

Location: Peru



AMI SWRO system boosts shrimp production for aquaculture company

Fisheries and aquaculture companies require optimal water quality for sustainable seafood production.

Challenge

The company is a leading player in the aquaculture industry, operating extensive shrimp farming facilities across 40 hectares of semi-intensive and intensive production tanks. The company distributes its products globally including to United States, Spain, Russia, France, Vietnam, and other countries. They play a pivotal role in meeting the growing demand for seafood.

The primary challenge was to secure a reliable and efficient supply of high-quality water suitable for shrimp farming and seafood production. The company relied on seawater and beach well sources, both of which contain high salinity levels and contaminants.

The existing water treatment methods were inadequate, leading to suboptimal shrimp growth and increased operational costs.

Applied Membranes was engaged to provide a solution.

Solution

Applied Membranes engineered and built a custom **30 GPM (7 m³/h)** state-of-the-art seawater desalination reverse osmosis (SWRO) solution.

The AMI desalination system includes Energy Recovery Systems (ERS) and Multi-Media Filtration (MMF) filters to remove suspended solids and impurities from the source water.

Local AMI representatives worked with the client to oversee the installation process and provide on-site support.

Key Features

- Antiscalant
- Energy recovery system
- SWRO system including energy recovery system
- Clean-in-place system
- Multimedia filters (6)

Results

AMI SWRO system helped the company sustain and elevate its operations.

Improved water quality: AMI system consistently delivers high-quality water, creating an optimal environment for shrimp growth and health.

Increased production capacity: With access to a reliable source of high quality water, the company experienced a notable increase in shrimp production yield and quality.

Energy efficiency: AMI system reduces energy consumption, making the desalination process more sustainable and cost-effective for the client.

Delivery and support: The project was expedited to meet client timelines. Applied Membranes provided support and troubleshooting as needed for optimal system performance.

