

TRSTM

TACTICAL RINSE SYSTEM

MODULAR CLEAR WATER RINSE SYSTEMS
FOR TAXI-THROUGH AIRCRAFT



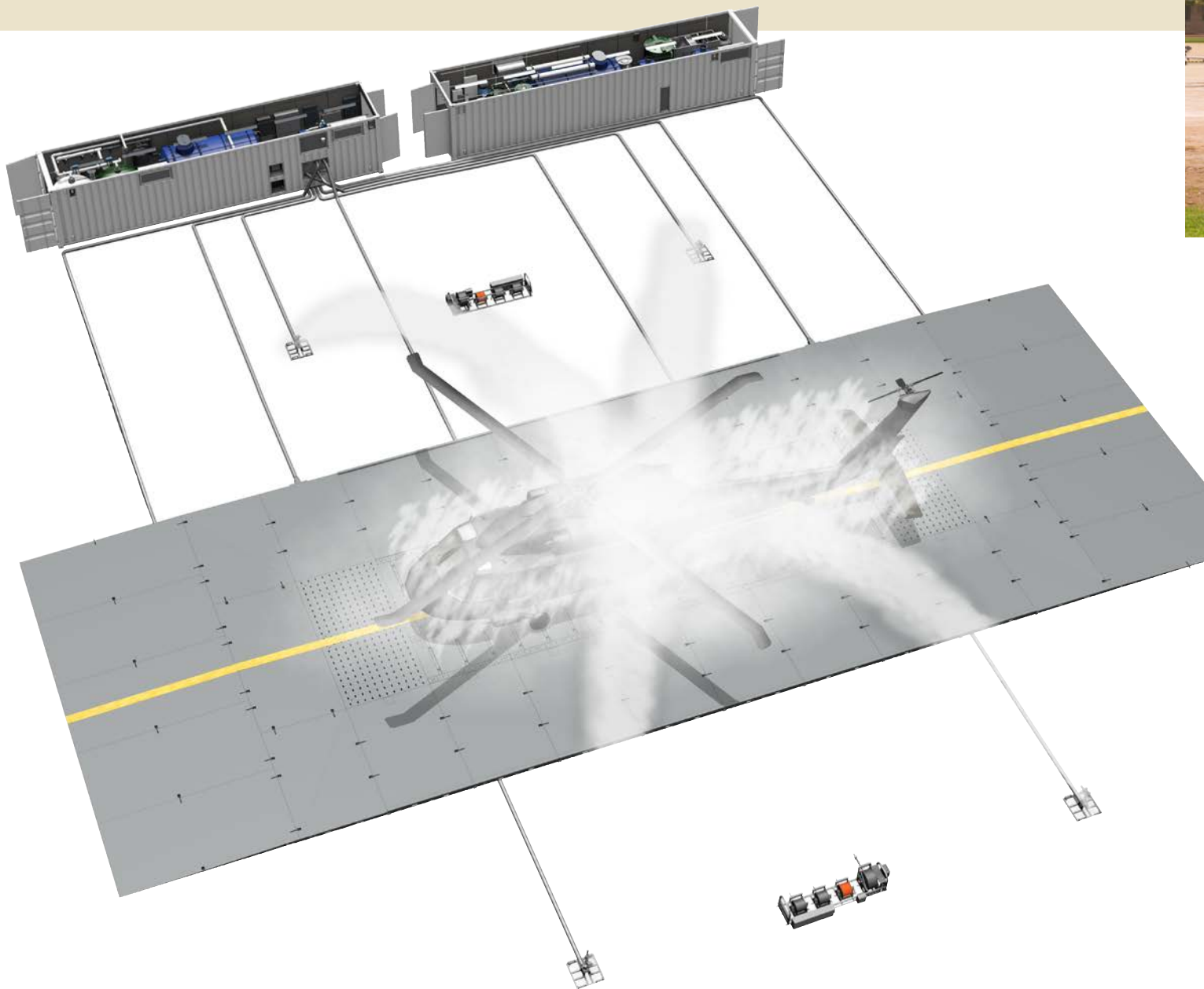
RIVEERTM

Engineered Wash Water
Recovery Systems

The Solution is Clear with RiveerSM

TRS™ Modular Clear Water Rinse Systems for Taxi-Through Aircraft

The Riveer Tactical Rinse System (TRS) is an automatic clear water rinse system for aircraft of virtually every configuration and complexity. Fully deployable, the TRS is installed above ground, eliminating the time and expense of infrastructure modification and associated site engineering/environmental considerations. The modular configuration consists of steel pad sections forming the wash rack and complete rinse/wash and filtration system housed in special ISO containers. All that is required is electrical power.



TRS™ Modular Clear Water Rinse Systems for Taxi-Through Aircraft



AUTOMATIC, DEEP REACH RINSING DURING TAXI-THROUGH

TRS is automatic. Onboard PAR (Pilot Activated Rinse) technology allows the pilot to activate precision spray nozzles from the cockpit when taxiing onto the rinse pad. The TRS cycle completes a thorough rinse of dust, salt and corrosive deposits, then reclaims the wash water, filters and reuses it. Foaming and washing features can be added to TRS system.



TRS™ Modular Clear Water Rinse Systems for Taxi-Through Aircraft

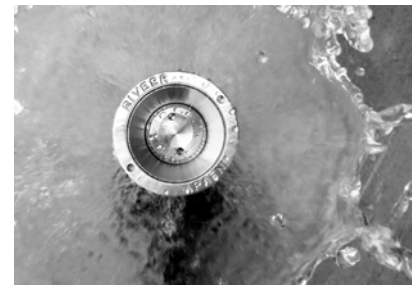
Best practices require aircraft stationed near salt water shall be clear water-rinsed at least once every 15 days. Furthermore, all aircraft flown at low level (under 3000 ft.) over salt water require daily rinsing.

TACTICAL DEPLOYMENT, COMMERCIAL APPLICATIONS

The TRS is configured to accept specific aircraft and can be reconfigured to accept new models, including requirements for flow, reclamation, filtration and wash water discharge, if any. As a self-contained, above grade system, the TRS meets the need for rapid global deployment and for semi-permanent installations on taxiways and tarmacs. The TRS is cost-effective. The system is often assigned at the unit level, for regiments, air groups and squadrons operating near coastal areas or whose exercises take aircraft through salt air or other corrosive environments.

FIELD-PROVEN ENGINEERING

- Fast deployment for virtually immediate operation
- Cockpit activated PAR (Pilot Activated Rinse) allows pilot to select and activate airframe-specific rinse pattern via mic clicks.
- Sprays 800 to 3,000 GPM at a safe-for-aircraft pressures, under 60 PSI for undercarriage and 175 for flight surfaces.
- Automatic operation, no ground crew required, adjusts to type of aircraft and weather conditions
- Utilizes multiple corner-mounted, automatic, oscillating, high-flow monitors with patented spray and flow trajectories and multiple lower deck nozzles ensure a thorough and efficient rinse of all surfaces.
- Quick Rinse Cycle
- Standard footprint for rotary wing or F/A aircraft is 60'L x 80'W x 6'H, with larger pads available
- Patented FOD-proof (Foreign Object Debris) nozzles offer pattern and flow adjustment capabilities.
- TRS patented technology also adjusts spray patterns and flow based on current weather conditions



TRS™ Modular Clear Water Rinse Systems for Taxi-Through Aircraft



Clear water rinses provide corrosion mitigation by removing corrosion-causing agents on a frequent basis between scheduled washes.

WATER FILTRATION & RECYCLING FEATURES

- TRS utilizes the RTST™ high-flow water filtration and recycling unit
- Water utilized to rinse the aircraft is reclaimed and monitored for Total Dissolved Solids (TDS)
- When water TDS reaches a prescribed limit, it's discharged into a waste tank
- Recycling saves roughly 520 gallons per minute or 1,500,000 gallons of water per year (based on 12 aircraft per day 250 days a year).



FIGHT THE BATTLE OF AIRCRAFT CORROSION

The TRS helps mitigate the skyrocketing cost of airframes corrosion maintenance, delivering cost savings by eliminating ground crew man hours required for less-effective manual rinses, while at the same time recycling up to 80% of the water. Positioning TRS on a taxiway or flight line ramp allows inline rinses immediately upon aircraft recovery. Rinse cycle times can be adjusted to accommodate water spray lasting from 30 seconds to 2 minutes, allowing for customization to environmental and mission conditions.

TRS™ Modular Clear Water Rinse Systems for Taxi-Through Aircraft

TRS™ SPECIFICATIONS

Chlorides

pH

Total Dissolved Solids (TDS)

Total Suspended Solids (TSS)

Hardness

Biological Oxygen Demand (BOD)

Total Petroleum Hydrocarbon (TPH)

Langlier Saturation Index (LSI)

NAVAIR 01-1A-509-2 • TM 1-1500-344-23-2

2-3.1. DAILY CLEANING

When deployed within three miles of salt water or when flown below 3000 feet over salt water, daily cleaning or wipe down is required on all exposed, unpainted surfaces, such as landing gear struts and actuating rods of hydraulic cylinders.

NOTE: Optimum use of taxi-through rinse facilities is recommended for removal of salt contamination and light soils when operating near sea water.

2-10. FRESH WATER RINSING

The purpose of fresh water rinsing is primarily to remove salt from aircraft surfaces that have become contaminated due to operations near salt water. Most salt deposits are readily dissolved and/or dislodged and flushed away by rinsing. Rinsing can be done in a taxi-through facility or by direct manual spraying.

2-12. TREATMENT AND DISPOSAL OF WASH RACK WASTE

- a. Precautionary measures shall be taken to prevent wash rack waste from contaminating lakes, streams or other natural environments. Some of the chemicals used for cleaning require treatment or other special control prior to disposal.
- b. The disposal of materials shall be accomplished in accordance with applicable directives and in a manner that will not result in the violation of local, state, or federal pollution criteria.
- c. To minimize the problems associated with disposal and the actual cleaning process, all work shall be accomplished on an approved wash rack.



Riveer employs a quality management system that is ISO 9001:2008 certified.
©2013 RIVEER. All rights reserved. Specifications subject to change. R10.14

RIVEER | 233 VETERANS BLVD | SOUTH HAVEN MI | RIVEER.com | 888.857.7304

RIVEER™
**Engineered Wash Water
Recovery Systems**