

SERFILCO®

BULLETIN
SO-171
MAY 2004

SOLID/LIQUID SEPARATION AND COALESCING SYSTEMS

**PROTECT
HYDRAULIC
MACHINES FROM
COSTLY REPAIR AND
SHUT-DOWN**

**EXTEND TOOL AND GRINDING
WHEEL LIFE, BY KEEPING COOL-
ANTS FREE OF CHIPS AND SWARF**

ACHIEVE UNIFORM QUENCHING

**PROVIDE DRY COMP AIR FOR TOOLS,
PAINTING, INSTRUMENTS AND ACTUA-
TERS**

**REDUCE WATER TREATMENT DIS-
POSAL COST**

STOP HYDRAULIC SYSTEM FAILURES AND LOSS OF ADEQUATE LUBRICATING AND COOLING EFFECTIVENESS DUE TO DIRTY . . . DAMAGING SLUDGE

SERFILCO designs and builds complete filtration systems for the reconditioning and transferring of all petroleum and synthetic fluids. We offer you higher flow rates and greater dirt holding capacities in a more compact package. Every unit is designed to be completely self-contained — consisting of our own pumps, motors, suction strainers, motor starters, hoses and proper filter to meet the application. We provide the appropriate filter media to meet your specific requirement, assuring you of the most economical operation.

These rugged, compact systems are built to be functional, dual purpose units. They can be used for transferring oil from drum to reservoir or operated for continuous and / or intermittent recirculation including filtration as required. Often, the same filter can be used for many different applications by merely changing the filter media.

Filters are ingeniously engineered for the effective removal of damaging grit and abrasive sludges which contaminate and accumulate in hydraulic and lubricating oil circuits and reservoirs. These filters protect your machinery and system investments. They eliminate pump damage, scored cylinders, malfunctions of valves and controls attributed to the destructive actions of dirty oil. Our filters do the job that no ordinary by-pass filter or suction strainer can do — they remove the tiniest damaging abrasives that act like a lapping compound on the systems components.

SERFILCO filters also greatly extend the useful life of the oil — reduce the need for oil changes, providing cleaner oil — fewer maintenance problems.

SERFILCO provides the highest quality filtering media — assuring maximum filtering efficiency. SERFILCO precision wound depth type cartridges or heavy resin impregnated pleated paper type cartridges are available in a broad range of micron porosities to meet every application. Fuller's Earth type cartridges are also available for removal of soluble impurities.

SERFILCO trans-o-filter oil filtration systems are offered in various styles such as portable, stationary, machine or wall mount, and lightweight hand-carry units. Most systems are available from stock or are assembled to meet your specific engineering requirements. SERFILCO units are also available with explosion-proof motors and special pumps where required. SERFILCO filters are effectively used for filtering hydraulic oils, straight oils, inhibited oils, hydrolubes, synthetics, leakage oils, lubricating oils, gear lubes, run-in oils, way oils, flushing oils and salvage oils providing maximum protection for all types of standard or custom production machinery as well as stationary diesel and gasoline engines.

The SERFILCO filter's performance is guaranteed — assures you of real job reliability.

SERFILCO Portable TRANS-O-FILTER — Here's the real work-horse of the industry. It's purposely designed with compactness in mind — providing easy portability through restricted, close quartered machinery areas and aisles. It provides both transfer, pumping and filtration where you want it.

COMPLETE, NO EXTRAS TO BUY, READY FOR SERVICE

Any SERFILCO unit can be supplied with explosion-proof motors and special pumps to be used with paints, lacquers, enamels, solvents or rust preventative solutions. SERFILCO also manufactures a complete line of electroplating and chemical filtration systems.



TRANS-O-FILTER
w/optional coalescing chamber

LARGER CAPACITY FILTERS
ARE AVAILABLE.
CONSULT CUSTOMER SERVICE.

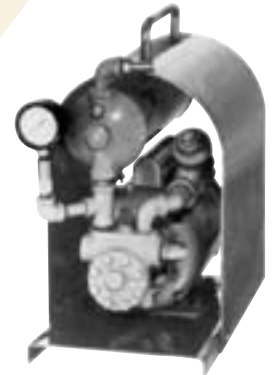


PORTABLE

SERFILCO HAND-CARRY FILTRATION SYSTEM

There is no need to neglect those small, but equally sensitive and important oil systems. Here's the versatile, compact oil filter designed to be moved or carried, easily and quickly, to any location to remove abrasive sludges from smaller hydraulic and lube oil reservoirs and sumps.

This amazing unit is also ideal for the filtration of hydraulic fluids from heavy equipment, such as that used in heavy construction work. Real dollar savings can be realized in a short time.



HAND-CARRY

SERFILCO PORTABLE FILTRATION SYSTEM

To operate, choose your filter media, insert hoses into reservoir or sump, flip the switch and your mobile oil filtration system goes to work removing the abrasive sludges which are the major causes for costly down-time and damage to systems.

SERFILCO ALSO OFFERS LOW, MEDIUM and HIGH-FLOW IN-LINE FILTERS and CARTRIDGES to solve every filtering problem!

In-line units are available for all pressure or vacuum service for liquids and gases. Available in such materials of construction as steel and cast iron, stainless steel or plastic. The larger units are available in code and stamped construction. 'O'-ring gasketing is featured for sealing wherever possible. Davit cover lift is available to make all models serviceable by a single person. Single bolt construction is featured on the low and medium models with tee handles available. Larger units have eye bolts to afford opening without tools. Ideal for continuous by-pass clarification or to handle full flow from fill or process lines.

IDEAL FOR HYDRAULIC SYSTEMS ON PRESSES, LEVELERS OR ELEVATORS. ALSO SUITABLE FOR PLASTIC DIE CASTING OR OTHER MACHINE TOOLS.



GET HIGHER QUALITY HEAT TREATING WITH SERFILCO FILTERS FOR QUENCH OIL

Better quality control — with uniform hardness, fewer rejects, cleaner parts, less oil dragout and better temperature control is assured through filtration of quench oils.



SERFILCO QUENCH OIL FILTER FOR LARGE TANKS

CONSTANT OIL CLEANLINESS — The quench filters are primarily designed for use on controlled atmosphere furnaces where the quality of parts being quenched are desired to be above average. These units can also be used on open quench tanks, depending upon the existing conditions.

Systems are available for use with quench tanks of oil capacities ranging from 1200 gallons on up. The filter is permitted to circulate the oil continuously — maintaining the oil at a constant level of cleanliness. The filter pump is sized to pump the contents of the quench tank through the filter usually at least once an hour, simultaneously creating additional agitation which aids in quicker heat transfer from the parts.

ECONOMICAL OPERATION — Quench oil filters are proven to be extremely economical in operation. Many users report they get from two to four months of continuous operation before it is necessary to replace the low cost filter cartridges. The filter itself is very easily maintained and serviced.

HIGH FLOW RATES — These integral systems have centrifugal pumps which offer high flow rates to effectively remove foreign particles from the quench tank as quickly as possible. These units can also be used for transfer operations as well as filtering.

Special filters containing Fuller's Earth can be supplied for the control of neutralization or acidity of the oil in Marquench or high temperature operation. Consult Customer Service for complete details.

SERFILCO QUENCH OIL FILTERS FOR SMALL TANKS —

are designed primarily for use with the packaged heat treating systems of the atmosphere controlled type, but can also be used on open quench tanks depending upon existing conditions.

The quench oil filters are available in three sizes to accommodate quench tanks of 150 to 1200 gallon capacity. Available in stationary or portable models.

Best overall results are obtained when a stationary filter is permanently piped to the quench tank for continuous filtration of the oil. Excellent results are also obtained with the portable filter for periodic use on the quench tank. An excellent feature of the portable unit is that several quench tanks can be serviced with the same unit.



STATIONARY QUENCH OIL FILTER FOR SMALL TANKS

QUENCH OIL FILTERS OFFER THESE MAJOR ADVANTAGES —

- Uniform hardness control, less distortion, fewer rejects. Clean filtered oil promotes more even heat dissipation.
- Much cleaner piece parts. Surfaces are free of grit and grime. After-cleaning is reduced or eliminated.
- Varnish or glazed deposits on piece parts are eliminated. Filter removes the tars, asphaltenes and carbon sludge.
- Better control of oil temperatures as filter removes the contaminants which plate out on oil cooler surfaces.
- Fewer gallons of oil to buy. Filtered oil results in less drag-out, less make-up, clean oil drains faster from parts.
- Less system maintenance. Filter removes abrasives causing wear and tear on pumps, valves, etc. Cooler cleaning reduced.

SERFILCO ALSO OFFERS COALESCERS *for moisture and solids removal from oils or compressed air*

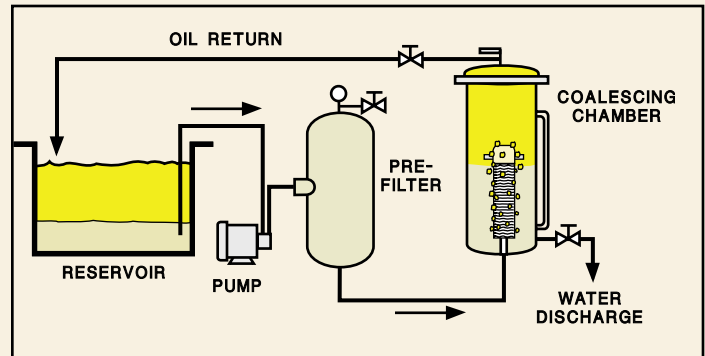
SERFILCO COALESCING SYSTEM FOR LIQUID / LIQUID SEPARATION

Coalescing separation of water from oil or other liquids of dissimilar specific gravities is available for the recovery of hydraulic, lube or cutting oils, or for the trapping of tramp oil from waste effluents as part of an anti-pollution system. Separation of liquids having 0.09 or greater differential can be accomplished continuously with less than a 10 ppm carry-through and, in some instances, as low as 5 ppm contamination.



SERFILCO COALESCING
SYSTEM WITH PRE-FILTER

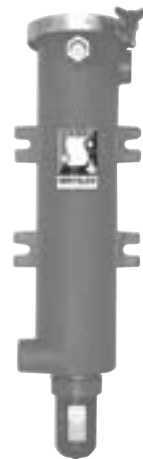
WATER SEPARATION FROM OIL RESERVOIR OR OIL REMOVAL FROM WATER



PROTECT AIR INSTRUMENTS AND TOOLS WITH SERFILCO "3-in-1" COMPRESSED AIR CONDITIONER

Offers effective removal of unlimited quantities of water, oil, dirt and even vapors from compressed air. Unit consists of cyclone for basic water separation followed by a desiccant for absorption and the trap filter media.

- Simple in design
- Compact, lightweight construction
- Minimum pressure drop
- Working pressure: 250, 300, 500 & 600 psi
- Doubles the life of air devices
- Reduces device failure by five times



OBTAIN SMOOTHER FINISHES WHEN GRINDING, HONING, POLISHING WITH A SERFILCO AUTOMATIC GRAVITY FILTER

*with unattended indexing for continuous flow —
will provide solids retention at lowest cost.*



Your first step to quality control. Cleaner cutting action from tools or wheels — less rejects — closer tolerance can be met.

Your first step to higher production, longer tool and wheel life mean less time to regrind or redress — eliminate sump cleaning, replacement or disposal problems or cutting oils.

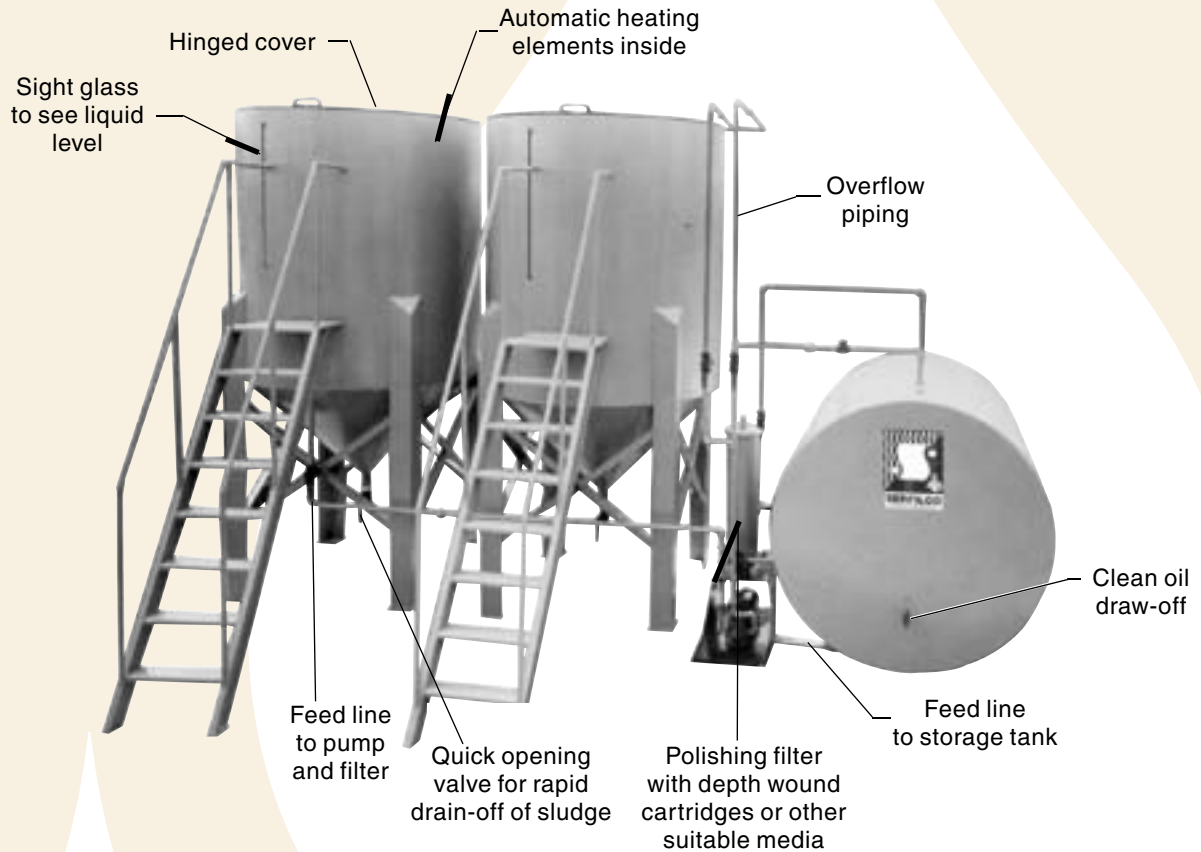
Your first step towards a happier employee relationship. Better work with less effort due to controlled conditions of the coolant.

EASY TO INSTALL — Simply direct or pump the contaminated liquid to a tray which diffuses the flow across the filter bed. Separation starts immediately by gravity flow through the media to a reservoir tank below (to waste or recirculation for recycling of the liquid). Solids collect until the pores are closed off raising the level of the liquid causing a float to activate the motor driven belt. Fresh media is stretched over the belt as the solids are dragged over an incline which drains the liquid off before collecting the spent media in the sludge box for disposal. Cycling is automatic with only the occasional replacement of a roll of fabric required.

LOW OPERATING COST — Gravity flow provides for gentle accumulation of the solids without forcibly compacting them to cause premature loading and premature indexing of the media. The deep pool created as filtration takes place assists the flow to achieve maximum sludge capacity.

Also suitable for treated waste, process or cooling water, phosphating solutions, fume scrubbers or water wall - paint spray booths. (See Bulletin F-701).

RECYCLE CUTTING OILS FOR RE-USE INCREASE TOOL LIFE AND REDUCE PRODUCTION COSTS WITH A SERFILCO OIL RECONDITIONING STATION



WITH 50, 250, 500 and 1000
GALLON SETTLING CAPACITY



OIL RECONDITIONING STATION
for salvaging oils in large volume

It's actually profitable to salvage contaminated oils for further use. SERFILCO oil reconditioning stations remove sludges, water and other suspended foreign material through natural settling action accelerated by controlled elevated temperatures. Any extremely fine foreign particles that remain are then removed by a polishing filter of inert depth type media. If the removal of oxidation products are desirable, the polishing filter is then equipped with adsorbent Fuller's Earth.

PURIFIES ALL TYPES OF LUBRICANTS

The above station is extremely well suited for screw machine oil coolants. Cutting oils, oil coolants, lapping oil, honing oil, hydraulic oils, synthetic oils, lubricating oils, vacuum pump oils, compression oil and other special oils of many kinds can be economically restored.

EASY AND LOW IN COST TO OPERATE

This station is extremely economical and easy to operate. The unit is very compact. It features a cone bottom settling tank equipped with a thermostatically controlled electric heating element that raises the temperature of the contaminated oils to a point that accelerates natural settling of suspended foreign materials into the cone for easy removal. The system includes a positive displacement pump with a pressure relief valve, TEFC motor, pressure filter with gauge and a clean oil storage tank.

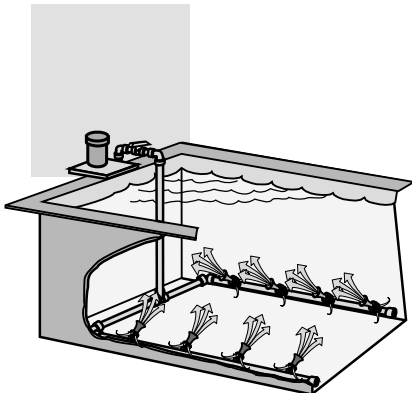
SAVE MONEY NOW!

by preventing rejects with better cleaning and phosphating



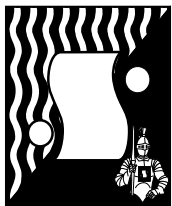
SERFILCO FILTRATION AND OIL / WATER SEPARATOR SYSTEMS CAN KEEP YOUR AQUEOUS AND SEMIAQUEOUS CLEANERS CLEANER AND MORE EFFECTIVE, MINIMIZING DOWN-LINE CONTAMINATION AND IMPROVING THE QUALITY OF THE FINISHED PRODUCT.

The quickest and most convenient way to remove solids automatically without labor is employing the Serfilco Titan permanent media or the Serfilco 'DF' Gravity Filters. Extends cleaner life. Reducing dumps to waste treat.



Add Ser-Ductor® pumped agitation system to improve impingement for cleaning in recesses (keeps particles in suspension).

If oil is present, add a coalescer, which separates the oil from the cleaner to 5 ppm. Then add carbon in the rinses to prevent plating solution contamination.



SERFILCO®

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Want more info?
 Contact us today!

SERFILCO
 ALSO OFFERS —

