Customer Success Story

Location: California

AMI builds custom pilot plant to further R&D efforts for major manufacturing company

R&D and Manufacturing can advance their technologies with customized pilot plants

Challenge

A global manufacturing company specializes in providing innovative technologies and solutions across various industries. Their products are used in diverse applications such as chemical processing, pharmaceutical manufacturing, and oil and gas production.

The client sought to revolutionize its manufacturing processes and products through R&D initiatives.

They needed a partner who could not only fabricate but also provide design, engineering, and testing services to develop a highly customized pilot plant.

Applied Membranes was selected for the project.

Solution

Applied Membranes designed and built a highly customized double-pass Reverse Osmosis (RO) pilot plant with a **variable flow rate as determined by the customer**.

The customer could use different membrane elements in the system and adjust parameters to obtain the desired flow rates for their R&D efforts.

AMI system includes manual and automatic controls to simulate process parameters for hydrotesting and dynamic testing.

Controls are adjusted to mimic real-world conditions, including pressure and temperature variations under different scenarios. Data collected during testing is analyzed to evaluate system behavior and results.

AMI system includes custom-fabricated frames, panels, and equipment to meet the customer specifications.

Key Features:

- Skid mounted storage tank
- Programmable Logic Controller (PLC)
- Heat exchanger

Results

By investing in cutting-edge pilot plant, the client gained valuable insights.

Custom built: AMI custom-built the pilot plant with special skid dimensions to meet client requirements. The system facilitated experimentation, enabling the client to iterate and refine their processes and products.

Flexibility: AMI system includes adjustable flow rates based on the membrane elements being tested.

Driving insights: Insights gained from the pilot plant contributed to the optimization of the client's manufacturing processes and new product development.

2450 Business Park Dr, Vista, CA 92081 | www.appliedmembranes.com | sales@appliedmembranes.com | 760-727-3711