

Axium Process provides specialist expertise in the development of bespoke water recycling systems designed to reduce discharge volumes and potentially recover up to 95% of the waste water as re-useable clean water for many industrial applications.

With increasing environmental concerns and rising costs there has never been a better time to discuss your requirements.

Microplastics, particulates, oils, grease, fats and many other constituents can be selectively separated from an effluent stream; often recovering valuable materials in the process. The treated water is crystal clear, 100% particle free and commercially sterile ready for immediate recycling.

Axium's water recycling and effluent treatment systems utilise membrane filtration technology, typically using a combination of Microfiltration, Ultrafiltration, Nanofiltration and Reverse Osmosis.

The systems are versatile, effective and stable; often used as a direct replacement for chemical treatment processes or integrated with AD systems to simultaneously clarify the outflow, while improving biomass recovery and reactor efficiency.

SYSTEM BENEFITS

- Mechanical separation ensures process stability
- Eliminates the need for chemical flocculants
- ✓ Produces commercially sterile crystal clear water for discharge or recycling
- ✓ Opportunity to separate and recover valuable resources from waste water
- ✓ Large reduction in effluent discharge volume
- ✓ Potential to recover heat energy from the effluent

SYSTEM DESIGN

- ✓ Optimised for the application
- ✓ Manual or Automatic operation
- ✓ Remote monitoring and performance checks
- ✓ Straightforward maintenance
- ✓ Small foot print
- Compliance with increasing legislative and recycling requirements
- ✓ Skid mounted, or containerised, easy to scale up and install



Containerised systems for use on multiple sites

EXAMPLE DAIRY EFFLUENT COMMERCIALLY MEMBRANE STERILE WATER High levels of SEPARATION organic materials: (NO CHEMICALS) Low BOD, COD, proteins, fats, grease, zero TSS. 75% - 95% carbohydrates, recovery. minerals. High BOD, COD, TSS.

Axium Process is one of the UK's leading process system manufacturers specialising in the design and build of crossflow membrane filtration systems utilising microfiltration, ultrafiltration, nanofiltration and reverse osmosis technologies.

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

Phone: +44 (0)1792 883882 Email: info@axiumprocess.com