

Wastewater Recycling System



WRS-1



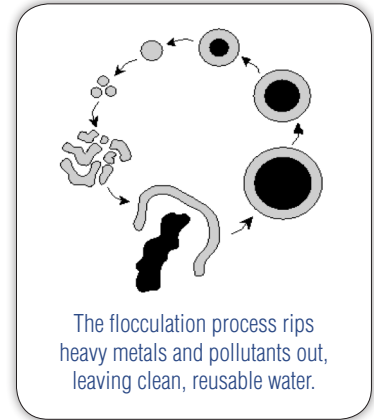
WRS-2

The BHS Wastewater Recycling System (WRS) is an automated, single structure, recycling system, providing on-site wastewater management. The WRS treats, filters and processes industrial wastewater to remove hazardous contaminants and particulates, ensuring that the recycled water is clean.

Functionality

As the WRS receives dirty wastewater, an automatic pH adjustment control is activated to raise the water to a neutral pH level of 8. The wastewater is then treated with a reactive separating agent to encapsulate the contaminants and form large flocculent. Using gravity flow, the treated water is separated from the flocculent by passing through an automatic deep bed filter. The captured sludge is conveyed to a sludge catch bin, where it dries and hardens into a non-hazardous, non-leachable sludge. The sludge is certified landfill friendly for standard trash disposal. The clean water can either be drained or held in a storage tank for reuse.

This process can be performed in batches or in a closed loop system, continuously supplying clean water to a Battery Wash Cabinet (BWC). Reference literature *PL-2400 Battery Wash Equipment* for more information on the BWC.



Available Models

WRS-1

WRS-2

WRS-2-KIT

Available Options

Mobile Tank (WRS-MT)

330 gal (1249 L) Portable tank for transport of wastewater from other locations

Clean Water Holding Tank (WRS-MT2)

330 gal (1249 L) Portable tank stores clean water intended for reuse, and includes recycle module, pressurization pump, and ozone purification

Note: Option is available on WRS-2 only.

Industrial Applications

Types of Industry	Waste Streams
General metal working	Cutting and grinding oils, water soluble coolants
Metal finishing, polishing	Burnishing, vibratory, deburring effluent
Metal fabricators	Parts washer effluent
Rental and repair centers	Steam cleaning, pressure washer effluent
General industry	Mop water, compressor condensate, oils, metals and suspended solids
Painting, screening, paint coating	Inks, latex solutions
Die casting	Die lube, quench pits, machine, run-off
Plating, general manufacturing	Dissolved metals emulsified
Truck wash centers	Emulsified oil, suspended solids

Features & Benefits

- Reclaims wastewater at a rate of two gallons per minute
- Automatic pH adjustment control neutralizes water for removal of hazardous materials
- Specially formulated reactive separating agent used in flocculation process removes soils, hydrocarbons, metals, etc. from wastewater
- Sludge generated is non-hazardous, non-leachable, and certified landfill friendly for standard trash disposal
- Wash water effluent micron filtered both before & after treatment
- Produces clean, reusable water
- Visual and audible alarms for operator notification on low supply of paper, flocculent, or caustic
- Alarm activation disables WRS, preventing untreated water from going down the drain
- Ozone purification removes bacteria for odor control*
- Independently lab tested and approved to safely process wastewater while meeting EPA and NJDEP regulations
- WRS-2-KIT includes wash station transfer pump

* Standard on WRS-1, included on option WRS-MT2

Product Specifications

	WRS-1	WRS-2	WRS-2-KIT
Input Voltage	460 V / 3 ph / 60 Hz	120 V / 1 ph / 60 Hz	120 V / 1 ph / 60 Hz
AC Current Draw	15 A	50 A, 2 separate circuits required: (1) 20 A and (1) 30 A	50 A, 2 separate circuits required: (1) 20 A and (1) 30 A
Water Pump Capacity	75 psi / 13 gal/min	14 gal/min	14 gal/min
Water Pump Motor	1 hp	1/10 hp	1/10 hp
Sump Pump Capacity	15 gal/min	42 gal/min	42 gal/min
Reservoir Capacity	185 gal / 700 L	—	—
Water Outlet	0.75" / 19 mm	0.5" / 13 mm	0.5" / 13 mm
Return Inlet	1" / 25 mm	0.75" / 19 mm	0.75" / 19 mm
Filter Capacity	9 ft ²	9 ft ²	9 ft ²
Overall Width	51.5" / 1308 mm	48" / 1219 mm	48" / 1219 mm
Overall Length	77.5" / 1969 mm	72" / 1829 mm	72" / 1829 mm
Overall Height	89" / 2261 mm	89" / 2261 mm	89" / 2261 mm
Weight	2,100 lb / 953 kg	550 lb / 249 kg	550 lb / 249 kg
pH Metering Type	Diaphragm	Diaphragm	Diaphragm
Dirty Water Tank	—	—	330 gal / 1249 L
Clean Water Tank	—	—	330 gal / 1249 L (Includes recycle module)

Consumables

- 50 lb (23 kg) Reactive separating agent
- 1 Bag filter
- 1 Liner filter for the sludge catch bin
- 1 Roll of filter paper
- Sodium Hydroxide (must be sourced locally)



Reference Literature SM-1177 for more information on the WRS-2-KIT.

