

Innovative RO system leads to customer savings



AUTOMATION SIMPLIFIES RO REPLACEMENT PROCESS FOR INDIANA ENERGY PLANT

Facing the failure of its reverse osmosis (RO) systems, an Indiana gas-and-coal energy facility sought the company with the best emergency response and customer service in the industry — MPW Industrial Services.

To meet the customer's standards for this project, MPW would have to execute a quick, efficient setup to provide RO-quality water, even in the event of feed-water contamination which was beyond MPW's control.

SOLUTION

MPW Applications Engineers customized the replacement system, which consisted of two mobile RO units working in unison to meet the customer's high-flow requirements. MPW mobilized equipment in fewer than 24 hours and ensured the setup was purifying water at the plant in fewer than four days after receipt of the order.

A focus on innovation allowed MPW's Field Services team to limit its in-person site visits to once a week. Technicians monitored and adjusted the system remotely, while trending software tracked and stored data for future reference.

During a feed water issue at the plant, MPW was able to remotely dial into the system and diagnose the problem immediately, without waiting on a technician to arrive onsite. This helped the customer instantly diagnose and begin fixing the feed water problem. The system was down for 12 hours so the feed water could clear up, and then the MPW RO units were back up and running. The MPW Field Service team monitored the equipment throughout the remainder of the project to confirm the RO units remained completely functional. The ROs were chemically cleaned at the end of the project and no damage resulted from the high-conductivity exercises.

Additionally, in an attempt to keep up with water demand, the plant switched from feeding MPW units with filtrate water to service water. MPW sent a Field Service Technician to the site to backwash the carbons and exchange the cartridge filters. The switch in water source did not cause any damage to MPW equipment and the MPW Field Service Technician was able to keep the project going, even with the contaminated feed water.

RESULTS

During the five-month project which treated 72,779,021 gallons of water, MPW met or exceeded the facility's quality specifications with no membrane damage, despite having to switch water sources. There were no safety incidents during the assignment.

MPW's system automation attained significant savings on customer manpower.

Customer feedback on this project was entirely positive, especially remarks regarding MPW's emergency response and Field Service.

COMMITMENT TO SAFETY

MPW recorded zero safety violations during this project