



A Division of Met-Pro Corporation

BULLETIN 702 SETHCO STAINLESS STEEL CENTRIFUGAL FILTER SYSTEMS

DEPTH FILTRATION OF
CORROSIVE LIQUIDS

Corrosion resistant stainless steel filter systems for filtration of hot alkaline solutions, some acid solutions, solvents, hydraulic fluids and more.

Features:

- 6 models to choose from with filtration rates from 100-2700 GPH
- Filters corrosive liquids at temperatures to 210°F
- Removes particles down to .5 micron
- Cover swivels for quick easy filter tube changeover
- Leakproof, trouble-free operation
- Portable
- One year warranty

Model SSI-330



COMPACT • LEAKPROOF • TROUBLE FREE SETHCO CORROSION RESISTANT, STAINLESS STEEL CENTRIFUGAL FILTER SYSTEMS

6 MODELS TO CHOOSE FROM

Sethco's compact, portable, "SSI" Centrifugal Filter Systems meet the need in industrial and plating plants for a dependable continuous duty filter system. They are constructed of highly corrosion resistant stainless steel 316 and are recommended for aqueous alkaline and acid solutions to 210°F.

RECOMMENDED FOR:

- Filtering all common alkaline and cyanide plating solutions and some acid baths.*
- Photo resist solutions (See Optional Equipment A).
- Solvents
- Ultrasonic Cleaners
- Alkaline Type: Hot Alkaline Cleaners – Emulsion Cleaners
- Acid Type: pH 4 and above
- Solvent Type: Chloroethene – Trichlorethylene – Carbon Tetrachloride – Freon
- Hydraulic Fluids

For filtering solutions where stainless steel is not applicable see Mefiag Bulletins 740, 802, or 853.

*Add nickel up to 5 oz./gal. sulfuric acid at room temperature.

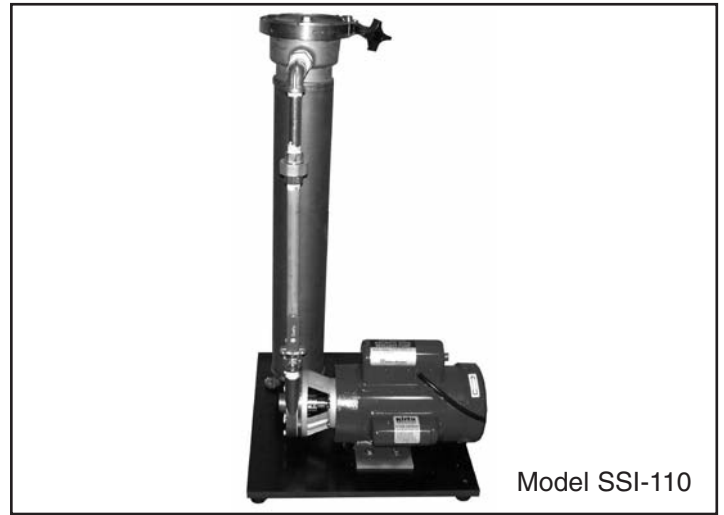
FILTER CHAMBER

Sethco's "SS" Series stainless steel filter chambers are available in 6 models in capacities from 120 to 2700 GPH (454 to 10,220 LPH) at pressures to 150 psi (10kg/cm²). Corrosion resistant type 316 stainless steel construction makes Sethco's filter chambers suitable for filtering most corrosive aqueous or organic liquids without product contamination. Viton O-rings are standard on all models. Teflon is optional for both. These chambers offer quick, easy filter change over.



SETHCO PUMPS

The centrifugal pumps, constructed of 316 stainless steel, are close coupled to their motors. The pumps are equipped with appropriate mechanical seals, selected for the application. These mechanical seals are available in various materials of construction, depending on application. For specifications, see table 2 on back page or visit Sethco's website at www.sethco.com for complete information.



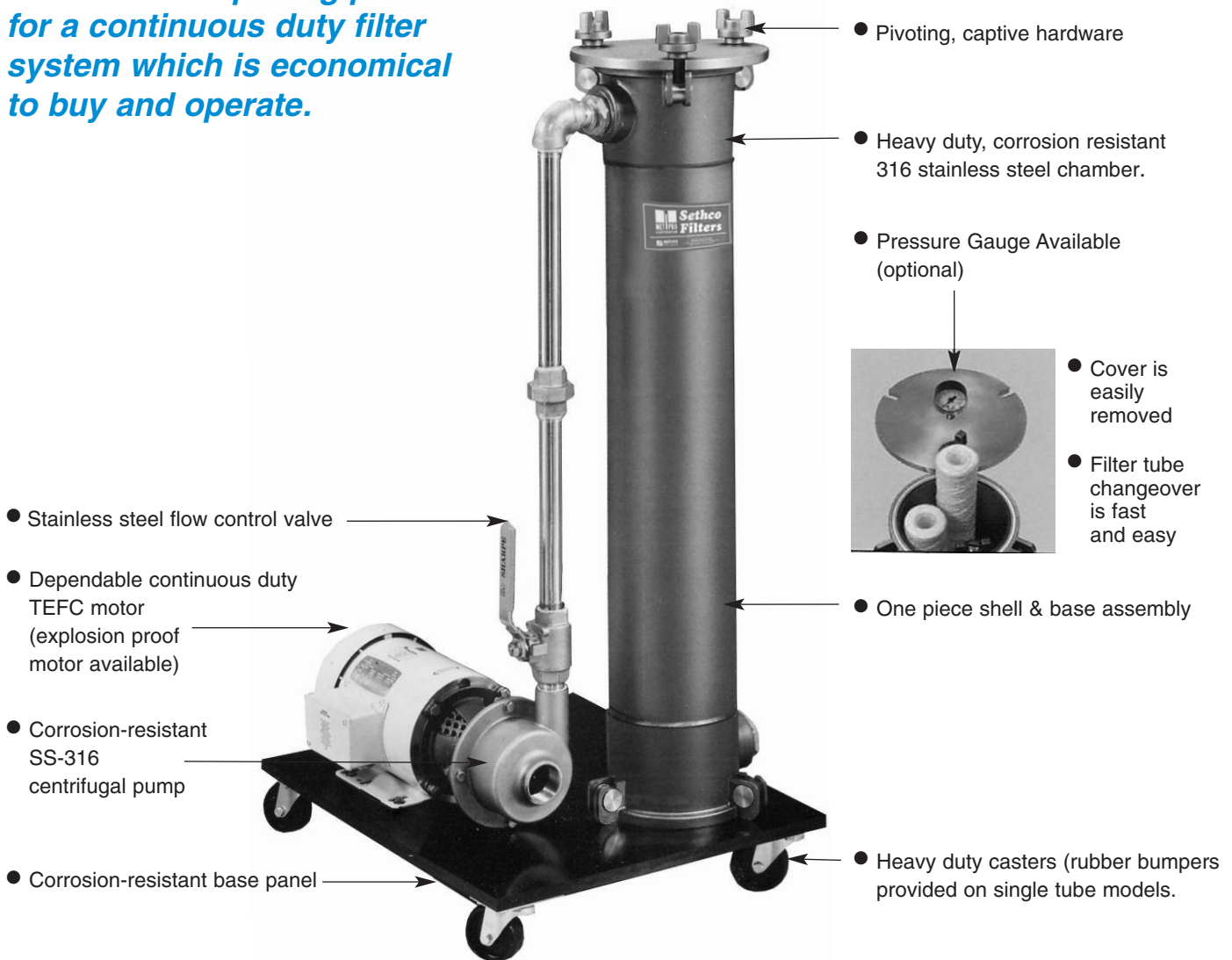
Model SSI-110



Model SSI-330

SEAL	TYPE	ROTATING HEAD	STATIONARY SEAL	GENERAL SEAL GUIDE*
CM	21	Neoprene-Graphite	Neoprene-Ceramic	For Acid (Sulfuric, Chlorides) and Mildly Alkaline Solutions pH 1-110
NM	21	Neoprene-Graphite	Neoprene-Carp. 20	For Acid and Highly Alkaline Solutions pH 3.0-14
MC	21	Viton-Graphite	Viton-Ceramic	For Solvents and When Hypalon and Neoprene are Not Preferred Materials
MN	21	Viton-Graphite	Viton-Carp. 20	For Solvents and When Hypalon and Neoprene are Not Preferred Materials
RC	9	Teflon-Graphite	Viton-Ceramic	Replaces "MC" Seal for Improved Sealing Capability
RN	9	Teflon-Graphite	Viton-Carp. 20	Replaces "MN" Seal for Improved Sealing Capability
RS	9	Teflon-Graphite	316 SS	Replaces RC for Improved Sealing Capability

They meet the need in industrial and plating plants for a continuous duty filter system which is economical to buy and operate.



- Stainless steel flow control valve
- Dependable continuous duty TEFC motor (explosion proof motor available)
- Corrosion-resistant SS-316 centrifugal pump
- Corrosion-resistant base panel

- Pivoting, captive hardware
- Heavy duty, corrosion resistant 316 stainless steel chamber.
- Pressure Gauge Available (optional)
- Cover is easily removed
- Filter tube changeover is fast and easy
- One piece shell & base assembly
- Heavy duty casters (rubber bumpers provided on single tube models).

FILTER TUBES

Sethco offers a wide selection of cotton and polypropylene filter tubes to meet your specific requirements. Filter tubes are available for controlled filtration from 150 microns down to .5 microns. Cotton, and polypropylene filter tubes are multi-layered processed yarn wound around either perforated stainless or perforated polypropylene core. Each chamber is equipped with a set of #10 cotton, 15 micron tubes with a SS core. Polypropylene tubes are available at no extra charge. Cotton filter tubes are recommended for moderately acid and moderately alkaline solutions (pH 3-11) as well as most solvents. Polypropylene filter tubes are recommended for concentrated acid and concentrated alkaline solutions. We suggest that you include a carton of additional filter tubes with your order. *For prices as well as complete specifications of filter tubes, consult bulletin 901.*



MOTORS

Sethco makes available a wide choice of continuous duty, TEFC or explosion proof motors*. The 1/6 and 1/2 HP pumps are normally equipped with single phase motors. One and two HP pumps are provided with a three phase motor. A motor switch and line cord is supplied for all 1/6 HP motors and is optional for other motors up to 1 HP. *For specifications and optional equipment see table 2 on back page.*

*Observes all safety precautions (such as grounding and bonding requirements) when pumping flammable solutions, as required.

FLOW CONTROL VALVE

Regulates flow of liquid being filtered.

BASE

All systems with multi tube chambers are mounted on a rigid plastic panel on rubber tire ball bearing casters. Single tube systems are provided with panel on rubber bumpers. *For specifications see Table 3 on back page.*

SETHCO QUALITY AND WORKMANSHIP

Only the finest workmanship and materials are used in Sethco equipment. Each unit is carefully tested before it is shipped and comes to you fully equipped, ready for instant operation.

HOSE

Nylon reinforced vinyl hose is supplied when it is suitable for stated application and temperature. Always advise your application and temperature. *For specifications see table 2 .*

SSI SERIES

STAINLESS STEEL CENTRIFUGAL FILTER SYSTEMS

TABLE 2 - PUMP, MOTOR AND HOSE SPECIFICATIONS

FILTER SYSTEM MODEL	PUMP SPECIFICATIONS			STANDARD MOTOR CHARACTERISTICS (3400 RPM TEFC) ^{††}	HOSE (NOTE 1)
	MODEL	GPH/LPH*	PSI†		
SSI-110, SSI-120, SSI-130	SI-1/3	690 / 2600	22	1/6 HP, 115V, 60 Hz, 1ph	16 ft. 1/2" ID
SSI-310, SSI-320	SI-1035	2880 / 10,900	17	1/2 HP, 115-230V/50-60Hz/1 ph	12 ft. 1" ID outlet 12 ft 1-1/4" ID inlet
SSI-330	SI-1040	3900 / 14,750	25	1 HP 208-230/380-460V, 50/60 Hz, 3 ph	

TABLE 3 - SPECIFICATIONS OF STANDARD SSI FILTER SYSTEM

FILTER SYSTEM MODEL*	RECOMMENDED FILTRATION RATE GPH / LPH**	FILTER CHAMBER MODEL	NUMBER & SIZE OF FILTER TUBES	OVERALL DIMENSIONS INCHES / CM	WEIGHT POUNDS / KG
SSI-110	100-150 / 750-1125	SS-110	One #10	14 x 16 x 18 / 35 x 40 x 45	55 / 20
SSI-120	200-300 / 1125-1700	SS-120	Two #10 or One #20	14 x 16 x 28 / 35 x 40 x 71	60 / 27
SSI-130	300-450 / 375-550	SS-130	Three #10 or One #30	14 x 16 x 33 / 35 x 40 x 88	65 / 29
SSI-310	600-900 / 2250-3400	SS-310	Three #10	20 x 24 x 25 / 50 x 60 x 63	120 / 54
SSI-320	1200-1800 / 4500-6800	SS-320	Six #10 or Three #20	20 x 24 x 35 / 50 x 60 x 88	140 / 64
SSI-330	1800-2700 / 6800-10,200	SS-330	Nine #10 or Three #30	20 x 24 x 45 / 50 x 60 x 114	150 / 68

* Complete model designation includes type of mechanical seal furnished with system. For description of seals available, see table 1.

** For viscous solutions, such as high speed cyanide solutions, recommended filtration rate is one-half these values.

MATERIALS OF CONSTRUCTION - OPTIONAL EQUIPMENT

FILTER SYSTEMS FOR PHOTO RESIST

Filter chamber is equipped with Teflon O-rings. Pump is equipped with Teflon O-ring and #9 ceramic-graphite-Teflon (RC) mechanical seal. Filter tube is cotton, X-fine density with stainless steel core. Motor is explosion proof. Series is SSI-RCE.

OPTIONAL MOTORS

Optional motors are available when standard motors do not meet electrical requirements.)

SI-1/3 (1/3 HP)	230V, 50Hz, 1ph., TEFC*
	208-220/380-440V, 50/60 Hz, 3 ph., TEFC**
	115/230V, 50/60 Hz, 1 ph, Expl. Prf.
SI-1035 SI-1040	115/230V, 50 or 60 Hz, 1 ph, TEFC*
	208-230/380-460V, 50/60 Hz, 3 ph, TEFC
	115/230V, 50 or 60 Hz, 1 ph, Expl. Prf.
	208-220/380-440V, 50/60 Hz, 3 ph., Expl. Prf.

* Includes manual reset circuit breaker and waterproof switch. When ordering add "X" after model number.

** Includes 3 phase waterproof switch.

WARRANTY: One year warranty against defective parts and workmanship. See Form TC-01 for full warranty details. Always be specific about your application in order that proper materials may be furnished. Let Sethco or an authorized distributor know; liquids being handled, gallons, temperatures and pH.

The standard warranty does not apply when equipment is used contrary to factory recommendations.

Since the policy of Sethco is one of continual improvement, we reserve the right to change design or materials at any time, without giving notice or creating any obligation to previous or future customers.



A Division of Met-Pro Corporation

1550 Industrial Road, Owosso, MI 48867
989-725-8184 • Fax: 989-729-1013

Website: www.mefiag.com • Email: mefiag@met-pro.com