INDUSTRIAL PARTS CLEANING SYSTEMS

FOR DEGREASING AND PRETREATMENT OPERATIONS





DEGREASING OR PRETREATMENT

WASH WATER CAPTURE, TREATMENT AND RECOVERY SYSTEMS

Riveer pretreatment, washing and degreasing systems are engineered to efficiently use and recycle your preferred cleaning solutions, be it a degreaser or phosphate, zirconium, sealer. . . you name it. No propriety chemicals required. Use what's best for your process with Riveer Industrial Equipment Systems.

AUTOMATIC AND MANUAL WASH WAND 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 (enclosed booth) wash systems, Riveer's team of professionals can help save time, resources and chemicals while also improving production rates, process repeatability, part cleanliness, and operating within a zero-discharge environment.





MANUAL SPRAY WAND SYSTEMS

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 operations 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%

- Spray and recycle degreasers, phosphate, zirconium and other metal pretreatment solutions in your operations
- 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 on chemical and disposal costs
- Complete turnkey systems including integration with paint, cure and dry operations







AUTOMATIC MULTI-STAGE SYSTEMS

CLOSED-LOOP WASH BOOTH RECYCLING TECHNOLOGY

Riveer team members will work closely with you to design a fully integrated solution that is tailored to your specific operational needs, helping you achieve a better finish and 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:

- Batch Style, fully enclosed wash booth
- Closed-loop options ensure environmental compliance
- Recycle all stages of the wash operation or process for discharge
- Engineered floor systems for either above-grade washracks or concrete at-grade designs
- Vacuum recovery ensures minimal cross-contamination between process steps
- Various process filtration options for a multitude of oils, soils and contaminants





Riveer automated wash systems can handle a multitude of parts produced and can degrease or pretreat, as needed. These systems are typically used in high-volume operations. Benefits of multi-stage wash systems include high operational efficiency, process reliability and consistency, and minimal handling by workers. Space saving design minimizes floorspace needs vs. in line tunnel style wash systems.

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 degrease stage, a rinse, a conversion coating, a second rinse, and a sealing post-treatment rinse. Riveer systems have been used in varying chemical processes, applying up to 7 stages of wash stages.

ENCLOSED WASH BOOTHS

CAPTURE, CONTAIN AND CONTROL THE ENTIRE WASH PROCESS

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 handles oil and particulate separation and capture. This integrated recycling helps you meet the most demanding environmental requirements while giving your operations extended bath life and chemical savings.

ENCLOSURES ARE CUSTOMIZED TO YOUR NEEDS:

- Installed at existing grade or at above-ground
- Closed-loop options ensure environmental compliance
- Manual wand spray or fully automatic process
- Integrated recycling assures environmental compliance
- Self-contained washing process won't affect the surrounding environment
- Designed for manual spray cleaning, degreasing or pretreating operations







OIL WATER SEPARATOR (OWS)

SEPARATION EFFICIENCY FOR THE MOST STRINGENT DISCHARGE REQUIREMENTS

The OWS is modular, engineered oil/water separator that can easily be integrated with other equipment to meet the industrial user's needs.

The treatment system's single stainless steel tank assembly saves valuable floor space and time during installation. Designed to continuously skim the water's surface to remove even the faintest trace of oil. Once intercepted, the oil is then transferred to a containment compartment where it can be removed easily. A sludge draw-off valve is located on the back of the unit where collected solids can be discharged.

The OWS is the perfect solution for very low (PPM) discharge level situations required for industrial plants, commercial garages, and cleaning applications. The OWS 500 is capable of delivering discharges under 10 PPM.

THE PERFECT SOLUTION

- No filters, or chemicals simple design
- · Continuous skim assures efficient separation
- Easy modification allows wash water to be recycled
- Simple, minimal maintenance





CUSTOM SYSTEMS

STAGE 4 M

PRE-TREAT

RIVEER'S EXPERIENCE WITH INDUSTRIAL CLEANING SYSTEMS— INCLUDING THE CHALLENGES YOU FACE—HELPS CONTROL COSTS AND ENSURE YOU WILL MORE EFFICIENTLY ACHIEVE YOUR GOALS.

- 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 systems
- 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



STAGE 4 (MANUAL) (IT-S4-M)





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