – UK**  
[sales@kasto.uk.com](mailto:sales@kasto.uk.com)  
[www.kasto.uk.com](http://www.kasto.uk.com)

*One of the input/output stations serving the KASTOunicompact warehouse*





# New facilities come out of the pipeline

A UK-based specialist engineering consultancy that was established by four former British Gas engineers is celebrating its 20<sup>th</sup> year in the oil and gas sector by expanding its office space and opening a custom-made training suite.

MACAW Engineering, whose name is taken from the initials of some of its principal activities (materials and corrosion and welding) is part of the worldwide technology company Rosen Group, and now has more than 90 employees and a prestigious headquarters in Newcastle, UK.

The company specialises in pipeline integrity, corrosion management, welding and materials technology, and bespoke studies and testing. Since 2009, growing demand for its services has seen turnover steadily increase from £2.9mn to last year's £7mn. The move to the current location took place in 2011, but the firm's rapid growth has necessitated the allocation of new office space.

The additional floor space contains a training suite, reception area and a number of meeting rooms. In keeping with MACAW's environmental policy, the firm has supplied a custom-built changing room complete with showers for those staff who regularly cycle to work.

General manager Roland Palmer-Jones said, "Our new facilities will help us in maintaining our global reputation for competence, quality and professionalism.

"We are a very progressive company that believes in getting things right first time and good training is at the root of our quality services. We have experienced strong sustainable growth from the original group of just four engineers in 1996 to 91 staff this year, and we will continue to expand based on our ability to tackle challenging problems and provide cost-effective solutions to our clients across the energy sector."



Engineers in the new training room

**MACAW Engineering Ltd – UK**  
 info@macawengineering.com  
 www.macawengineering.com

## **NEW!** WELDERS STOOL For Fabrication Shops



- ✓ Lock washer for quick seat adjustment
- ✓ Stamped steel seat with air holes
- ✓ All steel construction
- ✓ Seat contained to stool – will not come out accidentally
- ✓ Cozy seat conforms to body even during 8 hour shifts
- ✓ 300 lb/135 kg capacity  
 Max height: 22" / 55.9 cm  
 Min height: 15" / 38.1 cm



**SUMNER**  
 SUMNER MANUFACTURING COMPANY, INC.

For more information visit our website!

[www.sumner.com](http://www.sumner.com)

## MRC awarded SABIC valve supply contract

MRC Transmark Middle East FZE, a subsidiary of MRC Global Inc, has signed a framework agreement with Saudi Basic Industries Corporation (SABIC), naming MRC Transmark Middle East as one of SABIC's primary valve suppliers for operations in Saudi Arabia.

SABIC, headquartered in Riyadh, Saudi Arabia, ranks among the world's top petrochemical companies. It operates from more than 50 countries and has more than 60 manufacturing and compounding plants across the Middle East, Asia, Europe and the Americas.

The new framework agreement covers MRC Global's supply of valves to all

22 of SABIC's production complexes in Saudi Arabia, and is an expansion of their current framework agreement, which includes all of SABIC's European facilities. Through its subsidiary McJunkin Red Man Corporation, MRC Global has also served as the primary pipe, valve and fitting (PVF) provider to SABIC's US operations for more than 25 years.

"We are grateful for the trust SABIC has placed in MRC Global with this agreement," said Andrew Lane, MRC Global chairman, president and CEO. "We look forward to expanding upon our strong relationship and solid track record to support SABIC in this

important energy-producing country." MRC Transmark Middle East will initially support SABIC's Saudi Arabian business from its regional distribution centre in the Jebel Ali Free Zone. The 2,787m<sup>2</sup> (30,000ft<sup>2</sup>) warehouse and three acre pipe yard has maintained approximately \$20mn inventory of PVF products to support the region.

MRC Global is committed to opening a technical support and storage facility in the Kingdom of Saudi Arabia and is in the final stages of agreeing to the details with a local partner.

**MRC Global Inc – USA**  
[www.mrcglobal.com](http://www.mrcglobal.com)

## Contract for heat exchanger tubes

Peninsular de Vastagos has completed the supply of more than 200 tons of stainless steel seamless tubes for boilers and heat exchangers for a sulphuric acid plant in Turkey.

The contract, which was awarded early this year, included the supply of Ø 38-114.3mm seamless tubes in various grades (316L, 321 and 321H) with lengths up to nearly 15m. Peninsular de Vastagos, in cooperation with one of its approved manufacturers, was able to manage complex logistics and meet strict delivery time requirements and technical specifications. The company was recently awarded another contract for the supply

of a complete package of pipes, fittings and flanges for the same project.

Peninsular de Vastagos states that in recent years it has built a strong reputation for supplying complete piping packages and customised services for engineering companies, contractors and end-users in the most demanding industries. From its extensive stock or in collaboration with manufacturers worldwide, the company can source and supply any piping materials.

As part of Peninsular de Vastagos's ongoing expansion, the company has commenced construction of its new

warehouse and service centre. The warehouse will give increased capacity, not only in respect of stocking materials but also for processing and delivering daily orders and complete packages for industrial projects, where the aim is to provide both best-in-class quality and service. The construction is targeted to be completed next year.

Peninsular de Vastagos is a stockist and distributor of steel tubes and pipe components for all industrial sectors.

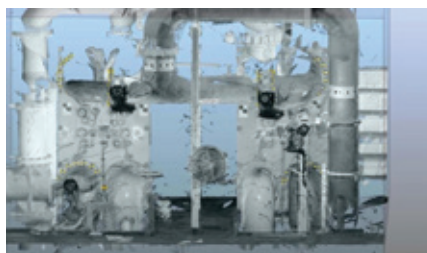
**Peninsular de Vastagos SL – Spain**  
[info@peninsulardevastagos.es](mailto:info@peninsulardevastagos.es)  
[www.peninsulartubes.com](http://www.peninsulartubes.com)

## 3D laser survey in the Bahamas

As an idyllic holiday destination, the Bahamas is known for its white beaches, crystal clear waters and amazing sea life (including swimming pigs). This exotic destination was recently visited by an expert engineer from Pipex px.

Casper Kruger, I.Eng MIMechE, flew to Grand Bahama to conduct a 3D laser survey on board a Stena DrillMAX Vessel. The existing copper nickel (CuNi) pipework had degraded beyond repair due to seawater corrosion.

The survey was conducted in six different engine and cooling rooms



*Faro point cloud with Leica flange orientation data*

using a Faro 3D scanner and Leica Total Station, to capture flange and bolt orientations for in-service install. This not only saves time, but also ensures

that the replacement spools fit the first time around.

The client was updated on a daily basis to ensure that every detail was captured, and was said to be so impressed with the work produced that two additional scopes were added. The 3D laser survey will provide as-built records of the pipework, and replacement spools made to fit, resulting in a fast-track installation.

**Pipex px – UK**  
[sales@pipexp.com](mailto:sales@pipexp.com)  
[www.pipexp.com](http://www.pipexp.com)

## Distributors attend lubrication academy

In June Metalube hosted its first ever 'Academy' at its headquarters in Manchester, UK.

With 13 guests attending from across Europe, China, Turkey, Egypt and the UAE, the Academy was designed to keep both distributors and agents informed of new and existing product ranges, as well as provide them with essential sales tools.

Douglas Hunt, commercial director at Metalube Ltd, commented, "We had a great couple of days and it's been really productive to have so many of our international team together. Product knowledge is an essential sales skill, and fully understanding our products' features allows our representatives to present the benefits accurately and persuasively. We know that customers respond to enthusiastic sales staff who are passionate about their products and eager to share the benefits with them."

Metalube manufactures a range of industrial lubricants, and has offices in China, India and Brazil.

**Metalube Ltd** – UK  
 post@metalube.co.uk  
 www.metalube.co.uk



Attendees at the Metalube Academy

### FIT & FORGET

**HIGH PERFORMANCE TUBING FOR THE OIL & GAS INDUSTRY**



Take advantage of our 150 years combined expertise in processing exotic and high performance alloys such as **6Mo, 904L, 825, 625** and **Super Duplex** - for less maintenance, less downtime and big cost savings.

- COILS
- CHEMICAL INJECTION
- INSTRUMENTATION
- HIGH PRESSURE
- CONTROL LINES
- STRAIGHT LENGTHS



**finetubes**  
 www.finetubes.com  
 +44 (0) 1752 876416  
 sales.finetubes@ametek.com



**SuperiorTube**  
 www.superiortube.com  
 +1 610.489.5200  
 sales.superiortube@ametek.com

**AMETEK**  
SPECIALTY METAL PRODUCTS

# SURAJ

India's Leading Manufacturer of  
 Stainless Steel Seamless Pipes,  
 Tubes and 'U' Tubes

[www.surajgroup.com](http://www.surajgroup.com)



<b>Materials</b>	: All Austenitic, Ferritic, Duplex & Super Duplex Stainless Steel
<b>Specialization</b>	: Heat Exchanger / Instrument Tubes Bright Annealed / Polished Tubes
<b>Pipe Length</b>	: Up to 12 Mtr. Long
<b>Tube Length</b>	: Up to 30 Mtr. Long
<b>Testing Facilities</b>	: All Required Testing Facility Available
<b>Inspection</b>	: We are supplying under all Customers & Third party Inspection Agencies.



**SURAJ LIMITED**  
 Serving World Wide Oil, Gas & Power Industries

**REGD. OFFICE** : 'SURAJ HOUSE',  
 OPP. USMANPURA GARDEN,  
 ASHRAM ROAD, AHMEDABAD-380 014,  
 GUJARAT (INDIA)  
 PH. : 0091-79-2754 0720, 2754 0721  
 FAX : 0091-79-2754 0722  
 E-mail : suraj@surajgroup.com

**MUMBAI OFFICE** :  
 KANJI MANSION, BLOCK NO. 3,  
 1ST FLOOR, 311 / 317, S.V.P. ROAD,  
 MUMBAI - 400 004. (INDIA)  
 PH. : 0091-22-2389 1649, 2389 1758, 6636 2534  
 FAX : 0091-22-2385 4979  
 E-mail : surajm@surajgroup.com

*Progress is Life*

# LEED Platinum building with PEX pipe heating and cooling wins industry award

When San Diego State University (SDSU) razed its student union building to replace it with a highly sustainable, 202,000ft<sup>2</sup>, three-storey structure, the goal was to receive LEED® Platinum status. Not only did it qualify, but the project recently was also named a Project of the Year by the Building and Construction division of the Plastics Pipe Institute (PPI), a trade association representing all segments of the plastic pipe industry.

In order to enable the new HVAC system at the new student union building to consume 40 per cent less energy than a traditional system, an in-slab radiant heating and cooling system was installed. This was one of the qualifications for the building to meet LEED Platinum requirements. It also reduced energy use and improved indoor air quality. The system used more than 14 miles of PEX tubing from Uponor North America in 36,000ft<sup>2</sup> of floor space.

The LEED Platinum SDSU Aztec Center is a project known for its sustainable design, including a green roof and underground rainwater collection storage. Nearly 80 per cent of the materials from the original building were recycled or reused in the new structure. Incorporating a radiant heating and cooling system that uses flexible, durable PEX piping for the



*The SDSU Aztec Student Union Center is a LEED Platinum structure with a PEX-based hydronic radiant heating and cooling system*

in-slab system helped the project meet its design requirement of consuming 40 per cent less energy while also offering greater comfort to occupants.

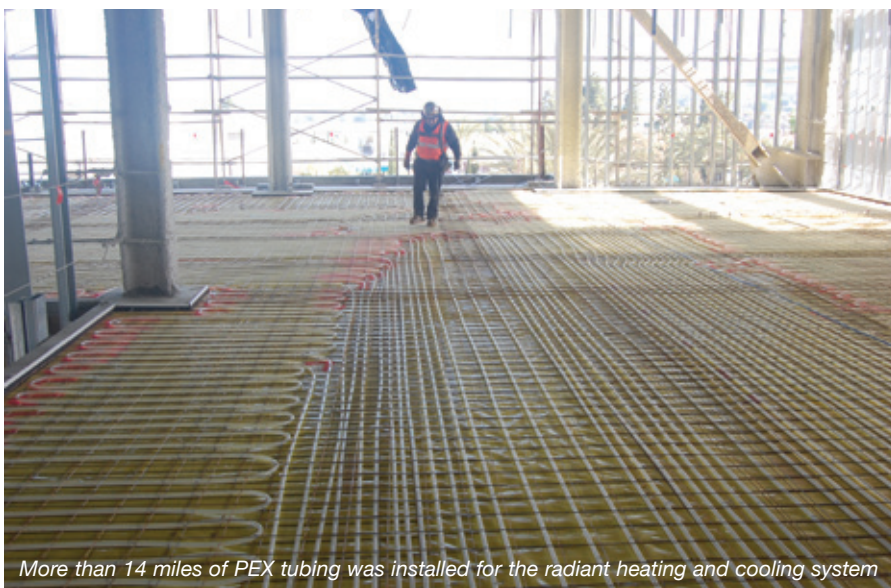
Because water has the capacity to transport energy 3,500 times greater than air, a PEX-based hydronic system can heat and cool a structure using much less energy than a traditional forced-air system. Radiant heating and cooling also aligns with the body's natural thermal curve, so occupants

are even more comfortable with radiant than with a forced-air system.

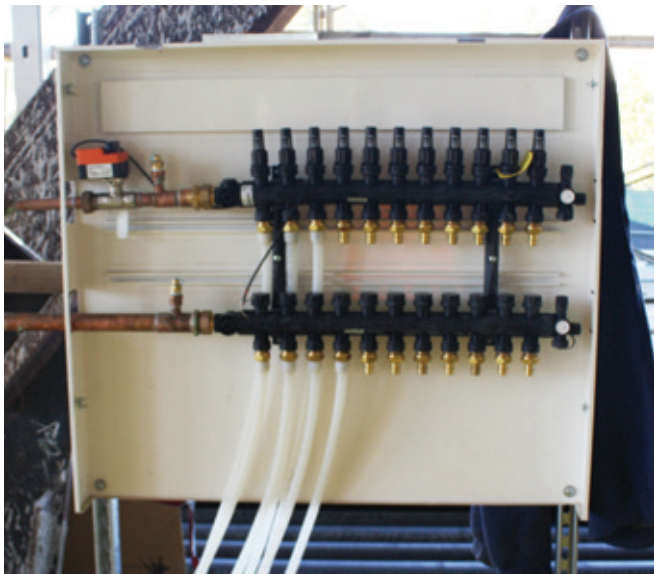
Completed in 2014, the project used 75,000ft of Uponor's 5/8" Wirsbo hePEX™ oxygen-barrier PEX tubing on three floors on the west side of the building to serve 36,000ft<sup>2</sup> of space, including dining and lounge areas on the first floor and meeting and office spaces on the second and third floors. The tubing was spaced 6" on centre and fed by 21 Uponor engineered polymer (EP) manifolds. The chilled and heated water is supplied from the campus central utility plant. The PPI award was presented to Uponor during the association's annual meeting held in Coeur d'Alene, Idaho, USA, in May.

"With the emphasis on LEED and green building continuing to grow with each passing year, use of a PEX-based system in projects such as the university's new student centre shows the importance plastic piping plays in sustainable building practices," stated PPI president Tony Radoszewski.

"It can effectively both heat and cool a large structure to keep occupants comfortable, and also offer a 40 per cent reduction in energy consumption. In fact, Uponor has seen significant



*More than 14 miles of PEX tubing was installed for the radiant heating and cooling system*



The project used 21 Uponor engineered polymer manifolds, which fed the PEX tubing loops

growth in its radiant heating and cooling projects over the past several years primarily due to the sustainability of the system. Because projects can incorporate hydronic radiant systems into other sustainable building practices, such as geothermal, solar and a dedicated outside air system, it is an ideal option for large commercial structures that consume great amounts of energy.

“Using PEX in a LEED Platinum project to help boost energy efficiency shows the value a PEX-based system brings to sustainable building practices. In addition, with the flexibility and strength of a PEX piping product that can be buried in the slab to effectively warm and cool a large structure, the professional community – including installers, project managers, architects and engineers – as well as the students, families, faculty and staff using the building, can see that PEX is a durable product that is manufactured to last for decades of successful use.”

According to Randy Knapp, director of engineering for PPI’s Building and Construction division, “PEX pipe is a product that satisfies the needs of homeowners, builders and plumbers by providing long-term performance, and making installations more labour- and cost-efficient.

“PEX is the material of choice for radiant heating systems and is quickly replacing copper for residential potable water plumbing. Other applications of PEX include AWWA municipal water service; snow and ice melt systems; turf conditioning; residential fire sprinklers; and geothermal systems. Typically found in sizes from 3/8" to 2", and up to 3" in diameter, PEX pipe comes in straight lengths or coils.”

The PPI Project of the Year recognition programme honours significant industry contributions and professional achievements (see page 24).

**Uponor – USA**  
www.uponor-usa.com

**Plastics Pipe Institute – USA**  
www.plasticpipe.org



E-mail: sales@tag-pipe.com  
Tel: +44 (0) 1869 324 144

PIPE EQUIPMENT SPECIALISTS LTD



FOR OUR LATEST PRODUCT SUMMARY BROCHURE VISIT:  
[WWW.TAG-PIPE.COM](http://WWW.TAG-PIPE.COM)



INTRODUCING...

## THE TAG E-Z FAB PIPE CUTTING & BEVELLING MACHINE

A New, Unique, Self-centering, Heavy Duty dedicated Pipe Cutting & Beveling machine. Operated via a Touch-Screen Delta Control, a Heavy Duty 1.75 kW Servo Motor, gives the E-Z Fab unrivalled power & torque, for accurate repeatable process cuts & bevels on almost any material and wall thickness application.

- 7 Models available
- 4 Models cover - 1" to 30"
- Unrivalled wall thickness capabilities
- Capable of cutting all materials
- Rapid Self Centering Jaw System
- Touch screen control with preset cutting speeds
- Unrivalled cutting speeds and times
- 6" Carbon Steel
- 22mm Wall Thickness
- Setup, Cut, AND Bevelled...
- 6 mins 34 seconds!!!



Pipe cutting has changed... Join the revolution!



## HANDY PURGE 100SC WELD PURGE MONITOR

Measures oxygen levels down to 0.01% (100ppm)  
The latest, entry level welders' toolbox monitor

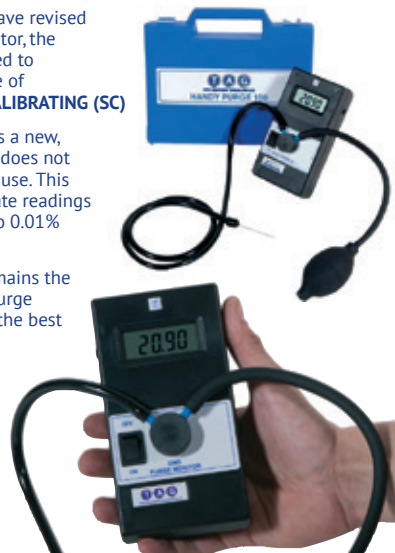
**NEW SELF CALIBRATING** - TAG have revised their most popular Oxygen Monitor, the Handy Purge 100, and are pleased to announce the Worldwide release of **THE HANDY PURGE 100 SELF CALIBRATING (SC)**

The **Handy Purge 100SC** features a new, upgraded Oxygen Sensor, which does not require calibration prior to each use. This produces faster and more accurate readings of oxygen concentration down to 0.01% (100 parts per million).

The **Handy Purge 100SC** still remains the most cost effective entry level Purge Monitor on the market, offering the best quality, at the best price.

The **HP100SC** is suited to most general high purity material welding applications and is best used in conjunction with one of our TAG Purge systems.

Get in touch with one of the TAG TEAM to order your New HP100SC today!



**WE'VE MOVED!**  
OUR NEW DETAILS ARE:



### Head Office

TAG PIPE EQUIPMENT SPECIALISTS LTD  
Unit 15 & 16 Grendon Industrial Estate, Grendon Underwood,  
Aylesbury, Buckinghamshire, HP18 0QX England  
Tel: +44 (0)1869 324 144 E-mail: sales@tag-pipe.com

[www.TAG-PIPE.com](http://www.TAG-PIPE.com)

## Extending lance tube life from a month to a year

Yong Steel Group Co Ltd, an iron and steel producer in China, was able to extend the service life of its pulverised coal injection (PCI) lance tubes – one of the most important blast furnace components – from as little as one month to a year, by replacing standard grade tubing with Sandvik 253 MA.

Sandvik 253 MA is an austenitic chromium-nickel steel that is designed for high-temperature oxidation resistance, carburisation corrosion resistance and high-temperature strength. These properties have assisted in reducing the cost of PCI through improved energy efficiency and production consistency.

“We understand that our customers require lance tubing that is capable of higher performance and longer service life, in order to fully realise the remarkable economic benefits made possible by PCI applications,” said David Zhou, technical marketing specialist, Sandvik.

“Worn out or bent lance tubes may cause the shutdown of the blast furnace and result in huge economic losses.

This can be avoided with Sandvik 253 MA, which has higher creep rupture strength, abrasion resistance and better corrosion resistance at higher temperatures. The grade has improved high temperature strength and structural stability to give added safety benefits.”

While standard grades last between one and two months, or for as little as two to three weeks with standard AISI 304L, Sandvik 253 MA is claimed to be able to increase PCI lance tube life by more than three times. It has been used to replace familiar PCI lance tubes manufactured from conventional materials such as 310S, TP 321H and 316L. The increased cost can be offset by the extended lifecycles and reduced maintenance costs.

The Sandvik material exhibits high oxide scale density and strong adhesion, due in part to its extra 0.05 per cent cerium content. In combination with



Sandvik lance tube

added 1.5 per cent silicon, this gives the grade high-temperature oxidation resistance and high-temperature carburisation resistance properties. Added 0.17 per cent nitrogen improves the material's high-temperature creep rupture strength over standard grades such as AISI 310.

Mr Zhou added, “Sandvik 253 MA is proving crucial to enhancing advantages such as better balanced coking coal resources and improved environmental protection, while improving safety in instances where it is dangerous for workers to replace the lance tube.”

**Sandvik Materials Technology** – Sweden  
[www.smt.sandvik.com](http://www.smt.sandvik.com)

## Tungum appoints VP of sales in USA

Tungum Ltd has announced the appointment of Ruben Muro as vice president of sales for the USA. His responsibilities include providing sales

*Ruben Muro*



and technical assistance to customers using Tungum tube – C69100, for hydraulic and pneumatic purposes in a wide variety of applications and industries.

Mr Muro holds a BS in Metallurgical Engineering from The University of Texas at El Paso, and is a member of NACE, API and ASM. Before joining Tungum, he was employed by Corrosion Materials in Houston, Texas, where he held a number of positions including branch manager, and manager of technical sales.

Prior to Corrosion Materials, he was accountable for technical sales of magnesium, strontium and calcium products in the US and in Latin America at Timminco Metals.

Mr Muro has also worked for Carpenter Technology as regional metallurgist, as well as for Chaparral Steel (now Gerdau), a division of TXI, where he served in various capacities, both technical and commercial, serving customers in the USA, Canada and Mexico.

Sean Hammond, sales and marketing director of Tungum, commented, “We are extremely pleased to have Ruben join our team. His wealth of materials and sales experience will give a massive boost to our operation, in the heart of where engineering and material specification decisions are made.”

**Tungum Ltd** – UK  
[sales@tungum.com](mailto:sales@tungum.com)  
[www.tungum.com](http://www.tungum.com)

**TOL**  
expo 2015

The International Show for  
Sheet Metal, Coil, Tube and  
Section Equipment

10<sup>e</sup>  
ANNIVERSARY

# Visit TOLEXPO and discover the latest innovations



assemblage  
découpage  
formage  
poinçonnage  
oxycoupage  
découpe jet d'eau  
refendage - pliage - cisailage - FMS - chanfreinage - ébavurage - dégraissage  
lavage - mesure - contrôle - XAO - profilage - outillage - robotique - manutention  
stockage - planage - repoussage - protection - sécurité - coupe à longueur  
outillage portatif - cintrage - usinage de tube - détournage - sciage...

soudage  
emboutissage  
roulage  
découpe laser  
découpe plasma  
encochage

Paris Nord Villepinte - France

**17<sup>th</sup> > 20<sup>th</sup> NOVEMBER**

**2015**



Your free access badge  
on [www.tolexpo.com](http://www.tolexpo.com)

Simultaneously with

**MIDEST**  
2015 PARIS



The world's leading industrial subcontracting show  
[www.midest.com](http://www.midest.com)

and

**maintenance**  
expo 2015



## AK Steel breaks ground for research and innovation centre

AK Steel has broken ground for its Research and Innovation Center at a ceremony held in Middletown, Ohio, USA.

The ceremony marked the start of construction of the company's new 135,000ft<sup>2</sup> facility, which is being built on a 16-acre site in the city's Renaissance District.

The company said that the \$36mn facility will be customer-focused, providing advanced technical support to the company's valued clients, as well as developing new and improved steel products for a number of markets.

"Today's ground-breaking ceremony represents another important milestone in AK Steel's long history of innovation in steelmaking technology," said James L Waincott, chairman, president and CEO of AK Steel.

"Once completed, our new state-of-the-art Research and Innovation Center will provide our talented researchers, scientists and engineers with the tools

they need to accelerate development of future game-changing products and processes."

The new facility will be home to the company's 76 researchers, scientists and engineers who will perform research, applications engineering, advanced engineering, product development and customer technical services. The company also expects to add 15 new full-time research positions.

The building will feature some of AK Steel's stainless steel products as part of the exterior design. Other features of the new facility will include state-of-the-art steel research and testing equipment and analytical tools; a 'customer experience' lobby showcasing the company's products and technologies, as well as its heritage of steelmaking; a tiered auditorium for technical conferences; and a technical information centre.

Various types of new research equipment will be incorporated into the building for improved testing, design

and modelling of new technologies and products, including the development of next-generation advanced high-strength steels for the automotive industry.

The facility will also house pilot lines that simulate the company's steel manufacturing operations, ranging from melting and casting, to hot- and cold-rolling, to final finishing.

The pilot lines will be used for enhancing existing products, and in experimentation for new and improved products.

The pilot line section will include a high bay area with a mezzanine from which customers may view the pilot processes. Construction of the new facility is expected to be completed by late 2016.

It will replace the company's existing research facility, which is located at another site in Middletown.

**AK Steel – USA**  
[www.aksteel.com](http://www.aksteel.com)

*At the ground-breaking ceremony (with shovels, from left), Eric Peterson, vice president of research and innovation at AK Steel; James L Waincott, AK Steel's chairman, president and CEO; and Larry Mulligan Jr, mayor of Middletown, Ohio, were joined by AK Steel's executive officers*



Photo credit: PRNewsFoto/AK Steel



## New tester at FABTECH show

Magnetic Analysis Corp (MAC) will feature eddy current and ultrasonic test systems, including the new Minimac® 55 eddy current tester and the Echomac® UT test system, at the company booth (N-1005) at the FABTECH show in Chicago, Illinois, USA. The new CE-compatible, single-channel Minimac 55 brings high performance eddy current testing to a broad range of production applications. It is the first eddy current tester to offer the capabilities of MAC's top-of-the-line Multimac in a powerful, compact design.

Especially suited for continuous production line testing where ease of setup is needed, without the need for constant operator adjustment, the Minimac 55 has software controls for all functions, including phasing, filtering and sensitivity, all while operating at speeds of over 4,000 fpm. Test results in full-colour polar and linear mode show real-time, true waveform signals for easy review on an on-site monitor or remote locations.

Minimac 55 can detect short surface and some subsurface defects such as laps, slivers and cracks in tube, bar, wire and parts, and weld line faults, including short ID or OD defects. Using the MID model, magnetic inclusions such as iron filings in copper material can be detected.

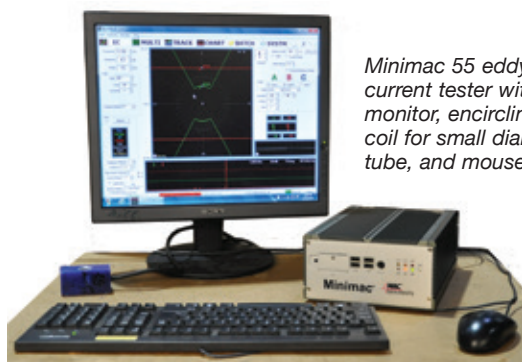
When networked, Minimac 55 can share the same library with multiple instruments on other lines, to ensure correct settings. Setup, monitoring, and reports with customer, product information, defect location, time, amplitude and phase can be stored locally or on the network for quality assurance.

MAC's broad range of encircling and sector test coils is available for use with the Minimac, which can also be configured for flaw or absolute mode, depending on the application. Coil platforms, including those with DC saturation for testing magnetic material, are offered.

The Echomac FD series ultrasonic tester will also be available at the booth at FABTECH, along with information on other MAC test systems and instruments.

### Magnetic Analysis Corp – USA

info@mac-ndt.com  
www.mac-ndt.com



*Minimac 55 eddy current tester with monitor, encircling test coil for small diameter tube, and mouse*

**GRILLO STEEL**  
THE WORLD OF PIPES

PEOPLE AND TECHNOLOGY  
WITH ONE COMMON PURPOSE:  
YOUR SATISFACTION.

STAINLESS STEEL PIPES

SPECIAL ALLOYS

AUTOMATIC WELDING PROCEDURES

**GRILLO STEEL S.R.L.**  
Via della Statistica, 11  
36016 THIENE (VI) ITALY  
Tel +39.0445.367092  
Fax +39.0445.367873  
info@grillosteel.it

[www.grillosteel.it](http://www.grillosteel.it)

CERTIFIED QUALITY MANAGEMENT SYSTEM  
ISO 9001:2008  
SINCERT DNV

## Plastics Pipe Institute industry awards

During its annual meeting in Coeur d'Alene, Idaho, USA, the Plastics Pipe Institute (PPI) announced recipients of awards through its yearly recognition programme honouring significant industry contributions and professional achievements.

Three individual members and six member-company projects were acknowledged for exceptional service and significant accomplishments involving the use of various types of plastics in pipe infrastructure. PPI is a major trade association representing all segments of the plastic pipe industry.

"Our association continues to grow and strengthen," stated Tony Radoszewski, president of the PPI. "We have had more members and guests attending our meetings, and have welcomed increased member participation for successive years now.

"At every event, we are seeing the trend of expanding knowledge and broadening industry growth in uses of plastics in pipe systems. Plastics continue gaining ground as venerated, proven solutions for new and existing applications.

"The PPI awards programme is one of the highlights of our annual meeting. The process involves members recognising other members – peers respecting peers – for efforts to improve our nation's infrastructure and to advance plastics for pipe of all kinds. It's exciting to see pipe being used in

different applications such as landfill gas gathering, which is representative of just one of the 'Project of the Year' winners. PPI saw record numbers of attendees at this past meeting who continually work on the technical, research and development aspects of our association's programmes and collaborative industry endeavours."

The PPI Projects of the Year award winners are profiled below.

### Building & Construction division

*PPI member company: Rehau  
Awarded project: École Secondaire Jeunes sans Frontiers (Secondary School for Youth Without Frontiers), Ontario, Canada*

To achieve maximum HVAC efficiency, the design included a Rehau radiant slab heating and cooling system, which circulates a heated or chilled water-glycol solution through a network of PEX piping installed in the floors throughout the entire facility. The radiant system enables the school to meet indoor environmental criteria related to air quality, noise reduction and occupant comfort, while also maximising space efficiency by eliminating bulky convectors and ductwork.

The system consists of 32,000m (104,700ft) of Raupex® 5/8" O<sub>2</sub> barrier pipe and 42 Pro-Balance® manifolds pre-piped with three-way valves into recessed manifold distribution cabinets. The PEX pipe was installed at the ground level in a concrete slab-on-grade design using a counter-flow spiral pattern to promote even surface temperatures.



*Kate Olinger of Uponor receives the PPI Project of the Year Award from PPI's Randy Knapp, director of engineering, Building & Construction division (left), and Tony Radoszewski, president (right)*

*PPI member company: Uponor  
Awarded project: San Diego State University Aztec Center*

In the spring of 2011, San Diego State University razed the existing student union building to replace it with a 202,200ft<sup>2</sup>, highly sustainable, three-storey building designed to house student offices, a recreation centre and an intercultural relations centre.

To meet the LEED® Platinum requirements, the HVAC system needed to consume 40 per cent less energy than a standard system. An in-slab radiant heating and cooling system was designed for the building, coupled with a dedicated outside air system (DOAS) to reduce energy and improve indoor air quality. The project used 75,000ft – more than 14 miles – of Uponor's 5/8" Wirsbo hePEX™ oxygen-barrier PEX tubing on three floors on the west side of the building, to serve 36,000ft<sup>2</sup> of space.

See page 18 for more details of this project.

### Conduit division

*PPI member company: Southwire Company  
Awarded project: Ameren's O'Fallon Renewable Energy Center*  
The O'Fallon Renewable Energy Center is Ameren's (St Louis Area Investor Owned Utility) first solar field for the region. Encompassing approximately



*Receiving the award from PPI's Randy Knapp, director of engineering, Building & Construction division (left), and Tony Radoszewski, president (right), is Lance MacNevin of Rehau*

20 acres in O'Fallon, Missouri, USA, it has more than 19,000 solar panels and will be one of the state's largest photovoltaic solar fields, generating 5.7MW of electricity – enough to power 650 average sized homes.

To connect the solar units, Southwire's SIMpull® Cable-In-Conduit (CIC) was used. CIC is a flexible HDPE plastic conduit with the individual cables preinstalled inside the conduit. The product is supplied on reels, and is installed by laying it in the trench. Therefore, when the CIC is installed, the cable is already installed, eliminating the need to pull wire.

The project allowed the contractor to realise the cost/labour savings potential of moving from traditional pipe and wire installation to an HDPE cable-in-conduit solution.

Having a flexible, continuous-length conduit speed installation by-passed the need for a complex arrangement of elbows, sweeps and connectors. Using cable-in-conduit also helped to relieve the backend labour required on the project by removing the need to pull cable.

## Corrugated Plastic Pipe division

*PPI member company: Prinsco, Inc*  
*Awarded project: ConAgra Foods Dry Foods Distribution Center Project*

Water management on this new construction site was challenging due to the large volume and size of pipe required. Approximately 500 acres drained through the property via an existing county drain. The engineer originally specified concrete pipe, but contractors were allowed to submit proposed design changes and related costs.

Poindexter Excavating offered large-diameter HDPE pipe from Prinsco as an alternative to concrete, based on its potential to save time and installation cost.

The HDPE pipe in diameters from 12" to 60" provided the same or better performance and could be used with the existing specified Class 1 backfill. The cost savings and value engineering of the HDPE pipe in lieu of concrete saved the project more than eight per cent over the entire utility package amount.

## Energy Piping Systems division

*PPI member company: Arkema, Inc*  
*Awarded project: Polyamide 11 Piping System For Landfill Gas Project*

This BioResource Development LLC (BRD) pipeline project connects landfill gas to the local gas distribution system. A three-mile piping system was required that could be operated at up to 200 psi to transport methane produced by the State Street Landfill, operated by Douglas County (Omaha, Nebraska, USA). The pressure requirements exceeded the tolerances that HDPE could offer, resulting in BRD's move to consider either polyamide 11 or steel. The up-front economics for PA11 were more attractive than steel, the company reported.

The PA11 is derived from a bio-renewable source, which fits with BRD's mission and focus on environmental sustainability. The pipe for this project was made from Rilsan® PA11, a product of Arkema, Inc. Georg Fischer Central Plastics LLC supplied the piping, fittings and transitions, offering a complete PA11 piping system.

## Municipal & Industrial division

*PPI member company: ISCO Industries*  
*Awarded project: Calder Road 39" Waterline Replacement Project*

Gulf Coast Water Authority (GCWA) and the City of League City, Texas, USA, were faced with the need to renew a critical 39" PCCP (pre-stressed concrete cylinder pipe) water transmission main.

The PCCP water main required replacement of approximately 6,800ft along Calder Road. The main, which interconnects the City of Houston and Galveston County, had been suffering from severe breaks and leaking joints. Maintaining capacity was imperative.

GCWA considered several trenchless methods, choosing Swagelining™ with HDPE pipe as it provided the best value. Murphy Pipeline Contractors utilised

ISCO Industries for its HDPE pipe for Swagelining due to its knowledge of the product, services and ability to meet critical time restraints with custom fabrication. ISCO provided 1,000mm OD pipe (39.37") inside a 39" ID host pipe.

**Plastics Pipe Institute – USA**  
[www.plasticpipe.org](http://www.plasticpipe.org)



Yonas Kebede, Formosa Plastics, flanked by PPI technical director Sarah Patterson and PPI president Tony Radoszewski



**Increased Flange stock range**  
from DK Jones Ltd



**A full range of F91 flanges from 150# to 2500# is now starting to arrive.**

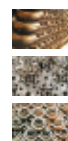
**When you need it fast you can rely on us to deliver the right product on time.**

**4,000 tons** of prime quality stock available for delivery to wherever in the world you need it.

**Fittings, Flanges and Pipe** to ASTM/ ASME standards. Carbon, Low Temp, Alloy & Stainless Steel grades.

**UK SALES**  
Tel: +44 (0)1642 222400  
E-mail: [uksales@dkjones.com](mailto:uksales@dkjones.com)

**PROJECT & EXPORT SALES**  
Tel: +44 (0)1789 772111  
E-mail: [sales@dkjones.com](mailto:sales@dkjones.com)



[www.dkjones.com](http://www.dkjones.com)



# products & developments

McElroy's Talon 2000

## Giant fusion machine vehicle tackles 2,000mm pipe jobs

The Talon 2000 – McElroy's largest fusion machine to date – has been designed to revolutionise the way large-diameter thermoplastic pipelines are built. It has the ability to lift 2,000mm pipe from the ground with its powerful jaws as the machine adjusts its height and orientation to correctly align and fuse pipe.

Fusion machines this size typically require a crane or a forklift to move them to the jobsite, but McElroy made the Talon 2000 a track-mounted, self-propelled vehicle that straddles the pipeline as a wireless remote control operator moves it from fusion to fusion.

"We built the Talon 2000 to take on the challenges of fusing large-diameter pipe, which is very difficult to move without

extra equipment and manpower," said McElroy president Chip McElroy.

"With the demand for increased pipeline capacity for growing populations in developing countries and the ongoing need to replace and expand the many aging infrastructures across the globe, it's very exciting to offer the machine that can best handle the job."

Other features include a quick-action facer that removes up to 1" of pipe per side in less than eight minutes, and an electric-powered indexer that safely and accurately positions the top-loading heater and facer into the fusion machine. The carriage converts to one fixed jaw and three movable jaws for easy tie-in capability. Its skid-steer and track-mounted features allow it to

position itself in tight spaces and move across rugged or uneven terrain.

The Talon 2000 has a built-in data logging capability to record fusion joint data that syncs with McElroy's DataLogger® Vault for storage and analysis in the cloud. A data-enabled SIM card allows remote access and real-time troubleshooting with a McElroy technical service specialist.

The self-contained Talon 2000 eliminates the need for a separate generator or hydraulic power unit. It is powered by an ultra-low sulphur diesel engine that provides electric and hydraulic power.

**McElroy – USA**  
fusion@mcelroy.com  
www.mcelroy.com

## Large-size press-fittings in industrial applications

The development of 'Big Size' and 'Super Size' diameter press-fittings is opening new markets, according to Eurotubi, especially in industrial applications where system performance and security are essential.

Planners and installers are increasingly discovering the beneficial characteristics of steel press-fitting systems. With larger diameters now available, press-fittings are no longer only for plumbing systems for construction and small industry, but can also be used in large flow systems.

Possible industrial applications include hydrocarbon distribution systems; distribution systems for certain chemicals; compressed air; heating systems for large industrial complexes,

hospitals and research centres; and water treatment plants for lines downstream from the treatment system.

The Eurotubi Pressfitting Technical Manual, which can be downloaded via the company's website, contains information on chemical compatibility with fluids, though in specific cases customers are recommended to contact Eurotubi's technical office.

In industrial system installations where safety and performance are essential, system construction speed is very important. Compared to other types of systems, Eurotubi Pressfittings not only allow assembly of a system in less time, but also enable reduced downtime for system maintenance or expansion. With a complete range of shapes available,

system design is less complex. The Eurotubi catalogue has various special hybrid shapes, and the company's research and development department is available to assist the customer with design execution and the production of new special shapes.

The Pressfitting system does not require the use of open flames or chemical substances for assembly. This makes it a suitable choice in areas with compounds and materials that are very flammable, such as chemical and petroleum industries. Eurotubi Pressfittings have numerous national and international certifications.

**Eurotubi Europa Srl** – Italy  
[info@eurotubieuropa.it](mailto:info@eurotubieuropa.it)  
[www.eurotubieuropa.it](http://www.eurotubieuropa.it)

## Facilitating lighter high-pressure GDI systems for the future

Lighter, energy-efficient cars of tomorrow, with low-emission engines, require the next generation of gasoline direct injection (GDI) engine components, which were promoted by Sandvik at Engine Expo 2015 in Stuttgart, Germany. Pressurfact™ is a new range of GDI tubing designed to handle higher operating pressures while delivering claimed weight savings of up to 40 per cent. The range offers design and operational benefits, with the ability to handle operational pressures over 350 bar/ 35 MPa.

"The development and introduction of Pressurfact means highly efficient gasoline direct injection systems can advance still further, continuing the development by manufacturers of high efficiency, low emission vehicles," explained Jari Ponsiluoma, Sandvik global product manager, for Pressurfact.

The drive to deliver lower emissions is being dictated by tougher regulations

in Europe, as well as in the USA and China. In particular, China has specified GDI as one of the power-train technologies of the future, with the government stating its intention to accelerate the development of direct injection fuel systems.

Designed for stronger, safer handling of fuel pressures with no pitting or cracking, standard Pressurfact is an austenitic chromium nickel steel designed for fuel rails and fuel lines.

Offering lightweight Duplex stainless steel tubing with mechanical strength, Pressurfact XP enables the reduction of tube wall thicknesses by up to 40 per cent, with the ability to handle the same high operating pressures as thicker tubes. Both Sandvik materials offer

high corrosion resistance and the ability to handle the increasing operational pressure levels being demanded for GDI fuel systems. Optimised for safe, reliable operation, as well as drilling and turning, when used in fuel lines they are easier to bend and shape as required.

**Sandvik Materials Technology** – Sweden  
[www.smt.sandvik.com/pressurfact](http://www.smt.sandvik.com/pressurfact)



## Metal and alloy products

G.Rau is a globally active supplier in the field of metal engineering. The company has achieved a degree of specialisation in the highly complex world of metals over the past 130 years.

With more than 540 employees, G.Rau is still a family-owned company, with three production sites in Pforzheim, Germany, one in Costa Rica, and a subsidiary in the USA.

G.Rau processes and refines more than 200 types of metal and metal alloys into products. The company is an expert in the manufacturing of strips, tubes and wires made of precious metals, special alloys and composite materials,



and also uses these pre-materials to manufacture precision parts and complex assemblies.

**G.Rau GmbH & Co KG** – Germany  
info@g-rau.com  
www.g-rau.de

## AT&T helps cities save water with new technology

AT&T, IBM and Mueller Water Products have developed a new solution to help cities save water. The solution uses Internet of Things (IoT) technology that can be installed quickly to help cities manage water and prevent leaks.

The companies are sharing results from recent trials at the National Institute of Standards and Technology (NIST) Tech Expo. The trials took place in Atlanta, Los Angeles and Las Vegas.

Communities everywhere are struggling to save water. Drought, old pipelines and limited funds for new equipment all play a part. Monitoring the water system can prevent large-scale leaks. Cities can get information on the condition of their fire hydrants, underground pipes and drainage systems, which have been difficult to monitor in the past.

The solution uses Echologics sensors and sound technology from Mueller Water Products with AT&T's LTE wireless network to detect water pressure, temperature and leaks. The IBM Water Management Center brings all sources of water data together, to

give a complete view of past, present and future performance.

“A typical water pipe leak wastes almost 400,000 gallons of water per year,” said Mike Troiano, vice president, AT&T industrial IoT solutions. “Cities are facing water shortages all over the world and need help identifying issues early to help avoid a catastrophic event. We’re giving communities more visibility into their water supply, and helping them better manage the future operation of their water systems.”

Charles Scott, engineering project manager, Las Vegas Valley Water District, commented, “With this new permanent leak monitoring technology, we can now monitor the pipe for small, subsurface leaks, which gives us a better opportunity to fix them before they develop into larger leaks. This reduces our risk, and allows us to focus our maintenance efforts to targeted sections of pipe.”

The Las Vegas Valley Water District (LVVWD) is a not-for-profit agency that began providing water to the Las Vegas

Valley in 1954. It helped build the city's water delivery system and now provides water to more than one million people, as well as 40 million visitors to Las Vegas, per year.

The district has built more than 4,000 miles of pipeline and a reservoir system that can store up to 900mn gallons of water.

LVVWD uses this new solution to manage the water supply pipeline and limit potential water loss.

AT&T, IBM and Mueller Water Products have teamed up to prove that IoT technology can help address the issue of water sustainability.

The companies have created an enhanced water management solution as part of NIST's Global City Teams Challenge.

**AT&T Inc** – USA  
www.att.com

**Mueller Water Products** – USA  
www.muellerwaterproducts.com

# Servo couplings for bridging larger distances without intermediate bearing support

Jakob Antriebstechnik is a manufacturer of servo bellow couplings, miniature couplings, and couplings for fitting in tight spaces or with high torques.

The company also manufactures servo couplings for long wheelbases of up to 6m. These distance couplings, also referred to as prop shafts or intermediate axes, are used to bridge large shaft distances without intermediate bearings.

Highly dynamic distance couplings are needed in machine and plant construction. They are used primarily in connection with jack screw gears, linear guides, palleting and packaging systems.

The main design feature of the distance couplings for large wheelbases is a variable-length intermediate pipe from aluminium, steel or carbon fibre composite (CFC), which can be optimally adapted to the customer's specific application.

Inside the metal bellow, it is supported on the hub parts by a special Cardan bearing.



Jakob distance coupling

This relieves the bellow element of the pipe weight and, in the event of impact, the possibility of damage to the unit and physical injury is ruled out.

The precision manufacture of the individual elements achieves high concentricity characteristics and quiet running behaviour.

They are capable of transferring torques higher than 1,600Nm and can be mounted to shafts with bore diameters of up to 85mm.

The couplings are suitable for applications such as connecting, joint and synchronous shafts, and replacing intermediate shaft structures with complex, additional intermediate bearing arrangements.

Major alignment errors, especially parallel offset, can be compensated.

**Jakob Antriebstechnik GmbH** – Germany  
 info@jakobantriebstechnik.de  
 www.jakobantriebstechnik.de



YOUR BEST PARTNER IN CHINA

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.**

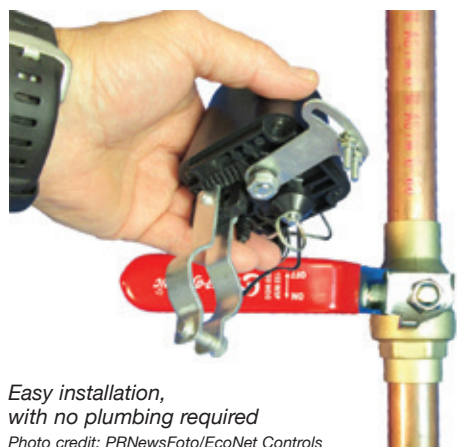
Address: No. B2305 Times Ark Building, 36 GuangAn Street, Shijiazhuang, China  
 Tel: +86-311-86219861 86219890 Fax: +86-311-86219891 E-mail: Luhw@cnchida.com Luhw634@hotmail.com  
 Website: www.flangescn.com www.cnchida.com

## Water shut-off for home automation systems

EcoNet Controls, a manufacturer of home automation devices and solutions, has introduced an automatic water shut-off controller.

The EBV105 is simple to install over an existing levered ball valve, as no plumbing is required.

The unit pairs as a standard Z-Wave Switch and is compatible with many home automation systems. It is easy to configure the device for automatic water shut-off to prevent water damage to a home or business. Any computer or smartphone can be used to control, manage and configure the certified Z-Wave device from anywhere Internet access is available.



Easy installation,  
with no plumbing required

Photo credit: PRNewsFoto/EcoNet Controls

Typically, the EBV105 receives its open and close commands through the wireless Z-Wave network. The toggled power button also opens and closes the valve. Although the device only requires 12V DC (1A) input, it has been mechanically geared with high torque and power to easily manage standard levered ball valves. The close and open cycle is a 90° turn that takes around ten seconds. A clutch release allows hand operation of the valve in case of power loss.

Several valve sizes are supported, including the 1/2" and 3/4" North American pipe standards. The EBV105 package includes the valve controller/motor, AC adapter, mounting bracket and quick user guide. Installation takes up to ten minutes, and no special tools or skills are required to install and configure the EBV105 water shut-off controller.

EcoNet also offers EBV105 Starter Kits that include a SmartThings Hub and wireless water leak sensors. These preconfigured kits will automatically turn off the water to a home or business the instant a leak is detected.

Multiple leak sensors are supported, and when any sensor detects a leak the valve is closed and a notification alert is sent to the user's smartphone. The



EcoNet's Z-Wave  
water shut-off

alerts can be customised depending on the location of the leak.

A typical installation would include a leak sensor in the laundry room, one by the kitchen sink/dishwasher and one by the hot water tank. The SmartThings Hub also supports hundreds of other home automation devices.

The water shut-off controller and Starter Kits are available for purchase direct from EcoNet Controls. Discounts are available for qualified home automation distributors and installers.

**EcoNet Controls – USA**  
sales@econetcontrols.com  
www.econetcontrols.com

## Expanded non-shrink tubing label range

UK-based labelling solutions manufacturer Silver Fox has announced new additions to its Legend Non-Shrink tubing range.

Silver Fox now produces 2:1 sized tubing, which is suitable for labelling thin 'bell' wires, and has been designed with the data and telecoms industry in mind.

All sizes of Non-Shrink tubing are now offered in light blue, for intrinsically safe installations, and in new standard pack sizes of two rolls.

Non-Shrink tubing does not require a hot gun permit for installations, unlike heat shrink.

The oval shape maximises grip, and there is no limit to the length of the idents or the number of characters.

Driving all of these products is the Fox-in-A-Box® thermal printer and Labacus Innovator® software, which offers cross-ferruling functionality allowing two idents to be printed at the same time. Users can produce up to 100 labels in 34 seconds.

Silver Fox tests its labels at recognised independent UKAS-certified test laboratories in compliance with a number of different MIL and other standards, and is ISO 9001:2008 registered. The company also offers three levels of software, all of which are downloadable from the Silver Fox website, for free trial. Developed in conjunction with engineers, these software solutions offer an array of time-saving options.

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



# New seal design reduces risk of concrete ingress for integrated pipes

Trelleborg's pipe seals operation has developed the new Forsheda 165 integrated concrete pipe seal design, which reduces the risk of concrete ingress during pipe manufacturing and improves sealing performance.

Using a co-extrusion method, the new seal features a slurry lip made of soft rubber – 50 International Rubber Hardness Degrees (IRHD) – for improved flexibility.

The enhanced profile of the seal ensures a more secure fit against the pallet, removing the risk of leaking concrete and unnecessary pallet cleaning.

The forming parts of the seal are made from hard 70 IRHD rubber to increase stability and grip.

Julian West, product manager at Trelleborg's pipe seals operation, commented, "The correct design of an integrated seal within a concrete pipe is vital for its installation into the pipe and its placement into the ground too.

"If the seal is not designed to the right rubber stiffness, it can compress under pressure when being fixed onto the pallet. Similarly, if it is not stable, the vibration that is applied to the concrete as the mould is filled can cause the seal to be displaced, or even lift off the pallet.

"Once the seal is in place within the pipe, it cannot easily be moved or replaced. It is therefore vital that the seal performs exactly as required, first time, to avoid unnecessary loss of time and money associated with pipe scrappage."

The Forsheda F165 seal provides benefits for pipe manufacturers, installers and specifiers.

It is easier to stretch and accurately position onto the pallet, reducing the risk of compression or bouncing.

The rubber's optimised stability during concrete vibration ensures more accurate socket dimensions and lower scrap rates.



Trelleborg's new F165 integrated seal

The optimum jointing force of the F165 seal makes it suitable for mechanised pipe laying.

This improves health and safety on-site, as fewer installers are required to be in the trench during installation.

In addition, the seal offers near zero push-back and excellent jointing even at low temperatures.

Mr West continued, "We are aware of the fact that the performance of the seal can also be affected during packaging and delivery.

"To prevent the seal warping or misshaping, we only pack them once they have reached a suitable temperature.

"We also limit the number of seals per box to ensure they arrive ready for pipe production in the same condition as they left the factory."

The new F165 seal complies with EN 1916, EN 681-1 and German legislation QR4060.

**Trelleborg** – Sweden  
www.trelleborg.com



**Dedicated supplier  
of seamless steel tube  
and pipe!**

- EN 10294
- EN 10305
- EN 10216
- EN 10297
- EN 10210
- API 5L
- ASTM A106
- ASTM A179



**Contact:**  
Tel: +44 (0) 2084 530046  
Emails: info@qualitube.co.uk  
0.8A Europa Studios  
Victoria Road  
London  
NW10 6ND

Member of the ITA 

[www.qualitube.co.uk](http://www.qualitube.co.uk)

# 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.

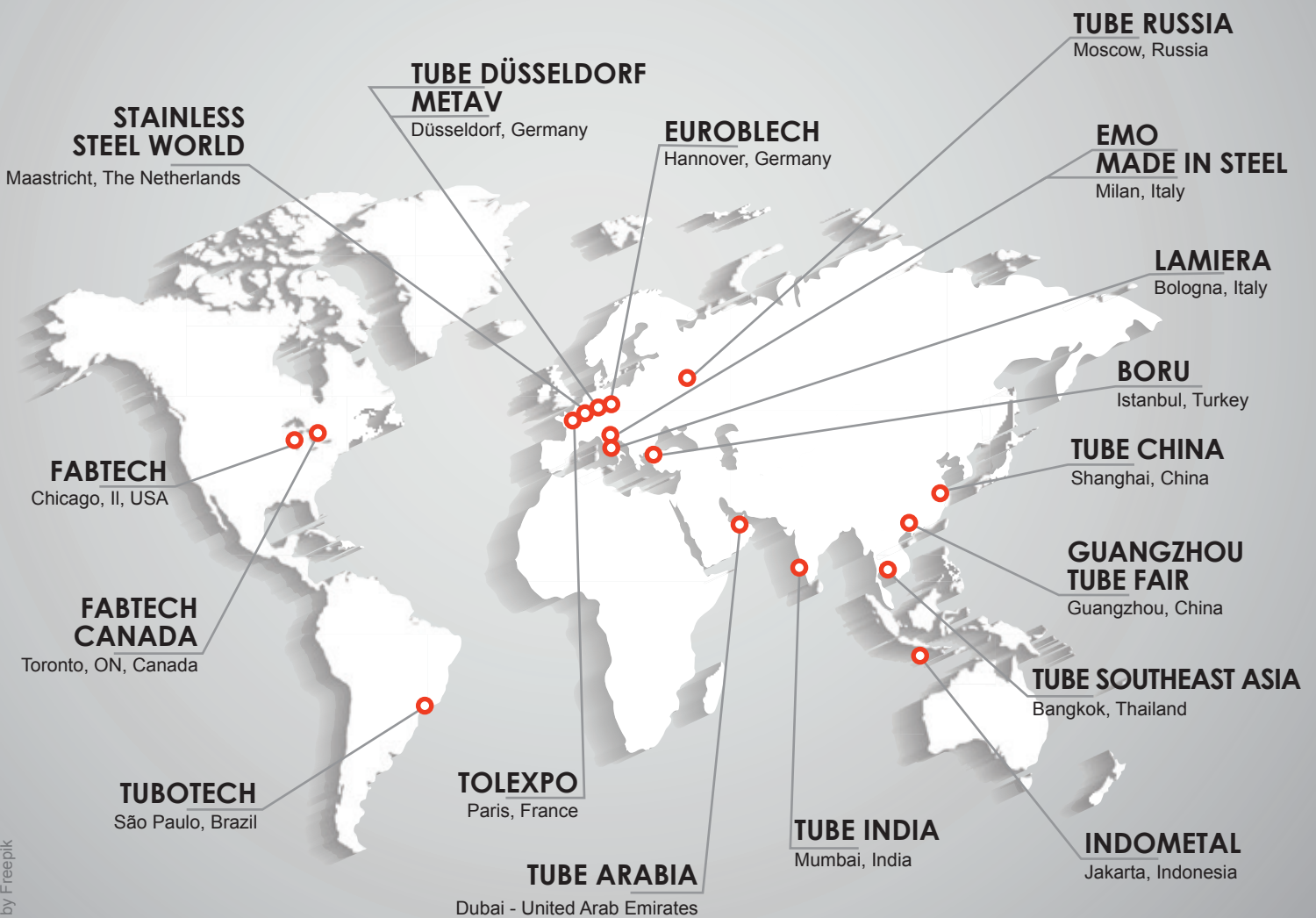
[www.read-tpi.com](http://www.read-tpi.com)

**Tube Products**  
INTERNATIONAL

**roducts**  
INTERNATIONAL

## 2015 / 2016 INTERNATIONAL SHOWS

See us there...



Map by Freepik

## Pipes for hydraulic cylinders

TMK-Artrom, a TMK subsidiary in Romania, has commissioned a new workshop to produce precision pipes used in the automotive industry and hydraulic cylinder manufacturing. The opening ceremony was attended by Romanian state secretary of economy Popa Maricel, and local authorities of Slatina municipality.

As a manufacturer of seamless mechanical pipe, TMK-Artrom has been the driving force behind TMK's European division since it became a TMK subsidiary. The company exports

almost 85 per cent of its total output to more than 50 countries around the world. With its cutting-edge equipment, the workshop is set to process the inner surface of cold-deformed seamless pipes by way of skiving and rolling burnishing. The products made by the workshop will be sourced to manufacture hydraulic cylinders widely used in hoisting machinery, sophisticated industrial equipment, automotive and aircraft industries, allowing TMK-Artrom to expand into new markets. The workshop's total treatment capacity stands at 25,000 MT of pipes per annum.

"Launching the production of pipes for hydraulic cylinders is yet another step for TMK's European division towards gaining a foothold in new markets as a manufacturer of value-added products for the engineering industry," said Alexander Shiryayev, TMK's CEO. "It clearly illustrates TMK's business approach and ambition to constantly drive up the share of high-tech tubular products in its overall shipment volumes."

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

## Increased range of alloy flanges

DK Jones Ltd has announced that a new range of European origin F91 chrome/molybdenum flanges is on order and will shortly be in stock. The new range of flanges conforms to ASTM/ASME S/A182 F91, and includes all pressure ratings up to 2,500lb.

This is a new addition to the extensive stock range of alloy materials held in the company's UK warehouse, which includes butt weld fittings and flanges in alloy, and seamless pipe in P5, P9, P11, P22 and P91. A full range of weld outlet fittings and high-pressure forged fittings and nipples is also available from stock in alloy grades, and solid forgings and bar are also kept on the shelf to enable the manufacture of non-standard items and 'specials' for fast delivery utilising the in-house machine shop.

DK Jones is a UK-based stockist of flanges, butt weld and high-pressure forged fittings, weld outlet fittings and seamless pipe in a wide range of material specifications, including alloy, carbon, low temp, and stainless steels. With more than 4,000 tonnes of high quality, fully certified materials in stock, the company regularly supplies a wide range of standard and non-standard items and materials to customers in more than 60 countries worldwide.

**DK Jones Ltd – UK**  
 sales@dkjones.com  
 www.dkjones.com



*The new range of flanges from DK Jones*

## Pipe and fittings from China

Beijing Haohong Pipe Fitting Co is a manufacturer of pipe and fittings. Its main products are elbows, bends, tees, flanges, reducers, caps, steel pipe, various steel materials, and corrosion insulation pipeline.

**Beijing Haohong Pipe Fitting Co, Ltd – China**  
 inquiry@hhpipefitting.com  
 www.hhpipefitting.com



**YOUR BEST ISO 9001  
MANUFACTURER IN TAIWAN**

**BOLA-TEK** 



**STAINLESS STEEL & CARBON STEEL**  
INVESTMENT CASTING MADE 1/4" - 12"

- BALL VALVES (2, 3, 4 WAYS)
- VALVES (GATE, GLOBE, CHECK)
- FLANGES & FITTINGS
- OEM (BALLS, CASTINGS)

**www.bola-tek.com.tw** 

E-mail: [bolatek@ms18.hinet.net](mailto:bolatek@ms18.hinet.net)  
P.O. BOX: 35-78 TAICHUNG TAIWAN R.O.C.  
TEL: 886-4-2234-8000 FAX: 886-4-2234-9000 

## The permeability problem

Most valves, mastics, seals and gaskets are a good barrier against liquids. However, some of them leak when it comes to vapours, such as hydrocarbon products and water vapour, which can actually permeate through the materials that make up the walls, seals and mastics. According to Versaperm Ltd, many materials, such as cellulose, EVOH or PVOH, allow water vapour to flow through almost as if they were not there. Some plastics allow hundreds of times more vapours to flow through than others. This leads to gaskets and seals not actually sealing properly for some vapours.

Versaperm offers a solution to this problem with its range of dedicated and generic permeability measurement instruments. The equipment is both accurate and simple to use. For some applications it can produce results in as little as half an hour, as opposed to the days or weeks taken by the conventional technique of gravimetric testing.

A wide range of application-dependent sensors is available depending on the

precise task at hand. Measurement techniques include flame ionisation, catalytic combustion, infrared, photoionisation, mass spectrometry, capacitive, coulometric, electrochemical, electrolytic, gas chromatography, impedance, infrared, paramagnetic, pressure measurements, semiconductor and thermal conductivity.

Versaperm's permeability meters typically achieve accuracies in the parts-per-million range (parts-per-billion with some gases). The systems are suitable for use on most materials, membranes, containers, films, laminates, coatings and components. They are also suitable for general testing, and QC, lab and development work.

As well as manufacturing the instruments, Versaperm offers a permeability laboratory service for companies that need to test samples on an irregular basis.

**Versaperm Ltd – UK**  
[info@versaperm.com](mailto:info@versaperm.com)  
[www.versaperm.com](http://www.versaperm.com)

# New design program for storm water systems

Advanced Drainage Systems has launched a new online program for designing and estimating the cost of a storm water system constructed with its StormTech® chambers. Available for free on the company's website, the ADS StormTech Design Tool enables engineers, owners and contractors to design customisable underground storm water management systems.

The flexible tool provides the ability for site-specific applications and can be accessed and used through multiple platforms, including smartphones, tablets and other mobile devices. System designs from the StormTech Design Tool are produced in both PDF and CAD formats, with data provided that allows users to estimate a total installed cost.

The design tool provides a first step in the evaluation of water management

solutions, including consideration for important criteria such as the feasibility of retention pond replacement, alternative underground products, land values and usage, public safety, regulatory compliance, water harvesting, water quality and LID applications.

"We developed this new design tool to help our customers who want and need a rapid and responsive means of planning underground storm water management solutions for their projects," stated Bob Klein, executive vice president, sales for ADS. "Subsurface storage systems are easy-to-install solutions that save space, improve land use and provide a way to meet EPA regulations. The new design tool makes it easier for the user to design a system using our products as a solution."

The combination of ADS StormTech chambers, StormTech Isolator Row™,

N-12® and HP pipe are long-life products to control storm water. The ADS StormTech Design Tool enables quicker evaluation and response time for designers, who can also share designs from the program directly with the ADS technical services group for additional support at no cost.

Typically used in non-residential, residential and infrastructure applications, StormTech chambers provide a large storage volume per square foot of land area. The chambers are designed in accordance with AASHTO and ASTM design standards and meet AASHTO LRFD Bridge Design Specifications for live and dead loads. Manufactured using polypropylene, the chambers are rated by ADS for a 75-year service life.

**Advanced Drainage Systems, Inc – USA**  
www.ads-pipe.com



The ADS StormTech Design Tool enables the design of underground storm water management systems

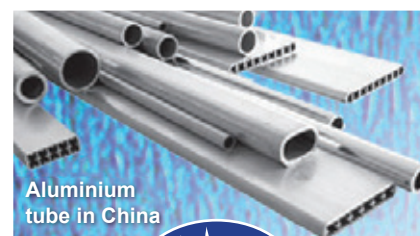
# Seamless steel pipes

Hunan Great Steel Pipe Co has specialised in manufacturing seamless steel pipes for more than 20 years. The company is experienced in exporting all kinds of steel pipes in bulk around the world.

The range of sizes and specifications includes carbon/alloy seamless steel pipe (OD ¼" to 30", WT 1.25 to 50mm);

ERW/LSAW/DSAW steel pipe (OD ½" to 52", WT 1.65 to 25mm); spirally welded steel pipe (OD 219 to 3,120mm, WT 3 to 25mm); and oil pipe, casing, tubing and line pipe.

**Hunan Great Steel Pipe Co, Ltd – China**  
info@hunantube.com  
www.hunantube.com



Aluminium tube in China



Aluminium precision tube made in China  
Cold drawn seamless 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](http://www.hatal.com.cn)

SEE US AT ...  
**EMO**  
Milan, Italy

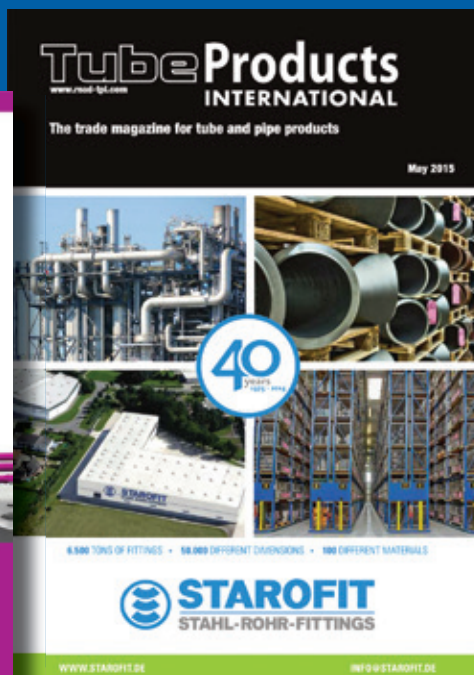
5<sup>th</sup> - 10<sup>th</sup> October 2015  
[www.emo-milano.com](http://www.emo-milano.com)



...AND PICK UP  
YOUR **FREE**  
MAGAZINES  
AND CDs

[www.read-tpi.com](http://www.read-tpi.com)

[www.read-tpt.com](http://www.read-tpt.com)



**LEADING  
MAGAZINES**

for the tube and pipe  
industries



## Cutting and bevelling

The E-Z Fab is an innovative development in workshop-based, semi-portable, self-centring, semi-automated cutting and bevelling systems, offering high pipe cutting and bevelling speed, range and capacity. Seven models enable the TAG E-Z Fab to cover a range of ½" to 30" pipe.

TAG's split-frame toolboxes are bolted to a rotating ring on the E-Z Fab machine. Due to the rigidity of the frame and the strength of the ring, these toolboxes, fitted with TAG HS HD tooling, can be rotated around the contour of the pipe at high speed (up to 35 rpm), and are fed into the cut on every rotation by a striker system, feeding the tooling down a thread via a gear-controlled transmission slide.

As an example, 6" carbon steel with 22mm wall thickness can be set up, cut and bevelled in six minutes and 34 seconds. Pipe is loaded into the machine and clamped in seconds by a rapid self-centring jaw system. Power is delivered from a new single-phase 1.75kW NC-controlled servo motor that delivers power and torque, even under heavy load, enabling uninterrupted cutting and bevelling.

The system can be coupled with TAG's new programmable Delta touch screen control, with pre-set and memorable application settings. The Delta NC control delivers a signal to the servo motor according to the operator's touch screen instruction. Pulse (jog), start/stop and soft start features are incorporated into all modes, allowing tool set-up and final checks to be made under controlled conditions.

**TAG Pipe Equipment Specialists Ltd – UK**  
 sales@tag-pipe.com  
 www.tag-pipe.com



The E-Z Fab from TAG

## join the best: worldwide



Mumbai



Dubai



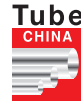
Moscow



Bangkok



São Paulo



Shanghai

**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](http://www.tube.de)

# Tube®

## Düsseldorf



Messe Düsseldorf GmbH  
 P.O. Box 10 10 06  
 40001 Düsseldorf, Germany  
 Tel. +49 (0) 2 11/45 60-01  
 Fax +49 (0) 2 11/45 60-6 88

[www.messe-duesseldorf.de](http://www.messe-duesseldorf.de)



## Inflatable dams

The Purge Buddy by Sumner Manufacturing is an inflatable dam product designed for efficiency and ease of use. Compared to the industry standard of a single inflatable bladder, the Purge Buddy has two inflatable bladders connected by a stainless steel hose.

The Purge Buddy is available in 18 sizes, from 50 to 900mm (2" to 36"). Each is constructed from a heavy-duty cotton/polyester material impregnated

with canvas that is heat resistant to 210°C (100°F). The dams inflate easily with a standard bicycle pump, and include a 1.5m (4.8ft) inflation hose and pull loops for pulling through long lengths of pipe.

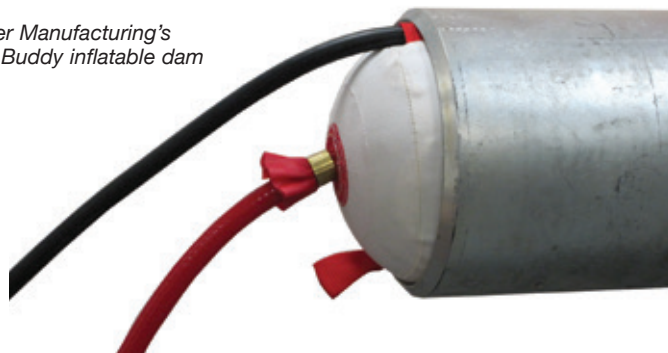
Purging products can be used to quickly and efficiently create a reduced-oxygen weld chamber where it is critical to avoid oxidation in the weld, for example when welding exotic metals such as stainless, Duplex or titanium.

Sumner Manufacturing has served the welding and mechanical contracting industry for nearly a half century, creating material lifts, jack stands, pipe fit-up clamps, welding tools and material carts that are used in more than fifty countries around the world, and in numerous industries.

**Sumner Manufacturing Co, Inc – USA**  
 customerservice@sumner.com  
 www.sumner.com



Sumner Manufacturing's Purge Buddy inflatable dam



### Compare NEW with OLD



**PurgEye® 100**  
Weld Purge Monitor®



**Mark V (MKV)**  
Out of Date Model

<ul style="list-style-type: none"> <li>✓ IP65 dustproof and waterproof accredited.</li> <li>✓ Leak tight probe assembly.</li> <li>✓ More robust carry/presentation storage case.</li> <li>✓ Auto-break, wrist and neck safety carry, strap.</li> <li>✓ Swivel hinges on carry/presentation case.</li> <li>✓ Tripod mount (for fixed and gorilla tripods).</li> <li>✓ Low battery indicator and low sensor indicator.</li> <li>✓ Increased sensor reading range.</li> <li>✓ Display size 24 mm high digits.</li> <li>✓ Push button 'Auto Calibration' feature at precisely 100 ppm as well as at ambient (20.94%).</li> <li>✓ Automatic sleep mode when not in use.</li> <li>✓ Quick connect/disconnect leaktight fittings for gas purge tubing.</li> <li>✓ Protective rubber housing (optional).</li> <li>✓ PurgEye® 100 to 1000 a complete Family of Weld Purge Monitors®.</li> </ul>	<ul style="list-style-type: none"> <li>✗ Not IP65 dustproof nor waterproof accredited.</li> <li>✗ Three piece probe assembly, which can leak oxygen.</li> <li>✗ Poor quality carry case by comparison.</li> <li>✗ No tripod mount.</li> <li>✗ No low battery indicator.</li> <li>✗ No low sensor indicator.</li> <li>✗ Tiny, difficult to read display (11 mm high digits).</li> <li>✗ No leaktight connect/disconnect fittings for gas purge tubing.</li> <li>✗ No optional protective rubber housing.</li> <li>✗ No automatic sleep mode when not in use.</li> </ul>
--	--

Competitors have Restricted Awareness of Purging.

HFT® has over 40 Years of Innovation, Design and Manufacturing Experience.

Senior Metallurgical and Scientific Personnel.

Buy the right tools for the job from HFT® once only. We are the Weld Purging Experts. Call on us 24/7.



### Keeping your 'Eye' on the Purge!


Tel +44 (0) 1554 836 836    Web www.huntingdonfusion.com

Fax +44 (0) 1554 836 837    Email hft@huntingdonfusion.com

### In 1975, MAC led the way in flux leakage testing


Forty years ago, MAC engineers introduced Rotoflux®, a new test system that could detect ID/OD defects in heavy-wall magnetic tubular products.

Today, MAC's high-speed flux leakage systems are the benchmarks for OCTG testing throughout the world.



## Put Us To The Test

NFL
UT
ECT



**MAC**  
Magnetic Analysis Corporation  
Nondestructive Testing Since 1928

[www.mac-ndt.com/intras](http://www.mac-ndt.com/intras)



# Multipurpose ball valves added to FloLok range



SSP FB floating ball valve

SSP, a specialist in instrumentation tube fittings, valves, and tubing, has announced a new addition to its line of FloLok® instrumentation valves. The FB Series multipurpose ball valves have a wide range of uses, but are specifically designed for use in demanding applications that many ball valves are not able to handle, such as high pressure, high temperature and low differential pressure.

The FB Series multipurpose ball valves feature a floating ball design that allows upstream pressure to assist the downstream seal. Live loaded seats allow the valve to seal under differential pressures lower than other floating ball designs. Standard PEEK seats deliver leak-tight performance at 6,000 psig.

A primary advantage with the FB Series is the fact that the downstream spring can cushion the shock of the ball against the seat, preventing damage over the long term. Additionally, the end-screw completely supports the seat at high pressure, protecting the seat from deformation, even at high temperatures. This design reduces seat wear and leakage, and extends the performance life.

SSP's new FB Series ball valves are suited to low- and high-pressure applications, and dynamic temperature and pressure conditions. Additional specifications include 6,000 psig (413 bar) working pressure at 250°F; high flow – Cv up to 13.8; wide temperature range (-40 to 400°F); leak-tight envelope seal and shut off; a wide range of end connection size and type combinations, including three styles of tube fittings; low torque actuation; and higher cycle life and low maintenance.

**SSP Corp – USA**  
customer.inquiries@mysspusa.com  
www.mysspusa.com

# TUBOTECH

## 8th International Trade Fair for Tubes & Pipes, Valves, Pumps, Fittings and Components

### 6 – 8 October 2015

Imigrantes Exhibition Centre  
São Paulo EXPO EXHIBITION & CONVENTION CENTER

[www.tubotech-online.com](http://www.tubotech-online.com)

Held in conjunction with:



Supported by:



In co-operation with:



FIERA MILANO

Messe Düsseldorf GmbH  
P.O. Box 10 10 06 \_ 40001 Düsseldorf \_ Germany  
Phone +49 (0) 2 11/45 60-77 68/-77 64 \_ Fax +49 (0) 2 11/45 60-77 40  
NiemannH@messe-duesseldorf.de \_ HesseS@messe-duesseldorf.de  
[www.messe-duesseldorf.de](http://www.messe-duesseldorf.de)



# SEE US AT ...

## TUBOTECH

São Paulo, Brazil

6<sup>th</sup> - 8<sup>th</sup> October 2015

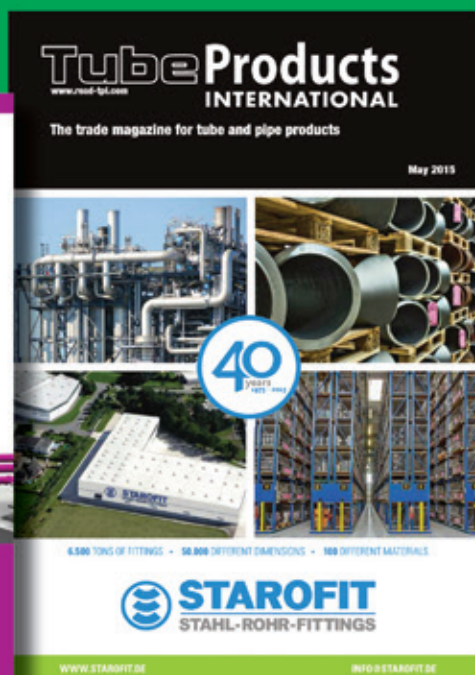
[www.tubotech-online.com](http://www.tubotech-online.com)



# ...AND PICK UP YOUR **FREE** MAGAZINES AND CDs

[www.read-tpi.com](http://www.read-tpi.com)

[www.read-tpt.com](http://www.read-tpt.com)



## LEADING MAGAZINES

for the tube and pipe  
industries



## Inflatable stoppers for hard-to-access job sites

A range of standard and non-standard Inflatable Stoppers for tubes, pipes, pipework fabrications and ductwork is available from the Pipestoppers® division of HFT.

The versatile Inflatable Stoppers are used to service a wide variety of industrial applications. As 'overnight stoppers' they provide a strong barrier in pipeline activities, to prevent foreign bodies entering the line during down time. In machining applications they can be inserted below a horizontal flange on a vertical pipe, to prevent machining fluid from falling below into expensive machinery such as pumps and turbines.

When welding large tanks and vessels, stoppers inflated with air can reduce the volume inside, so that the argon purging process takes little time and uses the minimum of expensive gas.

It is claimed that the stoppers pay for themselves in one weld, and they can be used multiple times.

Other applications include leak testing of pipework systems, whether commercial,

domestic or industrial, on-site thermo-forming of bends in plastic materials, and fibre-optic construction projects.

All Inflatable Stoppers are manufactured with a strong internal inflatable bag covered in waterproof sewn polyurethane-coated nylon for low friction and to prevent the production of static electricity or accidental sparking. The stoppers are particularly useful when inserting into a small opening close to a job site, rather than at the end of the pipe. No high-pressure equipment is needed for inflation.

The standard range of HFT's Pipestoppers Inflatable Stoppers is available for immediate delivery in cylindrical or spherical formats, with sizes ranging from 25 to 2,440mm (1" to 96").

Inflatable Stoppers are also available with heat-resistant covers to protect them against high temperatures.



HFT's cylindrical Inflatable Stoppers



The spherical range

HFT also has a range Rubber Inflatable Stoppers that are suitable for petrochemical applications and are resistant to all hydrocarbon fluids and gases.

**Huntingdon Fusion Techniques – UK**  
[hft@huntingdonfusion.com](mailto:hft@huntingdonfusion.com)  
[www.huntingdonfusion.com](http://www.huntingdonfusion.com)

## TKM targets automotive stainless steel tube market

ThyssenKrupp Materials (UK) Ltd (TKM) has announced a new addition to its growing reach in the UK market, with the expansion of its stainless steel tubular product range with major investment in a new range of stainless steel welded tube designed specifically for the automotive sector.

With stainless tube already part of its UK portfolio, and in line with ThyssenKrupp's global development plans for tubular products, Wayne Bagnall has joined ThyssenKrupp as UK business development manager for stainless tube. With many years of experience within the tubular and automotive sectors, Mr Bagnall brings key product and market knowledge.

The Tube Service Centre division of ThyssenKrupp Materials (UK) is already established in the automotive industry as a processor of carbon steel tubes, having supplied semi-finished processed parts to the OEM and aftermarket industries for many years. The aim is that both existing and potential new clients will benefit from TKM UK's growth in stainless tube.

TKM has branches strategically located throughout the UK, and a fleet of more than 60 vehicles with the ability to deliver on a JIT basis to meet specific customer requirements within 24, 48 or 72 hours.

The company can offer not only stainless tube, designed around the exhaust

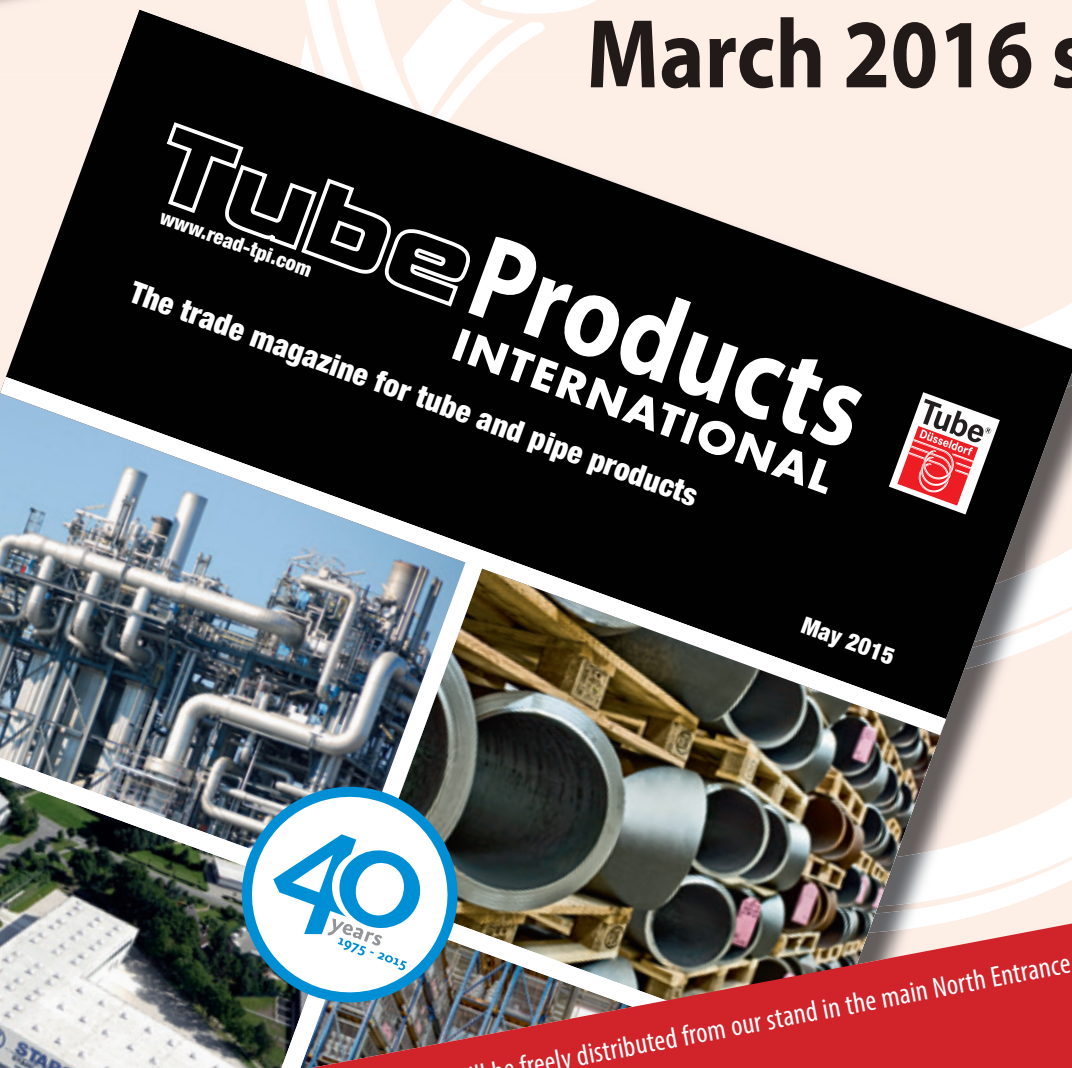
market, but also a full range of sheet, plate, bar and other supplementary products (including welding wire and wire wool) to complement its stainless tube range.

Mr Bagnall commented, "Our standard stock range is complete and includes welded plain and welded perforated tubes, in grades 304 (1.4301) and 409 (1.4512). The current range is already evolving and will include alternative grades along with more customer specific sizes."

**ThyssenKrupp Materials (UK) Ltd – UK**  
[sales.tkmuk@thyssenkrupp.com](mailto:sales.tkmuk@thyssenkrupp.com)  
[www.thyssenkruppmaterials.co.uk](http://www.thyssenkruppmaterials.co.uk)

# Get your company noticed!

by advertising in the  
March 2016 show issue



4-8 April 2016



The March 2016 issue will be freely distributed from our stand in the main North Entrance hall and in Hall 4 stand 4B29

**Advertising deadline:**

**MARCH 2016**

**SHOW ISSUE**

**11 January 2016**

**Contact: +44 1926 334137**

**Email: [tpi@intras.co.uk](mailto:tpi@intras.co.uk)**

**[www.read.tpi.com](http://www.read.tpi.com)**

## Flexibility with no cross-contamination

Alfa Laval Unique Mixproof Valves are designed to provide maximum flexibility in hygienic flow processing by making it possible to handle two different fluids at the same time, with no risk of cross-contamination. Using two independent plugs and seals means a single mix-proof valve can often replace two or more valves of other types.

The company supplies several different designs of mix-proof valves, all with leakage detection, that help boost reliability and safety levels. They enable the design of versatile set-ups that are easy to maintain, as well as providing new processing opportunities.

The Alfa Laval Unique Mixproof Valves provide a modular solution that is easily tailored to specific requirements. This also means that the user only pays for the exact features and capabilities required.

As part of the range, the Alfa Laval Unique Mixproof Large Particle Valve

has features that make it suitable for handling fluids with high viscosity or large particles, such as lotions, soups and yoghurts. This valve is specially designed with large openings, handling particles up to 45mm in diameter, to minimise pressure loss and secure product integrity by eliminating the risk of product damage or blockage.

Alfa Laval provides specialised products and engineering solutions based on its key technologies of heat transfer, separation and fluid handling. The company's equipment, systems and services are dedicated to assisting customers in optimising the performance of their processes. The solutions help them to heat, cool, separate and transport products in industries that produce food and beverages, chemicals and petrochemicals, pharmaceuticals, starch, sugar and ethanol.

The company's products are also used in power plants, aboard ships, in oil



*Alfa Laval Unique Mixproof Large Particle Valve*

and gas exploration, in the mechanical engineering industry, in the mining industry and for wastewater treatment, as well as for comfort climate and refrigeration applications.

**Alfa Laval** – Sweden  
 info@alfalaval.com  
 www.alfalaval.com

## HIGH PRESSURE FITTINGS & FLANGES

**FORGED CARBON · ALLOY · STAINLESS STEEL, THREADED AND SOCKET WELD**

**PRODUCTS :**  
 FITTINGS : 90°/45° ELBOW, TEE, UNION, COUPLING, BUSHING, PLUG, CAP, INSERT, PIPE & SWAGE NIPPLE.  
 FLANGES : BLIND, SLIP ON, LAP JOINT, THREADED, SOCKET WELD, WELD NECK.

**MATERIALS :**  
 STAINLESS STEEL : ASTM A182(F304/L, F316/L, F304H/F316H, F317L, F321/H, F44, F51, F53, F60)  
 CARBON/LOW TEMPERATURE CARBON STEEL : ASTM A105, ASTM A350 LF2  
 ALLOY STEEL : ASTM A182(F5, F9, F11, F22, F91)

**PRESSURE RATINGS :**  
 FITTINGS : 2000, 3000, 6000 & 9000 lbs  
 FLANGES : 150, 300, 600, 900, 1500, 2500 lbs

**APPROVAL CERTIFICATES :**  
 TÜVRheinland ISO 9001 Registered Manufacturer, LR, CR, & ABS Register of Shipping, PED(CE)

**BOTH-WELL STEEL FITTINGS CO., LTD.**  
 NO.303 Rensin Road, Renwu District, Kaohsiung City, TAIWAN.(81460)  
 TEL : 886-7-371-1536 ● 371-0497    FAX : 886-7-371-3864 ● 371-3882  
 E-mail : box@bothwell.com.tw ● sales@bothwell.com.tw  
 Web Site : www.bothwell.com.tw

# SEE US AT ... **FABTECH**

Chicago, Illinois, USA

9<sup>th</sup> - 12<sup>th</sup> November 2015

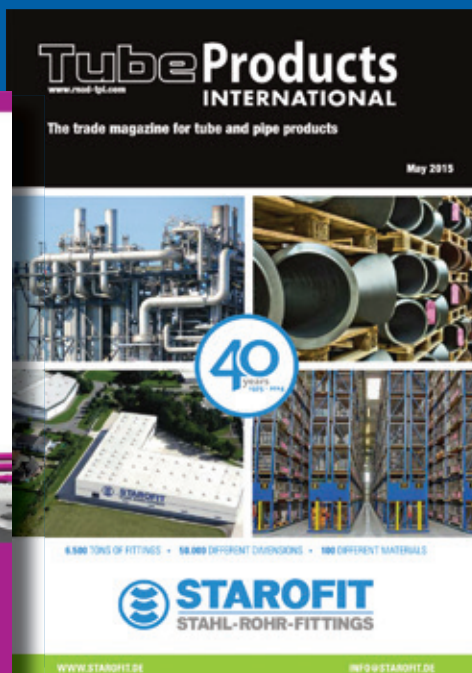
[www.fabtechexpo.com](http://www.fabtechexpo.com)



...AND PICK UP  
YOUR **FREE**  
MAGAZINES  
AND CDs

[www.read-tpi.com](http://www.read-tpi.com)

[www.read-tpt.com](http://www.read-tpt.com)



**LEADING  
MAGAZINES**

for the tube and pipe  
industries



## X-ray equipment to detect tubing blockages

Anritsu Industrial Solutions Ltd, a manufacturer of product quality assurance systems, has made its first move into the automotive industry. The company, better known for supplying the food industry with X-ray and metal detection systems, has risen to the challenge of solving a very specific problem surrounding windscreen washers.

Based in Cheshire, Flexi-Cell UK manufactures rubber tubing and sealing sections for a car parts manufacturer that supplies windscreen washers to be fitted in Jaguars, BMWs and Volvos. Unknown to Flexi-Cell at the time, there were sometimes blockages in the tubing produced, causing problems with the flow of fluid through to the windscreen washer.

John English, Flexi-Cell's projects manager, explained, "Very occasionally you can get material down the centre of the tubing which stops it from working in the end application. We couldn't find

a way round it in-house, so we were desperate for a solution."

Anritsu was able to solve the problem by devising an X-ray system that integrates into the manufacturing process line. The rubber tubing is extruded in continuous lengths, with more than 100,000m going into one manufacturing slot. If the X-ray system detects a blockage in the tubing, it activates an alarm and a printer. The printer sprays yellow paint on the tubing where the blockage is, so that section of rubber can be discarded, preventing the faulty section from entering the windscreen washer manufacturing process.

Flexi-Cell chose Anritsu to supply the X-ray system after approaching a number of companies with the challenge. Mr English commented, "First I contacted each company to see which ones were prepared to run trials with us, and Anritsu were the only company to offer that. It took them less than a day to get

the X-ray set up on the line. Since then we've had no complaints at all from customers as the X-ray detects all faulty tubing. We are very happy with Anritsu and would certainly recommend them."

Since the installation of the X-ray system, Flexi-Cell has encountered no more issues with blockages in the pipes.

Anritsu has been designing and manufacturing X-ray inspection systems, automatic check-weighers and metal detectors since 1964. All of the company's products are developed in-house in Japan, and distributed in the UK from its facility in Bromsgrove, Worcestershire.

**Anritsu Industrial Solutions Europe Ltd** – UK  
www.anritsu-industry.com

**Flexi-Cell (UK) Ltd** – UK  
info@flexi-cell.co.uk  
www.flexi-cell.co.uk

### ROHRBEFESTIGUNGEN Hammerschmid GmbH



[www.hammerschmid.at](http://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](mailto:jacqueline.hammerschmid@hammerschmid.at)

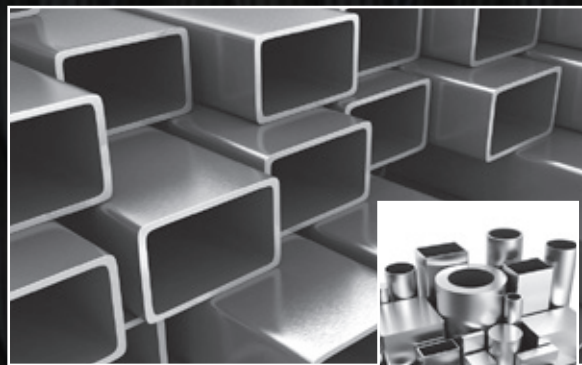
A-4614 Marchtrenk | Linzer Straße 141  
phone: +43 (0)7243 / 58 222 | fax: +43 (0)7243 / 58 222-800



### AK EXPORT IMPORT



We care about your business, because we care about ours.



We offer the best quality product at the right prices, worry-free returns and exchanges, no minimum quantity to order and great credit. You are assured of the highest product quality.

[www.akexport.com.tr](http://www.akexport.com.tr)

Tel: +90.216.339.2403

Fax: +90.216.339.2961

Tel: +90.216.339.6624

Email: [info@akexport.com.tr](mailto:info@akexport.com.tr)

Acıbadem - Zerrin sok. Akman Apt. No:11/A 34660 Üsküdar, İstanbul, Turkey



**9-12 November 2015**

North America's largest metal forming, fabricating, welding and finishing event heads to McCormick Place in Chicago, Illinois, USA, from 9 to 12 November 2015.

The upcoming event is expected to cover more than 550,000ft<sup>2</sup> and anticipates over 40,000 attendees and 1,500 exhibiting companies to take part over the four days of the show.

FABTECH 2015 provides a convenient 'one-stop shop' venue in the welcoming city of Chicago where you can meet with world-class suppliers, see the latest industry products and developments in action, and find the tools you need to improve productivity, increase profits and discover new solutions to all of your tube, metal forming, fabricating, welding and finishing needs.



## Venue

McCormick Place  
2301 S. Martin Luther King Dr.  
Chicago, IL 60616  
[www.mccormickplace.com](http://www.mccormickplace.com)

## Organisers

**Fabricators & Manufacturers  
Association, International**  
Tel: +1 815 399 8775  
Email: [information@fabtechexpo.com](mailto:information@fabtechexpo.com)

## Opening times

9 November: 10:00am – 6:00pm  
10, 11 November: 9:00am – 5:00pm  
12 November: 9:00am – 3:00pm



**North America's largest metal forming,  
fabricating, welding and finishing event**



[www.fabtechexpo.com](http://www.fabtechexpo.com)

# TUBOTECH

6-8 October 2015

Approximately 15,000 trade visitors went to the Exposições Imigrantes exhibition centre in 2013 and the organisers hope even more will attend this year. Brazil's boom in the construction, automotive and consumer electronics industries has led to a marked increase in the demand for tube products and there is an increasing interest in an international trade fair for these sectors on the South American continent.

TUBOTECH features approximately 577 exhibitors, all of which are involved in tube manufacturing,

treatment, processing and related industries. TUBOTECH and wire South America 2015 will again be an outstanding opportunity for visitors from Brazil and its neighbouring countries to obtain information about advances in the industry. International exhibitors will also have the chance to present themselves to South America, which is an important and attractive market of the future.

The event in São Paulo is organised by experienced tube trade show organiser Messe Düsseldorf GmbH.



## Venue

Imigrantes Exhibition & Convention Center  
Rod. dos Imigrantes, km. 1,5  
CEP: 04329-900  
São Paulo, Brazil  
[www.imigrantesexpo.com.br](http://www.imigrantesexpo.com.br)

## Organisers

Messe Düsseldorf GmbH  
Messeplatz  
D-40474 Düsseldorf, Germany  
Phone: +49 211 45 60 01  
Fax: +49 211 45 60 668  
[www.messe-duesseldorf.com](http://www.messe-duesseldorf.com)

## Opening times

6-8 October: 11:00am – 7:00pm

**8<sup>th</sup> International trade fair for tubes & pipes,  
valves, pumps, fittings and components**



**[www.tubotech-online.com](http://www.tubotech-online.com)**

# Oil & gas tubes and pipes

The background of the entire page is a photograph of an oil rig. The rig's complex steel structure is silhouetted against a sky that transitions from a deep blue at the top to a bright orange and yellow near the horizon, where the sun is setting. The rig's towers and various pipes are visible, creating a dense network of lines and shapes.

To try to imagine the oil and gas sector without the tube and pipe industry would be an exercise in futility. In addition to oilfield goods including tube, casing, drill pipe, drill collars and line pipe, oilfield work calls for tubing couplings, tubing hangers, tubing pumps, tubing heads, and a variety of other essentials without which oil and gas exploration and recovery would grind to a halt.

The scope of that activity and its outsize equipment should not obscure the contribution of those meticulously engineered smaller components. Take the example of a tubing head: a vital element of the wellhead assembly that supports the tubing string, seals off pressure between the casing and the outside of the tubing, and provides a connection that supports the Christmas tree.

That is much to ask of a flanged fitting, especially since the top spool on the assembly contains the highest pressure in the wellhead. But the tubing head delivers – as it must. With technology accelerating the capabilities in oilfield production at an unprecedented rate, drilling efficiency requires it.

## Seamless pipe facility

Established in 1992, Tianjin Baocang International Trade Co (TBCC) is the largest supplier of Tianjin Pipe (Group) Corporation (TPCO), a single-location seamless pipe manufacturing facility with 3.5mn tons of annual production capacity.

With an inventory of 60,000 tons of mainly TPCO pipes, with a size range ¼" to 26" and wall thickness

up to 30mm, in a single location of 200,000m<sup>2</sup>, the company supplies around 250,000 tons of pipes per year for a wide range of applications.

Strategically located 5km away from TPCO and 16km from Tianjin International Port, China, it is an integrated facility with services ranging from project management, processing, storage, material testing, quality control

and inspection, and distribution. It is also fully equipped with chemical and mechanical testing equipment to ensure consistent product quality, and a pipe coating mill providing PE, FBE and 3LPE coating solutions.

**Tianjin Baocang International Trade Co, Ltd** – China  
 tjbcgg@tbccgroup.com  
 www.tbccgroup.com

## Lean Duplex and Hyper-Duplex tube portfolio at GRPC 2015

Sandvik was among the exhibitors at this year's Global Refining & Petrochemicals Congress (GRPC), and helped visitors explore how next-generation stainless steels can yield economic and lifecycle benefits, and also overcome operational challenges in the refining and petrochemical industry.

The GRPC 2015 conference and exhibition was held in July in Delhi, India.

Attendees not only had an opportunity to see Sandvik's hydraulic and instrumentation tubing, heat exchanger tubing and piping portfolio up close, but also to gain hands-on experience of the quality of the stainless steels through interactive tablets, product samples and testing equipment.

During the second day of the conference, Sandvik presented a paper comparing the standard austenitic grades 304L and 316L with the benefits of Sandvik SAF 2304TM, a lean Duplex (austenitic-ferritic) stainless steel that is characterised by good resistance to stress corrosion cracking (SCC), general corrosion and pitting.

"India's refining and petrochemicals sector is seeing a growing need for high-performance stainless steel materials due to increased complexity of the service conditions under which the downstream sector operates," said Sharath Satish, tube and primary sales manager, India, Sandvik Materials Technology.

Sandvik stainless steel tubular products, such as SAF 2304 and the Super-Duplex stainless steel grades SAF 2507<sup>TM</sup> and 3R60<sup>TM</sup>, have optimum corrosion resistance to meet the demands of the industry.

Sandvik claims that its high-alloy stainless steels have exhibited superior longevity, tolerances and bendability properties that are well beyond the specifications of the ASTM standards.

Mr Satish added, "Sandvik stainless steel tube and pipe is shown to significantly help eliminate risks, unscheduled

downtime, leaks and accidents. This is complemented by Sandvik's immediate support to our customers when they need it, all as part of 'The Sandvik Peace of Mind Standard'."

Sandvik Materials Technology develops and manufactures products in advanced stainless steels and special alloys for demanding environments, as well as products and systems for industrial heating.

**Sandvik Materials Technology** – Sweden  
 www.smt.sandvik.com



*Hydraulic and instrumentation tubing by Sandvik*

# Feasibility study for extension of gas pipeline network in West Africa

The Economic Community of West African States (ECOWAS) and international energy services company Penspen have announced the completion of contract signing to enable a formal start to the feasibility study examining the current West African Gas Pipeline (WAGP) system performance and its possible future network extension to other ECOWAS states.

The work will look at how WAGP has performed since its completion in 2010 and what measures need to be taken to optimise its operation. This includes a technical and economic analysis of the extension of the pipeline conditions. Market assessments will be made of possible ECOWAS countries to consider where network extension can be substantiated, and estimates of the required investments will be made to quantify costs and benefits.

The study is planned to take 18 months and will include a number of validation workshops to review progress and study results involving experts from ECOWAS member states and sub-regional institutions. Peter O'Sullivan, CEO of Penspen, commented, "The signing of the contract for this

significant study marks yet another occasion where the critical early phase abilities and experience of Penspen have been recognised by multi-nation clients. This study builds on our established work and reputation gained for other feasibility study work on major projects such as Kampala-Kigali, AGRI, TAPI and Trans Sahara."

ECOWAS includes 15 member states covering an area of over 5.1 million km<sup>2</sup>, with an estimated population of 300 million inhabitants. WAGP at present runs from Nigeria to Benin, Togo and Ghana – a total distance of 678km, with 569km offshore. Penspen has been providing engineering, project management, asset management and integrity services to the oil and gas industry worldwide for over 60 years. Originally founded in the UK in 1954 as Spencer & Partners, the company has now grown to include over 1,000 engineers with major offices in London, Aberdeen, Houston, Abu Dhabi and Bangkok.

During its history, Penspen has undertaken over 10,000 projects, addressing a wide range of challenges from the economic evaluation of pipelines to complex integrated facilities



*Peter O'Sullivan, CEO of Penspen*

design. In the area of onshore pipeline engineering, the company has been involved in major pipeline projects around the world.

Penspen has expanded to provide the full scope of engineering services for the life cycle of an asset. The company has also developed a range of training services covering engineering design and operations for energy assets.

**Penspen Ltd – UK**  
info@penspen.com  
www.penspen.com

# Saddlehorn Pipeline to extend to Carr, Colorado

Saddlehorn Pipeline Company, LLC has announced that the Saddlehorn Pipeline system will extend to Carr, Colorado, USA. The 50-mile pipeline extension from Platteville to Carr, which is anticipated to be constructed with 16" diameter pipe, will provide a connection to existing crude oil assets in that region. The extension has been designed to provide shippers with streamlined access into the Saddlehorn Pipeline system.

Saddlehorn is a limited liability company owned by Magellan Midstream Partners, Plains All American Pipeline and Anadarko Petroleum Corp. The company will construct, own and

operate the approximately 600-mile pipeline (including the Carr extension), which will transport various grades of crude oil from the DJ Basin, and potentially the broader Rocky Mountain and Bakken area resource plays, to storage facilities in Cushing, Oklahoma, owned by Magellan and Plains. The 20" pipeline from Platteville to Cushing ultimately has the capacity to transport up to 400,000 barrels per day (bpd), with the initial capacity expected to be closer to 200,000 bpd.

The Carr extension project is currently estimated to cost between \$80mn and \$100mn. Magellan will serve as

construction manager and operator of the Saddlehorn Pipeline system. Subject to receipt of necessary permits and regulatory approvals, the Platteville to Cushing pipeline is expected to be operational during mid-2016.

**Magellan Midstream Partners, LP – USA**  
www.magellanlp.com

**Plains All American Pipeline, LP – USA**  
www.plainsallamerican.com

**Anadarko Petroleum Corp – USA**  
www.anadarko.com

# Tenaris to supply products and services for Mariner Project

Statoil has awarded Tenaris a contract for the supply of casing, tubing and all related services for the Mariner Project.

Discovered in 1981, Mariner is the largest field development on the UK continental shelf in more than a decade. Estimated to hold approximately 250 MMbbl of recoverable oil, the field is located more than 90 miles east of the Shetland Isles, and is currently under development by operator Statoil and its co-venturers JX Nippon and Dyas.

Tenaris will provide TenarisHydril Blue® connections and TenarisHydril Wedge™ connections, both with Dopeless® technology, together with a full range of services including demand planning, inventory management, delivery to the well, rig returns and repairs that will be managed from Tenaris's facilities in Aberdeen, UK.

"Tenaris is proud to be part of a project of such scale as Mariner," said Gabriel Podskubka, Tenaris eastern hemisphere area manager. "We'll work hard to be up to our customer's expectations in an operation that will take place in one of the most demanding environments. We are committed to delivering a best-in-class service to Statoil and are happy that our extensive portfolio of products and services has given us this opportunity."

Mariner is estimated to be in production for at least 30 years, with start-up expected in 2017. The oilfield consists of two reservoirs – Heimdal and Maureen – at depths of 1,227m and 1,492m (approximately 4,000 and 4,900ft).

According to Statoil, the main Mariner platform will have one drilling rig and one well intervention and completion unit. In addition, a newly built jack-up rig will be located next to the Mariner

installation, working through well slots on the platform for the first four years. Over the field's lifetime, as many as 130 well targets are planned.

Tenaris manufactures and supplies steel pipe products and related services to the world's energy industry and other industrial applications. Customers include oil and gas companies as well as engineering companies engaged in constructing oil and gas gathering, transportation, processing and power generation facilities. Tenaris operates an integrated worldwide network of steel pipe manufacturing, research, finishing and service facilities, with industrial operations in the Americas, Europe, the Middle East, Asia and Africa, and a direct presence in most major oil and gas markets.

**Tenaris SA** – Luxembourg  
www.tenaris.com

## Dixon Low Pressure Systems Designed specifically for the SHALE GAS industry

Dixon Products are already being widely used in the American and Canadian fracking industry. Dixon currently have over 66,000 parts being used in low pressure fluid transfer systems within hydraulic fracturing applications.



### Application:

Used for the transfer of water, brine, water based chemicals, water based acids and slurries used at fracturing sites

### Products:

- Hoses- Hydrocarbon, chemical resistant, abrasion resistant and general utility.
- Hose assemblies
- Hose fittings
- Flange adapters
- Manifolds
- Split nuts
- Caps and Plugs

### Services:

- Global Inventory and Locations
- Sales and technical support worldwide
- Onsite services and consultancy
- ISO9001 accredited
- Pressure Equipment Directive (PED97/25/EC)



For further information please contact us now on:

+44 (0)1772 323 529 sales@dixoneurope.co.uk

www.dixoneurope.co.uk



## Natural gas project benefits from Weholite pipes

The ongoing Corrib gas project in Mayo, Ireland, has been advanced by the employment of large diameter plastic pipe manufacturer Asset International. The landmark project, anticipated to be operational this summer, is estimated to harvest a massive 5,940 billion cubic feet of natural gas.

When it was discovered in 1996, the Corrib gas field was the largest of its kind discovered in Ireland for over a quarter of a century. At peak it is predicted that it will supply up to 60 per cent of Ireland's natural gas requirements, for some twenty years.

The Shell-owned Corrib gas field is located about 52 miles off Erris Head in County Mayo, in an area known as the Slyne Trough at a depth of around 355m. The gas originates from a Triassic sandstone reservoir 3,000m below the seabed.



The gas project in Mayo, Ireland

Shell began work on the offshore section of the pipeline in the summer of 2009. Over 7,000 lengths of pipe have been welded together on board the *Solitaire* pipe-laying vessel.

Asset International provided 4.9km of 750mm 4k Weholite pipe, which was used to create an air duct for part of the marine section of the large-scale project. The Weholite pipes were installed on-site by Murphy International, a wholly owned subsidiary of J Murphy & Sons Ltd, for the project, overseen by principal contractor BAM Construction.

Donnacha Keating, project manager at Murphy International, commented, "The Corrib Gas Pipeline Project is one of the most significant engineering projects ever undertaken in Ireland. With the help of key people dedicated to the detail the project demanded, we ensured all design, planning, safety, quality and environmental challenges were met within time and budget. The project was considered a success on all levels by all parties, with the main factors for this being the effective planning, good communication and skilled people involved throughout the project."

Paul O'Regan, technical engineer at Asset International, said, "Being involved in a project of this scale and standing has been both challenging and incredibly rewarding. We needed to ensure that nearly 5km of Weholite pipe



was completely airtight, as the tunnel it occupied was to be filled with grout once completed. Despite a challenging brief, the job was well executed, and delivered on time."

Weholite exploits an advanced technology polyethylene material and is used primarily in water infrastructure projects across the UK. It is a lightweight, durable, easy-to-install and abrasion-resistant product tolerant of ground movements.

It is manufactured in internal diameters from 400 to 3,500mm. The low-pressure, high-technology pipe offers the construction and water industries a solution across a range of applications, including surface drainage, foul sewers, inter-process pipe work and outfalls.

**Asset International Ltd – UK**  
sales@weholite.co.uk  
www.weholite.co.uk

**MADE IN CHINA**

[www.thinwalltubing.com](http://www.thinwalltubing.com)

All products sold under brand name  
"TRANNEL"



Specialists in fulfilling and custom requirements in thin wall tubing and bellows.

**Minimum Walls thickness  
0.0025**



Jerry Wang: 813-298-6667  
Email: tubingsolutions@outlook.com  
881 Dunbar Ave, Oldsmar, Florida 34677



# Wood Group secures KPOC pipeline contract

Wood Group Kenny (WGK) will support the Keababangan Petroleum Operating Company (KPOC) in pipeline engineering and flow assurance engineering studies for the Kamansu East (KME) field offshore Sabah, Malaysia.

The scope of work will include concept select studies and definition engineering on subsea heating options, thus preventing hydrates, for the 30km

gas pipeline, which runs from the KME field in 750m of water to the new shelf edge Keababangan platform. The pipeline heating technology could be the first application for deepwater gas development in Malaysia.

Bob MacDonald, CEO of Wood Group Kenny, commented, "This project is a great opportunity to tackle the challenges posed by subsea pipeline

heating for deepwater projects. It is an honour to work with KPOC on the Kamansu East project."

The KME field and Keababangan Northern Hub Project are part of the Keababangan Cluster, which is owned by Petronas Carigali Sdn Bhd, ConocoPhillips (Sabah Gas) Ltd and Shell Energy Asia Limited. KPOC is a joint venture company that was established to act as the cluster operator. The first gas from the field is expected to be required in the early 2020s.

Wood Group is an international energy services company operating in more than 50 countries. The group has three businesses – Wood Group PSN, Wood Group Kenny and Wood Group Mustang – providing a range of engineering, production support and maintenance management services to the oil and gas and power generation industries.

**Wood Group Kenny – UK**  
www.woodgroupkenny.com



Bob MacDonald, CEO of Wood Group Kenny

www.norpicofittings.com



NORPICO Since 1987

ISO9001:2008, ISO14000:2004, ABS Type Approval  
API QR ISO9001:2008, API SPEC Q1, TS271067E-2018

# NORPICO

Your Reliable Partner In Piping

- ASTM B16.9/MSS-SP-75/EEMUA 146
- NORMAL: ASTM A234 WPB/P11/P12/P22/P91/P92
- UPDATED PHASE 1, ASTM A860 WPHY X52/X65/ASTM A420 WPL6/WPL9
- UPDATED PHASE 2, ASTM A403 WP304/304L/316/316L/ASTM A815 S31803/S32750/S32760
- UPDATED PHASE 3, UNS C70600/UNS 4400/UNS N06625/UNS N08825, etc.
- ASTM 519 4130



AGENT: S+ C DDS STEEL PIPE

**Dalian Norpico Pipe Fittings (Manufacture) Co., Ltd.**

No.23, Sanyi St. Changxing Island, Economic Zone, Dalian City, PRC  
Tel: +86 411 87647345, 87612882  
E-mail: sales@norpicofittings.com  
skype: 13889503666@163.com  
Managing Director: Ms Li-Jing 13889503666

# Hose bundle range handles stainless steel, electrical, titanium and plastic cable combinations

Parker Hannifin has launched its armoured oil and gas hose bundle product range to the UK offshore oil and gas specifier market. The Multitube® range – originally launched in the USA – is now available in the UK, allowing UK specifiers to use any combination of stainless steel, electrical, plastic and titanium in one Parker bundle.

Multitube is a bespoke tubing product constructed from stainless steel, copper or thermoplastic hose and tubing. The range spans from low-pressure thermoplastic tubing – including fluoropolymer PFA, FEP and PTFE – to high-pressure hoses to +650 bar. The tubes and hoses can be helically cabled into long length umbilicals to +750m continuous, and can also consist of electrical wires for temperature, pressure and valve control.

Alongside the Multitube range, Parker has introduced the TempTrace™ product portfolio. This consists of thermally insulated heated sample obtainment and freeze protection bundles. Parker's cross-wrapping insulation process applies thermal insulating materials around tubing in a way that reduces the possibility of cold or hot spots occurring at bends.

TempTrace also provides a wide variety of parallel resistance heaters for temperature control and regulation. This combats the likelihood of gas

condensing in tubes, or pipework freezing in sub-zero temperatures.

The new products give EPCs the scope to save time and money on new systems and installations, as well as being more space-efficient. In refurbishments and planned maintenance, Multitube offers specifiers the chance to reduce shutdown times for pipe and hose replacements, as the products are delivered pre-engineered, pre-insulated and pre-heat traced, ready to install.

To support the launch, Parker is offering oil and gas customers free design advice and specification guidance. Customers can also access specialist hose training at no cost, which covers safe installation, connection and product handling of

the new range. Parker's technology and market development manager for tube products, Robert Airey, said, "For EPCs running lots of tube or pipe type products, Multitube offers the scope to save a lot of time, money and space. Whilst hose bundles are nothing new, the expanded portfolio gives oil and gas specifiers much greater flexibility in engineering design. Multitube is one of the first UK ranges to combine electrical cables, stainless steel tubing and temperate gas control in one bundle."

The Multitube range is now available from Parker and a limited number of authorised distributors.

**Parker Hannifin Ltd – UK**  
[www.parker.com](http://www.parker.com)



*Multitube allows oil and gas specifiers to combine stainless steel, electrical, plastic and titanium*

## UAE oil and gas industry gathers at SteelFab

STEELFAB 2015 featured 350 direct exhibitors and attracted 10,324 trade visitors from 83 countries. More than 900 brands were exhibited during the four-day show.

Indications of the show's global acceptance was visible from the steady increase of visitors from Afghanistan, Algeria, Armenia, Azerbaijan, Egypt, Ghana, Kazakhstan, Kenya, Libya, Nigeria, Sudan, Tanzania, Tunisia,

Uganda and Ukraine. For over a decade, the steel fabrication and metal working industry has used SteelFab to acquire some of the latest equipment to improve productivity and efficiency.

This has resulted in SteelFab registering impressive growth in number of exhibitors, brands on display, visitors, business leads and enquiries. Now, with the United Arab

Emirates providing a fresh momentum to economic diversification, the steel fabrication industry is looking at better growth momentum. The majority of the demand will be generated by the region's core sector, which includes construction, manufacturing, oil and gas and infrastructure, and the the pipeline industry.

**SteelFab 2016 – UAE**  
[www.steelfabme.com](http://www.steelfabme.com)

# Horn – A tool manufacturer with API certification

If you were to line up the oil and gas drill strings of all the production derricks and platforms that are currently in use, you would end up with a total length far in excess of one million kilometres. That is long enough to circle the equator at least 25 times. Given that these strings constantly have to be replaced due to wear and the creation of new extraction sites, there is a huge market for these products.

The fact that pipes measuring eight to twelve metres in length have to be screwed together to create the strings means that threads are required every eight to twelve metres as well. In the case of socket joints, it is every four metres. This is a mammoth production task, and finding a production method that is cost-effective, precise and fast is a major challenge for tool manufacturers. Horn in Tübingen, Germany, decided to take on this challenge by developing a system that would allow precision manufacturing of oilfield pipe threads.

The pipes used in exploration and producing wells range from 2<sup>3</sup>/<sub>8</sub>" to 28" in diameter. They can be longitudinally welded, spiral welded, rolled, hot rolled or pilgered. A distinction is drawn between delivery pipes, casing and tubing. The materials used include chromium steel, stainless steels, carbon steels (hot-rolled and high-strength), chromium-nickel steel pipes for acidic environments or, in the case of extreme applications, round-forged and longitudinally bored drill rods made from nickel-based alloys. Pipes with API round/buttress threads, which are referred to as standard pipes, must feature screwed connections that are both positive and non-positive locking.

In the case of integral connections, one end of the pipe has an external thread while the other end has been widened and has an internal thread. These pipes are screwed together without using sockets. In the case of standard socket connections, both ends of the pipe have an external thread and the pipes are connected via a threaded socket. Threads approved for oilfields must meet the requirements of the API standard (American Petroleum Institute) and are subdivided into API round and buttress threads.

In addition to these, there is a whole range of premium threads for the most stringent requirements. The threaded connections have to withstand extreme levels of stress due to the high temperatures and pressures that prevail deep underground. The connections have to be positive/non-

positive locking and leak-proof. Not only that, but in the case of directional boring (when the vertical path of the bore moves in the horizontal plane), high levels of bending stress are exerted on the threaded connection.

## Stationary or rotating tool

Machining with a stationary tool on two- and four-axis machines can involve either one or two supports. Aside from this, there is another machining concept that relies on a rotating tool head and six individually controllable slides. The key issue here is to master the centrifugal forces of the tool slides and tools.

Thread machining on a finishing line must satisfy several boundary conditions: the concentricity of the pipes that are being screwed together, a high level of torque transmission, and high-quality centring during screwing operations to prevent cold welding of the threaded connection. This does not really pose a problem in the case of welded pipes with the same wall thickness. However, greater machining effort is required for rolled pipes with diameter tolerances, different wall thicknesses and out-of-roundness deviations. In addition, rolled pipes generally have a rolling skin, which affects the tool life. If the threads are machined while the pipe rotates, vibrations may be generated as a result of the mass, and this could affect the precision, the surface quality and, once again, the life of the tools.

*Combination cartridge for peeling and thread cutting*



Cartridge for thread chaser system 315



## Minimal floor-to-floor time

Of the two methods, machining with rotating tools is the more challenging. With this in mind, Horn has developed a new tool system that is able to face the pipe ends, perform internal and external chamfering, create the conical thread with peeling inserts and produce a finished thread with three tool cartridges (featuring thread-cutting inserts) that are each offset by 120° – all in one pass.

The thread pitch for API pipes of medium diameter – which is the dominant market segment – is exactly 5.08mm per turn. The inserts used for thread machining are structured differently from follow-on tools and are precisely coordinated to produce the required thread geometry. First of all, the first tooth of the first insert makes contact, followed by the first tooth of the second cutting edge, then the first tooth of the third cutting edge, the second tooth of the first cutting edge, the second tooth of the second cutting edge, and so on. The technology supports up to five teeth per insert. This results in optimum distribution of the cutting forces across the individual teeth and inserts, so that none of them are overloaded. This machining concept enables an extremely short floor-to-floor time, but also places a great deal of importance on precision and cost effectiveness at the same time.

## Optimum production technology

The tools used in this compact tool solution feature effective internal cooling to facilitate heat dissipation and chip removal. Depending on the application, the coolant flows through, under or over the cutting edge. There is a minimum coolant pressure of 50 bar and the volume flow rate is 50 l/min.

The most effective part of the cooling concept is the way the cooling lubricant can be supplied through the cutting edge. The thread-cutting inserts from the S117 thread system (with a thickness of up to 7mm) ensure optimum heat dissipation and vibration reduction. Integrated chip breakers that are tailored to the material being machined make for excellent chip control. The threading insert is secured in a precision insert

seat that provides lateral support by means of an individual and adequately dimensioned clamping bolt. There is no need for any additional elements such as separate chip breakers, supports, etc.

The substrates offer a combination of hardness and toughness in accordance with the specific application. The AS66 PVD multi-layer coating, which is highly resistant to wear, is used on the inserts, and the surface parameters of the cutting edges are optimised for the particular application. In terms of their cutting edge geometries and position in the tool head, all the inserts used in this complex tool system are designed to ensure optimum cutting conditions and chip control.

## Technology leader for oilfield pipe threads

This technology from Horn for producing oilfield pipe threads in a single machining pass offers major commercial benefits:

- Enhanced productivity
- Excellent surface quality
- Superb thread accuracy with secure positive and non-positive locking
- Threaded surfaces with a high load-bearing ratio to prevent galling due to high torques during disconnection and connection processes
- High levels of leak tightness and concentricity

These complete tools can be used with an API diameter range of 2<sup>3</sup>/<sub>8</sub>" to 26" as standard. The Horn system also supports pitches of up to 10mm/turn with diameters above 14", although this option is not currently available as part of the standard solution.

In spring 2011, Horn received certification according to API Q1 from the American Petroleum Institute (API). The API is the largest association for the oil and gas industry, including the petrochemical industry, in the USA. With this Q1 certification, Horn was the first company worldwide to be included in the APIQR's Composite List for the development, manufacture and sale of turning and milling tools. This achievement, combined with the company's ISO 9001 certification, is positive proof of its commitment to compliance with higher, internationally recognised quality standards.

Horn's many years of experience in this segment, coupled with its approach of offering the best solution to meet a particular challenge, have enabled it to achieve its objective and given it a competitive advantage. Horn is recognised as a technology leader in various areas, and these now also include the machining of oilfield pipe threads.

---

**Paul Horn GmbH** – Germany

info@phorn.de

www.phorn.de

Advanced Drainage Systems, Inc.....	35	MRC Global Inc.....	16
AK Steel.....	22	Mueller Water Products.....	28
Alfa Laval.....	43	Optical Metrology Services.....	10
Anadarko Petroleum Corp.....	52	Parker Hannifin Ltd.....	56
Anritsu Industrial Solutions Europe Ltd.....	45	Peninsular de Vastagos SL.....	16
Asset International Ltd.....	54	Penspen Ltd.....	52
AT&T Inc.....	28	Pipe Center.....	14
Beijing Haohong Pipe Fitting Co, Ltd.....	33	Pipex px.....	16
Bibby Offshore Ltd.....	10	Plains All American Pipeline, LP.....	52
BKP Berolina Polyester GmbH & Co KG.....	9	Plastics Pipe Institute.....	18, 24
Centravis.....	12	Sandvik Materials Technology.....	20, 27, 51
Contech Engineered Solutions.....	12	Silver Fox.....	30
EcoNet Controls.....	30	SSP Corp.....	39
Eurotubi Europa Srl.....	27	SteelFab 2016.....	56
Flexi-Cell (UK) Ltd.....	45	Sumner Manufacturing Co, Inc.....	38
G.Rau GmbH & Co KG.....	28	TAG Pipe Equipment Specialists Ltd.....	37
Hunan Great Steel Pipe Co, Ltd.....	35	Technip.....	13
Huntingdon Fusion Techniques.....	41	Tenaris SA.....	53
Jakob Antriebstechnik GmbH.....	29	ThyssenKrupp Materials (UK) Ltd.....	41
DK Jones Ltd.....	33	Tianjin Baocang International Trade Co, Ltd.....	51
Kasto Ltd.....	14	TMK.....	9, 33
MACAW Engineering Ltd.....	15	Trelleborg.....	31
Magellan Midstream Partners, LP.....	52	Tungum Ltd.....	20
Magnetic Analysis Corp.....	23	Uponor.....	19
McElroy.....	26	Versaperm Ltd.....	34
Messe Düsseldorf GmbH.....	8	Wood Group Kenny.....	55
Metalube Ltd.....	17		

# advertisers index

AK Export Import .....	45	Magnetic Analysis Corporation .....	38
Bola-Tek Mfg Co Ltd.....	34	Max Value Industries Co Ltd.....	Front Cover
Both Well Steel Fittings Co Ltd.....	43	Messe Düsseldorf GmbH.....	37
CSM Group .....	1	Messe Düsseldorf GmbH – TUBOTECH 2015 .....	39
Dalian NORPICO Pipe Fittings Manufacture Co Ltd .....	55	Qualitube Ltd.....	31
Dixon Group Europe Ltd .....	53	Randolph Tool Co Inc.....	2
Fine Tubes Ltd.....	17	StaRo Stahlrohrhandelgesellschaft mbH .....	Back Cover
Grillo Steel Srl .....	23	Sumner Manufacturing Co Inc.....	15
Rohrbefestigungen Hammerschmid GmbH.....	45	Suraj Ltd.....	17
Hebei Chida Manufacture and Trade Co Ltd.....	29	TAG Pipe Equipment Specialists Ltd .....	19
Huntingdon Fusion Techniques HFT® .....	38	Tolexpo 2015.....	21
Interservice Trading BV .....	13	Tube Developments Ltd .....	3
IRC SpA.....	7	Tubing Solutions LLC .....	54
D K Jones Ltd .....	25	VASS Pipe & Steel Co Inc.....	Inside Front Cover
KBS (Kartal Bombe Sanayi) Dished Heads.....	11	Wuxi Hatal Aluminium Co Ltd .....	35
KRV Kunststoffrohrverband eV .....	Inside Back Cover		

Published by  INTRAS

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

46 Holly Walk, Leamington Spa, Warwickshire CV32 4HY, UK  
Tel: +44 1926 334137 Fax: +44 1926 314755 Email: [tpi@intras.co.uk](mailto:tpi@intras.co.uk) [www.read-tpi.com](http://www.read-tpi.com)



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](mailto:kunststoffrohrverband@krv.de)**

**[www.krv.de](http://www.krv.de)**



### The company ■■■■

- competent personnel
- 40 years' market experience
- 10.000 tonnes of steel tubes in stock

Exploit our strengths to your advantage!

Your **StaRo**-Team

### Our delivery programm ■■■■

#### Seamless steel tubes

acc. to DIN, EN, ASTM and API standards  
from 10,2 to 660 mm

- materials S355J2H, S235JRH, S235J2H
- Inspection certificate  
EN 10204 / 3.1. b

#### Welded steel tubes

acc. to DIN, EN, ASTM and API standards  
from 17,2 to 1620 mm

- Longitudinal seal-welded or spiral-welded,  
Material: S355J2H, S235JRH
- Inspection certificate 10204 / 3.1. b

#### Structural hollow sections

Hot-produced acc. to EN 10210  
and cold-produced acc. to EN 10219  
40 x 40 - 400 x 400 mm  
50 x 30 - 500 x 300 mm

- materials S355J2H, S235JRH, S235J2H
- Inspection certificate EN 10204 / 3.1. b

#### Precision steel tubes

acc. to DIN, EN, ASTM and API standards  
from 5,0 to 200 mm

#### Processed tubes available on request

- as customer – specific cuts
- with PE coating
- blasted and primed

A list of all deliverable dimensions/weights is available on request.

