

# Wash Water Recycle Systems

Water Treatment Systems

WLP & WCP Series

Making a positive impact on our environment for today and future generations.

## WLP Series Advanced Wash Water Recycle Systems



THESE RECYCLE SYSTEMS ARE DESIGNED TO REMOVE FREE HYDROCARBONS AND FILTER WATER TO BE SENT BACK THROUGH A PRESSURE WASHER. THEY FEATURE pH AND ORP INJECTION AND ARE DESIGNED WITH CORROSION-RESISTANT TANKS.

WLP-20-0M10

### FEATURES

- Poly skid is non-corrosive
- Easily accessible pumps
- Corona discharge ozone system
- · Advanced oil/water/solids separator
- ORP/pH controller
- Customized multi-media filter
- Activated carbon filter
- 1.0 HP surface-mount sump pump



Hose connectors are designed for easy accessibility and quick installation



ETL listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation



Recommended Air Compressor, AM1-HE02-05M, for use with auto-backwash models

AM1-HE02-05M

4.2 CFM @ 90 PSI 2.0 HP, 120V, 15.0A Electric Motor 5-Gallon Twin Tank Receivers

MODEL NUMBER	FLOW RATE	MEDIA FILTER (CUSTOM MIX)	CARTRIDGE FILTER	CARBON FILTER (DEGASSED)	POWER REQUIREMENTS	AIR REQUIRED	DIMENSIONS (LxWxH)	SHIP WT.
WLP-20-0M10	0-20 GPM	550 lb.	400 sq. ft.	110 lb.	230V, 1Ø, 25.0A	-	8x5x4.33ft.	2435 lb.
WLP-20AB-0M11*	0-20 GPM	550 lb.	-	110 lb.	230V, 1Ø, 25.0A	60 to 100-PSI	8x5x4.33ft.	2435 lb.
WLP-20AB-0M31*	0-20 GPM	550 lb.	-	110 lb.	230V, 3Ø, 13.0A	60 to 100-PSI	8x5x4.33ft.	2435 lb.
WLP-40AB-0M11*	0-40 GPM	900 lb.	-	165 lb.	230V, 1Ø, 30.0A	60 to 100-PSI	7x9x5ft.	3100 lb.
WLP-40AB-0M31*	0-40 GPM	900 lb.	_	165 lb.	230V, 3Ø, 17.0A	60 to 100-PSI	7x9x5ft.	3100 lb.

#### \*Auto-backwash models (air required 60 to 100-PSI). 230V/208V/460V 3Ø available on all models as options.

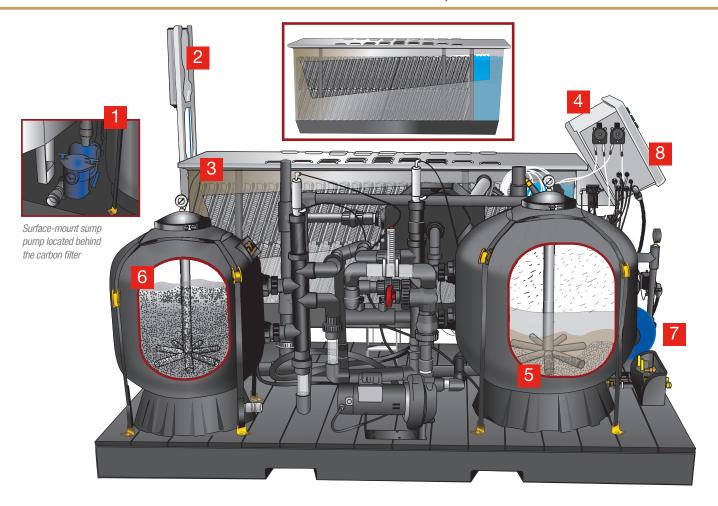
#### ACCESSORIES:

PART NUMBER	DESCRIPTION	FITS MODELS
32-0538	pH probe – Keeps the water at an appropriate pH level so germicide is effective at killing bacteria and controlling odor	All models
32-0540	ORP probe - Measures and injects a germicide to control odor by killing odor-causing bacteria	All models
55-1887	Check valve, 2-inch – Holds prime in suction line	All models
AT-4007-M	Replacement air filter – Moisture trapping replacement filter	Auto-backwash models

OPTIONS:

PART NUMBER	DESCRIPTION	FITS MODELS
WX-0054	460V, 30 - Upgrades 230V models to operate at 460V	WLP-20AB-0M31
WX-0055	460V, 30 - Upgrades 230V models to operate at 460V	WLP-40AB-0M31

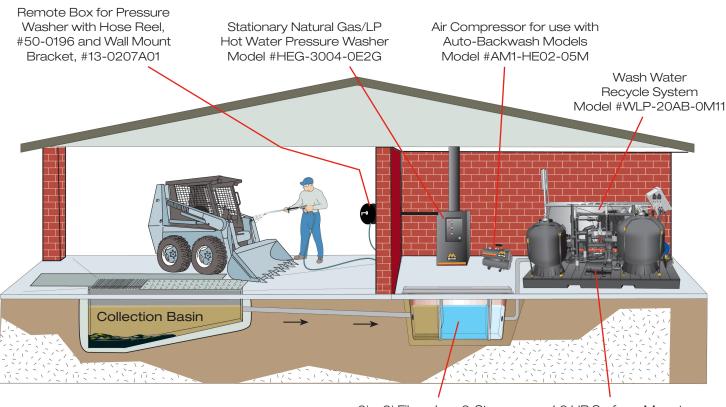
### WLP Series Process & Flow Description



- 1. SURFACE-MOUNT SUMP PUMP Untreated wash water is introduced into the system via a 1.0 HP surface-mount sump pump, which is included with the system, located on the unit.
- 2. CORONA DISCHARGE OZONE SYSTEM Wash water is injected with a high concentration of ozone via a corona discharge ozone injector system for a "quick kill" of live bacteria on contact. Ozone also breaks up emulsified oils, allowing them to coalesce and float to the top of the tank for separation into the oil decanter.
- 3. ADVANCED OIL/WATER/SOLIDS SEPARATOR As the water flows through the three-stage oil/water/solids separator, it changes directions countless times as the water is directed and redirected through four horizontal baffles and hundreds of square feet of honey-combed-shaped meshed oleophilic (oil-attracting) coalescing media. Mechanically emulsified oil particles are attracted from the water to the oleophilic media and float to the surface. Once on the surface, the oil is skimmed off into an oil decanter for easy disposal. Fine silt and particulates are dropped to the bottom of the sloped stainless-steel tank for easy flushing and disposal.
- 4. ORP/pH CONTROLLER For longer term control of bacteria, the ORP injection system automatically measures and injects a germicide to control odor by killing odor-causing bacteria. The automated pH control system keeps the water at an appropriate pH level so germicide is effective at killing bacteria and controlling odor.
- 5. CUSTOMIZED MULTI-MEDIA FILTER Once the water has been treated for oil and solids removal, it is then pushed through a customized multi-media filter which contains a special media blend to filter out particulates down to 25-microns.
- ACTIVATED CARBON FILTER The final treatment stage of the system occurs as the water is filtered through activated carbon which absorbs hydrocarbons, herbicides, pesticides, metals and dozens of other carbon-based constituents. Activated carbon also works as a polisher for treated water to remove chlorides.
- 7. TREATED WATER IN HOLDING TANK Once the water is treated, it is pressurized where it will be ready for reuse at 30-PSI to 50-PSI.
- 8. ELECTRICAL CONTROL PANEL ETL listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation.

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# WLP Series Sample Equipment Wash Pad Application



3' x 9' Fiberglass 3-Stage Collection Pit Model #12-0074 1.0 HP Surface-Mount Sump Pump Included with System, #3-0460

### RECOMMENDED APPLICATIONS:

- Rental Yards
- Heavy Equipment Dealers
- Trucking Facilities
- Military Bases
- Truck Rental Fleets
- Diesel Repair Facilities
- Forklift Washing Operations
- Aircraft Maintenance and Restoration
- Shipyards
- Municipalities/State DOTs
- Oil Fields

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- Engine Rebuilders and Manufacturers

# THE IMPORTANCE OF A PROPER PIT SYSTEM:

Once equipment is washed, the untreated wash water flows into your pit system. A proper pit system for your application is the first step in proper wash water treatment and a critical element in any wash water recycle system.

Consult your dealer to determine the pit system configuration that works best for your application.

### WCP Series Clarifier Wash Water Recycle Systems

DESIGNED TO REMOVE FREE HYDROCARBONS AND FILTER WATER, THESE SYSTEMS COME STANDARD WITH pH AND ORP INJECTION AND ARE CORROSION-RESISTANT WHEN UTILIZING POLYMER TANKS AND RECYCLED PLASTIC SKIDS.



FEATURES

- Cone-shaped tank
- Heavy-duty corrosive-resistant base
- Corona discharge ozone system
- Clarifier oil/water/solids separator
- Oil decanter
- Sludge box
- Multi-media, reusable polyester and activated carbon filters
- ORP/pH controller
- 1.0 HP surface-mount sump pump



Hose connectors are designed for easy accessibility and quick installation



ETL listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation



Recommended Air Compressor, AM1-HE02-05M, for use with auto-backwash models

AM1-HE02-05M 4.2 CFM @ 90 PSI 2.0 HP, 120V, 15.0A Electric Motor 5-Gallon Twin Tank Receivers

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MODEL NUMBER	FLOW RATE	CLARIFIER TANK	MEDIA FILTER	CARTRIDGE FILTER	CARBON FILTER	OIL COALESCING AREA	OZONE GENERATOR	POWER REQUIREMENTS	DIMENSIONS (LxWxH)	SHIP WT.
WCP-20-0M10	0-20 GPM	600 gallons	350 lb.	400 sq. ft.	110 lb.	425 sq. ft.	12 grams/day	230V, 1Ø, 30.0A	6x8x9ft.	2500 lb.
WCP-30AB-0M10*	0-30 GPM	600 gallons	900 lb.	_	165 lb.	425 sq. ft.	12 grams/day	230V, 1Ø, 35.0A	7x9x9ft.	3470 lb.
WCP-30AB-0M30*	0-30 GPM	600 gallons	900 lb.	-	165 lb.	425 sq. ft.	12 grams/day	230V, 3Ø, 20.0A	7x9x9ft.	3470 lb.

\*Auto-backwash models (air required 60 to 100-PSI). 230V/208V/460V 3Ø available on all models as options.

#### OPTIONS:

PART NUMBER	DESCRIPTION	FITS MODELS
WX-0039	Pinch valve assembly - Pinch valve, bladder style (used on cone-bottom tanks), 2-inch, 120V, 10	Manual backwash models
WX-0056	460V, 30 - Upgrades 230V models to operate at 460V	WCP-30AB-0M30
WX-0133	Coagulation system - Used in heavy solids applications to help dirt and solids settle for easy removal	All models

## WCP Series Process & Flow Description

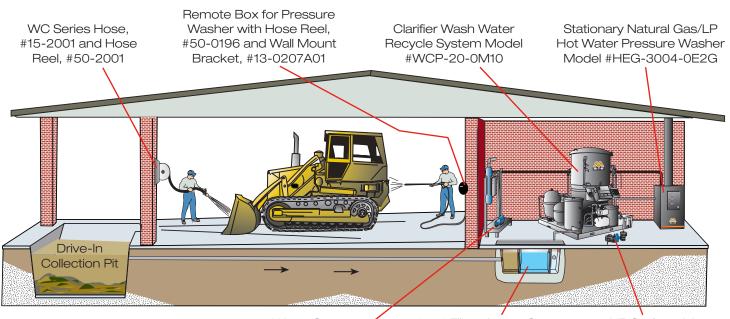
1. SURFACE-MOUNT SUMP PUMP – Untreated wash water is introduced into the system by a 1.0 HP surface-mount sump pump, which is included with the system, located on the unit.

#### 2. CLARIFIER OIL/WATER/SOLIDS SEPARATOR -As the water flows through the cone-shaped oil/water/solids separator, it changes directions countless times as the water is directed and redirected through cone baffles and hundreds of square feet of oleophilic (oil-attracting) coalescing media. Mechanically emulsified oil particles are attracted from the water to the oleophilic media and float to the surface. Once on the surface, the oil is skimmed off into an oil decanter for easy disposal. Fine silt and particulates are dropped to the bottom of the sloped stainless-steel tank for easy flushing and disposal. 3. CORONA DISCHARGE OZONE SYSTEM -Water in the cone tank is injected with a high concentration of ozone via a corona 6 discharge ozone injector system, tiny bubbles saturate the water in the cone tank, killing live bacteria instantly on contact. Ozone π also breaks up emulsified oils, allowing them to coalesce and float to the top of the 4 tank for separation into the oil decanter. 4. OIL DECANTER -Oil skimmed from the 10 surface of the clarifier tank is captured in a conveniently located oil decanter where oil can be DODDD easily removed for disposal. $\overline{}$ SLUDGE BOX – Solids from the wastewater stream settle at the base of the clarifier tank. With the opening of a single valve, solids are easily dropped into a

opening of a single valve, solids are easily dropped into a bag filter in the solids separation chamber for effective capture and easy disposal. The bag filter is suspended on a dewatering tray with drainage returning to the in-ground collection pits.

- 6. CUSTOMIZED MULTI-MEDIA FILTER (Located at the back of the skid) Once the water has been treated for oil and solids removal, it is then pushed through a customized multi-media filter which contains a special media blend to filter out particulates down to 25-microns.
- 7. REUSABLE POLYESTER FILTER Once the larger particulates are removed, the water is then filtered through hundreds of square feet of reusable polyester 30-micron filters. (Not used on auto-backwash models)
- 8. ACTIVATED CARBON FILTER The final treatment stage of the system occurs as the water is filtered through activated carbon which absorbs hydrocarbons, herbicides, pesticides, metals and dozens of other carbon-based constituents. Activated carbon also works as a polisher for treated water to remove chlorides.
- 9. ORP/pH CONTROLLER For longer term control of bacteria, the ORP injection system automatically measures and injects a germicide to control odor by killing odor-causing bacteria. The automated pH control system keeps the water at an appropriate pH level so the germicide is effective at killing bacteria and controlling odor.
- 10. TREATED WATER IN HOLDING TANK Once the water is treated, it is pressurized where it will be ready for reuse at 30-PSI to 50-PSI.
- 11. ELECTRICAL CONTROL PANEL ETL listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation.

# WCP Series Sample Equipment Wash Pad Application



Water Cannon / Model #WC-100-0ME3 3' x 9' Fiberglass 3-Stage Collection Pit Model #12-0074 1.0 HP Surface-Mount Sump Pump Included with System, #3-0460

### RECOMMENDED APPLICATIONS:

- Rental Yards
- Golf Courses
- Heavy Equipment Dealers
- Trucking Facilities
- Military Bases
- Truck Rental Fleets
- Diesel Repair Facilities
- Forklift Washing Operations
- Aircraft Maintenance and Restoration
- Shipyards
- Municipalities/State DOTs
- Oil Fields
- Engine Rebuilders and Manufacturers

# THE IMPORTANCE OF A PROPER PIT SYSTEM:

Once equipment is washed, the untreated wash water flows into your pit system. A proper pit system for your application is the first step in proper wash water treatment and a critical element in any wash water recycle system.

Consult your dealer to determine the pit system configuration that works best for your application.

### WCPB SERIES

- Special-build model
- WCPB Series allows the end user to switch from a mechanical filtration unit to a biological unit depending on certain factors. The unit may be changed depending on the time of year, temperature, contaminants in water pH or other factors.
- Contact your dealer for more information



# WLP & WCP Series Replacement Filter Element & Media

### REPLACEMENT FILTER ELEMENT

REPLACEMENT MEDIA

DESCRIPTION

Gravel #3

Garnet #12

Garnet #50

Garnet #80

Filter ag

Activated carbon

Organoclay - Custom media

Zeolites - Custom media, best for red clay, 50 lb. bag

Order per pound

33-0302

33-0303

33-0304

33-0305

33-0306

33-0318

33-0403

33-0450

PART NUMBER	DESCRIPTION	FITS MODELS
19-0264	Filter – Replacement filter for #19-0630, 30-micron, 400 sq. ft., 3 filters needed	WLP-20 & WCP-20





Activated Carbon



Filter Ag



Organoclay

Garnet #50



**EQUIPMENT** SALES & SERVICE

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