

SERFILCO®

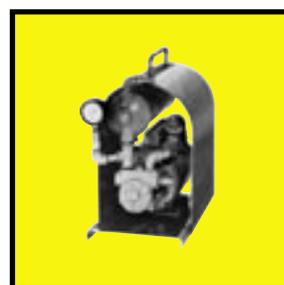
FILTRATION AND OIL/WATER SEPARATION



Hydraulic fluids, die casting, injection molding, elevators, construction



Electrical discharge pick up the eroded metals



Cutting fluids increase tool life, and improve cutting accuracy



Water removal from oil prevent corrosion, improve lubrication, extend life



Use for:

- Hydraulic fluids
- EDM / dielectric fluids
- Cutting fluids
- Lubricating oils
- Quench oils
- Drawing oils
- Gear box oils
- Turbine oils
- Water glycol
- Transmission fluid
- Oil & water based coolants

PROTECT YOUR HYDRAULIC, LUBE AND TRANSFORMER SYSTEMS

Protect your investments

Consider the investment in your machinery and processes. A SERFILCO filtration system will extend the life of your equipment and pay for itself in a matter of months.

Remove damaging dirt and sludge

SERFILCO filtration systems provide effective removal of damaging grit and harmful abrasive sludges that plague petroleum and synthetic fluids. These contaminants eventually accumulate and damage the machinery and parts in contact with the fluid. Proper use of these systems will clean up and maintain the clarity of your fluids. In addition to continuously protecting your machinery and equipment, these systems greatly extend the useful life of the fluid reducing replacement, labor and disposal costs.

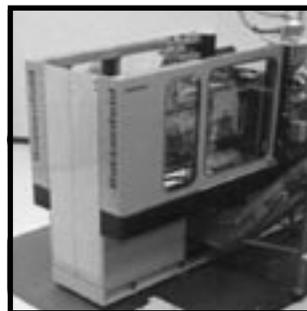
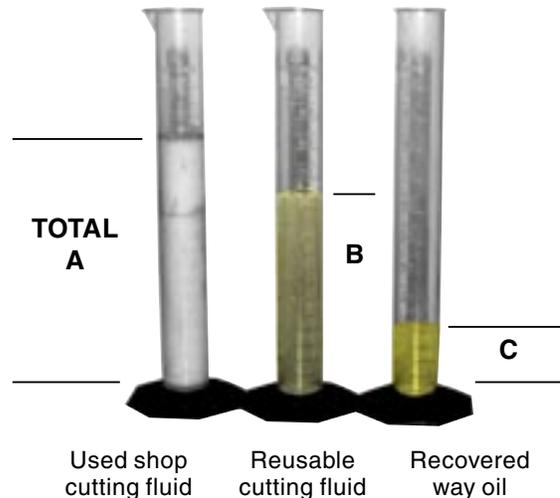
These systems utilize a variety of filtering media, including depth wound cartridges and heavy resin impregnated pleated paper type cartridges. Fuller's Earth cartridges are also available for removal of soluble impurities.

Choose system size and style

SERFILCO manufactures a broad range of these systems to serve applications from small hydraulic circuits to large centralized collection sumps and treatment tanks. These systems include lightweight hand-carry designs, portable cart mounted models for servicing multiple locations, machine mountable styles for dedicated filtration that traditional OEM style filters/strainers cannot provide and stationary systems for large and/or centralized reclamation or treatment.

For proper sizing and pilot testing, SERFILCO offers many of these units on a rental basis. Call for details on our rental and performance guarantee programs:

1-800-323-5431



KEEP EDM MACHINES OPERATING AT TOP EFFICIENCY

For electrical discharge machines (EDM) to operate at peak efficiency, the dielectric or insulating fluid must maintain its original cleanliness and clarity. EDM fluids must be kept free of residues and carbon by-products which reduce their insulating, cooling and flushing capabilities. However, as parts are processed, many by-products (contaminants) begin to accumulate.

As with filters in many other metalworking and machining operations, the OEM filters that many EDM machines employ are undersized. They cannot maintain an efficient electrical discharge and a clean spark because they simply cannot maintain liquid clarity or handle the large volume of solids that are produced.

SERFILCO EDM filtration systems are specifically designed to supplement these "built-in" filters, assuring constant clarity. These durable systems are engineered to be dedicated to a single EDM unit or centralized to serve multiple EDM units. A variety of standard models are offered including filtration and purification of dielectric oils for traditional RAM/

sinker machines and filtration and resin treatment for DI (deionized) water EDM machines.

FILTRATION SYSTEMS FOR EDM OILS

- Portable or stationary models
- Complete system with self-priming pump for easy operation
- Economical replacement cartridges for most EDM machines.



FILTRATION & PURIFICATION SYSTEMS FOR D. I. WATER EDM MACHINES

Units provide high quality deionized water when filled with a strong base mixed-bed resin. Product water is low in dissolved solids, CO₂ and silica, with a resistivity of 50,000 ohms or higher.



- Non-metallic solution contact
- Magnetic-coupled pump
- Easy servicing without tools
- Recirculation pump, prefilter, carbon and D. I. resin in one package
- Conductivity meter indicates quality of water
- Systems from 1 GPM to 10 GPM
- Custom designs available.

AND PERMITS CLOSER TOLERANCES

HAND CARRY

- Provides transfer or recirculation filtration
- Portable for remote service
- Ideal for escalator, elevator or other hydraulic applications
- Flow rates to 180 GPH



STATIONARY

- Provides continuous filtration for medium to large reservoirs
- Available with optional coalescing chamber
- Components mounted on a vinyl coated steel base
- Accepts 7" x 18" or 2.5" x 10" pleated or wound filter cartridges
- Flow rates to 540 GPH



MACHINE OR WALL MOUNT

- For continuous filtration on a single machine
- Provides greater protection than traditional OEM filter / strainers
- Mounts next to oil or coolant sump
- For all machines with liquid cooling and / or lube sumps
- Flow rates to 180 GPH



AUTOMATIC, GRAVITY FLOW

For unattended filtration of:

- Machine tool coolants
- Hydraulic fluids
- Cutting fluids
- Quench oils
- Lubricating oils
- EDM / dielectric fluids
- Drawing oils
- Gearbox oils
- Turbine oils



OIL AND COOLANT FILTRATION EXTENDS TOOL LIFE

Water and tramp oil removal

For situations where water and / or tramp oil could cause corrosion, inefficiency and rancidity in your oils or water soluble fluids, SERFILCO offers coalescing chambers as an option on most systems. Coalescers offer a means of separating immiscible fluids such as oil and water.

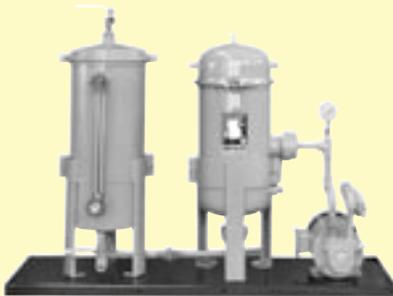
Here is how it works: The oil / water mixture is pumped through the coalescing (oleophilic) element which retains the oil (light phase) droplets on its surface until they agglomerate and rise to the solution surface at the top of the chamber. They accumulate there until they are bled off through a valved discharge port. The water or soluble coolant (heavy phase) discharges via the bottom chamber outlet. SERFILCO coalescers will handle dissimilar liquids with specific gravity differences of 0.09 and greater. The resulting effluent contains less than 10 PPM of the discontinuous phase.

COALESCING ELEMENT SEPARATES OIL FROM WATER



FILTER/COALESCER

- Provides continuous filtration for medium to large reservoirs
- Components mounted on a vinyl coated steel base
- Accepts 7" x 18" or 2.5" x 10" pleated or wound filter cartridges
- Flow rates to 540 GPH with electric pump, flow rates to 600 GPH with air operated pump



PORTABLE TRANS-O-FILTER®

- Filters, reclaims oil /coolant, reduces downtime, replacement and disposal costs
- Permits quick clean-up of multiple sumps or machines in entire shop
- Available with optional coalescing chamber
- Ideal for field servicemen
- Flow rates to 540 GPH



PURIFY AND REUSE ALL TYPES OF LUBRICANTS

Oil reconditioning stations increase tool life, reduce production costs by recycling cutting oils

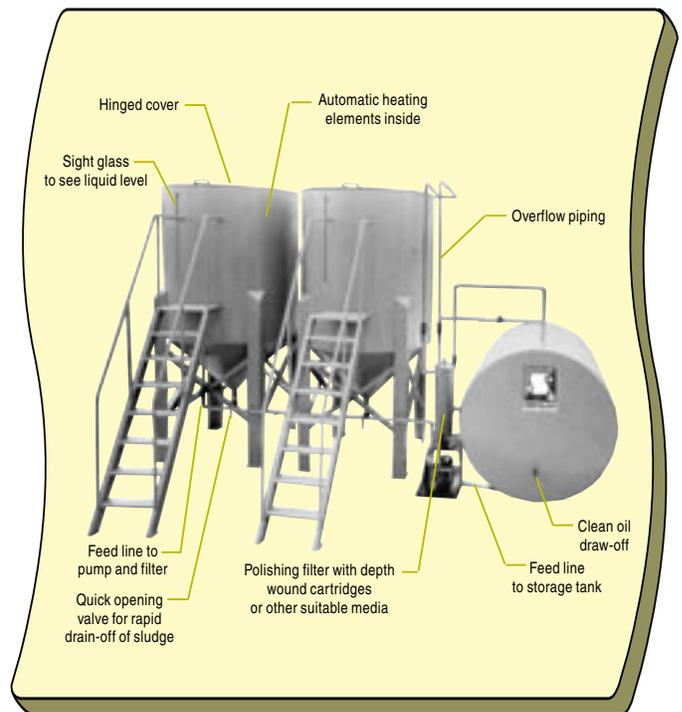
These stations are extremely well suited for screw machine oil coolants. Cutting oil, lapping oil, honing oil, hydraulic oils, synthetic oils, lubricating oils, vacuum pump oils, compression oil and many other special oils can also be economically restored.

The stations are easy and economical to operate. Each features a cone bottom settling tank of 50 to 1000 gallon capacity (not including cone capacity), equipped with a thermostatically controlled electric heating element that raises the temperature of the contaminated oils. This accelerates the natural settling of suspended foreign material into the cone for easy removal. The largest system includes two 1000 gallon tanks.

In addition, each station also includes a positive displacement gear pump with suction strainer and internal pressure relief valve, a TEFC motor, a pressure filter with gauge and a clean oil storage tank. Each clean oil storage tank is equipped with a sight glass and draw valve to provide a visual check of the liquid level.

Models feature all-welded construction and two-part epoxy enamel paint. Interconnected valve arrangement enables the product to be conveniently transferred according to need and clarification required. Custom systems, the addition of a coalescing chamber or the substitution of a pump or filter chamber can be accommodated.

- For versatile and centralized oil / coolant reclamation
- Provides removal of sludges, water and suspended particles
- Available with oil and water separator (coalescer)
- Thermostatically controlled heating accelerates settling of particles
- 50 to 2000 gallon capacities



PERMANENT MEDIA FILTER SYSTEMS PROVIDE EXCELLENT CLARITY OF WASTE SOLUTIONS

TITAN-90 automatic backwash filtration systems

Each TITAN-90 system incorporates a filter chamber for use with permanent media, electric actuated PVC control valves, corrosion resistant pump, PVC piping with electronic flow meter controller and pre-wired control panel with pre-programmed micro-processor and skid mounting base.

The TITAN-90 operating cycle is computer controlled, assuring optimum use of backwash water. It can be field reprogrammed to provide adjustment for variation in treated effluent. The unit maintains a consistent high flow rate between backwash cycles. Optional carbon purification is available on side-stream discharge.

TITAN-90 units, available in a variety of sizes, use heavy duty industrial components to provide automatic, reliable operation.

'BWM' self-cleaning filtration systems

This compact filter system utilizes a bed of floating polyethylene media which is periodically scrubbed on demand. The scrubbing cycle is initiated by a state-of-the-art microprocessor control system. During the cleaning cycle, dirt is ejected from the filter chamber with no loss of media or addition of water to the system. Subsequently, the filter bed is re-established for maximum efficiency and flow.

The 'BWM' system is specifically designed for final entrapment of submicron size solids. It does not require disposable filter media, since it cleans itself automatically by means of a controlled backwash cycle which scrubs the unique floating media and discharges the concentrated residue to a receiving tank.

TITAN-90

- Inline installation for polishing waste streams.
- Achieve 0.5 ppm with recirculatory installation
- Automatic backwash eliminates labor
- Flow rates from 2,700 to 30,000 GPH, depending upon unit size and application



'BWM'

- Replaces sand or mixed bed filters
- Completely automatic microprocessor controlled
- Does not require external, clean backwash fluid
- Patented upflow design utilizing permanent floating media
- Large solids holding capacity
- Submicron particle retention
- Corrosion resistant construction



SERFILCO also offers:

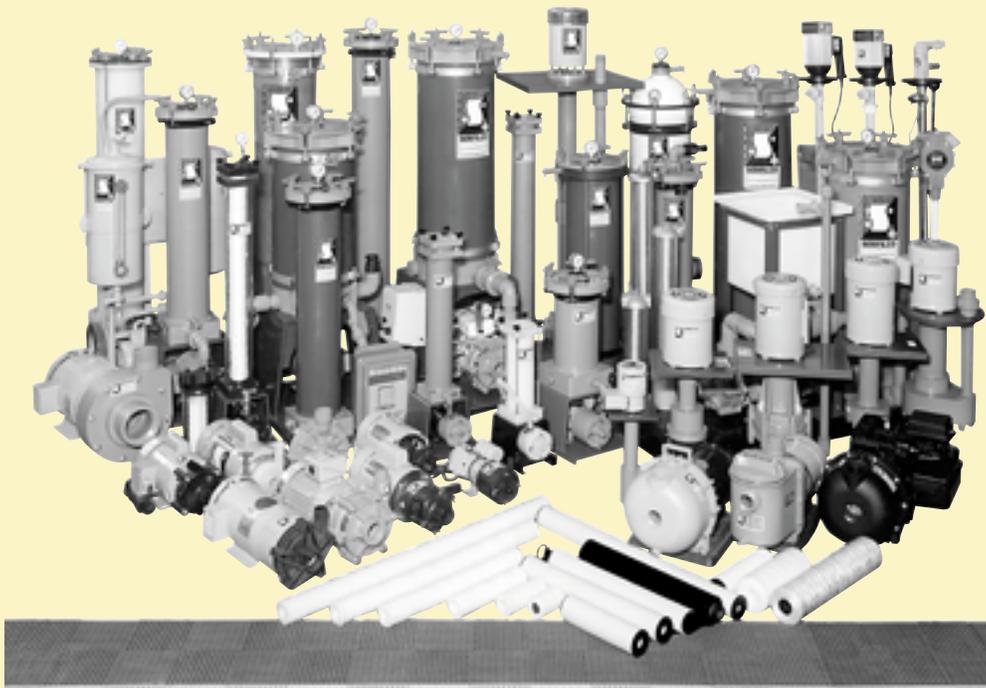
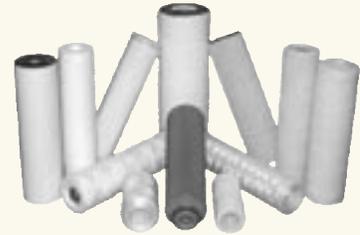
Batch Control Systems



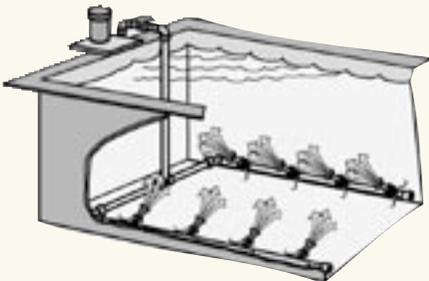
Aftercooler



Filter Media



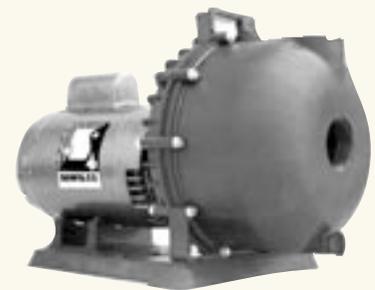
Ser-Ductors



Strainers



Self-Priming Pumps



SERFILCO[®], LTD.

2900 MacArthur Blvd 847-509-2900
Northbrook, IL 60062-2005 U.S.A. 800-323-5431
Email: sales@serfilco.com FAX: 847-559-1995
Web: <http://www.serfilco.com>

DISTRIBUTED BY