



HEAVY DUTY MINING VEHICLE WASH SYSTEMS





COST Savings

In the mining industry time is money, every minute your vehicles are idle you are not producing.

Hand washing large equipment is time consuming especially if you do not have the right tools for the job. It often takes 4 to 8 hours – in an easy case – to wash a 400 ton haul truck manually with standard manual equipment. However, when we are talking about difficult soil and ground conditions in harsh autumn, spring or winter conditions the unprofessional operation can take even more than 24 h. Implementing the correct modern high capacity equipment and design and equipment package we can significantly reduce this down time while also reducing ongoing maintenance costs.

InterClean offers several options for heavy, medium and light vehicle washing including:

- Automatic drive through packages for rapid throughput applications
- Manual monitor and fire hose packages for standard applications
- Semi-automatic joystick controlled monitors to limit the employee involvement in the wash lane
- Fully robotic monitor packages to completely remove the employee from the wash process.

Options

The ever changing mining market requires us to evolve and quickly react to application requirements and project standards. Through the years we have built up a very impressive customer base and with it many new options have been developed via their projects. Although we would prefer to provide InterClean standard equipment we have are willing to work with our customers to meet their specific needs.

Below is a list of some of the options we can offer:

- Chassis wash packages
- Intensified side blaster
- Oil skimmers
- ISO container plant rooms
- Custom controls packages to meet the most strict international requirements
- IP56 – IP66 motors and electrical components.





DRIVE Through

Some benefits of our wash system include:

- Multi-vehicle design which can accommodate most fleet vehicles
- Reduced wash time
- Easy operation as driver simply idles through the wash
- Up to 100% recycled water
- Pre-wired and pre-plumbed containerized plant rooms available
- Extends the life of your fleet while presenting a positive clean image to your neighbors and associates

Heavy Duty

Washing heavy mining vehicles requires a large amount of recycled water at lower pressure. This allows us to safely remove heavy mud and hydrocarbons without damaging expensive equipment or injuring personnel.

Medium Duty

Medium sized vehicles on a mine site typically include dump trucks, buses, road trains and other large road legal vehicles. Washing these vehicles can also be very time consuming and expensive, not to mention the health and safety risks involved. With our standard wash package we can clean a dump truck in less than two minutes top to bottom including the chassis. InterClean offers a full line of tire and wheel washing packages to maintain your fleet and also prepare your vehicles for leaving the mine property.

Light Duty

Just about every mine site in the world has dozens if not hundreds of light duty vehicles. A light vehicle is typically a: car, pickup or SUV, ambulance or other street legal small vehicle. Maintaining this fleet can be challenging especially at a mine site where these cars travel off road and on city streets. Washing your fleet is imperative not only for maintenance purposes but also for a positive presence in the community.





MANUAL Wash

The Washman filtration package requires no consumables and very little preventative maintenance. This passive filtration package is comfortably placed in this environment where down time costs money. The high volume manual monitors are of the highest quality and provide a heavy stream of focused and intense water to the dirtiest of vehicles. This impact quickly removes large rocks and dirt from dozers and haul trucks.

The Washman manual wash package consists of:

Self-contained Washman Filtration Package

Skid mounted easily installed and serviced all pumps and panel included.

High Volume Monitors

Mining duty quality with several options to meet any application including joystick controlled packages.

Fire Hose

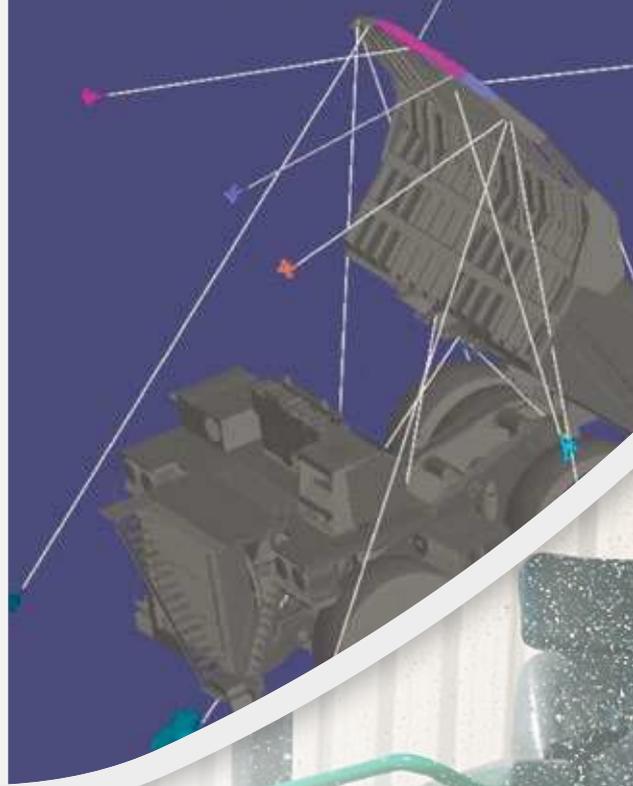
Rigid rubber hose including hose reel and adjustable nozzle, spring rewind hose reel as well.

High Pressure Washer

100% recycled water high pressure pump can feed up to four hoses simultaneously.







ROBOTIC WASH Options

Innovation

InterClean is always looking to the future and listening to our customers about their needs and requirements. Due to safety standards at many mines, clients have asked us to design a wash package which removes the employee from the wash bay. In response to this requirement we have developed a fully robotic wash package for washing large vehicles up to 400 ton haul trucks. This robotic package is designed to wash haul trucks with multiple monitors performing simultaneously, thus greatly reducing the down time.

Safety

The robotic monitor package can be used in several different configurations depending on the project needs and requirements. This system can be installed in hazardous locations such as underground mines, underneath the vehicle, or in any other areas not safe for human traffic.

Technology

The wash system software is designed to recognize the vehicle and wash specifically designated areas avoiding those sensitive portions of the vehicle which cannot withstand a direct blast from water cannons. This is ideal for the newest diesel-electric haul trucks being produced by CAT & Komatsu.







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/min), multiple modules can be utilized in parallel. The 1200 GPM (500 l/min), 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 modem 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/min) continuously
High pressure capacity: 50 - 300 GPM (200-1250 l/min) 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
- 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 3D 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 2D or 3D views.

InterClean 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.

CLEAN BY NATURE



WORLDWIDE



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