OPERATION AND
SERVICE GUIDE
O-875G
MAY. 2004

SERIES 'L'
PLASTIC FILTER CHAMBERS

Refer to Bulletin C-105 and Parts Lists P-195 and P-9700.

SAFETY PRECAUTIONS BEFORE USING FILTER CHAMBERS

1. Read operating instructions and instructions supplied with chemicals to be used.
2. Be sure the material and elastomers of the filter chamber are chemically compatible with the fluid being used by referring to a chemical resistance data chart.
3. Note pressure limitations.
4. Operating personnel should always wear suitable protective clothing: face mask or goggles, apron and gloves.
5. All piping must be supported and aligned independently of the filter.
6. Always close valves slowly to avoid hydraulic shock.
7. Ensure that all fittings, connections and cover are properly tightened.

BEFORE CHANGING APPLICATION OR PERFORMING MAINTENANCE

1. Wear protective clothing as described in item 4 above.
2. Flush the filter chamber and system thoroughly with a neutralizing solution to prevent possible harm to personnel.
3. Verify compatibility of materials as stated in item 2 of Safety Precautions above.

CAUTION

These units incorporate an 'O'-ring seal at cover and vent plug. Verify fluid compatibility. Cover should be sealed securely, DO NOT OVER-TIGHTEN COVER - it could cause stress or failure of the cover. If leakage occurs, open the unit and clean and inspect the 'O'-ring. A suitable lubricant (such as petroleum jelly) applied to the 'O'-ring will facilitate the seal. Replace the 'O'-ring if stretched or otherwise damaged.

INSTALLATION

Filter is normally supported in the pipe line or mounted on a flat surface under the base. Carefully note IN and OUT connections. Install in the proper direction of flow. Unit is shipped completely assembled and ready for installation. A filter cartridge is not included. Cartridges must be ordered separately. Have replacement quantity in stock. 4" & 6" models require a rubber cartridge spacer when using a depth filter cartridge for proper sealing

OPERATION

Open inlet valve to filter slowly, checking for gasket leak. See CAUTION if leakage occurs. Loosen vent plug to bleed entrapped air. Tighten when liquid appears around plug. As the filter cartridge removes the contaminants, the pressure drop across the unit will slowly rise. This can be determined by pressure gauges mounted upstream and downstream from the filter. A pressure gauge installed in chamber cover is a convenient means of noting operating pressure and determining differential from start-up. In normal operation, it is desirable to change cartridges when a rise of 20 to 25 pounds above initial inlet pressure has been reached. In no case should 35 PSI be exceeded. If no pressure gauges are available, rise in pressure will be reflected by a drop in flow if a centrifugal pump is being used. When flow drops below an acceptable point, cartridges should be changed. Make certain pump being used will not develop greater than 35 PSI.

WOUND DEPTH FILTER CARTRIDGES

Standard depth type filter cartridges wound with spun yarn typically have anti-static and other organic "finish or sizing" agents applied to them These agents may be removed by flushing the cartridge in warm water or a dilute acid compatible with the filtration process. Recirculation through a slurry tank is a convenient and recommended method. Two or more changes of "rinse" solution may be required. The more critical the filtration requirement, the greater the care necessary to flush and rinse. The presence of tiny bubbles or foam in the rinse solution is the result of the anti-static agent. Directing flow of rinse solution or plating solution through a chamber containing granular activated carbon will also remove the agent. Contact Customer Service for media free of sizing agents.

TO USE AS A DEPTH FILTER

Depth cartridges (10" length) have an equivalent 3-1/2 sq. ft. of filter area. The cartridge traps the soil in the fibrous structure as the solution passes through it. Cartridges are available in a variety of porosities making it possible to use coarse cartridges that have greater dirt holding capacity rather than dense cartridges to obtain optimum clarity. Refer to a cartridge selection chart for available densities, media and core materials for determining the proper cartridge for your solution and needs. Depth cartridges should be discarded after use. However, under some circumstances, cartridges may be washed off, back-flushed and reused for limited service. When cartridges are rinsed and reused, care should be taken to insert a rubber spacer between each two adjacent cartridges and between cartridge ends and the filter chamber to assure a pressure tight seal.

CARBON FILTRATION

Carbon cartridges are available for water or plating solution applications. Refer to selection chart. Carbon cartridges may be installed in total or in a combination with depth cartridges to achieve the desired results.

TO REPLACE FILTER CARTRIDGES

When filter cartridges are expended, close inlet and outlet valves to unit. Open vent plug, loosen cover lock nuts and remove cover. For chambers which can accommodate 20", 30", & 40" cartridges, cartridges of varying lengths can be combined to fill the chamber. The shortest cartridge should be positioned at the top. When replacement is required, it can be lifted out first and then the center post can be lifted out to remove the remaining cartridges.

DOE (Double open end) cartridges: Remove and discard used filter cartridge.

SOE (Single open end with 222 "O" rings) cartridges: Pull used cartridge straight up. Note that the double 'O' rings at the bottom of this cartridge may give resistance to this motion.

Clean all parts. Inspect, clean, and replace seals, if necessary. Install new filter cartridge(s). Replace cover and tighten four lock nuts. Be sure filter cartridge is sealed at compression seat at base and cover by verifying that cover is supported by filter cartridge before tightening cover lock nuts.

CAUTION: ***Do not use air or gas as the operating or testing medium.***

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