

# Heavy Duty Vehicle Wash Systems





### **Transit Rail**

InterClean Equipment's approach to Transit Rail wash systems is as innovative as the company itself. With our global installations for Transit Rail, 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.

InterClean creates site-specific washes with special chemical formulations designed to achieve a successful end result, whether the train is located in the frigid winters of Canada, the warm humidity of the Southeastern United States, or anywhere in between.



#### **Transit Bus**

InterClean Equipment has multiple solutions for cleaning transit buses. Whether the customer is looking for completely touchless, or a brush wash system, we have the equipment and experience to assist in designing the appropriate wash system for the application.

NOT IN SERVICE ------

InterClean has designed and developed our Hybrid Bus Wash, which combines the best of the brush and touchless technologies. With high pressure front, rear, top and wheel sprays, combined with side brushes the result is a clean vehicle with no potential for damage to the bus or the wash system.







### **School Bus**

School busses present a particular challenge for conventional brush wash systems, which is why InterClean's touchless wash units are so popular in school bus garages across the country. The InterClean Centri\*Spinner system will never damage cross-over mirrors, safety side signs or rear light covers.

Our systems can clean the under carriage of the bus, dramatically reducing chassis and side panel corrosion, and making maintenance access easier. At a working rate of up to

40 vehicles an hour, driver productivity is high and downtime is not a factor.



### **Public Works**

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The first ever InterClean Public Works vehicle wash installation is still going strong, even after 20 years of operation. For washing municipal fleets from police cars to garbage trucks and waste haulers, there is no more effective or efficient system. It takes just 60 to 90 seconds for our units to clean a garbage truck, and the wash is unattended.

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Not only do the cleaner vehicles present a better visual impression, but corrosion is reduced, and maintenance access is notably improved. This combined with the low maintenance requirements of our systems makes it easy to see why we have a dominant U.S. market share in this sector.





#### **Fleet Wash**

Simplicity. Efficiency. Results. The same things an operator would want from a fleet of trucks, InterClean delivers in its fleet wash systems. Automated systems remove the need for attendants, are low-maintenance, and require no detailing. Our fleet washes can handle over 7,000 trucks in a month, ensuring that your fleet presents a clean impression of the company over the road.

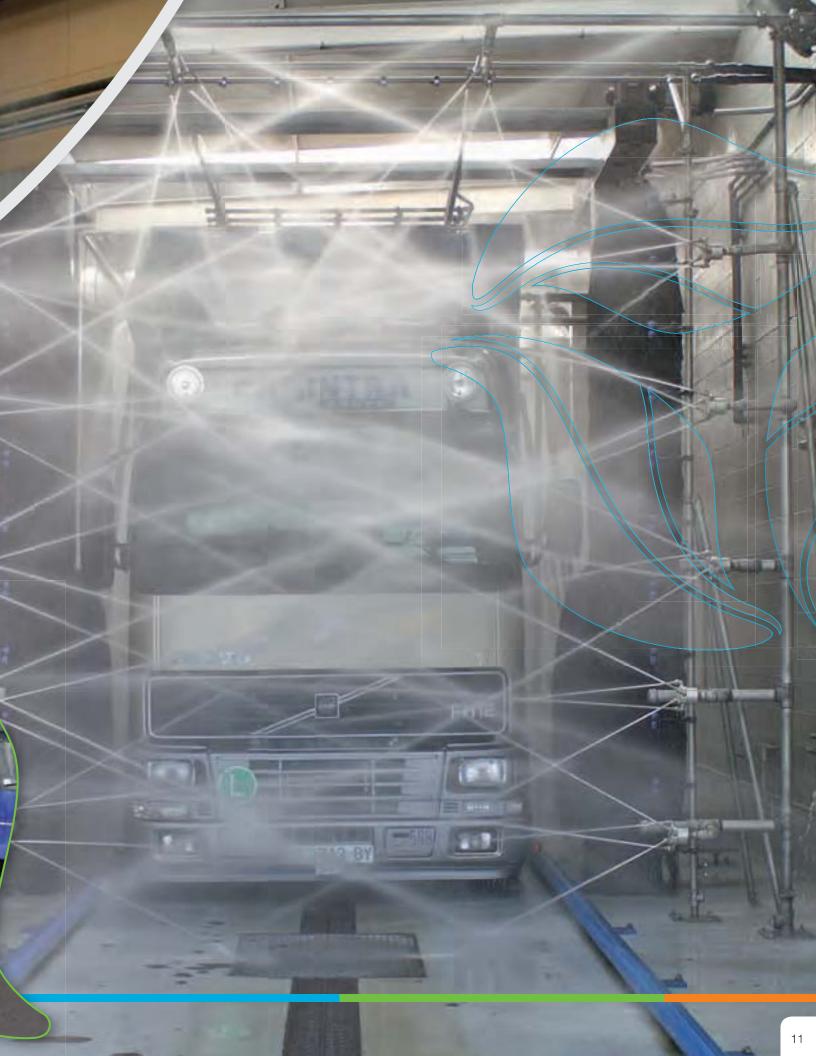
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A cleaner vehicle is easier to maintain and suffers less maintenance issues that arise from dirty trucks, such as corrosion. InterClean fleet wash systems can utilize recycled or fresh water, and can be fitted with one or two-step chemical applicators in order to meet your specific needs.

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#### **Oil & Gas Field**

Oil & Gas field support vehicles have to perform their duties in extreme conditions and in remote locations. This generally means poor or non-existent roadways to travel from site to site. Often these support vehicles travel for miles on unpaved surfaces where they build up large amount of soil. This soil can weight between 200 to 2000 pounds depending on the size of the vehicle. If this issue is ignored, it leads to extreme wear on the vehicle driveline and braking systems as well as reduced efficiency as the vehicle has to carry the additional weight. Using conventional methods, removing this amount of buildup can take hours.

InterClean has designed a heavy duty system using recycled water to address the issue of heavy mud buildup. Spraying water at relatively low pressures with high volumes we can remove this heavy buildup in a matter of minutes.

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## Military

The United States Army operates the largest, more sophisticated wash installation ever designed and installed, and only one company could provide it - InterClean. By utilizing state-of-the-art virtual prototyping software to predict the dynamic behavior of the robotic gantry and analyze all critical parameters, we were able to meet the challenge of washing military tanks automatically.

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Our systems utilizes a laser-guided outline recognition and control system, ensuring that all areas of the tank are throroughly cleaned. InterClean is currently under contract to provide systems to meet the specific needs of military depots in Georgia and Alaska, cementing our place as a leader in the military market.







Mining vehicles work in extreme conditions and require routine maintenance to operate properly and safely. The task of cleaning these vehicles before the maintenance can be done is a difficult one. Depending on the size of the vehicle and conditions at the mine site, it can take between 8-15 hours to clean each piece of equipment. InterClean's approach to cleaning these vehicles uses relatively low pressure, under 300 PSI, at high volumes to remove the soiling buildup. This is a much safer method than the ultra high pressure wands operating at 10,000 -20,000 PSI. We have seen substantial reductions

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in the time required to clean these vehicles, which reduces equipment downtime. This allows the vehicles to be maintained and placed back into service faster than other cleaning methods.

InterClean was the first company to install an automated, drive through wash system for mine haul trucks. These vehicles have capacities up to 440 tons. Our drive through wash can remove most exterior soiling in less than 10 minutes. This allows the haul trucks to be cleaned after each work shift, rather than waiting to clean them for preventive maintenance tasks.



#### **Wheel & Under Chassis**

Landfills, mines, quarries, power plants, and agricultural facilities all generate dirt and waste. To keep these potentially harmful by-products in their designated areas - away from the public and off of vehicles - a fast, effective means of washing the tires and chassis of vehicles becomes necessary. At InterClean, we have produced the ideal system, balancing intense cleaning power, reliable and safe water recycling, and the convenient and economical removal of accumulated dirt and waste. By simply driving vehicles through your on-site InterClean system, you can easily comply with the standards of public safety and environmental responsibility.

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### **Car Wash**

Simplicity and reliability are the hallmarks of any InterClean wash system, and our car washes are no different. Simple to install and maintain, our touchless Centri\*Spinner wash systems provide unmatched performance for you and your clients. The InterClean car wash system is one designed to meet the needs of today and tomorrow by leaving behind the over-complicated, ineffective, high-maintenance car washes of the past. In addition, the water-recycling knowledge of our larger systems applies to our car wash system as well, resulting in a reusable water rate of 90% to satisfy the needs of an increasingly

"green" society while also lowering your bottom line. Cost-effective, responsible, reliable cleaning and a sound financial investment - our promises to you.





#### InterClean Components

The heart of the InterClean system is the patented anti-turbulent recycling and high pressure equipment module. The same module is used for all InterClean applications, from automated military tank washing to manual hand gun applications.

Each module is capable of producing up to 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 such as recycling water used to wash garbage trucks. The system uses no chemical or additives and is totally environmentally sound.

By using this effective yet inexpensive recycling system, InterClean Equipment is able to employ the full force of huge volumes of pressurized wash water, which create a cleaning impact that is simply not possible with other automatic vehicle washing systems.

To achieve recycled water volumes in excess of 300 gpm (1,250 l/m), multiple modules can be utilized in parallel. The 1200 gpm (500 l/m), necessary in washing military tanks, is achieved by the use of four parallel InterClean modules.

The module is pre-wired, pre-plumbed and mounted on a skid. The overall dimensions of the unit are such that it can be shipped in standard road trailers, or in high cube 40 feet ocean freight containers.

The system has its own electrical panel, which includes a slave PLC that controls all system internal functions, such as liquid level monitoring and adjustments. The system allows modern hook-up for remote control and trouble shooting.

**Dimensions:** 60" (150 cm) wide, 60" (150 cm) long, 102" (260 cm) high **Recycling capacity:** 300 gpm (1250 l/m) continuously **High pressure capacity:** 50 - 300 gpm (200-1250 l/m) continuously



The patented Centri\*Spinner® is approved for both fresh and recycled water applications. Please contact InterClean for system performance approval before using with recycled water applications not engineered and supplied by InterClean.

Centri\*Spinner® Specifications:

- Power Venturi Assisted Zero Degree
  Nozzles
- Hydrodynamic Rotational Speed Control
- Mechanical High Pressure Seal
- 1" NPT Connection

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• 270-300 psi Operational Pressure Range

Established in 1984, InterClean Equipment Inc. is an engineering, innovation, and technology pioneer in the field of large vehicle cleaning applications. InterClean builds wash systems for vehicles ranging from standard automobiles up to 440-ton mining haul trucks. We have the knowledge and experience to handle the toughest applications in the most demanding environments.

InterClean is first and foremost an engineering company. We strive to understand the intricacies of each application in order to design the

best wash solution. By taking the time to fully understand our customer's specific needs, we can create the best cleaning solution possible. Although most cleaning applications may appear similar, we at InterClean take the necessary steps to ensure the best solution is provided to the customer.

AutoCAD 3-D solid modeling is used to construct all of our engineering, fabrication and facility layout drawings. Custom designed equipment packages can be placed into architectural drawings in either 2-D or 3-D views.

Interchange owns numerous patents on high pressure washing, water recycling and waste water treatment technologies. The worldwide recognized Centri\*Spinner® patents and trademarks are both owned by InterClean.

If you want to know more about Interclean Equipment, Inc., please do not hesitate to contact us.



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