

axium process NEWS

www.axiumprocess.com

WINTER 2009



With so many companies chasing less business it is fair to say that 2009 was a challenging year and one which saw many companies diversifying into new markets, developing new skills and consolidating their operations. Axium Process also embraced the challenges that 2009 had to offer and has come out of it with a highly motivated workforce that has developed its range of skills enabling us to widen our scope of supply to the pharmaceutical, biotech, food, beverage, chemical, dairy, brewing and aerospace industries. 2009 also saw existing commercial partnerships strengthened and new ones entered into, culminating in a healthy order book as we enter 2010.

SKY'S THE LIMIT

Whilst we operate primarily in the pharmaceutical, biotech, food and beverage industries, we also undertake fabrication projects within the aviation industry and recent contracts have included aircraft plumbing assemblies and components, workdeck skin assemblies, grab handles and other bespoke stainless steel fabrications. Our welders are certified to CAA BCAR A8-10 and our rigorous systems and procedures have ensured that we have passed our inspection audits with 'flying' colours.

AXIUM PROCESS HELPS MANUFACTURERS RECYCLE WATER, SAVE ENERGY & REDUCE WASTE VOLUMES

By utilising combinations of microfiltration, ultrafiltration, nanofiltration and reverse osmosis membrane technology, we can supply custom built manual and automatic filtration systems that offer manufacturers enormous potential for cost savings in terms of reduced water and energy costs, water recovery, effluent treatment, product recovery and diversification of products.

We specialise in the concentration and separation of liquid streams and in the design, testing, fabrication and commissioning of membrane filtration systems.



ERIKS

We were recently invited by Eriks based in Alkmaar in the Netherlands to be their supplier of wedge-wire and perforated sheet filters throughout the Benelux countries. Axium's Pure-Screen and Econ-Screen stainless steel filters complement the Eriks' Group range of filtration products and are already finding success for a number of applications where the highest quality has been specified and where product consistency is essential.

Axium Process is also a preferred supplier to Eriks UK and is working with a number of their Integrated Solution Branches based in many of the UK's leading food, drink and pharmaceutical companies.

ERIKS is an international service provider offering a wide range of high-quality mechanical engineering components and associated technical and logistics services.

STOP PRESS

WRG AWARDS ULTRAFILTRATION CONTRACT FOR TREATMENT OF LANDFILL LEACHATE

Waste Recycling Group, a leading waste management company which provides a range of cost and environmentally effective processing, recycling, disposal and energy recovery services for local authority and private commercial customers, recently awarded Axium Process a design and build contract of almost £200K for a self-contained Ultrafiltration membrane plant which is designed to treat landfill leachate in North Lincolnshire.

Call us on: 01792 883 882 or email us at: info@axiumprocess.com

WATER RECYCLING PLANT FOR AXMINSTER CARPETS LTD'S WOOL PROCESSING FACTORY AT BUCKFAST IS FIRST OF ITS KIND IN THE UK

Axminster Carpets Ltd, the renowned manufacturer of fine carpets, has installed a large water recycling plant (WRP) at its Buckfast wool processing factory in Devon. It is believed that this is the UK's first wastewater recycling plant (WRP) that has a closed loop system with a target "zero discharge" to sewer.

The complete WRP was supplied by Cornwall based Puriti Ltd and is designed to recycle all of the company's wastewater. Only a small quantity of slurry leaves site for further processing by anaerobic digester, the final products being compost and electricity. The water recovered is pure, free of mineral salts and other organic matter and is ideal for dyeing. Having to deal with the variability of the supply from the River Dart is eliminated. The water recycling process includes staged filtration followed by staged evaporation of the concentrates.

The filtration plant, including the pre-filters and membrane systems, was designed, built and commissioned by Axium Process and has a total membrane area of 3000 m², including both tubular ultrafiltration and spiral wound reverse osmosis membranes.

Of particular interest to many manufacturers is the fact that the company will save a substantial amount of money with zero discharge to sewer. Also, the use of chemicals has been much reduced and a significant amount of energy saved by returning hot water for process applications.

This WRP is currently processing up to 400m³ of factory effluent per day, the total wastewater volume from Axminster's wool scouring and dye house operations.



REVERSE OSMOSIS MEMBRANE FILTRATION FOR LEADING UK EQUIPMENT MANUFACTURER

W7TER Ltd, a leading UK equipment manufacturer for electro-based water and waste water treatment recently awarded Axium a £300K contract for the design and build of a fully automated, two stage, reverse osmosis membrane filtration plant, capable of processing 106,000 litres of pre treated water per hour.



BARRY CALLEBAUT PURCHASES JACKETED DUPLEX FILTER

The World's leading manufacturer of high-quality cocoa and chocolate products has purchased a specially developed duplex filter system from Axium Process utilising a combination of wedge-wire and mesh filter screens and is designed to offer high product security as well as a consistently filtered product. The entire filter system including the valves, is completely jacketed to ensure that the product temperature will be maintained to close limits.



STAINLESS STEEL FINISHING

Our in-house polishing facilities are continually updated in line with new techniques and consumables as they become available. All components and constructions we supply or manufacture are vetted for materials of animal origin. Specifically we do not use any parts, welding, polishing or packing consumables which may contain animal derived materials. We offer certificated finishes to 0.10µm Ra with bead blasting, mirror and electropolishing options available.



Our dedicated team of polishers is trained to provide the level of finish required by the pharmaceutical and biotech industries.

Nominal Grit	Ra measurement		Typical applications and techniques
	Micron (micrometer)	Micro-inch	
80	2.5	100	Dull polish – applicable for tube, bends and tees in general food processing subject to daily cleaning-in-place (CIP). Normal abrasive techniques achieve this.
100	1.2	48	
120	1.0	40	
150	0.8	32	Satin polish - used by high end food and beverage plants, cosmetics, toiletries and with standard pharmaceutical and biotechnology applications. Easier to CIP. Sequential use of abrasives is required.
180	0.6	24	
240	0.5	20	
320	0.4	16	Bright polish – Top end pharmaceutical (water for injection), high value biotechnology materials, semi-conductors, solvents and pure gases. Abrasives plus electropolishing normally required.
500	0.1	4-8	

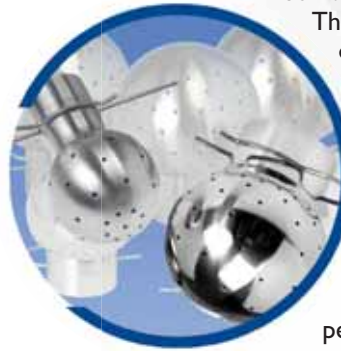
VEOLIA WATER CHOOSES PURE-SCREEN FILTER RANGE



Veolia Water Solutions & Technologies (Gulf) FZC based in Sharjah, United Arab Emirates has recently purchased a number of 90 degree, 50 micron Pure-Screen wedge-wire stainless steel filters for Veolia Co. as pre-filters on a design and build contract for a prestigious reverse osmosis system that had been awarded to Veolia Water, a world leader in the provision of water services. After reviewing a number of different filters, Veolia chose Axiom's Pure-Screen filters based on the quality and standard of their finish and their robust design".

NEW RANGE OF STAINLESS STEEL SPRAYBALLS FOR TANK CLEANING DUTIES

Our NEW range of hygienic 316L stainless steel static sprayballs designed specifically for tank cleaning duties, is available with 360°, 180° upward, and 180° downward spray patterns.



The sprayballs are self draining and are capable of effectively distributing both water and cleaning solutions onto the internal surface area of tanks and vessels.

Available with material certification to BS EN 10204 3.1, our sprayballs are supplied with a retaining 'D' Clip and are designed to fit OD tube from 3/4" up to 2", with ball diameters ranging from 1 1/2" up to 3 1/2". Flow rates can be up to 16,000 litres per hour with spray hole sizes of 1.6mm.



Welsh ice-cream manufacturer Mario's scooped the 2009 National Ice Cream Alliance's prestigious silver challenge cup for the best dairy ice cream.

Award winning Welsh ice-cream manufacturer Mario's has found great success using a specially customised Econ-Screen filter which was modified to suit their installation requirements. The Econ-Screen is designed for full drainability, employs no 'O' rings and has a metal to metal seal design which ensures that the filter element can be removed easily and without sticking. The interchangeable filter elements are available in 1000, 2000 and 3000 micron sizes as standard. End connections can be fabricated to suit customer specification and include plain-ended, clamp, DIN, IDF, SMS, RJT, and BSP options.



New Design

SAMPLE VALVES

Our new range of 316L stainless steel sample valves has been developed with hygienic constraints in mind. The internal body is now constructed with a crevice free elastomer boot and as well as being an efficient method of taking manual samples, the valves can also be used as low holdup drain or vent valves.

- Intrinsically safe design: prevents over-tightening or accidental plug removal
- Suitable for clean-in-place (CIP) and steam-in-place (SIP)



STAINLESS STEEL MANWAYS, FOR TANK ACCESS AND CLEANING

We offer a comprehensive range of 304/316 stainless steel tank manways and ancillary equipment providing access to tanks, storage vessels and ducting systems used by pharmaceutical, food, beverage, chemical, dairy and cosmetic processors. Tank manway options include a PED certified range with working pressures of up to 8 barg, a crevice free option which is fitted with a domed, low product holdup cover and a tempered glass lid manway designed for easy product viewing with a working pressure of up to 3 bar.



CLAMP FERRULES ARE UP TO STANDARD

Our comprehensive range of hygienic stainless steel clamp ferrules now includes the new German DIN 32676 Tables A, B and C range alongside the ISO 1127 standard and the newly updated ASME BPE 2007 standard that is designed for the pharmaceutical industry.

Our ferrule range also consists of BS 4825-3, SMS 3008 and SMS 3017 ferrules to suit OD tubing and the thicker walled BS6362 Schedule 5, 10 & 40 clamp ferrules completing our extensive range of options.



LATEST BUZZ WORDS FOR STANDARD QUALITY REQUIREMENTS AND EQUIPMENT / SYSTEM VALIDATION

Good Manufacturing Practice (GMP)

Is that part of Quality Assurance that ensures that products are consistently produced and controlled to the quality standards as appropriate to their intended use as required by the Marketing Authorisation (Licence) or product specification.

Quality Risk Management

A sound methodical process for the identification, assessment, control, communication and review of risks. Seen as being an iterative approach to apply throughout the system (IT, equipment and process) life-cycle.

Process Validation

Establishing documented evidence which provides a high degree of assurance that a specific process will consistently produce a product meeting its pre-determined specification and quality attributes.

Verification

Definitions include, but are not limited to:

Confirmation, through the provision of objective evidence that specified requirements have been fulfilled.

Verification that manufacturing systems, either acting singly or when combined are fit for their intended use. This includes correct installation and that they operate correctly.

Process Analytical Technology

System (i.e. during processing), for designing, analysing and controlling manufacturing through timely measurements of critical quality and performance attributes of raw and in-process materials and processes with the objective of ensuring final product quality.

Good Engineering Practice(GEP)

Is defined as established engineering methods and standards that are applied throughout the life cycle to deliver cost effective solutions that minimise risk to the patient. This is applicable to suppliers and regulated users e.g. manufacturing equipment during development, manufacture and subsequent use in operation.

Quality by Design(QbD)

This is a systematic approach to development (medicines) that begins with predefined objectives and emphasises product and process understanding based upon sound science and quality risk management.

As supplied by Alan Benbow of ITS Ltd
www.its-ltd.co.uk

TRAINING

I ncreasing our skill level has been a major factor in winning new business and training that has recently taken place includes CAA BCAR A8-10 & ASME IX Codings, ILM Award in Management, Environmental Management Systems, Control Panel Building, Electrical Installation and Ladder Logistics HMI/PLC.

NEW LITERATURE



MEET THE SALES TEAM

O ur technical sales team has grown in both size and capability and is committed to providing a rapid response to your enquiries. Our emphasis is on best practice hygienic engineering and our team of engineers work closely with our customers to provide the best solution to your engineering requirements in terms of cost, quality and delivery.



Leah Murray
Technical Sales

Mike Horgan
Technical Sales

Selina Jones
Technical Sales Manager

Derek Davies
Business Development Manager

www.axiumprocess.com

Don't forget to visit our Picture Gallery and Latest News - both of which are continually updated with company news and product photos



Axium Process Ltd

Hendy Industrial Estate,
Hendy, Swansea, UK SA4 0XP

Tel: +44 (0) 1792 883882

Fax: +44 (0) 1792 886049

Email: info@axiumprocess.com

Web: www.axiumprocess.com



FS 83081



All data is provided in good faith and is subject to change
Copyright 2009 Ref NEWS 09-01