MART Tech Services Coalescing Oil Removal System

Features:
- Continuous closed loop recycling system – skim and remove free oil during washing
- Tough steel coalescing Media pack is washable in MART washer for reuse
- Solids accumulation zone with drain
- Adjustable cylindrical oil skimmer
- Clean water effluent chamber
- Inlet diffuser for improved separation
- Material of construction compatible with wash chemicals
- High Temperature (190°F) resistant - capable of operation during washing
- Floating weir pulls solution from surface for maximum separation
- Large lid allows access to the coalescing pack and rotary skimmer
- System leaves no visible oil sheen on wash solution and collects solids
- Pre-engineered, prepackaged and integrated with MART Washer

Advantages:
Use of a coalescer can:
- Simplify the overall cleaning process.
- Cut cleaning times considerably,
- Eliminate water in separated oil
- Reduce labor and chemical costs,
- Reduce the volume of treated wastewater, and
- Reduce clean out of washer by up to 60%

Specifications:
- 190 degree maximum temperature rating – compatible with alkaline chemicals
- Design flow rate of 5 gpm removes oil to 20 ppm, 30-micron size
- Stainless Steel Air Operated Diaphragm (AOD) circulation pump ½” npt inlet and discharge
- Coalescer Size 22.5” x 33.5” x 63” - 15” solution depth, 75 Gallon

Description:
The MTS Coalescing system uses simple and well know principles to accomplish its goals. An AOD stainless steel pump pulls suspended and free-floating oils from the washer surface and pumps them into a coalescing chamber. An inlet diffuser spreads and slows the flow through the matrix of vertically-positioned steel coalescing oil/water separator imparting laminar flow characteristics to the solution. Larger oil droplets migrate to the surface of the stilling chamber where they collect and are skimmed off. The high surface area of the coalescing pack attracts and agglomerates smaller droplets until they are large globules and buoyant enough to float to the surface. An adjustable rotary weir skimmer picks up accumulated oil from the surface and deposits it in a receptacle for disposal. A capped drain allows removal of any accumulated solids that sink. Gravity flow returns the cleaned effluent to the washer reservoir. The permanent steel coalescing pack is removable for easy cleaning in your wash machine thus eliminating the need for replacement media.

Although the stem is highly effective while the wash machine is in use, the coalescing efficiency is improved during periods when solutions are cooler such as non-production hours. Non-emulsifying cleaners must be used to maximize the advantages of coalescer technology.
MART Tech Services Coalescing Oil Removal System

MART Coalescer chamber with inlet diffuser, removable steel coalescing media, adjustable oil skimmer and solids discharge drain

Variable speed Stainless Steel Pump System transfers solution from Washer to Oil Coalescing Chamber

Floating suction device pulls oil from surface for maximum separation