



METALEX WATER TREATMENT SYSTEM (MWTS)

The MWTS water treatment system treats water used for cleaning batteries, helping our customers minimize the quantity of battery cleaning wastewater that must be disposed. This environmentally friendly system supplies water to a wash cabinet or wash rack with a battery treatment system.

The system resists corrosion and wear and allows for ease of maintenance with convenient access to operating components. The MWTS utilizes a solids filter, and four chemicals to neutralize acids, removing lead, heavy metals, and other contaminants, making the water suitable for most public sanitary sewer systems.

FEATURES

- The MWTS can be combined with a WCA (Wash Cabinet) or WRR (Wash Rack) to form a closed loop recirculation system. A closed loop system reduces environmental impact by recycling battery wash water
- Reduces the cost of paying for waste disposal by removing lead, heavy metals, and other contaminants, allowing disposal in most sanitary sewer systems. *
- Saves time and money by utilizing a single filter bag that requires changing only once a month on average.



The MWTS is controlled by the PLC. The PLC monitors liquid levels, pressure, flow and adjusts accordingly.

The MWTS incorporates a HMI (Human Machine Interface), which displays warnings and allows the user to change settings and perform diagnostics.



The MWTS utilizes four chemicals: Sodium Hydroxide, (Caustic), MetalEX, Aluminum Sulfate (Alum sed as a Coagulant) and Polymer. Adjustable speed chemical injection pumps are used for injecting chemicals into the treatment tank



The MWTS utilizes an air-operated stainless steel slant valve as it performs well in environments with debris and corrosive materials.



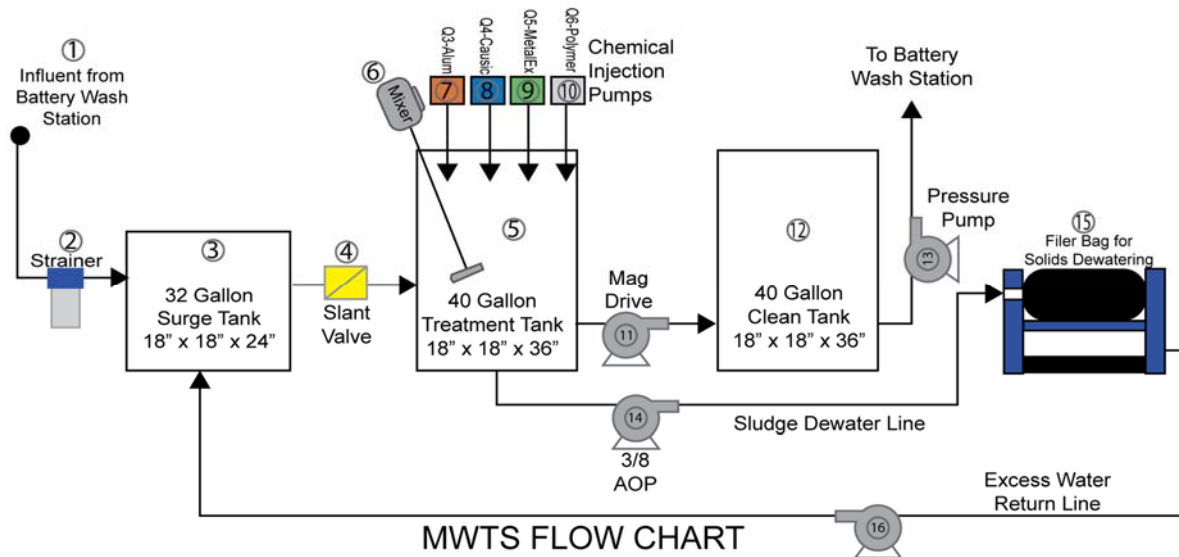
The MWTS Recycle System includes a pressure pump that is set to turn off at pressure above 50 PSI and turn on at lower pressure. Pumps are fully automated and do not require a pressure tank to maintain pressure.



The Paddle Mixer in the treatment tank turns on when the top liquid level sensor in the treatment tank has lifted. The mixer motor speed is controlled by a VFD (Variable Frequency Drive) and is preset to 25 Hz.



Liquid Level Sensors: Reed Type Liquid Level Sensors are used throughout the system to monitor the water levels in the tanks. Liquid Level Sensors control the flow of water into and out of the surge tank.



MTC MWTS vs MTC H ₂ O		
	H ₂ O	MWTS
Neutralizes Acid	Yes	Yes
Test PH Levels	Yes	Yes
Removes Lead/Heavy Metals	No	Yes
Filters Contaminates	Yes	Yes
Use In Recirculation Systems	Yes	Yes
Discharge to Sanitary Sewer	No	Yes
Number of Filters	2-4	1
Filter Change Frequency	≥1/Week	≤1/Month
Ozone Bulb Replacement	Yes	No
Chemical Cost/Battery Wash	\$0.27 - \$1.08	\$0.15 - \$0.88
Battery Washes/Treatment Cycle	0.25-1	2-12
Max Battery Washes/Hour @1 Minute Wash Time	Over 6	Over 6

Model Number	Description
MWTS	Automatic Water Treatment and Recirculation System: Sanitary Sewer Disposal Capable*, PLC Controlled with Automatic Chemical Dosing Per Treatment Batch, Single Consumable Long-Life Filter Bag, 120 VAC Input Voltage, 12 GPM at 50 PSI Clean Water Output Flow. Unit Measurements: 48" Length x 48" Width x 85.5" Height. (1) 120v 30amp Electrical Connection, (1) ¼" NPT 90psi-10cfm Air Connection Required. (*End User is Responsible to Ensure Any Discharge Water Adheres to All Local, State, and Federal Codes, Regulations, and Laws)
Replacement Filters & Chemicals	
9-0004-431	MWTS Replacement Filter
MTWS-EBC-5GAL	MWTS Coagulant, Emulsion Breaker, 5 Gallon
MTWS-LWE-83A-2OZ	MWTS Polymer, Anionic Emulsion, 2 Ounce
MTWS-METALEX-5GAL	MWTS Chem, Metal Precip, 5 Gallon
MTWS-PH-UP-5GAL	MWTS PH Adjuster, 5 Gallon

Notes:

- Customer is Responsible for the Proper Disposal and Handling of Contaminated Water in Accordance with Local Environmental Law – i.e., Ensuring Water is Sanitary Sewer Ready.
- Any City/County/State or Federal Permits Required for Site Construction or Operation of the MWTS are the Responsibility of the End User.
- Specifications Subject to Change Without Notice
- Utilities and Air Supply to be Provided by the Customer