

PRETREATMENT SYSTEMS

For Metal Cleaning, Washing and Recovery



FOR PAINT, POWDER, E-COATING AND PLATING OPERATION

RECYCLE UP TO 100% OF YOUR CLEANING SOLUTIONS

CUSTOM CONFIGURATIONS UP TO 7 STAGES

USE YOUR PREFERRED PRETREATMENT CHEMICALS



RIVEERTM

PRETREATMENT SYSTEMS

WASH WATER CAPTURE, TREATMENT AND RECOVERY SYSTEMS

Metal pretreatment prior to finishing, Riveer offers a wash and recycling system to accomplish these tasks quickly, effectively and safely. Riveer pretreatment, washing and degreasing systems are engineered to efficiently use and recycle your preferred cleaning solutions, be it a degreaser or phosphate, zirconium, nano. . . you name it. No propriety chemicals required. Use what's best for your process. . . and your pocket book. . .with Riveer Industrial Pretreatment Equipment (Systems).

AUTOMATIC AND MANUAL WASH WAND PRETREATMENT OPERATIONS

The Riveer line of Industrial Systems spans the requirements of today's compliant manufacturing operations. Riveer capture, treatment and recovery systems are designed to optimize water and water-based solutions to clean, degrease or pretreat just about every part used throughout your facility.

From manual wand (pressure washer wand) processes to fully automated wash systems, Riveer's experienced engineers and salespeople can help save time, resources and chemicals while also improving production rates, process repeatability, part cleanliness, and operating within a zero-discharge environment.



AUTOMATED SYSTEMS

Totally Enclosed Multi-Stage Wash Booth and Rinse Recycling Technology

Riveer custom-engineered systems are capable of multiple stages—including degrease, rinse, pretreat, and seal stages—in many PLC-controlled configurations.

DESIGNED TO YOUR SPECIFICATIONS

Riveer engineers will work closely with you to design a fully integrated solution that is tailored to your specific operational needs, helping you achieve use and discharge higher throughput with a system that isolates, captures and controls all stages of the wash cycles for re-use, saving costs associated with chemicals and water usage.

Degreasing, pretreatment, spot-free rinse, recovery and recycling of wash water, phosphate or other pretreatment chemistry...name the operation, and Riveer can integrate it within your production process to provide an easy-to-use, turnkey system.

SYSTEMS ARE FULLY CUSTOMIZABLE:

Fully enclosed wash booth or splash control walls.

Closed-loop options ensure environmental compliance.

Recycle all stages of the wash process or process for discharge.

High-pressure or high-volume spray delivery.

Engineered floor systems for either above-grade washracks or concrete at-grade.

Vacuum recovery ensures minimal cross-contamination between process steps.

Various process filtration options for a multitude of oils, soils and contaminants.

Mist control and elimination via air handling systems.

Integrated material handling options.

Waterproof lighting provides excellent illumination.

Climate controlled for heat and humidity settings.

Isolates, captures and controls all stages of the wash cycles for re-use, saving costs associated with chemicals and water usage.

Cycle time options ensure a thorough and effective method to enhance part cleanliness levels and increase production rates, plus process repeatability.



SPRAY WAND SYSTEMS

Closed Loop Metal Pretreatment System for Superior Finishes

Spray and recycle degreasers, phosphate, zirconium and other metal pretreatment solutions in powder, paint, E-coat, and plating systems. Hard at work in hundreds of installations, the system power washes and recycles solution for reuse.

EASY TO OPERATE, SIMPLE TO MAINTAIN

The Riveer system is ideal for manual pretreatment applications. Because the wash solution is being recycled, users can wash as long as necessary without worrying about sending thousands of dollars of chemistry down the drain. The Riveer system has saved powder coaters tens of thousands of dollars every year by recycling phosphate and related pre-treatment chemicals. Whether you are degreasing equipment or applying a conversion coating process, we can help save you time and money while the closed-loop system ensures environmental compliance.

CUT YOUR CHEMICAL COSTS BY 85%

EPA Compliant, Zero Discharge.

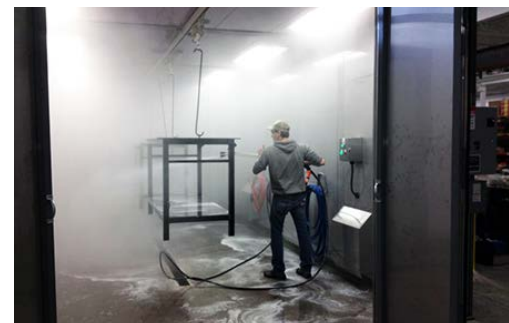
Vacuum suction for recovery during spray, a superior process to minimize cross-contamination.

High throughput wash, rinse, filtration and reclamation.

Excellent ROI in powder, paint, E-coat, and plating operations.

GripStart™ on/off.

Complete turnkey systems including integration with paint, bake and dry operations.



ENCLOSED WASH BOOTHS

Capture, Contain and Control the Entire Wash Process

Self-contained so the washing process won't negatively affect the surrounding facility environment, these booths are designed for manual spray cleaning, degreasing or pretreating fixtures or weldments, directing effluent to the drain or sump.

SUPERIOR COLLECTING AND CONTAINING

What sets the Riveer wash booths apart from the others is our comprehensive recovery system. Sprayed water and particulate matter are channeled through a robust filtration system that separates the particulate from the water, where it can be easily reused for proper disposal. The treated water can be safely disposed of through appropriate wastewater infrastructure. This integrated recycling helps you meet the most demanding environmental requirements while giving your facility the best possible parts washing solution.

BOOTHS ARE CUSTOMIZED TO YOUR NEEDS:

Installed at existing grade or at above-ground wash racks for effluent containment.

Closed-loop options ensure environmental compliance.

Manual wand spray or fully automatic process.

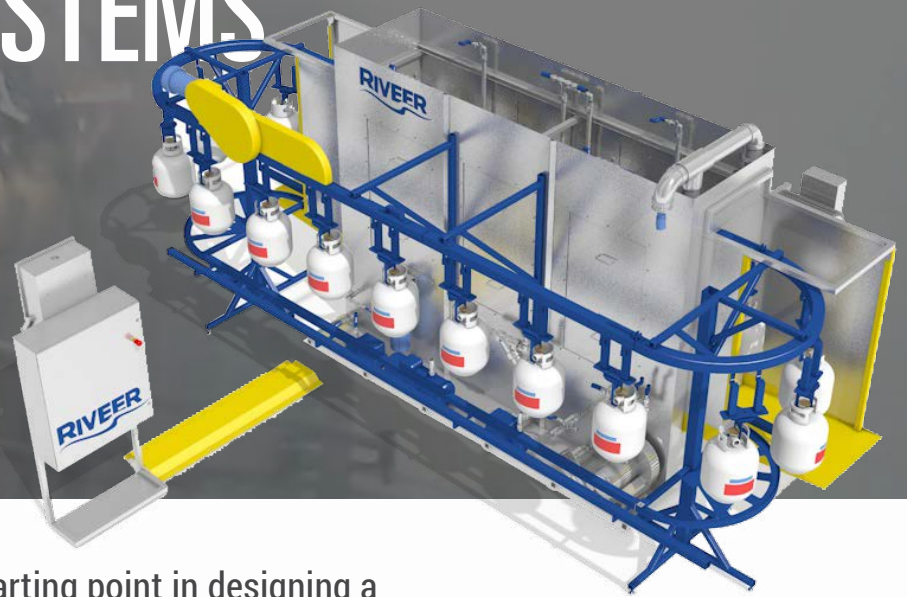
High-pressure or high-volume spray delivery.

Integrated recycling assures environmental compliance, proper disposal of solids.

Integrated material handling options.



CUSTOM SYSTEMS



Riveer standard product line is the starting point in designing a custom system: your needs drive design. Riveer's experience with pretreatment systems—including the challenges you face—help control costs and ensure you will more efficiently achieve your goals.

AS AN INNOVATOR IN THE FIELD, RIVEER OFFERS YOU A LEVEL OF EXPERIENCE AND PERFORMANCE ASSURANCE THAT NO OTHER COMPANY CAN MATCH. RIVEER HAS:

Designed a system to automatically wash car tires and wheels prior to storage for a company performing winter/summer tire swaps.

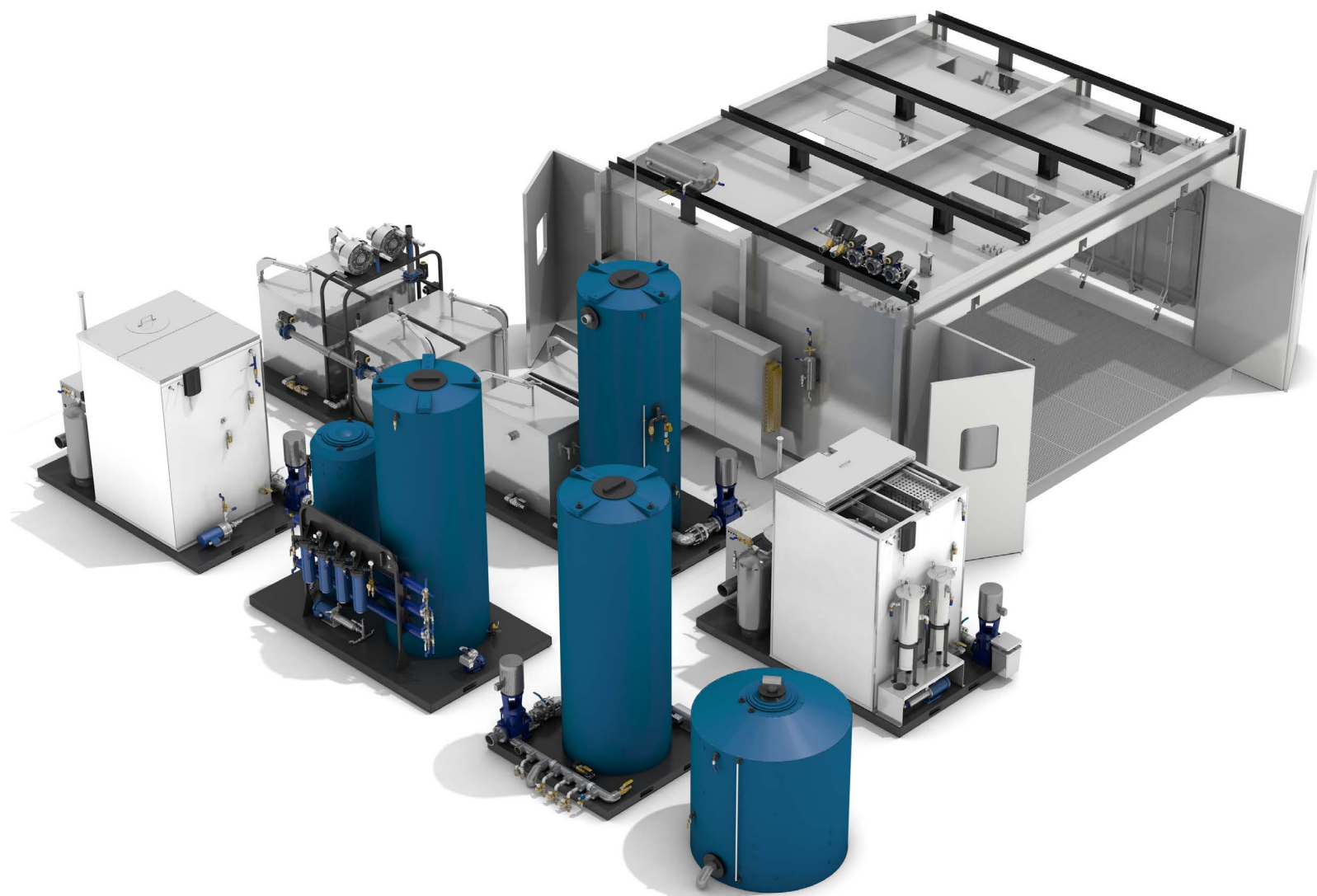
Created an ultra-high-pressure automated wash conveyor to strip paint and labels off of LP tanks.

Integrated ultra-high-pressure water blasting equipment with noise suppressing booths and air handling for moisture and breathing air.

Designed a completely above-ground rinse system to remove salt deposits from U.S. Special Forces helicopters.

Developed and constructed many batch style pretreatment system.

Designed and fabricated a building with 14 computer-controlled monitors to automatically wash construction equipment. Including 3,000 GPM of hot water flow to de-ice in winter applications, automatic heavy mud control, and user interface that allows the user to select equipment type and leave.



Riveer custom automated systems use powered belts or conveyors to move large numbers of parts through connected cleaning and treatment stages. These systems are typically used in high-volume operations and almost always use aqueous cleaners, though some use solvent cleaners. Benefits of multi-stage systems include high operational efficiency, reliability and consistency, and minimal handling by workers.

A typical three-stage system consists of the application of a cleaning solution, followed by a rinse, followed by a conversion coating. A typical five-stage system consists of a cleaning, a rinse, a conversion coating, a second rinse, and a sealing post-treatment rinse.



Riveer employs a quality management system that is ISO 9001:2008 certified.
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