



CYCLE-CLEAN® FILTRATION SYSTEM

OPERATION AND
SERVICE GUIDE
0-1425
AUG. 1990

MODEL	PRICE CODE NO.
CYCL 36	49-0411
CYCL 72	49-0412

Refer to Parts List P-5050.

SAFETY PRECAUTIONS

BEFORE STARTING

1. Read operating instructions and instructions supplied with chemicals to be used.
2. Refer to Chemical Resistance Data Chart for compatibility of materials in system with solution to be used.
3. Note temperature and pressure limitations.
4. Personnel operating equipment should always wear suitable protective clothing; face mask or goggles, apron and gloves.
5. All external piping must be supported and aligned independently of the system.
6. Always close valves slowly to avoid hydraulic shock.
7. Ensure that all fittings and connections are properly tightened.

BEFORE CHANGING APPLICATION OR PERFORMING MAINTENANCE

1. Wear protective clothing as described in item 4 above.
2. Flush system thoroughly with a neutralizing solution to prevent possible harm to personnel.
3. Verify compatibility of materials as stated in item 2 above.
4. Shut off power to motor at disconnect switch.

PRE-START-UP

Filter should be mounted on or beside a compartmented tank with a clean and dirty section so that clean liquid can flow over baffle into dirty compartment. A separate clean supply pump should carry liquid to the machine the filter is serving. Refer to page 2.

Pump suction inlet (#1 on diagram) should be connected to dirty compartment of tank. It may be connected with a 3-way valve to both dirty and clean if you wish to backwash only with clean coolant. (This valve is not supplied by Serfilco.)

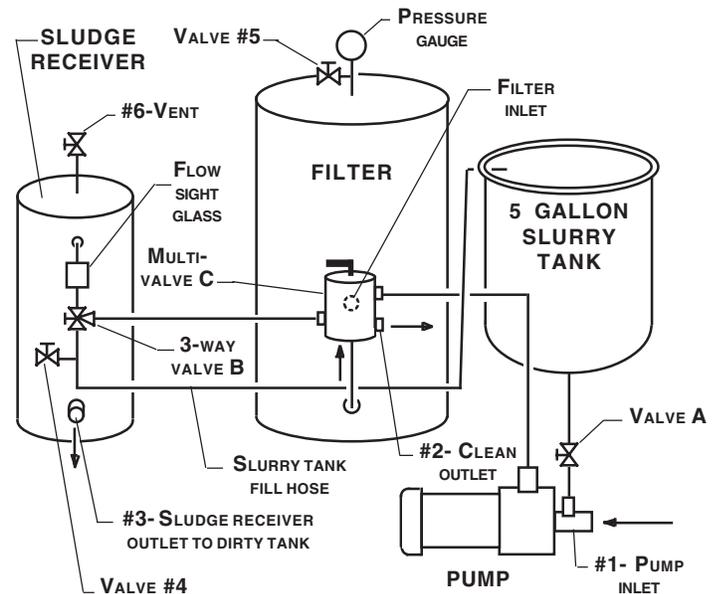
Clean liquid outlet (#2) should be connected to the clean compartment.

Bag Filter Sludge Receiver (outlet #3) should be connected to the dirty compartment.

Outlet (#4) is used during the pre-coat cycle and discharges to dirty tank. A valve is required at this point for regulating flow through the hose when liquid must be added to the slurry tank. The hose will also have a nozzle at the tank end of hose.

START-UP

1. Secure hoses so they do not fall out of tank. Refer to Bulletin A-202 for tank clamp with hose clamp.
2. Prime pump according to pump operating instructions and energize motor. **Note:** This is a self-priming pump, but it is still necessary to pour liquid into basket strainer compartment for initial prime and operation.
3. Open air vent in cover to release air from chamber. Tighten vent plug when solution level rises to top of chamber.



OPERATION PRECOAT

1. Position Multi-Port valve (C) to "PRECOAT" position (indicated on valve). Turn valve (B) to allow discharge through (#4) outlet. Open bleeder valve (#5) on the filter vessel to vent air.
2. Fill slurry tank and reservoir tank with liquid. Clean section of compartmented tank and fill pump with liquid by removing cover over basket strainer.
3. Turn pump on and open valve (A) briefly to get pump primed so that it pulls liquid from dirty tank compartment. Once filter vessel is filled and bleeder valve closed, you can fill slurry tank using hose. Mix proper amount of filter powder in slurry tank (9 lbs. for **Model CYCL 72**, 4½ lbs. for **Model CYCL 36**). Open valve (A) and allow slurry mix to be pumped into filter, then close valve. Powder does not have to go into filter all at once. This process may be repeated until all of powder is pumped into filter.

FILTER

1. When water appears to be clear as it emerges from outlet or by observing small sight glass you may turn valve (C) to "FILTER" position. This will cause liquid to emerge from outlet (#2) and begin the filtering cycle. Note and record initial gauge pressure.
2. Periodically inspect pump strainer basket and remove any debris that has collected. Be sure motor is de-energized.

BACKWASH CLEANING

To Clean Filter by Backwashing

When the filter gauge registers approximately 10 psi above the clean starting pressure it is time to backwash. To backwash, first turn off the pump. Turn valve (B) to permit discharge to Sludge Receiver (through sight glass). Turn valve (C) to "BACKWASH" and turn on pump.

The filter bag in the Sludge Receiver will retain the solids and the liquid will drain back to the dirty tank. Continue backwash until liquid appears clear in the glass (about 2 minutes). To filter again, repeat the backwash cycle. To restart, refer to OPERATION.

WASTE

When valve (C) is positioned to "WASTE", then process solution from "dirty" compartment of reservoir is pumped to drain without going through filter chamber.

Normally, backwashing is accomplished with unfiltered solution from the receiver tank. In some situations it may be preferable to backwash from a clean solution reservoir.

MANUAL CLEANING

To Clean Filter Manually

After a period of time, enough powder and contaminant may collect between leaves in the filter so that you will want to wash them down with a hose. To do this, shut off pump, open bleeder valve to relieve pressure, loosen each clamp alternately and remove the tank top.

The leaf elements may be cleaned in place or the entire grid assembly may be lifted straight up out of the vessel and removed to a location where it can be hosed off.

In cases where calcium deposits are evident, soak the entire assembly in 4 parts water to 1 part solution of muriatic acid for 20 to 30 minutes.

Visually inspect the filter cloth for tears or holes and the cover ring and small pipe "O"-ring for nicks. Clean rings and seats and lubricate with petroleum jelly.

COMPARTMENTED TANK (not included) AND OPERATING TIPS

1. Tank should have a clean and dirty compartment with an overflow weir from clean to dirty side. Clean compartment should have a solution volume for 1-12 minutes of backwashing.
2. Arrange piping so pump drains solution from clean side of tank when precoating. This will require a tee and two valves on pump suction.
3. During filtration cycle, pump will draw from dirty compartment of tank.
4. For backwash cycle, pump will draw from clean tank. Underflow (discharge) from bag chamber is directed to dirty compartment of tank. For some installations, backwashing from dirty compartment may be acceptable.
5. Vibratory and tumbling operations may have a 1 to 5 GPM flow to dirty compartment and will include a high volume of solids. Backwash frequency will be approximately 1-2 times per day, depending on work load and metal being processed.

BULK FILTER AID 50 lb. bag

RETENTION	PRICE CODE NO.
1 micron	33-0902
3 micron	33-0901

QUANTITY OF FILTER AID REQUIRED

CYCL36	4½ lbs.
CYCL72	9 lbs.