

- ALPHA™ - Model CWT75 Heavy Metal Removal System



Side View. Drum, mixer and pan sold separately.

Applications

- 75-gallon batch applications.
- Solenoid shutoff on inlet line to prevent overfilling.
- Automatic chemical feed and sequencing using a batch program on a PLC with manual water release.
- pH probe, metering pump and mixer included.
- Level controls initiate batch with the closing of the inlet solenoid.
- Designed for metal part washing, circuit board shops, laboratories, small manufacturing applications.
- Treated water collects in the bottom of the unit and may be discharged to the sewer using the integral transfer pump.
- Removes 21 identified heavy metals such as zinc, copper, lead, etc.
- With one pH adjustment contaminants are removed.
- Filter bags remove sludge and can be disposable or reused.
- Sludge may be non-hazardous and will typically meet or exceed the TCLP requirements.

Chemistry

- Designed for one step PELLU chemistry.
- PELLU will mix easily and produce large floc particles.
- Floc settles quickly and is removed with filter bags.
- Sludge dewateres easily requiring little labor.

Standard Features

- Complete packaged unit – may be lifted by forklift.
- Reaction tank with mixer.
- Sludge separation using two filter bags.
- Holding tank for clean water.
- Self-priming Sump Pump for automatic discharge of clean water into the sewer (20 gpm min.)
- Automated process with timers and alarms built in
- Audible and visual alarms on panel.
- Industrial flat glass pH probe, preamp and controller.
- Chemical feed with metering pump.
- Foot valve for drum feed included.
- Polymer feed system included.
- Manual ball valve release through filter bags.
- Small tank footprint 40"x 40" x 72" high.
- Complete NEMA 4X control panel"
 - PLC controlled
 - pH controller for PELLU injection
 - Mixer control
 - Holding tank alarm
- 115 VAC, 1-Phase, 60 Hz power

Options

- CWT75 Plus for two-chemicals system
- Final pH adjustment
- Pump lift station for feeding waste to the system
- Various communication options available
- Alarm contacts for monitoring
- Control panel also available separately.

Operational Guidelines

- Semi-automatic operation with PLC prompts.
- Prior lab evaluation by Wastech FREE.
- Large debris may clog plumbing and damage sensors.

Materials of Construction

- Tanks (PP)
- SS mixer shaft and propeller
- Fabricated skid package
- All-plastic construction

Complete Water Treatment Package

Part #	Component	Tank Capacity	Description
480-250	Plastic reaction tank	75 gallons	PP
480-200	Plastic treated water tank	75 gallons	PP
480-500	Industrial Mixer	(1)	1/3 HP
480-200	Filter bags – 25 microns	Two each	Rosedale
480-100	Level sensor	(2)	PP float
5102S-020	Manual ball valves	Two each	PVC
480-700	Metering pump for chemical	(1)	1.8 gph
480-720	Foot valve for drum feed	(1)	
480-650	pH probe assembly with preamp	(1)	
480-150	Inlet actuated ball valve	(1)	3/4" PVC
480-880	Sump Pump for discharge	(1)	1/2" PVC
480-200	Control Panel		NEMA-4X

