

Axium Process

Company Profile

Axium Process specialises in the design, fabrication, testing and commissioning of customised manual and automatic membrane filtration systems. The company is also a specialist in the supply of custom built processing equipment, components, tube and pipe fittings that meet the individual requirements of their customers. Axium is committed to providing the best possible value for money in terms of design, fabrication, product quality and consistency, delivery and traceability.

Axium engineers have over 150 man years of hygienic stainless steel and filtration expertise and whilst they operate across a diverse range of industries, investment in the very latest technologies, training, systems and procedures allow them to meet the rigorous standards set by pharmaceutical and biotech companies for hygienic design, manufacturing quality, surface finish, testing and certification.



Collaborating with BEACON

BEACON is a £20m research initiative to build integrated 'Green Supply Chains' with a focus on developing new routes to function, cost competitive products using biomass rather than oil. The BEACON intention is to understand and engage with businesses to cultivate and deliver 'Green Technology Solutions' to benefit industry across a range of sectors. To facilitate this BEACON have a network of scientific expertise based at Aberystwyth, Bangor and Swansea Universities with the capacity to provide solutions from bench to demonstration.

In order to maximise the Biorefining Centre at Aberystwyth, BEACON sought specialist pilot scale equipment, including ultrafiltration and reverse osmosis filtration systems. Axium is a market leader in the manufacturing of multi-stage filtration systems with proven experience in meeting the requirements of pharmaceutical and biotech organizations. BEACON supplied Axium with data on the fractionation and concentration of grass juice obtained through experimental research for Axium to calculate the requirements of a scaled-up system for a biorefinery scenario. Axium provided expert advice, modelling and feedback on the feasibility and costing for a filtration system for the biorefining of grass juice.

In accordance with the results of the study BEACON proceeded with the purchase of an integrated wet feedstock processing line, pasteuriser and membrane filtration pilot plant utilising ultrafiltration and reverse osmosis technologies for processes including fractionation, concentration, clarification and water conservation.

As a result of their collaboration with BEACON, Axium is now one of the partners involved in the Welsh Government's A4B scheme research project, involving both academic Universities Aberystwyth and Bangor, and industrial partners including a supermarket chain to demonstrate the possibility of producing meat, packaging and transport fuel from the same biomass feedstock in an environmentally sustainable manner. The project "STARS" will look to generate a range of products from a readily available UK biomass source: rye grass.



For more information on
the work Axium Process
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