



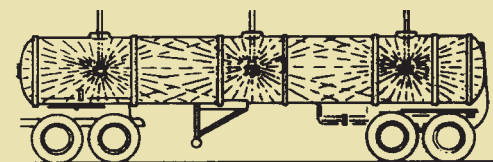
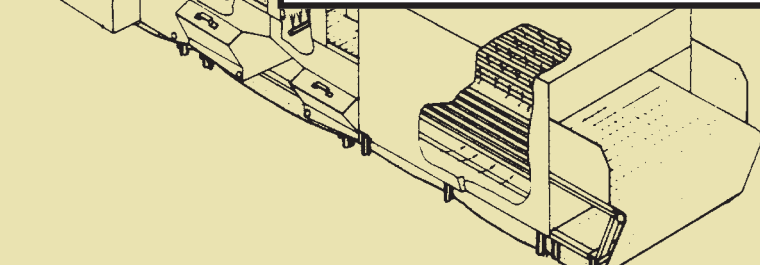
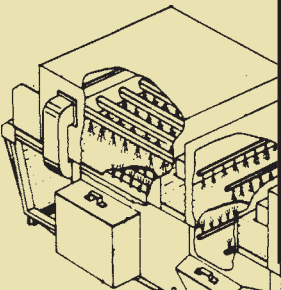
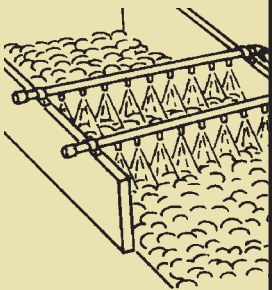
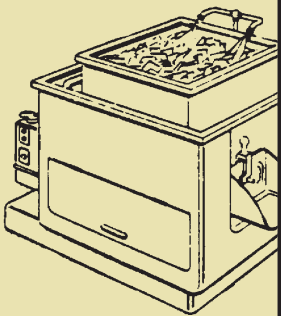
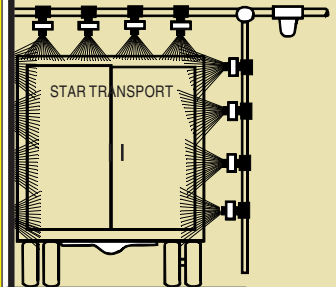
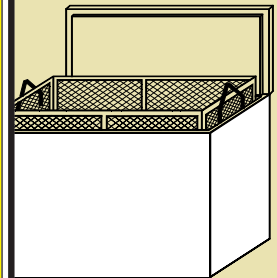
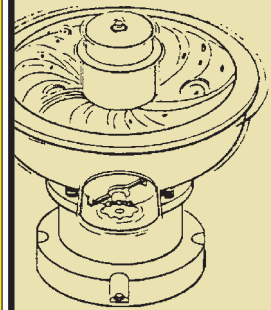
SERFILCO®

BULLETIN
F-692C

Filtration Systems for Aqueous & Semi-aqueous Cleaners and Phosphating Solutions



**Cleaner cleaners
clean better ...
and longer!**



Why filter cleaners & phosphating solutions?

In the past, metal finishing processors would not consider the filtration of cleaners because the baths were relatively inexpensive and would merely be dumped down the drain when their cleaning effectiveness was diminished.

Today, with the higher cost of chemicals, labor and waste treatment, it is prudent and economically sound to extend the life of cleaners simply by filtering the solutions, removing oil as required and even creating aggressive solution agitation. By doing so, you can save unnecessary expense, minimize "down line" bath contamination and improve quality of the finished product.

SERFILCO pump and filter systems improve cleaners that have a tendency to emulsify as well as those that float oils by continuously removing particulate, free oil and greases. Contaminants are removed before emulsification and are prevented from being dragged down-line, minimizing quality problems in subsequent finishing operations.

Because we specialize in handling aggressive chemicals, all of our systems can keep your solutions clean — from the lowest pH acids to the highest alkaline cleaners.

- **Conserve expensive cleaning agents -**
3X-6X bath life extension is common . . .
Less dumping required saves \$\$
- **Don't oxidize your cleaners with air . . .**
SERFILCO pump / filter agitation systems prolong cleaner life . . . Eliminate making carbonates that reduce alkalinity.
- **Remove oil before it emulsifies . . .**
Selectively retain wetting agents to maintain effective cleaning - remove only wetting agents that are attached to the soil . . . **Extend bath life!**
- **Reduce particulate, TDS, BOD and COD** in your final effluent by trapping them at the source.
- **Reduce and eliminate waste treatment costs.**

Filter your phosphating solutions for better paint adhesion



GUARDIAN® FILTRATION SYSTEMS

SERFILCO offers a complete line of Guardian Filtration Systems engineered to remove solids at flow rates from 3,000 to 14,000 GPH.

Materials of construction include such chemically resistant materials as PVC, PVDF, CPVC, Noryl® and polypropylene to provide non-metallic solution contact for long service life when handling the most aggressive chemical solutions.

Filter media choices include depth wound cartridges, cleanable sleeves, bags, discs or carbon.

Optional oil / water separators with skimmer assemblies and oil absorbent elements can be included in the system to continuously remove floating oil. (See below)



COALESCING SYSTEM WITH PREFILTER



OIL / WATER SEPARATORS

SERFILCO SEPARATION COALESCERS take the oil out of rinse water, cleaning solutions, waste effluents and pollution control systems, and separate oil from water in hydraulic systems. They handle dissimilar liquids with a specific gravity difference of 0.09 and greater, leaving the effluent with less than 10 ppm of the discontinuous phase.

LABMASTER®, SPACE-SAVER® and SUPER SPACE-SAVER® FILTRATION SYSTEMS

These compact, yet high performance systems are available with flow rates from 240 to 6,600 GPH.

Non-metallic solution contact is provided by the use of such plastics as polypropylene, CPVC and PVDF. Systems available with choice of pump: magnetic-coupled, mechanical seal or self-priming.

Filter media choices include depth wound cartridges, cleanable sleeves, bags or carbon.



Who can benefit from SERFILCO filtration systems?

If you are doing any of these operations, you can benefit from SERFILCO's filtration systems:

Electroplating
Paint stripping
Bright dip
Phosphating
Grinding

Electroless plating
Degreasing
Anodizing
Painting
Polishing

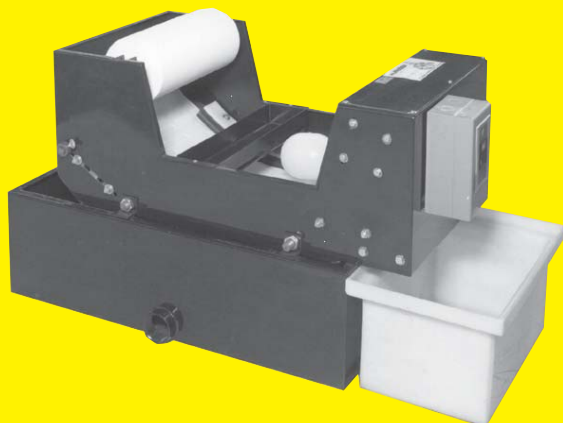
Pickling
Chromating
Cutting
Buffing

Our Application Engineers will be glad to recommend a filtration system tailored to your needs - just FAX (847-559-1995) your requirements and we'll FAX you back with the FACTS!

Depending upon the application, some smaller scale SERFILCO filtration equipment is available on a rental basis for in-plant testing and evaluation of the process prior to purchase. In addition, equipment can also be purchased on a performance guarantee basis. These arrangements give you the opportunity to actually filter your solutions and see for yourself how proper filtration can benefit you in reducing costs and improving product quality. Our Application Engineers can advise you if these programs are available in connection with your application.

TITAN-90™ AUTOMATIC FILTRATION SYSTEMS

TITAN-90 automatic backwash filtration systems employ permanent filter media of a specific size / density in a filter bed through which contaminated solution is fed at controlled limits of flow and pressure. Computer control automatically maintains constant design flow without compacting particulate onto the media bed. Backwash cycle, programmed for optimum use of backwash fluid, responds automatically to a pre-set minimum flow rate of filter discharge.

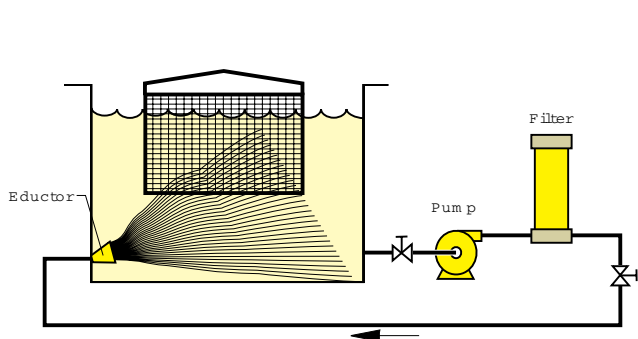


AUTOMATIC GRAVITY FILTERS

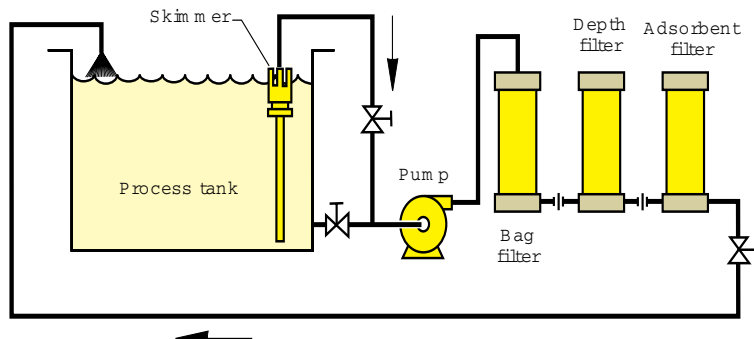
Automatic gravity filters separate solids from liquids at the lowest possible cost using automatically indexed disposable media. Models are available in a range of sizes and materials of construction to meet varying application requirements. Applications include:

Treated plating waste / Phosphating solutions
Machine tool coolants / Process or cooling water
Industrial waste water / Water wall spray booths
Fume scrubbers & parts washers

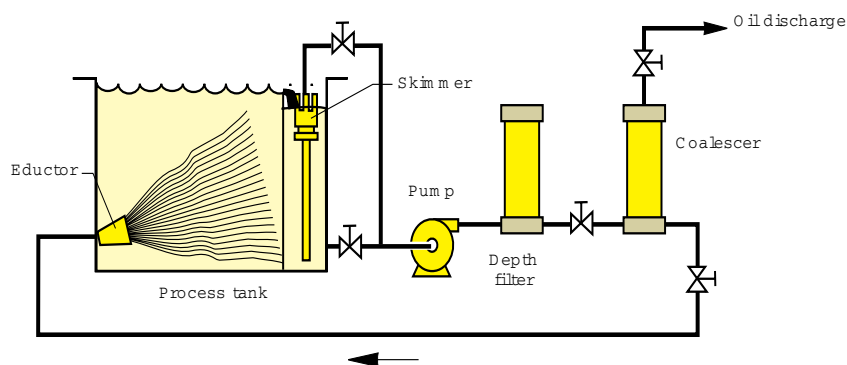
Filter systems for spray or immersion cleaners and phosphating solutions with optional "free oil" removal.



PUMP AND FILTER FOR BASKET-TYPE WASHER

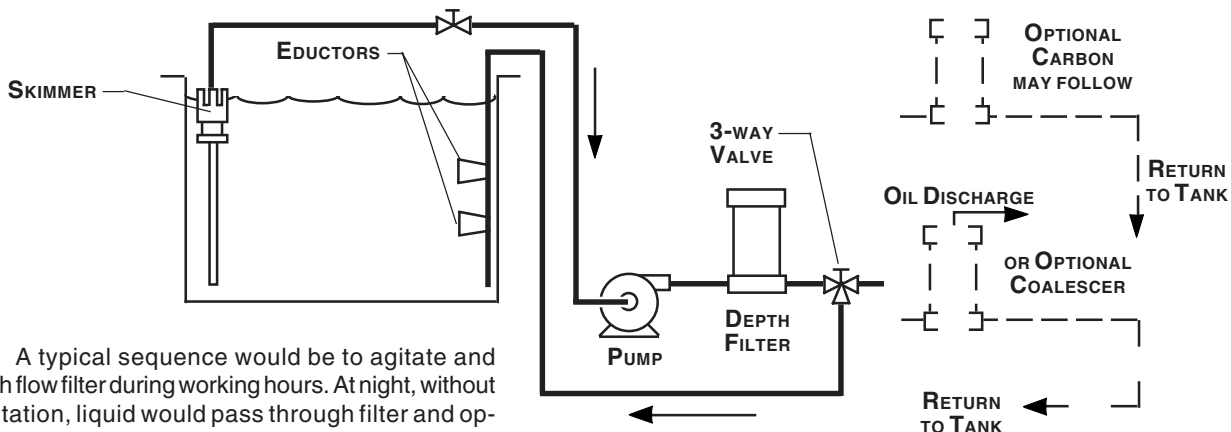


COMBINATION SKIMMER - FILTRATION WITH ADSORBENT FILTER FOR OIL REMOVAL



REMOVE PARTICULATE AND OIL EFFICIENTLY

AUTOMATIC GRAVITY FILTER FOR CLEANER AND PHOSPHATING SOLUTIONS



A typical sequence would be to agitate and high flow filter during working hours. At night, without agitation, liquid would pass through filter and optional coalescer at low flow to remove oils.

DISTRIBUTED BY



SERFILCO®

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