

Location: South America



Applied Membranes elevates mining operations with rapid deployment of eleven containerized water treatment systems

The mining industry faces a distinctive challenge: the need for dependable and durable water treatment solutions in remote locations.

Challenge

A mine operations in a very remote location faced critical water management issues and high Total Dissolved Solids (TDS) in the source water.

Due to the remote location and project timeline, the solution needed to be both durable and rapidly deployable.

Applied Membranes was selected for this project for our ability to deliver high-quality systems in a short amount of time.

Challenges include:

- **Water source:** High TDS seawater for mining operations
- **Remote location:** The remote location made it challenging to access and install the system

Solution

Applied Membranes Inc. commissioned over **4 million gallons per day (MGD) (20000 m3/d)** 2-pass Reverse Osmosis (RO) systems treating high TDS seawater for mine operations, built in **eleven 40-foot containers**.

AMI delivered the systems in a short amount of time, meeting customer timelines.

The containerized systems allowed for easy transportation, durability, and quick assembly in the remote location.

Key Features:

- Double-Pass Reverse Osmosis (RO) Systems built in eleven (11) 40-foot ISO containers
- Antiscalant Injection systems
- Electrodeionization (EDI)
- Centralized control system with ability to remotely monitor each containerized system



Results

Applied Membranes' containerized water treatment systems provided an innovative solution for our customer's mining operations.

This project reflects AMI's commitment to excellence and solutions tailored to unique operational demands.

- **Fast turnaround time:** AMI was able to swiftly build and deploy the systems without compromising on quality. The rapid installation allowed for immediate water treatment, significantly improving water quality, and enabling uninterrupted mining operations.
- **Remote monitoring:** With remote monitoring capabilities, system performance can be optimized in real-time by AMI.
- **Modular design:** The plug-and-play setup, including integrated electrical and plumbing, saved crucial time and resources for the mining operations. Ongoing expansion of project is possible with scalable design.