



Process filtration, engineering and equipment
Delivering bespoke design, fabrication and system solutions



STAINLESS STEEL SYSTEMS • MEMBRANE FILTRATION • FABRICATIONS • FILTERS • TUBE & PIPE FITTINGS



- ✓ Bespoke design, system and component fabrication
- ✓ Hygienic process plant & assemblies
- ✓ Membrane filtration systems
- ✓ Project management
- ✓ In-house manual & orbital welding
- ✓ Machining, fabrication & polishing

We maintain a comprehensive stock of hygienic stainless steel fittings and components:
filters, tube & pipe fittings, sample valves, valves, tank manways, sprayballs.

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Design & fabrication



Typical fabrications:

- Skid mounted systems
- Membrane filtration systems
- Pilot Plants
- Hygienic machine frames
- CIP systems
- Pasteurisers
- Pressure vessels and tanks
- Manifolds
- Funnels
- Aircraft workdecks and pipework
- Flowplates
- Standard, duplex, triplex, jacketed filters
- Special bends, tees, hoseliners, spool pieces

We specialise in design and customised stainless steel fabrication providing engineering solutions that meet the requirements of our customers.

Our engineers routinely offer advice relating to cost reduction in the construction of stainless steel fabrications making sure that you receive the best possible value for money in terms of design, fabrication and delivery.

- Our capabilities range from pipework fabrication up to high end pharmaceutical process equipment and systems
- Welders and procedures are Notified Body approved to ASME IX / BS EN 287-1 / BS EN ISO 15607
- Drawings produced to User Requirement Specification (URS) using latest 3D software
- Materials of construction include 304/316/316L stainless steel, Hastelloy®, Duplex and engineering plastics
- In-house processes include machining, orbital and manual welding, fabrication, polishing, pickling, passivation, ferroxyl, pressure and dye penetrant testing, surface finishing

Polishing and Surface Finishes

- Finishes from descaled to 0.10µm Ra
- Bead blasting, mirror and electropolishing options
- TSE certification

We can provide

- Full materials certification
- Surface finishes to 0.10µm Ra, full Ra testing and certification
- Boroscope direct view and video records of each weld
- Weld maps and weld logs
- Dye penetrant testing
- Radiography
- Pressure testing upto 110 Bar
- Nitric and citric acid passivation to ASTM A967
- Ferroxyl testing and certification
- TSE certification
- Mechanical and electrochemical marking options
- Ultrasonic cleaning and vacuum packing



The company

Axiom Process has earned a reputation as a major player in the field of membrane and filtration technologies and is one of the UK's leading hygienic stainless steel fabricators.

We pride ourselves on delivering a complete and integrated engineering service that encompasses process and product development, design using the latest 3D modelling packages, fabrication and surface finishing, validation and testing, commissioning, technical training and support.

We operate across a wide range of industries including pharmaceutical and biotechnology, food and beverage, brewing, dairy, chemical, textile, cosmetic and toiletries; working closely with our customers to ensure a clear understanding of their process, product, quality and delivery requirements.

Our customer base ranges from sole proprietors up to multi-national blue chip companies operating primarily throughout Europe and the Middle East.

Scope of Supply

- Project design and management capabilities
- Product and process development
- Membrane filtration utilising microfiltration, ultrafiltration, nanofiltration and reverse osmosis technologies
- Manual & orbital welding, machining, fabrication, polishing
- Full materials traceability
- Validation, testing, qualification to the highest levels
- 3D drawings to customer specification
- Filter manufacturer including wedge-wire, perforated sheet and sintered mesh options
- Stockist of process components

Project management

Working in accordance with strict QA procedures, each stage of a project, whether it is for the design and build of a bespoke piece of equipment or a large scale turnkey project, is closely tracked by a dedicated project engineer to ensure that the user requirement specification (URS) is fully complied with.



Membrane filtration systems

We specialise in the design, fabrication, testing and commissioning of customised manual and automatic membrane filtration systems designed for the concentration and separation of liquid streams utilising microfiltration, ultrafiltration, nanofiltration and reverse osmosis technologies.



Sustainable manufacturing

We are committed to continuously developing our processes and technologies, helping manufacturers to operate more sustainably. Membrane filtration offers enormous potential for cost savings in terms of reduced water and energy costs, recovery of chemicals, reduced effluent volumes and disposal costs as well as providing processing benefits such as a consistent supply of pure water.

We can provide

- Pilot trials, sample analysis and detailed report
- Product and process development
- Recommendations for plant design and evaluation of operating costs
- Suggestions to reduce plant costs based on energy input, flow channel size, risks of fouling, packing density and ease of membrane cleaning
- Design, build, validation, testing and qualification to the highest levels
- Technical and training support
- After sales support package tailored to accommodate customer requirements

We specialise in:



Membrane filtration pilot plants

Axiom Process has developed a range of mobile membrane pilot plants that is available for customers wishing to evaluate membrane technology as a solution to their process requirement and which can be used for both “in-process” applications or for waste stream concentration or purification.

Stainless steel filter range



Axiom Process manufactures a comprehensive range of stainless steel filters including interchangeable wedge-wire, perforated sheet and sintered mesh screens designed for filtration levels from 5 micron up to 6000 micron as standard.

- Easy to maintain as has no moving parts and does not require tools for access or cleaning
- Interchangeable filter elements
- Suitable for backflushing, CIP (clean-in-place) and SIP (steam-in-place) operations
- Filters can be fabricated to customer specification
- Duplex, triplex, jacketed, stand-alone options available



Stainless steel tube & pipe fittings



Axiom Process maintains a comprehensive stock of hygienic stainless steel fittings

By offering a rapid response to your fabrication enquiries and stocking a comprehensive range of processing equipment, we can meet your requirements in terms of delivery, quality and consistency.

Tube and Pipe Fittings

RJT, IDF, SMS, DIN, Clamp, ASME

Filters

Standard, Compact, Economy, High Capacity, Duplex, Jacketed options

Sample Valves

Single Port, Double Port, 4mm Entry, 8mm Entry, Clamp and Plain-ended options

Sightglasses

316L stainless steel/borosilicate glass, clamp or plain-ended options as standard

Manways

Oval, Circular, Rectangular, Low Retention, High Pressure options

Sprayballs

360°, 180° upward, 180° downward options



Flanges

ANSI 150, PN16

Valves

Butterfly, Ball, Non-Return, Pressure Relief

Flexible Hoses

PTFE Lined Hoses, Silicone Rubber Hoses