

Advanced Membrane Separation (GE AMS)

Stick water Treatment Equipment system

Description and Use

GE AMS is a patented combination of Advance Membrane Separation systems, which treat stick water from fishmeal plants. The objective of the treatment plant is to produce higher value, higher purity fishmeal products, by removing salts and removing biogenic amines. This objective is achieved while improving efficiency, reducing energy costs, and limiting environmental impact of the fishmeal processing plant.

Typical Applications

GE AMS has the capacity to treat stick water from three different sources:

- Stick water from recently processed fish trimmings (head, tails, viscera)
- Stick water from processed, whole fish
- Stick water from silage (acid preserved trimmings)

Materials of Construction

Skid = 316 SS & Titanium

Installation and Utility Requirements

Dimensions:

- Footprint= ~800 ft² (75m²)
- Clearance= ~10 ft (3m)
- Electrical Power= 10,000 KWH/day
- Service= 400 KVA
- Flush Water= ~8600 GPD (32.5 m³/day)

Operating Parameters

Pretreatment Skid:

- Feed rate= 133 GPM (30m³/hr)
- Permeate Rate= 106 GPM (24m³/hr)
- Concentration Factor= 5X
- Design Temperature= 176°F/80°C Plus
- Baseline Pressure= 0.5-3.5 Bar

Secondary Skid:

- Feed rate= 106 GPM (24m³/hr)
- Feed pH= ~3.0
- Permeate Rate= 95 GPM (21.6m³/hr)
- Concentration Factor= 10X
- Design Temperature= 158°F/70°C MAXIMUM
- Baseline Pressure= 20-35 Bar

Combined System:

- Protein Recovery= ~80%
- Water removed= ~85%
- Concentration= up to 25% TS

Options Available

- RO Skid for the treatment of secondary permeate to produce high purity water for plant use.
- 24 hour continuous system design
- 20 hour system design
- Modified secondary skid for production of pharmaceutical grade fish peptones

Documentation Included

- Operation & maintenance manual included
- Drawings: piping and instrumentation, electrical and general dimensional



Find a contact near you by
visiting gewater.com or
e-mailing custhelp@ge.com.

Global Headquarters
Trevose, PA
+1-215-355-3300

Americas
Watertown, MA
+1-617-926-2500

Europe/Middle East/Africa
Heverlee, Belgium
+32-16-40-20-00

Asia/Pacific
Shanghai, China
+86 (0) 411-8366-6489