



HOMOGENIZER WATER RECYCLING SYSTEM



GROUND BREAKING TECHNOLOGY



The most advanced water saving system for new and existing homogenizer installations. The HWRS recycles and reduces water use by up to 97%.



Every drop counts

The race to conserve our planet's most precious natural resource is on. Processors around the globe are seeking ways to reduce their water consumption for the sustainability benefits and substantial cost-savings potential.

Homogenizers in typical continuous processing environments are cooled and lubricated by clean, running water to keep them from overheating. This water has traditionally been sent directly to the drain. This wasted water can be as much as 2 million gals/7,500m³ per year (based on homogenizer water flow of 6GPM, 18 hours per day, 6 days per week, 52 weeks per year).

Groundbreaking technology in the Homogenizer Water Recycling System (HWRS) effectively reduces this water waste by up to 97%. The HWRS allows facilities to capture use water, sanitize, cool and return the water back to the homogenizer to be used again and again.





Designed to meet and exceed Pasteurized Milk Ordinance (PMO) specifications for Category I water and 3A Standards, the HWRS seamlessly integrates with new and existing homogenizer installations.

This virtually eliminates water use on homogenizers, upholding sustainability initiatives and significantly reducing costs.



CONSERVE ONE OF NATURE'S MOST VALUABLE RESOURCES



Water reduction, increased sustainability

- Recycles up to 97% of the water required by homogenizers
- Provides cost-saving potential due to water costs
- Reduces exposure to water availability challenges

Process quality water produced

- Meets or exceeds Pasteurized Milk Ordinance (PMO) Specifications for Category I Water
- Failsafe controls for continuous operation
- Built-in homogenizer leak detection
- Continuous water quality measurement
- Water temperature control

Seamless Integration

- Fits APV® and other brand homogenizers
- Compact
- Self-contained controls

**The HWRS is comprised of two elements;
a Tank Skid and a Sanitation Skid.**

The tank skid is placed next to the homogenizer where it collects used lubrication and cooling water. During its collection, the tank skid continuously monitors incoming water quality and provides preliminary treatment.

As long as the water remains in tolerance for quality, the water is pumped to the sanitation skid. In the sanitation skid, water is filtered, further sanitized, monitored and cooled. The water then returns to the homogenizer's water inlet.

The system utilizes redundant water quality sensors to monitor for impurities. If the water is outside of set quality tolerances, the system will reject the water and will supply city/municipal water to the homogenizer instead of recycling. Redundant valves and programming methods are used to ensure the homogenizer always has water for cooling.

Users have the ability to set alarm parameters within the system which can communicate system alarms, homogenizer product leakage and other customizable parameters via email and/or text message through network settings.



HWRS FEATURES



The HWRS offers a compact, modular design with plug-and-play integration.

Single or Dual models are available. The HWRS-D (Dual Model) pairs two Tank Skids with one specialized Sanitation Skid to service two homogenizers at once.

The APV HWRS comes standard with the following features

- Plug-and-Play with automatic functionality
- Homogenizer leak detection and notification
- Washdown construction
- Modular and mobile
- HMI with remote access and control capability
- Ethernet port for status and quality parameters
- Redundant water quality safety protocols
- Sanitary quick fittings for piping connections
- Variable temperature output
- Glycol or chill water capability
- 480V or 240V (3 phase) power capability

The APV HWRS has a capacity to recycle water at up to 10GPM (2,270 LPH) with a 97% recapture rate.

Dimensions

Sanitation Skid: 51" x 24" x 35" (1300 x 610 x 890 mm)

Tank Skid: 32.5" x 21.5" x 24.5" (825 x 545 x 620 mm)

WHY CHOOSE SPX FLOW HWRS?

SPX FLOW pioneered homogenizers through its APV Rannie® and Gaulin® brands and with over 100 years of experience we understand your needs to get the most from your processes.

The HWRS is a significant contribution to our long standing dedication to unmatched quality, safety, and the ever persistent pursuit of improving our planet's health. The HWRS offers up to a 97% recapture rate on your homogenizer's water while exceeding PMO and 3A standards.

SPX FLOW APV Homogenizer Solutions

With a long history in homogenization through our APV Rannie and Gaulin brands. We have a large installed base and vast process and application experience to help customers achieve the results they require. A wide range of specifications and choice of homogenizing valves is available to match process requirements. Our Innovation Centers can trial and test processes and recipes to help get products to market more quickly, while ensuring processes are operating as required before full production scale-up. Our comprehensive aftermarket solutions are dedicated to extending the life and efficiency of your homogenizer.





To learn more visit

spxflow.com/apv or email learn-more@spxflow.com



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