



# SERFILCO®

## OIL FILTRATION and RECONDITIONING SYSTEMS

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BULLETIN  
O-104\_H  
JAN 2012

### For renewal of:

**Hydraulic fluids / Lubricating oils**  
**Cutting fluids / Oil & water based coolants**  
**EDM — dielectric fluids / Synthetic oils**

- **Protect expensive machinery** from damaging dirt and abrasives
- **Quick payback** - Save disposal costs, re-use filtered liquid and lower biocide usage
- **No down-time** while restoring liquid to original level of cleanliness
- **Optional coalescers** to separate immiscible fluids

Oil contamination is the major cause of hydraulic equipment failure. Even fresh oil, right from the drum, may contain contaminants at levels exceeding new equipment manufacturers' standards. Petroleum products such as hydraulic fluids don't wear out. Filter them to like-new condition. Add new product only to make up for losses and to replenish additives.

**Trans-O-Filter Systems** effectively filter petroleum and synthetic fluids to remove abrasive grit and damaging sludges which contaminate and accumulate in hydraulic and lubricating oil circuits and reservoirs. They protect your machinery and system investments by eliminating pump damage, scored cylinders and the malfunction of valves and controls attributed to the destructive action of dirty or rancid oil. These systems offer you high flow rates and large dirt holding capacities in very compact packages. Each unit is designed to be completely self-contained; consisting of pump, motor, suction strainer and hoses. Carbon steel filter chamber will accommodate filter media down to 1 micron retention to meet your specific requirements. (Order filter media separately.)

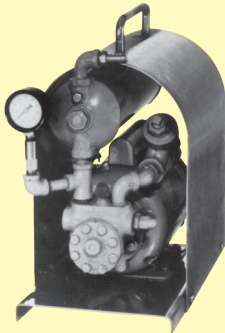
**Oil reconditioning stations** salvage contaminated oils for further use by removing sludges, water and other suspended foreign material. Systems accelerate natural settling action with controlled elevated temperatures. Residual fine particulate are then removed by a polishing filter of inert depth type media. If removal of oxidation products is desirable, the polishing filter can be equipped with adsorbent Fuller's Earth.

**Optional coalescing chambers** provide a means to separate immiscible fluids such as tramp oil or water. These 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.

### STANDARD TRANS-O-FILTER<sup>1</sup> SYSTEMS INCLUDE:

1. Carbon steel filter chamber with 75 psi maximum rating. "O"-ring closure is EPDM on portable model, Buna-N on all others.
2. Positive displacement self-priming gear pump with built-in relief valve set at 35 psi, Viton mechanical seal and 40 mesh suction strainer. Motor: 115-230V/1/60, 1725 RPM, TEFC, with 8 ft. of 3-wire extension cord and 3-prong plug. Units wired 115V standard.
3. Also available with air operated diaphragm pump, polypropylene with Teflon® internals.
4. 10' suction and discharge hoses (vinyl on portable; Buna-N and neoprene on others).
5. Petcock vent and drain plug.
6. Pressure gauge mounted on gauge snubber to indicate dirty filter.
7. Completely assembled stationary models mounted on a vinyl coated steel base. Mobile models include 2-wheel upright hand cart with handle.
8. Painted machine tool gray with two-part epoxy paint.
9. Optional coalescing chambers include Pyrex® sight glass and coalescing element<sup>2</sup>.

<sup>1</sup> For liquid temperatures up to 200°F. <sup>2</sup> For liquid temperatures up to 160°F.



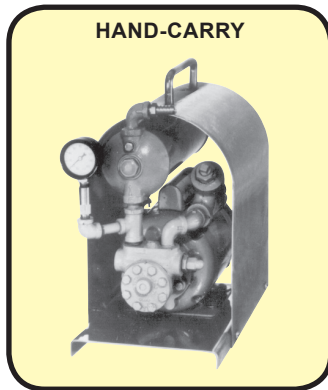
**HAND-CARRY**  
for remote or field servicing



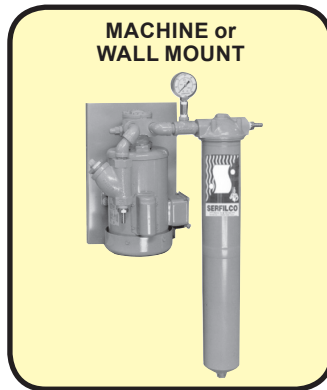
**TRANS-O-FILTER**  
w/optional coalescing chamber



**OIL RECONDITIONING STATION**  
for salvaging oils in large volume



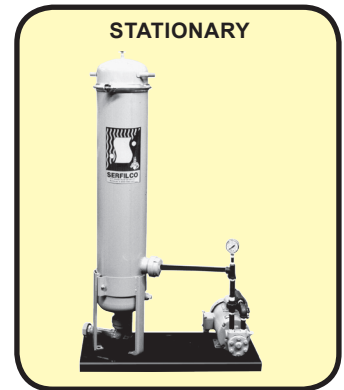
**HAND-CARRY**



**MACHINE or  
WALL MOUNT**



**PORTABLE**



**STATIONARY**

## HAND-CARRY

- Remote location service
- Hydraulic door openers
- Escalator / elevator service
- Ideal for machine-tool servicemen
- Small hydraulic reservoirs
- Transfer from drum to machine reservoir and get added benefit of filtration

## PORTABLE (on wheels)

- Easy to move to site of required oil filtration
- Includes motor starter (electric drive models)
- Ideal for field service personnel

## MACHINE MOUNT

- Ideal for mounting to press or machine tool
- Support / extend original equipment filter system
- Mounts next to oil reservoir
- For permanent installation and continuous duty filtration

## STATIONARY

- Provides same filtration as portable models, but mounted on a vinyl coated steel base
- Designed to be piped in place for high flow service on medium to large reservoirs
- Excellent for continuous recirculation of large central oil / coolant storage tanks

### TOORDER, use PRICE CODE NO.

#### HAND-CARRY

Includes protective hood and sturdy carrying handle.  
Painted machine tool gray.

PRICE CODE NO.	MODEL	FLOW	NO. OF CARTS.*	FILTER SURFACE AREA	SUCTION x DISCHARGE HOSE SIZE	MOTOR H. P.	DIMENSIONS L x W x H	SHIP WT.
		GPH					Inches	Lbs.
1402 A	S10 1/2S TS3	180	1 - 10"	3.5 sq. ft.	3/8" x 3/8"	1/3	13 x 9 x 15	60
1429	S20 1/2S TS3		2 - 10"	7.0 sq. ft.			23 x 9 x 15	65

#### MACHINE MOUNT

With wall mount base plate.  
Painted machine tool gray.

1430	MMS20 1/2S TS3	180	2 - 10"	7.0 sq. ft.	3/8" x 3/8"	1/3	14 x 14 x 7	60
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#### PORTABLE

	PRICE CODE NO.	MODEL	FLOW	NO. OF CARTRIDGES *	FILTER SUR- FACE AREA	SUCTION x DISCHARGE HOSE SIZE	MOTOR H.P. / SCFM @ PSI	DIMENSIONS L x W x H	SHIP WT.
			GPH					Inches	Lbs.
<b>Electric drive models</b>	1405 B	S1(718) 1/2B TS6-P-ST4-PS	360	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	1/2	18 x 17 x 46	115
	1407 B	S50(1) 1/2B TS3-P-ST4-PS	180	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	1/3	18 x 17 x 46	115
	1410 B	S100(2) 1/2B TS6-P-ST4-PS	360	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	1/2	18 x 17 x 46	125
	1413 B	S150(3) 1B TS9-P-ST4-PS	540	15 - 10"	52.5 sq. ft.	1" x 1"	1	18 x 17 x 52	130
<b>Air drive models</b>	1437	S1(718) 1/2B PPTF1/2-P-PRV	480	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	5 @ 50	18 x 17 x 46	110
	1438	S50(1) 1/2B PPTF1/2-P-PRV	480	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	5 @ 50	18 x 17 x 46	110
	1439	S100(2) 1/2B PPTF1/2-P-PRV	480	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	5 @ 50	18 x 17 x 46	120
	1440	S150(3) 1B PPTF1-P-PRV	600	15 - 10"	52.5 sq. ft.	1" x 1"	10 @ 40	18 x 17 x 52	145

#### STATIONARY

<b>Electric drive models</b>	1416 A	S1(718) 1/2S TS6-PS	360	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	1/2	30 x 13 x 30	105
	1418 A	S50(1) 1/2S TS3-PS	180	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	1/3	30 x 13 x 25	115
	1422 A	S100(2) 1/2S TS6-PS	360	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	1/2	30 x 13 x 37	125
	1426 A	S150(3) 1S TS9-PS	540	15 - 10"	52.5 sq. ft.	1" x 1"	1	30 x 13 x 47	130
<b>Air drive models</b>	1441	S1(718) 1/2S PPTF1/2-PRV	480	1 - 4" or 7" x 18"	29.0 sq. ft.	3/4" x 1/2"	5 @ 50	30 x 13 x 30	100
	1442	S50(1) 1/2S PPTF1/2-PRV	480	5 - 10"	17.5 sq. ft.	3/4" x 1/2"	5 @ 70	30 x 13 x 25	95
	1443	S100(2) 1/2S PPTF1/2-PRV	480	10 - 10"	35.0 sq. ft.	3/4" x 1/2"	5 @ 70	30 x 13 x 37	120
	1444	S150(3) 1/2S PPTF1-P-PRV	600	15 - 10"	52.5 sq. ft.	1" x 1"	10 @ 40	30 x 13 x 47	135



## TRANS-O-FILTER OPTIONS

DESCRIPTION	ADD	
	TO END OF MODEL NO.	PRICE CODE NO.
Coalescing chamber with K4x11N element(s) included. 1 element chamber (Portable or stationary models only.)	-1F8	O-1235
By-pass piping including 3 two-way valves for convenient transfer to by-pass filter. (Not for Hand-Carry)	-1/2" -1"	-BP O-1198A O-1199A
Portable base with two swivel and two fixed casters. (For stationary models only.)	-P	O-1428
Push button single phase motor starter with overload protection in water/oil tight enclosure. (Standard with portable models).	-ST4	O-1214
Viton® elastomers	-V	Add to PCN -V

## FILTER MEDIA

DESCRIPTION	MICRON RETENTION	PRICE CODE NO.
2½" x 10" depth wound cotton filter cartridges on tinned steel core	5	5C10TC
	10	10C10T
	15	15C10T
	30	30C10T
	50	50C10T
	75	75C10T
4" x 18" depth wound cotton filter cartridges on 304 stn. steel core	100	99C10T
	1	1B18A4
	3	3B18A4
	5	5B18A4
	10	10B18A4
	20	20B18A4
3" x 10" pleated paper cartridges	30	30B18A4
	1	PL310-1
	5	PL310-5
	10	PL310-10

### NOTE:

Order filter and coalescing media separately.  
Consult Sales Dept. for other cartridges.

### COALESCING ELEMENTS

DESCRIPTION*	MODEL NO.	PRICE CODE NO.
Nylon / 304 SS / Buna-N	K4x11N	88-3248
Polypropylene / 304 SS / Buna-N	K4x11P	88-3249
Glass / 304 SS / Buna-N	K4x11G	88-3250

Consult Sales Dept. for custom or special models, custom paint, Viton hose, three-phase motors or explosion-proof motors.

\* Media / Core / Cap

## OIL RECONDITIONING STATIONS

### INCREASE TOOL LIFE, REDUCE PRODUCTION COSTS BY RECYCLING CUTTING OILS FOR RE-USE

#### PURIFIES ALL TYPES OF LUBRICANTS

The station at right is 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 be economically restored.

#### EASY, LOW COST OPERATION

This station is very compact as well as easy and economical to operate. It features a cone bottom settling tank 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 station also includes a positive displacement pump with a pressure relief valve, a TEFC motor, a pressure filter with gauge and a clean oil storage tank.

Models with a 50, 250, 500, 1000 or 2000 gallon settling capacity are available.



***Interconnected valve arrangement enables product to be conveniently transferred according to the need and clarification required.***

1. Pump dirty oil from a floor drum to a settling tank.
2. Transfer and filter settled oil from settling tank to storage tank.
3. Recirculate and filter oil in storage tank.
4. Transfer and filter settled oil from settling tank to floor drum.
5. Recirculate and filter oil in floor drum.
6. Draw clean oil from storage tank to container.
7. Pump clean oil from storage tank to container or machine.



MODEL	PRICE CODE NO.
<b>50RS3-6-S4</b>	<b>1216A</b>

Consists of a 50 gallon cone bottom settling tank (not including cone capacity)

with 120 or 240V thermostat-controlled immersion heaters\*, sight glass, cover and 2" ball dump valve. One 50 gallon clean oil storage tank with sight glass and draw valve. Six-cartridge filter vessel, pressure gauge and vent valve. Piped to a 3 GPM positive displacement gear pump with suction strainer and internal relief valve, close-coupled to a 1/3 H.P., 115-230V/1/60 TEFC motor, with NEMA 4 motor starter. Components interconnected with 1/2" piping and lever handle brass valves for instant reference to open or closed position, 10' suction and discharge hoses. Mounted to a 4' x 3' steel base, 5'-7" overall height. Allow 1'-0" clearance for hinged cover.

\* 1 kw @ 120V or 4 kw @ 240V.

<b>250RS6-12-S4</b>	<b>1217A</b>
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Consists of a 250 gallon cone bottom settling tank

(not including cone capacity) with three 230 or 460V thermostat-controlled 5 kw immersion heaters, sight glass, hinged cover, 2" ball dump valve and platform ladder. One 275 gallon clean oil storage tank with sight glass and draw valve. Twelve-cartridge filter vessel, pressure gauge and vent valve. Piped to a 6 GPM positive displacement gear pump with suction strainer and internal relief valve, close-coupled to a 1/2 H.P., 115-230V/1/60 TEFC motor, with NEMA 4 motor starter. Components interconnected with 1/2" piping and lever handle brass valves for instant reference to open or closed position, 10' suction and discharge hoses. Approximate floor space 5' x 6'. Unit is 7'-1" high. Allow 2'-3" clearance for hinged cover.

#### NOTE:

Models feature all-welded construction, two-part epoxy enamel paint. Consult Application Engineering Dept. for custom systems, addition of coalescing chamber or substitution of pump or filter chamber. Order filter cartridges separately.

MODEL	PRICE CODE NO.
<b>500RS6-12-S4</b>	<b>1218A</b>

Consists of a 500 gallon cone bottom settling tank (not including cone capacity)

with three 230 or 460V thermostat-controlled 10 kw immersion heaters, sight glass, hinged cover, 2" ball dump valve and platform ladder. One 500 gallon clean oil storage tank with sight glass and draw valve. Twelve-cartridge filter vessel, pressure gauge and vent valve. Piped to a 6 GPM positive displacement gear pump with suction strainer and internal relief valve, close-coupled to a 1/2 H.P., 115-230V/1/60 TEFC motor, with NEMA 4 motor starter. Components interconnected with 1/2" piping and lever handle brass valves for instant reference to open or closed position, 10' suction and discharge hoses. Approximate floor space 6' x 9'. Unit is 9'-5" high. Allow 2'-8" clearance for hinged cover.

<b>1000RS9-18-S4</b>	<b>1219A</b>
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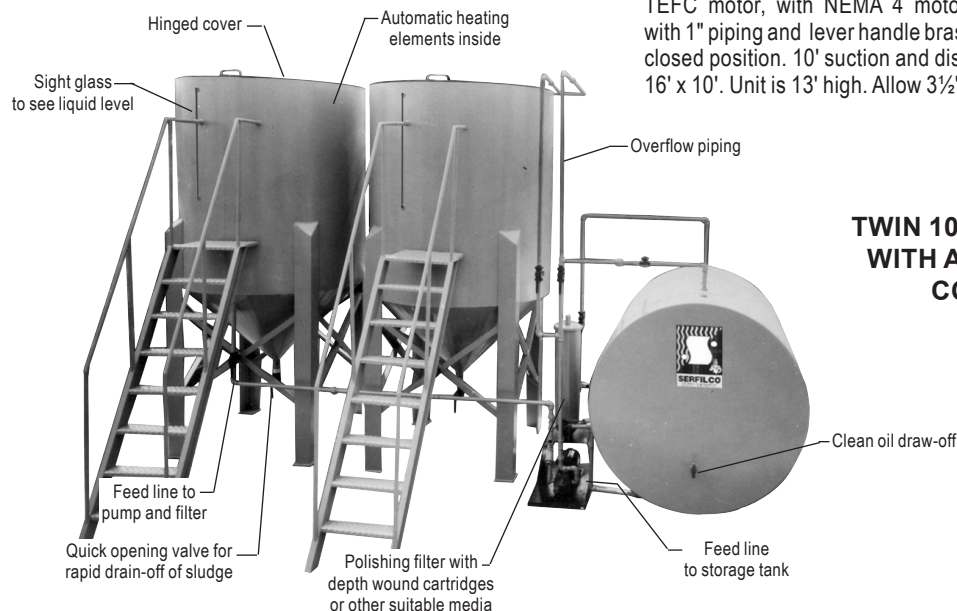
Consists of a 1000 gallon cone bottom settling tank

(not including cone capacity) with six 230 or 460V thermostat-controlled 10 kw immersion heaters, sight glass, hinged cover, 2" ball dump valve and platform ladder. One 1000 gallon clean oil storage tank with sight glass and draw valve. Eighteen-cartridge filter vessel, pressure gauge and vent valve. Piped to a 9 GPM positive displacement gear pump with suction strainer and internal relief valve, close-coupled to a 3/4 H.P., 115-230V/1/60 TEFC motor, with NEMA 4 motor starter. Components interconnected with 1" piping and lever handle brass valves for instant reference to open or closed position. 10' suction and discharge hoses. Approximate floor space 11' x 10'. Unit is 13' high. Allow 3 1/2' clearance for hinged cover.

<b>1000x2RS9-18-S4</b>	<b>1220A</b>
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Consists of two 1000 gal-

lon cone bottom settling tanks (not including cone capacity), each with six 230 or 460V thermostat-controlled 10 kw immersion heaters, sight glass, hinged cover, 2" ball dump valve and platform ladder. One 1000 gallon clean oil storage tank with sight glass and draw valve. Eighteen-cartridge filter vessel, pressure gauge and vent valve. Piped to a 9 GPM positive displacement gear pump with suction strainer and internal relief valve, close-coupled to a 3/4 H.P., 115-230V/1/60 TEFC motor, with NEMA 4 motor starter. Components interconnected with 1" piping and lever handle brass valves for instant reference to open or closed position. 10' suction and discharge hoses. Approximate floor space 16' x 10'. Unit is 13' high. Allow 3 1/2' clearance for hinged cover.



**TWIN 1000 GALLON SYSTEM  
WITH ALL WELDED STEEL  
CONSTRUCTION**