

# Filter and Recycling System

## Model 952A

Installation and Operating Instructions



**PRACTICAL SYSTEMS, INC.**

11617 Prospect Road • Odessa, FL 33556  
(800) 237-8154 • Fax (800) 330-3800

## 952A FILTER AND RECYCLING SYSTEM HOW THE SYSTEM WORKS

Water draining from the cylinder machines is directed to the 952A into the receiving bucket. Pump 1 (located in the bottom of the bucket) pumps the water up to the filter bag. Solids are removed by the bag and the water drains into the tank below. Pump 2 (located in the tank) pumps the clean water out through the bulkhead fitting and to the cylinder machines. The 'active' filter bag must always be located on the right side of the system (filter bag 2 in figure 1). After the bag has been used, it should be hung on the left side of the system (filter bag 1 in figure 1) to drain into the receiving bucket. The 952A will save you thousands of gallons of water daily and allow you to comply with most pollution laws.

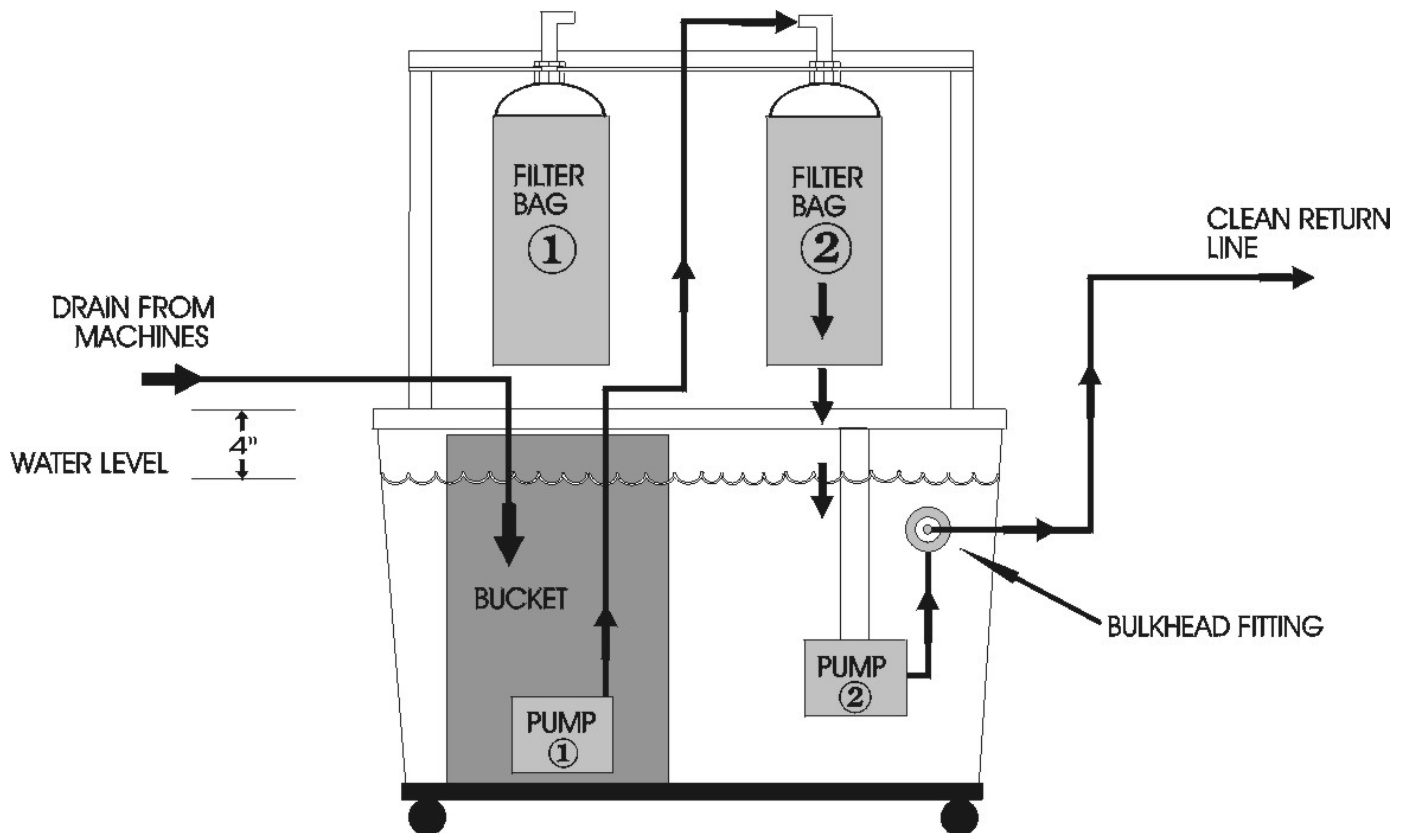


Figure 1

952A FLOW DIAGRAM

## INSTALLATION INSTRUCTIONS

NOTE: The 952A should be connected to a 110V outlet equipped with GFI (ground fault interrupt) to prevent possible electric shock.

1. Select a location for the 952A that is convenient to the machine and easily accessible for servicing and cleaning.
2. Connect the clean return line to your existing feed line or install a new line using PVC or other suitable material. The feed line should be at least 3/4" diameter. See figure 2 for sample manifold setup.
3. Direct drain lines from machines to the 952A and into the receiving bucket. For best results, connect an elbow at the end of the drain line so the returning water drains straight down into the bucket. Make sure that there is adequate slope in the line running to the 952A so that build up or blockage in the line does not occur.
4. Position the filter bag support rack on the tank. The bottom of each leg of the rack has a notch in it. This notch fits over the ridge on the top edge of the filter tank.
5. Place the filter pressure heads in the slots on the top of the bag rack.
6. Connect tubing from Pump 1 to the filter pressure head on the right side of the system using the quick-disconnect fitting provided.
7. Pump 2 should be hung on the back of the filter tank using the hanging bracket and should be positioned as shown in figure 1. Connect output line from the pump to the bulkhead fitting.
8. Connect existing or new feed line to the outside of the bulkhead fitting and connect to machines.

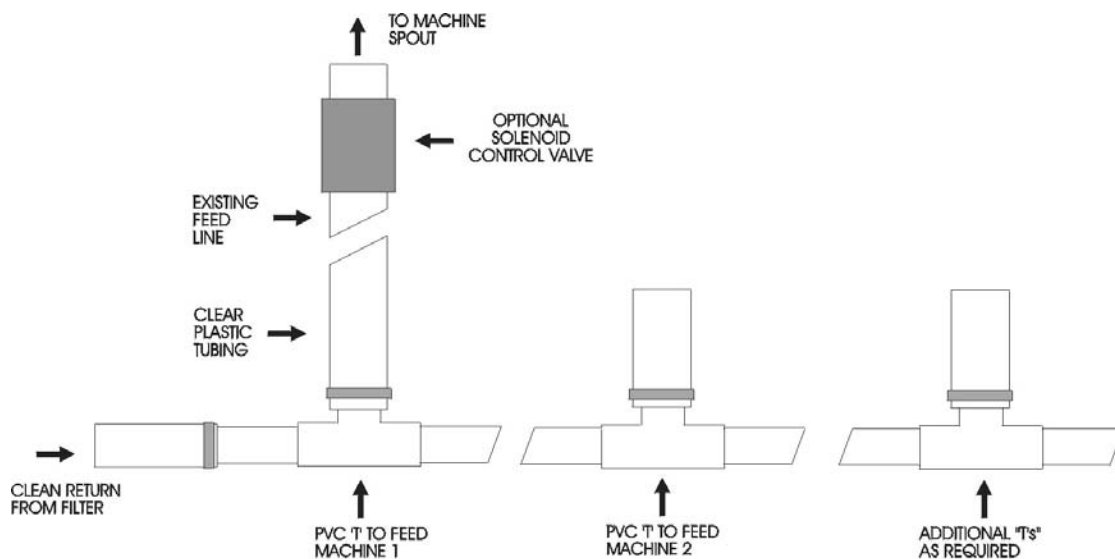


FIGURE 2  
SAMPLE MANIFOLD DIAGRAM

## OPERATING INSTRUCTIONS

1. Fill tank with plain tap water until the water reaches the notches in the filter tank (4 inches from the top). This is approximately 15 gallons. For best results, add 1 oz. of PSI's Fining Water Additive for every gallon of water (sample provided) to enhance the fining process and prolong pad life.

**NOTE:** When filling the system, fill the receiving bucket first to prevent the bucket from floating.

2. After the connections are made and the tank has been filled, turn on the clean water return pump (pump 2 in figure 1) and make sure that there is adequate flow to all machines. If there is inadequate flow, you may have too many machines connected, or you may need to open the valves at the individual machines.
3. Turn on the filter pump (pump 1 in figure 1). This will cause the level in the receiving bucket to drop about 2". As the filter bag collects and retains particles being removed from the fining water, the bag will clog and the pump will not be able to pump the fining water through the bag. This will cause the water level in the receiving bucket to rise. This is your indication that the bag should be changed. Failure to change bags at this point will cause the bucket to overflow into the clean water and contaminate it.

As you become familiar with the 952A, you will learn how long the filter can run before the filter bags need to be changed. Each lab's situation varies. You may want to change the bags regularly at mid-day instead of monitoring the system.

4. When it is time to change bags, turn off the filter pump (pump 1 in figure 1) and disconnect the 'active' filter bag at the quick-disconnect. Move the bag to the left side of the system and allow it to drain over the bucket. Move the empty bag to the right side of the system and connect it.
5. After the bag has drained, remove the pressure head assembly from the bag rack and remove the bag. Dump the contents of the bag by turning it inside out. Rinse the bag over your Pan Handler II Waste Water Treatment System's portable receiving tank so the rest of these solids can be collected and disposed of properly. After the bag has been rinsed it is ready to be used again. Two extra filter bags have been supplied with the system for your convenience.
6. To clean the system, disconnect the line to the 'active' filter bag and lift the bag rack off the tank. Pump or dump the water out of the system into the Pan Handler II portable receiving tank for processing. Rinse the tank and bucket into the portable receiving tank also.

The length of time you can run the system before it needs to be cleaned out varies from lab to lab. The length of time is directly related to how often the bags are changed. The more frequently the bags are changed, the longer the system can run. Typically, labs run the same water for between 2-4 days. The indication, from the lens processing standpoint, will be that the lenses have gray areas after being polished. (You may need to experiment with the system in your situation to determine how long you can run before this happens and clean the system prior to that time to avoid having to redo the fining process.)

**Note: NEVER** allow the water level to drop more than 2 inches from the starting level.

If you have any questions about the installation or operation of your 952A, or if you would like information about the Pan Handler II, please feel free to contact us at 800-237-8154 or 727-376-7900.

Replacement Filter Bags:	Plastic	25 Micron	1160S
	Polycarbonate	50 Micron	1174