High-Pressure Cleaning Solutions for the
HEAVY EQUIPMENT INDUSTRY

A Guide for the Heavy Equipment Industry on Setting Up an Environmentally Safe Wash Facility

Also featuring...
waterMAZE®
WATER TREATMENT SYSTEMS
WATER CLEANING SOLUTIONS FOR THE HEAVY EQUIPMENT INDUSTRY

How to Set Up a Closed-Loop Wash Facility

1. **Pre-Wash Pad:** Heavy dirt is knocked off the equipment by a 500 PSI water blaster at a rate of 25 GPM. The water flows into a sloped pit for settling out the mud. Oil is removed in a three-stage collection pit and the water is recycled back to the water blaster via a cone-bottom clarifier tank for more pre-washing. Sludge in the drive-in, sloped pit is scooped out and dumped in an adjacent drying or de-watering area where the water can flow back into the pit. Dry dirt is later discarded.

2. **Wash Rack:** Oil, grease and dirt are blasted off with a hot-water (up to 200°F) high-pressure washer at 4 to 8 GPM and 2000 - 3000 PSI. The water then flows into a trench drain or sump pit which dump into a three-stage fiberglass collection pit for oil, solids, and water separation.

3. **Wash-Water Treatment:** The water now passes through a cone-bottom, pre-treatment tank for additional separation of solids before entering the final treatment system. The all-natural Water Maze CLB wastewater treatment system then processes the waste stream using our exclusive advanced bio-technology to polish the water so it can be recycled or discharged to the sanitary sewer. The CLB, which is modular for maximum flexibility, also employs high-impact aeration to maximize aerobic digestion.

4. **Return to Pressure Washer:** Treated water is eventually returned to the pressure washer for reuse in high-pressure cleaning of heavy equipment.

5. **Super-Suction Pit Cleaner:** Using a water cannon, the Water Blaster knocks off dirt with a spray force of up to 500 PSI and 25 GPM.

6. **Pit Management System:** The PM-1000 is a bio-medication management system. It injects microbes, nutrients, and micro-bubbles of oxygen to create an aerobic environment to remove (digest) greases, oils, and other organic (carbon) based compounds.

7. **Hot-Water Pressure Washer:** The PHW portable hot-water pressure washer delivers up to 3000 PSI of pressure. It is also economical because it is electric-powered and diesel-heated.

8. **Above Ground Wash Pad:** The wash pad contains the wash water allowing it to flow into a stainless-steel sloped sump trough and sump trough for solids settling and water treatment.

9. **Cold-Water Pressure Washer:** The PG belt-driven, gasoline-powered, cold-water pressure washer can be used for cleaning equipment and/or operating the pit cleaner or surface cleaner.

10. **Wastewater Treatment System with Advanced Bio-remediation:** The CLB waste-water treatment system uses an advanced bio-technology to treat wash-water so it can be returned for reuse by a pressure washer or discharged to the sanitary sewer. This all-natural solution to wastewater treatment breeds aerobic bacteria to consume oils and greases and convert them into harmless water and CO2. The system is fully automated for ease of operation and low maintenance.

11. **Automatic Parts Washers:** Takes wash water so it can be returned for reuse by a pressure washer or discharged to the sanitary sewer. This all-natural solution to wastewater treatment breeds aerobic bacteria to consume oils and greases and convert them into harmless water and CO2. The system is fully automated for ease of operation and low maintenance.

12. **Excess Wastewater from Parts Washers is Economically Evaporated:** Evaporator

13. **Hot-Water Pressure Washer:** Hot-water pressure washer and solvent-free!
What Heavy Equipment Companies Are Saying About Our Water Cleaning Solutions

Jim Westfield, Vice-President, Modern Group, Philadelphia, PA: “We’ve had good success with Landa. The equipment is reliable and quality. It is environmentally friendly so we can avoid potentially costly problems.”

Blaine Bingham, President, Bingham Equipment, Mesa, AZ: “The equipment has protected our investment in real estate. It functions well. I have had several machines in place for several years. It has been performing well over the years.”

Don Schram, Director of Environmental Affairs, Pape Group, Portland, OR: “It takes a lot of wastewater equipment to work effectively in the heavy equipment industry because of the dirt loads we deal with. We have both your sewer discharge and recycling equipment in operation. The dealership was a big factor for us in determining to purchase Landa. I also talked to other CAT dealerships before purchasing and they liked Landa equipment. The wastewater equipment keeps us out of environmental and regulatory situations.”

“I like the product support and service I receive...it is a quality and reliable product.”
— Randy Lamb, Environmental Manager, Empire Southwest, Mesa, AZ

Landa and Water Maze: Names You Can Trust

Landa’s legendary quality and innovation in its pressure washer line is the result of focusing decades of experience into every detail of a pressure washer.

From the award-winning spinning spray bar for aqueous parts washers to wireless remote control of a pressure washer up to 300 feet away, Landa sets the standard, then raises the bar for every other cleaning equipment manufacturer in North America. Safe to use and built to last!

Since 1987, Water Maze has been a leader in water treatment systems designed principally for treating the effluent generated by pressure washers and other cleaning equipment.

Today there are more than 14,000 Water Maze systems installed worldwide utilizing a broad range of technologies including electrocoagulation, bioremediation, evaporation and mechanical filtration.