

Closed-loop industrial rinsewater recycling utilizing innovative Process Automation solutions from GF Piping Systems

The Californian company Water Innovations Inc. has a clear philosophy: You should always leave things cleaner than you found them. For nearly 20 years and with well over a hundred installed systems, Water Innovations applies this to the world's most valuable resource –water. Employing regenerating ion exchange resin systems, Water Innovations provides industrial companies one of the highest-efficiency means to closed-loop recycle wastewater, transforming it into high-purity deionized (DI) water with over 95% recovery. GF Piping Systems is responsible for automated processes.

Project background

Closed water circuits are an important strategy to save water. Industrial processes like printed circuit board manufacturing have very specific requirements, and Water Innovations has the experience and expertise to segregate recyclable from non-recyclable rinses to maximize water recovery with a high level of operating efficiency. Here, Process Automation plays a vital role in monitoring, analyzing, and controlling Water Innovations systems to ensure their reliable and effective operation.

Selected technical solution

Water Innovations has a longstanding partnership with GF Piping Systems and has utilized the entire ecosystem for Process Automation over the years. The company has implemented pipes, fittings and several hundred ball valves. In addition, Water Innovations uses around 60 pneumatically and electrically actuated valves, six flow and conductivity systems, as well as pH systems and level gauges. Together, these components ensure an efficient and reliable treatment of the process water.

Achieved improvement

As a result of the partnership with GF Piping Systems, Water Innovations is very familiar with the entire range of products and values their reliability. GF Piping Systems provides Water Innovations comprehensive support in order to further optimize the systems and solve any issues. Through their partnership, Water Innovations and GF Piping Systems have closed-loop recycled several hundred million liters of water, helping to sustain this increasingly at-risk precious resource.





The treatment of process water has to meet very high demands. Process automation plays key role.



 ${\it GF\ Piping\ Systems\ and\ Water\ Innovations\ are\ continually\ improving\ the\ systems.}$

Customer benefits

- GF Piping Systems offers customers complete ecosystems – with the help of valves, actuators, measuring technology and controllers, processes can be monitored, controlled and analyzed.
- All components are made of plastic, making them lighter, longer lasting and more sustainable than alternatives made of metal.
- Strong partnerships the Swiss flow solutions provider can assist during all project phases with the goal of optimizing piping systems.



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