

INDUSTRIAL SYSTEMS

FOR DEGREASING, PRETREATMENT AND WASHING



RIVEER
Engineered Wash Water
Recovery Systems

The Solution is Clear with RiveerSM



Industrial Products Division

FROM BASIC WASHING TO MULTI-STAGE 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.

Whether you need production type parts washing, metal pretreatment for pre-coat, maintenance and repair operations, rebuild, and so on: Riveer offers a solution to accomplish these tasks quickly, efficiently and safely.

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.



RECYCLING SYSTEMS



RIVEER TREATMENT SYSTEMS

The heart of every Riveer installation is the ability to capture, recycle and re-use the fluid used in wash applications. Regardless of the task, Riveer has a complete lineup of world-class water treatment systems that capture, control, contain and re-use solution to operate in a zero-discharge process.

Applications cover degreasing, pretreating for coating applications, cleaning vehicles and material handling equipment, maintaining and washing dies. Built-in filtration processes separate oil via coalescing, inject ozone for inhibiting bacterial growth, and completely filter for particulate removal. Additional Riveer filtration modules remove dissolved solids, heavy metals and salts.

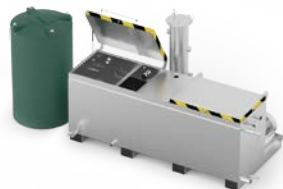
Riveer offers a host of options to exactly meet your cleaning requirements. From hot water high-pressure manual washers to automatic high-flow articulated and spinning washers, Riveer can provide a system that will meet your cleaning, quality and repeatability requirements.

RTS-500 LIGHT SOLIDS/OILS Compact and efficient wash water filtration system for light solids and oils, such as industrial parts degreasing and maintenance equipment washing. Filters and treats water to reuse in subsequent washings or to properly discharge in compliance with EPA and municipal regulations.

RTS-1000 Designed for pretreatment applications of more than one stage where separation of solutions is critical. Using high-velocity scavenging vacuums and finely programmed switching algorithms, the RTS-1000 prevents cross-contamination, assuring a quality multi-stage batch operation.

RTS-3000 For moderate to heavy soils and oil loads. Features inclined plate separators to settle solids in a large initial settling chamber. The chamber is sloped to a valve that automatically purges settled solids.

RTS-5000 For tough-to-handle heavy solids applications, the stainless steel filtration chamber incorporates inclined plate separators that drop solids into the RTS 5000's built-in conveyor, which drags the solids to an external hopper for easy disposal with a forklift.



Fast to setup, easy to operate and simple to maintain. All our systems meet UL, CE, TUV, IEC, NEC, NFPA electric standards. Proudly manufactured in South Haven, MI and covered by U.S. patents.



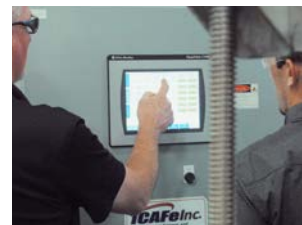
WASH BOOTH SYSTEMS

INTEGRATED MULTI-STAGE RECYCLING TECHNOLOGY

Wash booth enclosures create isolated work environments within your existing facility which capture, contain and control the entire wash process. The wash booth is self-contained and will not adversely impact surrounding facility environments. Adding a wash/pretreat station ensures a safe, environmentally secure area to clean, degrease or pretreat your parts of varying shapes and sizes. Whether you're looking for a process that utilizes a manual wand spray application or a fully automated system, Riveer can aid in planning for your production needs, cleanliness needs and process requirements.

From large and complex systems to basic wash booths, Riveer engineers will work closely with you to design a fully integrated booth solution that is tailored to your specific operational needs. Degreasing, pretreatment, spot-free rinse, recovery and recycling of wash water, phosphate or other pretreatment chemistry...name the operation, and Riveer can integrate it with your enclosure to provide an easy-to-use, turnkey system.

Various options are available with the wash booth system, and each application is reviewed and a system designed to accommodate your production needs.



BOOTHS ARE FULLY CUSTOMIZABLE:

- Installed at existing grade or above-ground wash racks for effluent containment
- Fully enclosed wash area or splash control walls
- Closed-loop options ensure environmental compliance
- Recycle all stages of the wash process or process for discharge
- Manual wand spray or fully automatic process
- High-pressure or high-volume spray delivery
- Engineered floor systems for either above-grade washracks or concrete at grade
- Vacuum recovery of stages ensures minimal cross-contamination between process steps
- Various process filtration options for a multitude of oils, soils and contaminants
- Integrated material handling options from manual to automatic; for individual parts, carts, overhead conveyance methods
- Mist control and elimination via air handling systems
- Waterproof lighting provides excellent illumination
- Climate controlled for heat and humidity settings
- Capable of multiple stages—including degrease, rinses, pretreat and seal stages—in many PLC-controlled configurations
- 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



RIVEER RACK™



EQUIPMENT WASH RACKS

These above-ground wash racks are an effective solution for capturing, containing and recovering wash water from many cleaning and pretreating applications. The modular design allows for a wide range of wash rack sizes and eliminates any need for engineering or permitting. Offering the lowest profile (height) in the industry, they are a safe option for “step-up” entry as well as provide an option of ramps for “roll-on/drive-on” applications. Center trough designs assures quick draining of solutions, and discharge plumbing options can capture the effluent and contain it or connect to a Riveer recycle system to reclaim and re-use. Either way, it’s a zero-discharge operation in accordance with today’s Best Management Practices (BMP).



STANDARD AND OPTIONAL FEATURES

- Low-profile (6 inches) designs feature easy-access ramps for forklifts and other low-clearance vehicles
- Plug-and-play design makes installation fast and straightforward; no infrastructure or permitting required
- Standard walls in 6, 8, 10, or 12 feet; lights, fans, hose reels, roofs, and custom designs available
- Grit impregnated diamond tread deck plate rack supports any OTR vehicle, tracks or wheels. Higher capacities are available.
- Drive-through or drive-in designs, in any length and width, can be engineered to meet your requirements
- Optional solids conveyor separates mud, clay, and other solids from the wash water and lifts it into a dump hopper for proper disposal
- Optional undercarriage wash is positioned for optimal performance
- Can be designed for recycle or discharge

WASHMASTER 500

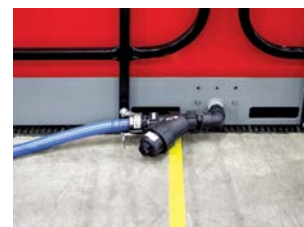


PRE-ENGINEERED WASH RACK AND RECYCLING

WashMaster is a complete, ready-to-use washbay that features a single-stage wash water recycling system and pressure washer. This combination affords you a wash rack and all related components to begin degreasing parts and equipment in a safe and effective manner, with full recovery and re-use of your cleaning solution. Many systems are used for degreasing parts and equipment in the MRO, production and rebuild areas and are easily assembled, commissioned and tested for a quick wash rack installation. Available in rack sizes to fit your specific requirements.

The WashMaster 500 is designed for industrial users who require complete cleaning and degreasing of large parts, assemblies and equipment within their facility. With its 100% water reclamation system, the WashMaster removes solids and oils from the reclaimed water, treats it with ozone, and then puts the water in a holding tank to be used again for washing. This helps keep your operation compliant with wash water containment and discharge regulations.

The low-profile wash rack allows for easy and safe access, even for low-profile equipment such as scissors lifts and forklifts. The WashMaster includes features like the diamond tread non-slip surface, level covered center trough, conveniently located heavy-duty hose hangers, and Riveer GripStart™ technology (which automatically turns the system on and off with a squeeze of the trigger). These components—and many more—help make the system incredibly user friendly.



CUSTOM SYSTEMS



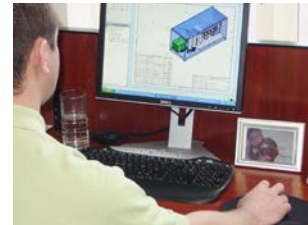
CUSTOM-DESIGNED SYSTEMS

Though Riveer offers a standard lineup of filtration/recycling systems and wash racks, these are often starting points in a custom system. When discussing your washing/pretreatment requirements, your needs will drive design.

Riveer's experience with successful systems in your industry—including the challenges you'll need to address—can help you control costs and ensure that 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 a series of automatic multi-stage pretreatment booths with high-flow hot water.
- Designed and fabricated a building with 14 computer-controlled monitors to automatically wash construction equipment. Includes 3,000 GPM 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.



TRAINING AND SUPPORT

Riveer is a single source for engineering, installation and service, from the initial site evaluation to onsite training and parts replacement. That's why 34% of Riveer sales come from existing satisfied customers. Riveer is known for prompt after-market support, with a complete inventory of replacement parts and consumables. Maintenance programs offer various levels of support to assure maximum system uptime.

- Factory installation
- PM programs
- 24/7 parts availability



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