

# HEAVY DUTY TRANSIT VERICLE SYSTEMS







### **WASH SYSTEMS**

# Engineered With Decades of Global Experience

Tammermatic Group i.e. Tammermatic Oy and InterClean Equipment, Inc. is an engineering, innovation and technology pioneer in the field of large vehicle cleaning applications. The fast changing transit market requires us to evolve and quickly

react to application requirements and market standards. InterClean's wash systems: Rainbow Ultima family, XJ Series and Hybrid deliver wash solutions that achieve maximum results in the transit bus, transit rail and paratransit bus industry.

### **HYBRID BUS WASH**

The Hybrid Wash System is a drive through wash system designed to use a combination of touchless cleaning for the front, top, wheel, under chassis and rear of a transit vehicle and foam brushes for the sides. The brushes are in a fixed position and typically use a foam material to prevent scratching and damage to the bus. As the vehicle passes through the wash, the wash detects it's position and activates the proper high pressure touchless cleaning component and activates and deactivates the brushes. Since the brushes are in a fixed position, they do not interfere with bus traffic and will prevent accidental damage to the bus and the wash equipment.

This system is available using fresh water or recycled water and the following options:

- Blowers
- Polyethylene Brush Material
- RO Rinse











# **RAINBOW ULTIMA WASH SYSTEM**

# Ultimate Cleaning Power for Large Vehicle Fleets

The Rainbow Ultima wash delivers state-of-the-art technology to the transit vehicle cleaning industry and is available in three models; the single wash unit, twin wash unit or drive through unit, the premium models combine advanced touchless and brush wash methods for the best cleaning combination for transit bus, rail and paratransit vehicles.

### Touchless Cleaning

The Rainbow Ultima can be equipped for only touchless cleaning, using the oscillating high pressure equipment or the Centri\*Spinner® system that can be equipped with the optional EQ100 water recycling module. This provides effective cleaning for odd shaped vehicles or vehicles with hard to clean areas that are beyond the reach of a brush.

### Brush Cleaning

The Rainbow Ultima can also be configured for using brushes for cleaning. There are 2 or 3 brush units which can be configured with a vertical front contour to match the profile of modern vehicles.

### Combination

The best cleaning solution may include a combination of the Touchless and Brush Cleaning, this will enable the machine to safely and effectively clean different types of vehicles within the same fleet.

### Wheel Wash

Wheel Washing and Under Chassis systems can be provided to clean the insides of the wheels, the lower portion of the bus and the under chassis.





# **XJ SERIES**

The XJ Series wash systems are drive through systems designed to use brushes to clean the front, sides and back of the transit vehicle.

In addition to the basic design, the system can be customized to include touchless cleaning for the front of the bus to prevent damage to the bike racks, mirrors or other accessories mounted on the outside of the bus. The Touchless Cleaning Modules are available with 22,5 kW (30 hp), 45 kW (60 hp) or 55 kW (75 hp) motors.

This system is available using fresh water or recycled water and the following options:

- Blowers
- Foam Brushes
- RO Final Rinse
- Touchless Cleaning Modules with 22,5 kW (30 hp), 45 kW (60 hp) or 55 kW (75 hp) motors













## **TAMMERMATIC GROUP'S APPROACH**

# to Transit Rail Wash Systems is as Innovative as the Company Itself

With our global installations we have become a leader in cleaning this type of vehicle. Whether catenary, third rail, diesel, or hybrid electric, we have the experience and knowledge to create the appropriate wash solution for the trains of today and tomorrow.

We create site-specific washes with special chemical formulations designed to achieve a successful end result, whether the train is located in the frigid winters of Siberia, the warm humidity of the Southeast Asia, or anywhere in between.

Our expertise in touchless cleaning allows us to design and manufacture complex systems that not only clean effectively, but also provide efficient water recycling, pH control, and multiple combinations of touchless and friction cleaning.

# INTRODUCING: New Automatic Brushing Options for Train Washing

- Automatic Brush Washing for the front and back of the train
- Automatically adjusting side brushes that move in to provide consistent brush pressure on the sides of train cars - even if the train cars are different sizes









# **RECYCLING MODULE EQ100**

# Delivers Continuous Supply of Recycled Water

The heart of the InterClean system is the patented anti-turbulent recycling and high pressure equipment module.

Each module is capable of producing up to 1135 l/m (300 gpm) recycled water continuously. The system is designed to recycle and aerate the wash water automatically without changing filters or manual supervision. The InterClean module facilitates the inexpensive and reliable use of high volumes of recycled wash water. The system is capable of operating under the most demanding vehicle wash conditions. The system uses no chemicals or additives and is totally environmentally sound.

To achieve recycled water volumes in excess of 1135 l/m (300 gpm), multiple modules can be utilized in parallel. The module is pre-wired, pre-plumbed and mounted on a skid. The units are designed to fit in standard road trailers, or in high cube 40 feet ocean freight containers. The system has its own electrical panel that controls all system functions, such as liquid level monitoring and adjustments. The system is configured for modem hook-up that allows remote control and trouble-shooting.

**Dimensions:** 1500 mm (60 in) wide, 1500 mm (60 in) long, 2600 mm (102 in) high

Recycling Capacity: 1135 l/m (300 gpm) continuously High Pressure Capacity: 190-1135 l/m (50-300 gpm)

continuously







# TOUCHLESS CENTRI\*SPINNER® Provides Unmatched Performance

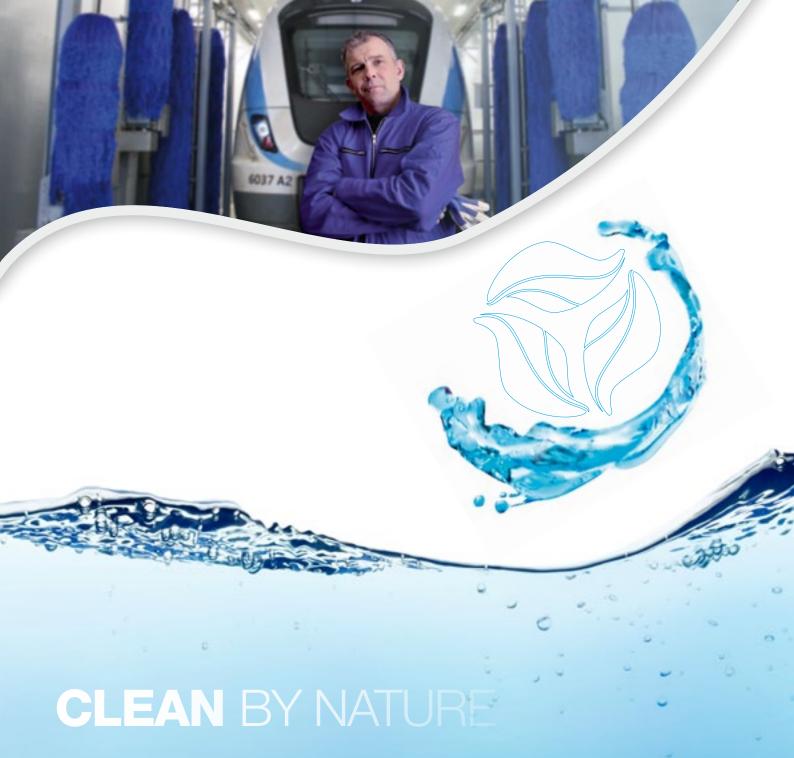
Bus, train car and locomotive shapes, configurations and exterior components present a particular challenge for conventional brush wash systems. Transportation vehicles have a larger number of areas beyond the reach of brushes. And, unlike rotating brushes, the Centri\*Spinner® system will not damage mirrors, safety side signs, bike racks or rear light covers. The Centri\*Spinner® is designed to provide the best available touchless cleaning power. The patented Centri\*Spinner® is approved for both fresh and recycled water applications.

### Centri\*Spinner® Specifications:

- Power Venturi Assisted Zero Degree Nozzles
- Hydrodynamic Rotational Speed Control
- Rotational Speed Range 60-200 rpm
- Mechanical High Pressure Seal
- 1" NPT Connection
- 19-23 bar (270-330 psi) Operational Pressure Range

Dramatically reduced corrosion, improved accessibility to the maintenance areas of the vehicle, and improved general appearance are direct advantages of using a Centri\*Spinner® Wash System.







TAMMER MATIC group

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