

WELCOME TO THE **4TH EDITION** OF BARTON FIRTOPS NEWSLETTER **"THE FIRTOP FLYER"**

NEW PRODUCT RANGE SECURES 5 YEAR SUPPLY DEAL WITH GAS UNIE

WE ARE DELIGHTED to announce that in 4th Quarter of 2009 Dutch client Gas Unie formally committed a 5 Year Supply Contract to Barton Firtop for the supply of Cast Basket Type Gas Filters. The contract was placed via our exclusive agents for the Netherlands, Kimman Process Systems (KPS) whose founder and M.D. Mr Dick Verloop was jubilant at securing this prestigious business.

Gas Unie are the state owned Dutch giant, responsible for the gas transmission network within the Netherlands and operation of gas pipelines into other countries including the UK, Germany, Scandinavia and Russia. This blue chip client is a proud addition to the Barton Firtop customer reference list. The contract was finally secured after a six man delegation from Gas Unie came to our UK site for pre-award discussions and quality system auditing.

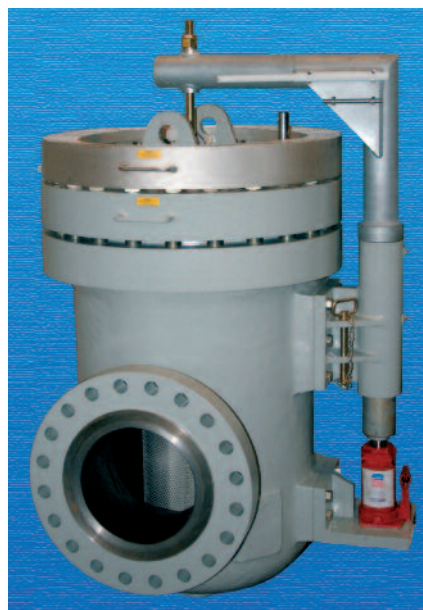
"Quick Release Closure design incorporates a safety interlock mechanism as standard"

Due to the full vessel specifications applied to this contract, the traditional way to manufacture this type of equipment would be to construct from fabrication. However, Barton Firtop took the innovative approach of utilising castings for the pressure housing, enabling us to supply a standardised range competitively over a long period. Our R&D Department set to work and quickly came up with a cast design solution to meet the bid deadline.

Amongst the special features of this new range is the Quick Release Closure design for sizes up to and including 6" NB Class 600# line size which incorporates a safety interlock mechanism as standard, preventing the closure being opened whilst the unit is under pressure. The bolted cover design for units from 8" to 16" also feature a safety interlock, which prevents access to the closure bolting until the pressure is relieved

(see under 'R&D' on page 3). These large bolted cover units are facilitated with a davit operated by a hydraulic jack mechanism ensuring safe operation of the closure when lifting the cover which weighs upwards of 900kg on the largest unit. These innovative design and safety features were major factors in Gas Unie choosing Barton Firtop.

For the Barton Firtop proposal to remain competitive our main filter housings were to be cast, NDE'd, machined, assembled and pressure tested at our wholly owned sister company Barton Firtop India (BFI) based in Goa. Gas Unie audited our UK facility, carrying out detailed checks on the extensive BFI stock range held at our UK premises. Included in the audit were random sample pressure testing, material certification & traceability review, NDE Report reviews, NDE Operator qualifications reviews, dimensional checks, casting visual / quality checks and PED/CE audit compliance. After close scrutiny our stock holding and manufacturing facilities were approved.



Above: 12" NB Class 600# Gas Filter as supplied to Gas Unie

The contract is to supply up to 80 Metering & Regulating (M&R) stations with gas filters of varying size and quantity over a period of 5 years, with option to extend to 10 years. The initial supplies have now been completed including supply of 16", 12", 10" and 8" Bolted Cover Units and 6" & 4" Quick Release Units. Each filter has a 50 m interchangeable filter basket constructed in 316 Stainless Steel. The manufacture of the safety interlock, filter basket and hydraulic davit lift assembly and final FAT test are all carried out in the UK.

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The project painting will be by client approved painting specialist Surface Engineers (Manchester) Ltd, who have provided us outstanding support to gain the Gas Unie painting approval. NACE Level 3 certified Managing Director, Gary McKeown, was pleased to have secured the business and hopes that their Gas Unie & NORSOK painting approvals will also contribute to a bright future for their company.

The exact final value of this contract is still unclear, but in the first 6 months since the frame agreement was placed, call-off orders valued around £0.5 million have been received, which is very encouraging.

IF YOU HAVE A REQUIREMENT for a quantity supply that may require the development of a new cast product range to replace costly fabricated items, please feel free to contact us with your enquiry details and we may soon be adding your company to our ever increasing list of satisfied customers. Most items that are fabricated can be cast so it does not necessarily have to be limited to filtration equipment that we can supply. Swap your supply to Barton Firtop and we guarantee that cutting cost does not mean a reduction in quality or service. Please give our sales team a call on +44 (0)1527 831644 for further information.

PRODUCED WATER RE-INJECTION (PWRI) FILTERS HELPING THE ENVIRONMENT

Barton Firtop recently completed the supply of high pressure single basket filters and low pressure Firplex™ dual filters to TOTAL's "Ellon & Dunbar" offshore oil fields. The Firplex™ unit was a flanged 2" 150# Unit constructed from 25Cr Super Duplex Stainless Steel (UNS S32760) with Inconel 625 filter baskets. The high pressure single basket filter (pictured) was a flanged 8" 2500# RTJ unit constructed in 22Cr Duplex Stainless Steel (UNS S31803) and pressure tested to 480 Bar g on our inhouse facility. Both designs were subject to NDE, PMI & NACE (for sour service) and CE Marked in compliance with the PED.

The filters were required on TOTAL's Produced Water Re-Injection (PWRI) Project to safeguard the integrity of the PWRI pumps against potential damage from excessive solids carryover.

Produced Water is a term used in the Oil & Gas Industry to describe water that is unintentionally "produced" together with the intended products of oil & gas. Oil and gas fields have a natural water layer that lies underneath the oil or gas, with oil fields

typically containing larger volumes of water than gas fields. Produced water contains harmful bi-products (e.g. H₂S / Hydrocarbons etc) which means that disposal of produced water is no simple task in these environmentally sensitive times.

In addition to the naturally occurring water in these oil fields, additional water is often required to be injected into the reservoirs to help maintain the well pressure and continue to force the oil to the surface in an effort to maximise the production capacity and optimise the life of the field. It follows that as the field becomes depleted the produced water content of the oil often increases.

Until recently, produced water was commonly disposed of in large evaporation ponds; however this has become an unacceptable practice due to environmental issues. Produced water re-injection (PWRI) is one of the most attractive methods for disposal of produced water, especially for offshore rigs. Re-Injection of the produced water back into the well has economical advantages, enabling pressurisation of the well and disposal of the produced water to often be achieved simultaneously. It is an

environmentally beneficial process as the harmful products contained within the produced water are ultimately locked away in the depleted well when drilling operations eventually cease.

The approximate £100,000 project to supply these PWRI Filters will aid TOTAL's efforts in significantly reducing emissions from the North Sea's Ellon & Dunbar fields.



Above: 8" ANSI 2500# PWRI Basket Filter in 22Cr Duplex Stainless Steel



Above: 3D Model of 24" 150# Large Bore Cast Basket Filter

NEW LARGE BORE BASKET STRAINER RANGE COMPLETES 3D MODEL STAGE

Our Engineering Department, headed by Colin Marshall, has just completed the design of a new Large Bore Cast Basket Strainer range which will be available to order from July 2010 with stock being scheduled for Dec 2010. The design has been optimised by the use of 3D modelling (pictured) and is Cat IV PED Certified with ASME VIII Div 1 design code.

The new range from 350mm(14")NB to 900mm(36")NB is ANSI 150# rated with PED Approval for construction in four standard material grades; ASME: SA 216 WCB Carbon Steel, SA 352 LCC Low Temp Carbon Steel, SA 351 CF8M 316 Stainless Steel and SA 995 Grade 4A (UNS S31803) Duplex

Stainless Steel. Other material grades are also available to order.

The design boasts many user friendly features including a simplistic hydraulic assisted davit lift and adjustable bolt-on leg design providing flexibility to meet clients specific height limitations. The strainers cast housings will be manufactured at our sister company Barton Firtop India enabling this extremely competitive product range to replace expensive fabricated designs in most applications. This design will soon be rolled out across higher pressure ratings with ANSI 300# & ANSI 600# standardised units to follow shortly, and subject to demand ANSI 900# and ANSI 1500# ratings will also be available upon request.

R & D

To enable the recent success on the Gas Unie M&R Upgrade Project to be possible (see front page story), Barton Firtop's R&D Department had to quickly adapt a traditional concept for this new application. Safety interlock closures were readily available across our quick release strainer range, now the task at hand was to see that concept adapted for a safety interlock to be fitted to the bolted closure range. The newly developed and patent pending bolted closure safety interlock prevents access to the closure bolting until the captive safety interlock vent-pin has been removed and pressure safely relieved from the pressure envelope. This provides vital operator

SAFETY INTERLOCKS FOR BOLTED CLOSURES PROVIDE VITAL OPERATOR PROTECTION

protection which is critical in high pressure or hazardous service applications.

Gas Unie were impressed with the concept offered and decided to implement this facility across the range of bolted cover filters in their 5 Year Supply award. The bolted cover safety interlock option is now available across our entire range of equipment upon request. We are also able to retrofit safety interlocks to many bolted cover items already installed at site, whether the original equipment was manufactured by Barton Firtop or another company. Please apply to our Sales Department for further information or to request a quotation or site visit .



Above: Bolted Closure Safety Interlock



Above: 6" ANSI 600# Quick Release Basket Strainer

ANSI 600# RATED QUICK RELEASE MONO BASKET STRAINER RANGE PASSES SAFETY TRIALS

Barton Firtop's R&D Department have just completed safety testing and received Lloyd's PED approval for a new range of Quick Release Mono Basket Strainers at ANSI Class 600# rating. Barton Firtop are the first manufacturer in the market place to offer a quick release version at this pressure rating class utilising their own company design quick release closure.

The closure has a fully integrated safety interlock feature fitted as standard to prevent an operator from accidentally accessing the unit whilst it is under pressure, which is

especially important in gaseous or hazardous liquid applications. The strainer range, which encompasses line sizes from 1"(25mm)NB to 6"(150mm)NB, has had prototypes pass the arduous pressure testing R&D process with loading pressures well in excess of double the design pressure being achieved. A positive seal integrity is also achieved due to the use of anti-extrusion seals especially fitted within the O-Ring groove. This new range, which is highly competitive, will be held in stock at our UK facility and will be available from our extensive stock facility in Summer 2010.

RECOMMENDATION FROM CB&I SPEAKS VOLUMES

We recently completed delivery of T-Type Strainers, Y-Type Strainers, Basket Strainers, Cartridge Filters, Conical Strainers and Fabricated Pressure Vessel Strainers (pictured) to CB&I on their prestigious Peru & Chile LNG Projects, with combined contract value exceeding £1Million. CB&I's letter of recommendation (right) was greatly appreciated and we believe well deserved.



Far Right: CB&I's letter of recommendation

Right: Pressure Vessel Strainer on Pressure Test

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03 March 2010

Dear Sir/ Madam,

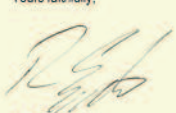
We would like to recommend Barton Firtop Engineering Company Ltd for your consideration as a reliable supplier of filters, strainers, coalescers and flame arresters.

Barton Firtop Engineering Company Ltd has provided materials and complete technical support for CB&I UK Limited on the Peru LNG Project and the Chile LNG Project, for the following commodities:

- Bolts and Strainer Elements
- Filters and Strainers
- Feedgas Metering Strainers
- Flame Arresters
- Piping Filters and Strainers
- Strainer Filter Gaskets

They have proven to be a committed manufacturer who is capable of meeting customer requirements and delivering on schedule.

Yours faithfully,


 Ray Eggleton
 Purchasing Manager

BARTON FIRTOP'S LONGEST SERVING EMPLOYEE

Barton Firtop's General Manager, Graham Usher, recently celebrated 40 years with the company and received a specially engraved carriage clock at a presentation in August 2009, in recognition of his achievement and outstanding contribution.

Graham started with Barton Firtop in 1969 as an apprentice and has been an instrumental figure in the growth and development of the company over the last 40 Years. Barton Firtop greatly appreciate the hard work and dedication that Graham has shown over the years and congratulate him on his achievement.

Right: Company Director, Val Ward, makes the presentation to Graham Usher



NEW RECRUITS AND PROMOTIONS

Barton Firtop would like to welcome the following new employees to have joined our ranks recently;

Jamie Turner (Trainee Machinist)
 Alex Morris (Trainee Quality Engineer)
 Les Workman (Test Engineer)
 Mark Teague (R&D Engineer)
 David Morris (Expediter)

Tom McCandlish was promoted to Senior Expediter in recognition of his hard work and achievements, and will now be focused on expediting larger contracts and Project work. Well done Tom!

NEW ARRIVAL

Barton Firtop's Operations Director, Kevin Troughton and his wife Helen are pleased to announce the birth of their daughter Phoebe Jasmine Troughton, born 12th September 2009, weighing in at 7lb 5oz. Their daughter Rebecca, now aged 4, is very excited about being a big sister. Our congratulations go to the Troughton family from all the staff at Barton Firtop.

BARTON FIRTOP EMPLOYEES CONTINUE THEIR FUNDRAISING EFFORTS



Above: Jamie Turner, Sasha Hollis, Jeff Scotford, Paul Rock with his daughter Fiona, Russell Barnes, David Shuttleworth, Colin Marshall and Lee Hawkes in their Roman costumes



On Sunday 6 June 2010, some of our employees took part in the 5km Spring Fun Run at the Three Counties Showground in Malvern, Worcestershire, in aid of local children's charity, Acorns. The runners were: Colin Marshall, Russell Barnes, Jamie Turner, Paul Rock and his daughter Fiona (aged 13), Sasha Hollis and Jeff Scotford. There was also a half marathon competition and our employees Lee Hawkes and David Shuttleworth took part in this race. As you can see from the picture, they ran the courses dressed as Romans, to really enter the spirit of the event. The weather was perfect for running, and for the second year running, our 5km team picked up trophies for finishing as the 2nd placed team. Overall the money they raised from employee and company sponsorship was £863. Well done to all of you.