# Sterile Tank Systems: The RWS STS

## Design Furnish Install Contro

### **Equipment, Systems & Control for Safe & Sterile Storage Between Process & Packaging**

At RWS Design & Controls, our mission is to be recognized as your trusted source for reliable sanitary processing, with a specialty being aseptic and ESL technology. Our years of experience in this discipline have resulted in superior designs for all of your sterile storage and transfer of UHT treated product. We understand the magnitude of PMO, 3A and all regulatory guidelines and design our systems accordingly. We are experts in providing the right solutions for your aseptic or ESL process. RWS sterile storage solutions are available as stand-alone units, in a multitude of sizes and configurations, or as a key component in an RWS complete sterile processing solution. With numerous tank configurations and sizes available, let RWS demonstrate their expertise in sterile storage.

#### The RWS Sterile Storage Tank

RWS Design & Controls engineers, furnishes, installs, and automates Sterile Storage Tank Systems (STS) that:

- Offer many different designs and configurations to allow for maintaining sterility and homogenous product while in storage. The tanks can be either horizontal or vertical and are available with optional agitation.
- Include complete steam barriers and sterile air modules as part of the supply to guarantee product safety.
- Are available in standard sizes ranging from lab scale designs up to full production units.
- Are capable of installations as part of a multi tank farm system for increased flexibility and higher production rates.
- Offer full CIP capability and complete automated control.
- Stop all contaminants from entering the tank and maintain a sterile environment.
- Eliminate burnt particles to safeguard taste and flavor by adding an optional, RWS sterile valve manifold, for added protection and control of the product flow and sterile environment.
- Include several styles of tank agitators, selected specifically for products and application.
- Available in standard and bespoke configurations.





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#### **Principles of Operation**

The RWS aseptic storage concept involves a thorough steam saturation for tank sterilization at a minimum of 250°F. The tank is then cooled via water recirculation through a cooling jacket while sterile air is injected into the tank to prevent vacuum. Aseptic conditions are then maintained with sterile air pressure and via a sterile steam barrier at a minimum of 220°F. While in production, sterile air occupies the space above the product liquid level and is controlled to regulate feed pressure required by your filler. An optional, RWS automated valve cluster module manages the direction of product, air and CIP fluids. The RWS STS is fully automated, with simple controls for operators to select from process function, sterilization, production, and CIP.

#### **Automation & Control**

As experts in automation, process instrumentation and control, all RWS sterile storage tank systems are supplied with your preferred, leading OEM technology based control platforms. Some examples include Ignition<sup>TM</sup>, Factory Talk<sup>TM</sup> and Wonderware<sup>TM</sup>.

#### **Available Options**

RWS offers a variety of tank finishes, configurations, agitation selections (aseptic seals/mag drives), porting, rapid cool down skid complement, ladders, platforms, remote HMI, sterile water for flushing, multi-tank configurations, multiple outlets to feed one or more fillers, and sterile valve manifolds for smart control of process and cleaning liquids.

#### **Typical Installations & Benefit of Factory-Built Skidded Designs**

Our sterile tank skids are installed in hundreds of installations throughout the USA. They are found throughout the dairy, beverage, personal care and sanitary processing industries. Our many satisfied customers have benefited from the RWS designed sterile tank skid in many ways, such as industry leading designs supported by expert engineering support and spare parts throughout the complete life cycle of the equipment. At RWS, we design and manufacture various modular process skids within our Sterile family of products, with superior OEM equipment. Because of the modular skid concept, we can offer fast lead times compared to site built systems, enhanced quality measures and cost savings that can amount to significant value for our customers. Our equipment can also be tested at our factory for added assurance.



#### **About RWS Design & Controls**

The sanitary processing experts at RWS are at your disposal to design, furnish, install, integrate, 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. We invite you to join the list of many delighted customers who realize that RWS Design & Controls can really make a difference.