

Cleaning & Recovery

Equipment, Systems, Control & Analysis for Optimal Sanitation

At RWS Design & Controls, we understand the magnitude of plant sanitation and how it impacts your operational costs, company reputation, and how it ensures the health and safety of the consumer. We take this responsibility quite seriously and are experts in the design and manufacture of customized Clean In Place Solutions (CIP) and the ancillary, Clean Out of Place (COP) equipment to supplement your sanitation program.

Our cleaning processes represent another part of RWS' comprehensive offerings, from concept to completion. As part of our large portfolio of equipment, systems and services, RWS has the skills and expertise to design, manufacture, install and properly automate a cleaning system for your operations. We are committed to assisting our customers improve the performance and profitability of their processing operations, and we achieve this by offering a wide variety of products and automated solutions from equipment components to complete process systems. We continue to assist throughout the entire system life cycle with reliable support and spare parts.

RWS Design & Controls is proud to offer a wide variety of alternatives to design and build the most cost-effective cleaning solution for your specific needs. Our designs incorporate proven methodologies to optimize the effectiveness of automated cleaning, and we work very closely with your sanitation and engineering teams to provide customized cleaning solutions that are highly effective and within your budget. RWS offers many standard designs in multiple sizes, or customized solutions for an entire plant. In addition, RWS technology provides you with the ultimate in control automation and data recording, for real time analysis and optimization of your cleaning program.

Our systems are designed to:

- Archive cleaning data and provide a real time log of all sensor readings
- Monitor and meter chemical usage to reduce cost
- Reduce chemical and utility usage
- Provide reporting and trending of every CIP cycle with a unique code for each cycle to compare to validated cleaning sequences
- Increase production time by minimizing cleaning cycles
- Monitor unclean equipment and log last cleaning dates and time
- Comply with PMO and all industry regulations





The RWS single-use CIP system is a stand-alone skidded system, which utilizes a fresh solution for each cleaning cycle.

This fresh solution passes through your equipment and is discarded after a single use. The simple, cost-effective design can be fully-automated using RWS PLC control, or simple remote I/O control, and is available in varying flow rates and pipe sizes. Numerous options are available in this basic design enabling you to customize the system to your budget. For example, optional rinse and water recovery tanks are available with the single-use skid making it even more effective at reducing water and effluent. Numerous other options can be included, to make this basic system as simple or advanced, as your needs dictate. RWS has a design to meet your needs.



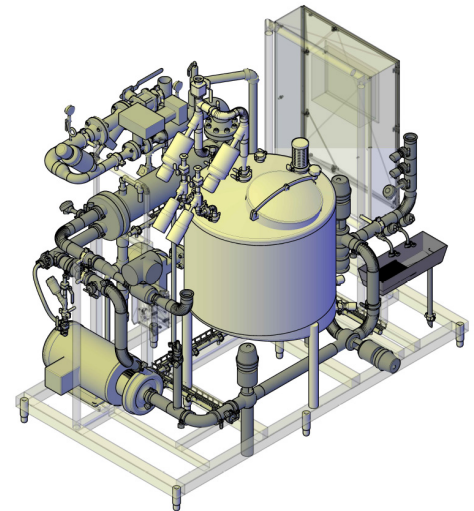
Our single-use CIP system is ideally suited for:

- Applications requiring complete elimination of cross contamination possibilities when a fresh cleaning solution is required for every wash
- Designs that require infrequent cleaning of a limited number of circuits
- Applications where cost of a more conventional reclaim system cannot be justified
- Small production plants, or processing that is remote from a central cleaning system, or the main plant
- Cleaning of heavily soiled equipment where the reclaim of the cleaning solution would be too contaminated for further use

RWS' fully-automated, self-contained, multi-tank and multi-pass CIP systems are designed for larger jobs and for tackling numerous circuits within your plant.

This allows for cleaning solutions to recirculate and be re-used, requiring minimum "top off" of water and chemicals throughout each cycle. Typically, an RWS multi-use system will consist of several skid mounted tanks for fresh water, alkali, acid and reclaimed wash water and like all RWS cleaning solutions, we offer numerous options for customizing your cleaning operations. Most RWS multi-use systems will be equipped with our popular automated control and data management system, yet you have great flexibility when working with RWS to design a control scheme that suits your plant. Available in many sizes, flow rates and configurations, the RWS multi-use systems are ideal for:

- Complete coverage of all plant cleaning circuits
- Sanitary reclaim of cleaning chemicals and solutions
- Customized solutions where cleaning flexibility and control are paramount to maintaining plant production
- A higher degree of automation, control and recording of all CIP activity



For operations where manual cleaning is required, RWS offers a wide selection of COP (Clean Out of Place) designs to help expedite the cleaning of items that cannot be cleaned in place. Some examples like clamps, small valves, gaskets, hoses and many other disconnected items can be cleaned more efficiently in an RWS-designed COP system. We offer customized designs with many accessories for optimizing your parts cleaning. Sanitary designs are our specialty with effective jet manifolds, high efficiency pumps and heating systems.

The sanitary processing experts at RWS are at your disposal to design, furnish, install and automate your processing solutions.

From concept to completion, we are well equipped to meet your complete project needs utilizing the latest technologies, while adhering to all regulatory requirements. Our dedicated team of experts and professionals welcome the opportunity to demonstrate our capabilities and solve your existing processing needs.