Feeding Equipment

Instructions For Installation Of
No. 20L MICROMET® FEEDER 4628-0 (46280)
No. 100L MICROMET® FEEDER 4650-0 (46500)

The No. 20L and No. 100L Micromet Pot Feeders are designed to slug or shot-feed chemicals into chilled water systems, hot water boilers, steam boilers, etc. The tank is composed of 11 gauge (20L) or 10 gauge (100L) Steel while the caps are cast iron. Other installation items such as the shut-off valves, elbows, nipples, strainers, tees, drain cocks, flow indicator, etc. are not included.

The feeder can also be used to introduce Micromet into commercial potable water systems for control of scale, corrosion and red iron staining. When doing so, it is necessary to utilize strainers and the FS01-7P Pyrex Flow Indicator. The flow indicator consists of a transparent Pyrex cylinder, containing a rubber ball, fitted in two castings having 3/4″ female connections at each end.

Also, it is important to install the feeder on a bypass arrangement (Fig. 1) particularly when feeding Micromet. In fact, when feeding Micromet, the feeder should be installed in a bypass on the COLD water line to the equipment to be protected. When putting Feeder before a water heater, place far enough away so that hot water will not flow back into Feeder. On private well systems where iron is present in the water, the Feeder must be installed before the water storage tank. Several typical bypass arrangements are illustrated in Figure 2.

1. Install Feeder in a convenient location where it can be refilled easily. Ensure that there is no strain placed on the flow indicator.
2. Use 3/4″ pipe between Feeder and the water line to be treated.
3. A flow control valve, “A”, must be installed in the water line between the inlet and outlet connections to divert a portion of the water flow through the Feeder.
4. 3/4″ shutoff valves, “B” and “C”, are required to isolate the Feeder when recharging. Where an anti-back siphon age device is required, a check valve should be installed at “D” in main line before Feeder.

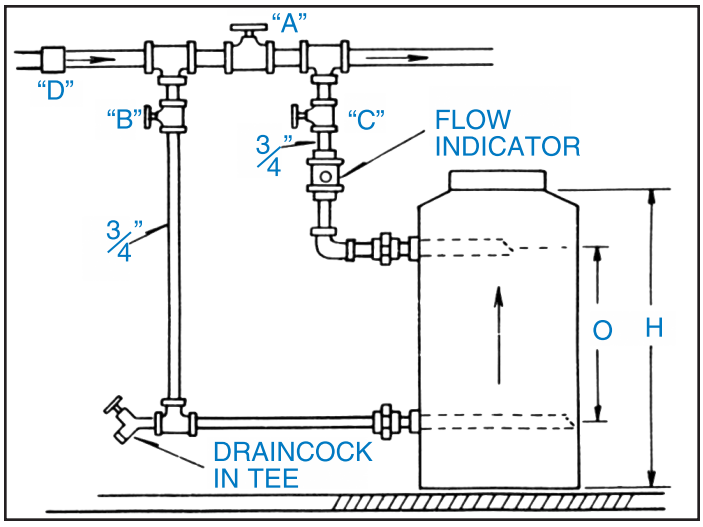

FIGURE 1

5. Insert a strainer in the bottom inlet opening and the a strainer in the top or outlet opening in the side of the feeder tank.

A drain cock should be installed in a tee, as shown in Figure 1, to drain water from the feeder when necessary.

6. Unions must be used on both inlet and outlet lines to facilitate removal of strainers for inspection and cleaning once a year.
7. The flow indicator is installed so that water will pass vertically up through indicator. Do not twist or place flow indicator where it will be under strain.
8. After installation is completed and tested for leaks, close valves “B” and “C”, remove filler cap, and drain water from Feeder through drain cock.
9. Remove the filler cap by turning counter clockwise.
10. Fill Feeder with recommended amount of Micromet.
11. Close drain cock, crack the inlet valve “B” slightly and fill the Feeder completely with water. Close valve “B” and replace filler cap.
12. Replace filler cap and secure.
13. Open valves “B” and “C”.
14. With water turned on so that it is being used at the maximum rate, valve “A” should be closed to the point where the flow indicator ball is raised and spins rapidly. When water is used at low flow rates, the ball should revolve slowly.

IMPORTANT: The following precautions should be taken to prevent a concentrated solution of Micromet from building up in the feeder and causing the bed of Micromet to solidify.

It is necessary to have some water pass through the Feeder to carry the Micromet solution into the system. Thus, when water is being used, the ball in the flow indicator should revolve. If the ball does not move when a normal flow of water is used, valve "A" must be closed further until the ball does move.

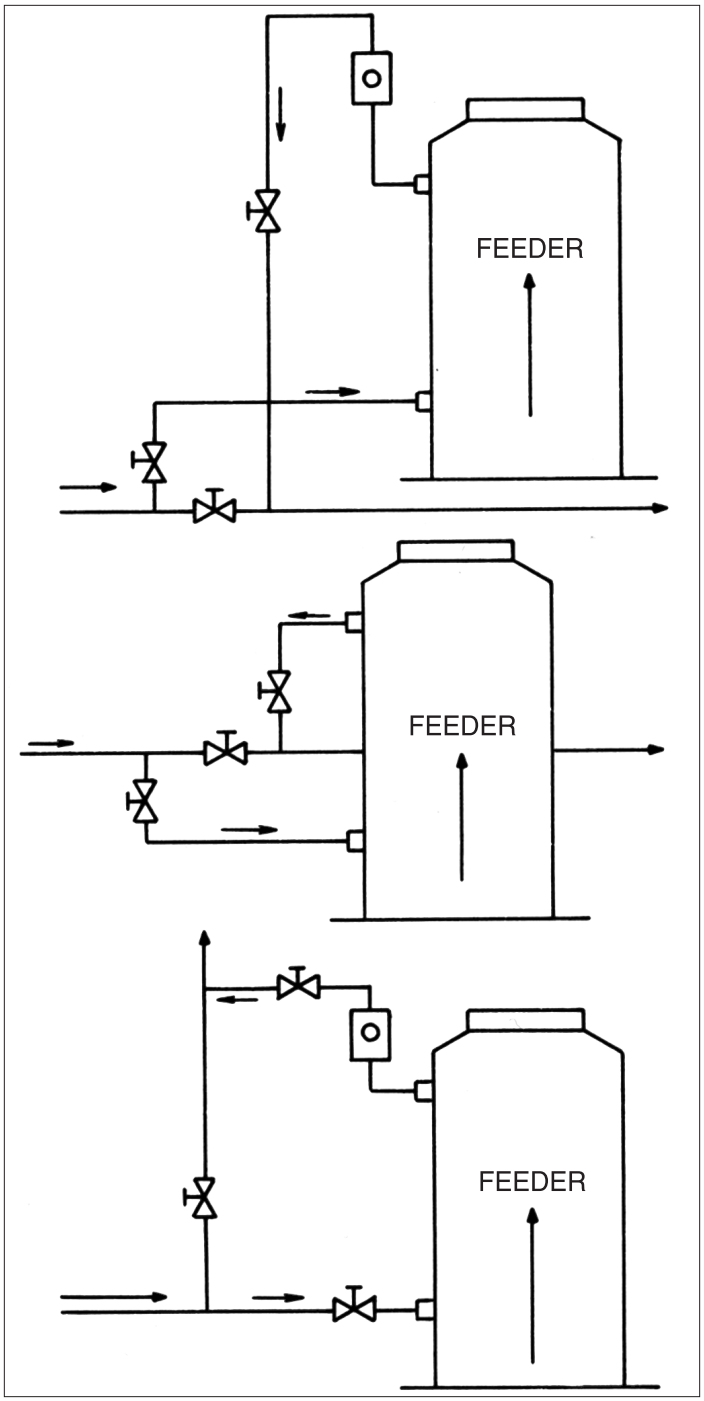

FIGURE 2

TYPICAL BYPASS ARRANGEMENTS

Where valve "A" cannot be restricted, a small circulating pump (preferably all bronze with 3/4″ connections, which will produce 1 to 5 gpm flow against a 2 ft. head) may be installed in the 3/4" line to the Micromet Feeder, and valve "C" adjusted so the ball in the flow indicator revolves about 2 revolutions per second. A time clock should be used to turn pump off when no water is used for 8 hours or more.

If the Feeder or water system will not be used for a week or more, close valves "B" and "C", remove filler cap and drain water from the Feeder. The Micromet remaining in the Feeder should be removed, dried and stored in a tightly closed container to protect it from contamination until the Feeder is put back into use. Be sure the Feeder cap is replaced and locked while the Feeder is not in service.

The strainers should be removed from the Feeder once a year for inspection to make certain the slots are not clogged. If any slots are closed, clean with wire brush or hacksaw blade.

NOTE: These feeders can be used to feed boiler chemicals as well as Micromet. For boiler chemical feed, follow instructions on the chemical's label. When feeding any chemical which generates excess heat and pressure when contacting water, a pressure relief valve should be installed on either the inlet or outlet line between the shutoff valve and the feeder.

Specifications

Feeder Model	No. 20L	No. 100L
PART NO.	4628-0	4650-0
Diameter	6″	10″
H	21 1/4″	35 3/4″
O	12 3/4″	26 1/2″
Capacity in gallons	2	10
Gauge-head	11	9
Gauge-shell	11	10
Gauge-bottom	11	10
Strainers	Polyvinyl dichloride plastic inside galvanized nipple	
Paint	Epoxy	Epoxy
Flow Indicator	3/4″ FPR Iron castings, stainless impellers, Pyrex cylinder, rubber ball	
Maximum Pressure*	200 psi	200 psi
Maximum Temperature	212°F	212°F

*The maximum pressure indicated above is the maximum pressure that should be tolerated in the Feeders. Even though normal operating pressure of the system never exceeds 200 psi the Feeder should not be used if periodic surges of pressure exceed this limit.