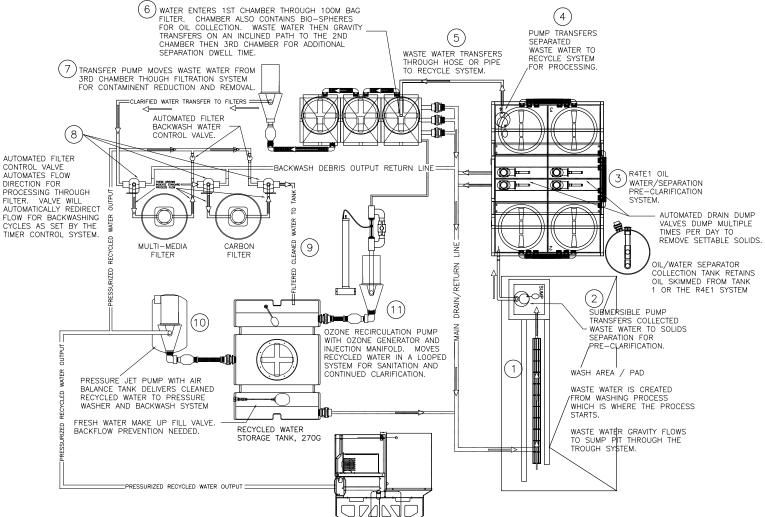


# **MASTEWATER TREATMENT**®

#### WHY HYDRO LOOP?

- Water purity 5 micron filtration allows you to reuse water and will also help meet future strict requirements for sanitary discharge.
- Three stage separation Three individual tanks separate better than one large tank. Up to 7 stages of separation on RMME2-R4T.
- · Compact size Takes up less of your floor space and in turn is less expensive to ship and install.
- Industrial column filters With extended bed depth, these filters are more effective than globe type filters. They allow the wastewater stream extended contact time with the filtration media as it travels through the filter, which provides a higher level of contaminant removal from the waste stream (Multi-media models)
- High capacity filters 135 sq. ft. primary filter with cellular media pleated filter element which reduces service intervals on the filter system. (Pleated filter on PFE model)
- Stainless frame Rustproof frame will last a lifetime and keep looking good when installed in areas of intense moisture.
- · Low profile recycled water storage tanks with automatic fresh water fill are included.

## (6) WATER ENTERS 1ST CHAMBER THROUGH 100M BAG



- Flow starts at the wash area from the washing of equipment. This flow is captured and directed to a collection area.
- A pump at the collection area delivers the wash water to the Hydro Loop recycle system. The wash water enters and fills the first chamber of the recycle system.
- This begins the process of separation of solids and oils from the waste stream.
- The waste stream then proceeds through multiple tanks in an uphill flow path. This creates a torturous path for the wastewater to flow, which enhances the oil/water/solids separation in the clarifier section of the system.
- The separated wash water is then directed by pump to the filtration system of the unit for finer polishing of the wash water as it is filtered to a resulting 5-micron finish.
- The water is directed by final stage plumbing to the "cleaned-water" holding tank for storage.
- · The cleaned water is maintained by chlorine or an ozone re-circulation system and fresh water "make up" fill valve

## PLEATED MEDIA WATER RECYCLER

#### **RPFE1:** Replaceable cartridge, filter system

The RPFE1 features the simplicity and dependability of filter cartridges that can be cleaned or replaced. It is ideal for exterior, non-detergent washing of equipment at rental yards, auto repair, detail shops, or for contractors who have a wash bay and single or multi-stage sump pit to recover wash water runoff.

The PFE features 3-stages of inclined gravity separation with easy to access sludge drains. Two separate stages of oil separation and three stages of pleated filtration, including a carbon impregnated stage to remove odors and hydrocarbons plus a chlorine injector to control bacteria growth.

#### Features

- Wastewater process rate up to 6gpm
- 6 stage filtration process, up to 5 micron
- 120v, 20amp, 1ph
- Automatic chlorinator
- Activated carbon filter
- · Light oil separation
- Rust-proof stainless frame
- 200 gallon cleaned-water tank, auto water fill

Dimensions: Water storage tank - 48" x 29" x 34", System - 52" x 40" x 60"



### MULTI MEDIA WATER RECYCLER

Discharge

#### RMME2: Automated back flush multi-media wash water recycle system

The RMME2 is an automated, multi-media recycle system for industrial and professional cleaning. For durability, it is constructed using high grade industrial filters and components. Wash water is clarified through a three stage separator and polypropylene oil coalescing biometric spheres. Water quality is enhanced through column style multimedia water filtration and ozone injection exterminates odor problems. It is designed to treat medium to heavy loads of wash water and will automatically back flush solids and oils for increased performance and less maintenance. The use of quick release detergents are recommended for enhanced water quality. It can be utilized in a wash environment for closed loop, wash water reuse or for discharge to the sewer with proper permits. Ideal for maintenance and rental yards, diesel truck and equipment repair facilities, military bases and municipalities.

#### Features

- Wastewater process rate up to 10gpm
- 5 micron final polishing
- 230v, 20amp, 1ph
- Automatic back flush and pH monitor
- Pre-filtration three cell clarification
- Hydrocarbon & solids separation
- Polypropylene oil coalescers
- Multi-media filter 225 lbs. (advanced media)
- Carbon filter 200 lbs. (degassed)
- On demand water supply for power washer
- Ozone treatment, 12 grams per day
- Rust-proof stainless frame
- 270 gallon cleaned-water tank, auto water fill with air gap

Dimensions: Water storage tank - 48" x 34" x 41"

System - 52" x 44" x 64"





#### RMME2-R4T: Fully automated, up to 10-12gpm process rate

Includes additional R4TE1 oil/water/solids separator module for 7-stage pre-separation, 520 gallon clarifier tanks with fully automatic dump valves, oil decanter tank and additional 270 gallon cleaned-water storage tank for a total of 540 gallons. (2 scfm, 100psi air required, stainless frame optional)

#### ABOUT THE HIGH PERFORMANCE FILTRATION MEDIA

This is a natural high purity mineral based media that is processed and refined. Unique properties allow it to radically alter the performance & cost of filtration. It is a high performance silt, sediment and turbidity media. Outperforms conventional media and provides micro-porous characteristics. A perfect filtration media for virtually every application in wastewater treatment.

- High filtration performance 3-5 micron removal
- · High capacity, twice the capacity of other media
- Functions as a true depth filter media
- · Long lasting when frequent backwashes programmed
- Superior solids load capacity & filtration
- Wastewater polishing for suspended solids removal

## **OIL / WATER / SOLIDS SEPARATOR**

#### R4TE1: Automated solids separator & oil skimmer system

This clarifier is the best above ground oil water separator for use in pre-treatment or waste water recycling. Maximize water clarity through flow controlled pre-separation. The quad, slant-bottom, tank system is automated with timed air actuated dump valves which remove solids. Hydrocarbons are automatically removed by skimming to a collection chamber. Biometric spheres allow for coalescing of oils and settling of solids prior to exiting the tanks. This system is typically used independently as a pre-stage separator for sewer discharge or can be added to any existing recycle system on site. Should you be a heavy solids producer and there is inadequate settling time, the use of these clarifier systems is advised. (2 scfm, 100 psi air required)

Features

- 120v, 10amp
- Hydrocarbon skimmer & solids separation
- Fully automated discharge pump
- Automated purging Four air controlled, programmable 2" dump valves
- Self sufficient & maintenance free
- Includes oil/water separator collection tank (AST00)
- Dimensions: 61" x 44.5" x 86"
- Optional stainless steel frame upgrade available

Pre-treatment or Sewer Discharge



shown with stainless frame option

#### AST00: Oil collection tank

The AST00 is available for all systems and is included with the R4TE1. This is a gravity flow separation system, which utilizes oil over water separation for oil removal and containment. Free floating oil is decanted with the water from the tank high-level overflow skimmer line to the separation tank where the water drains and traps the oil in the top half of the tank. When enough free oil is collected the drain valve can be utilized to remove the oil to a bucket for transportation to a waste oil container.



#### ASBT4: Solids drain collection tank

Designed for use with all of the Hydro Loop® systems as a means of collecting the settable solids in the separation tanks. This simplifies the containment and handling of the solids. When the drain valves open the solids are guided, by installed plumbing, to discharge into a bag filter located inside the tank. When full, the bag filter is easily removed for drying and handling or insert a spare filter that has already been cleaned. No moving parts to break or rolled filter media to constantly replace. (48"Lx13"wx25"H)

The standard recycle system may not be suitable for applications with high level organics such as: golf courses, solid waste haulers, food processing and highly emulsified waste streams. Biological wastewater treatment may be required. Additional components may be required to meet required specifications with the noted waste streams. To ensure your recycle system is compatible with your waste stream, Hydro Tek requires a site inspection survey and adequate wash pad design before system is ordered.



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