

Hygienic Stainless Steel Systems and Fabrications

Delivering bespoke hygienic engineering design, fabrication and system solutions



in One Company, One Source

Axium Process is a specialist in hygienic engineering design and the fabrication of high quality stainless steel equipment and components.

- Hygienic engineering design and solutions
- Process filtration equipment and systems
- Engineering drawing and modelling
- Project management
- Technical training and engineering support
- Validation, testing, certification & traceability
- Manual, Orbital, Mig & Tig welding facilities
- Mechanical metal polishing, bead blast and electropolishing
- Hygienic components and stainless steel fittings



Bespoke Design & Project Management

Axium Process has earned its reputation as a specialist hygienic engineering company that understands and delivers what the customer really wants.

By working closely with our customers and in accordance with Good Manufacturing Practice (GMP), each stage of a project is closely tracked by a dedicated project engineer to ensure that the customer's requirements are fully complied with from concept to delivery.

Our Design Office uses the latest 3D modelling and product design software, enabling the visualization of individual components and assemblies which is of benefit to customers wishing to develop an idea or progress to a prototype.

The design expertise is backed up by our team of qualified engineers who routinely offer advice and cost effective engineering solutions, ensuring the best possible value for money in terms of design, fabrication and delivery.



Our reputation and expertise is based on decades of stainless steel engineering experience.

Fabrication

We specialise in hygienic stainless steel fabrication across a broad range of industries with specialist expertise in bespoke stainless steel systems and components for high-profile, high-tech industries such as biotechnology, pharmaceutical and aerospace.



In-house processes include:

- CNC equipped machine shop
- Orbital and manual welding, fabrication, pickling, passivation, ferroxyl testing
- Pressure, and dye penetrant testing
- Bead blasting, mirror polish and electropolishing

Capabilities range from:

- Pipework fabrication, component customisation up to high-end pharmaceutical process equipment and systems
- Welders and procedures are Notified Body approved to ASME IX, BS EN ISO 9606-1 and BS EN 15614-1
- Construction materials include 304/316/316L stainless steel, Hastelloy[®], Duplex and engineering plastics (no ferrous metals onsite to avoid cross-contamination)











Rapid In-House Machining:

- Dedicated CNC equipped machine shop
- High precision quality products
- Prototypes, one-off, batches
- Stainless steel, copper, brass, PTFE, Inconel[®], Monel[®], Hastelloy[®], aluminium, Tufnol[®], Delrin[®], engineering plastics

Inspection, Certification, Traceability

- 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
- Ultrasonic cleaning
 and vacuum packing



Polishing & Surface Finishing

 \bullet Finishes from descaled to 0.10 μm Ra

• Bead blasting, mirror and electropolishing

• All polishing materials certified free of animal-derived products

SURFACE MEASUREMENTS			
NOMINAL GRIT			
	MICRON (MICROMETER)	MICRO-INCH	TYPICAL APPLICATIONS
80	2.5	100	DULL POLISH Applicable for tube, bends and tees in general food processing subject to daily cleaning in place (CIP).
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.
180	0.6	24	
240	0.5	20	
320	0.4	16	BRIGHT POLISH Top-end pharmaceutical, high-value biotechnology components.
500	0.1 – 0.2	4 – 8	





We maintain a comprehensive stock of hygienic stainless steel fittings and components that can be customised to customer requirements.





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