



Installation
and Operation
Instruction
Manual
INSMAN-112

Fertilizer
Tank

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FERTILIZER AND CHEMICAL DISPENSER TANK

GENERAL SAFETY GUIDELINES

Please read the entire manual before beginning any procedure.

1. Only properly trained personnel should operate and service the equipment.
2. Always wear proper safety gear when servicing equipment.
3. Before installing the system, ensure that the system falls within the designed operating parameters.
4. Know the safety operating limits of the system and any equipment directly connected to or affected by it.
5. Be sure that the system is depressurized before any maintenance work, removing components or opening of the vessels.
6. Be sure to re-examine the system before putting it back into service.
7. Be sure to maintain all equipment and to continuously check the system for leaks and or damage. Fixing problems as they occur will prolong the life of the system.

- **INSTALLATION**

When using **dry or granular material**, the dispenser tank is usually installed upline from the filters. When using **liquid material** the dispenser tank may be located at any point on the main irrigation line. A pressure differential provides a parallel flow through the dispenser tank. The volume of flow and displacement rate is regulated by installing a valve on the line from the tank to the irrigation line. Another isolation valve on the inlet line to the dispenser tank provides the ability to reload while the irrigation system is operational.

The connecting lines between the dispenser tank and the irrigation line should be 3/4” pvc pipe or polypropylene hose. **(See illustration below).**

OPERATION

Dry fertilizer or granular material is placed directly into the dispenser tank up to 2/3 of the tank capacity. With the tank cover removed, open the isolation valve and allow water to enter tank and dissolve the dry material. When the tank is filled, close the isolation valve and stir the mixture to completely dissolve the granuals. Replace and tighten the tank cover. Open the isolation valves and adjust the flow rate as shown in the chart of displacement time for application.

Prior to placing **liquid fertilizer or chemicals** into tank, open isolation valve and allow water to fill 1/4 of the tank volume. Pour the measured volume of liquid into the tank. Close and tighten tank cover. Open isolation valve and adjust the flow rate as shown in the chart on displacement time for application.

The total planned irrigation time should be provide for adequate displacement application time, plus sufficient time to fill the irrigation lines prior to start of application and the time necessary for the last of the solution to clear the lines.

Displacement (dilution) is based on approximately 6 gallons of water flow through the tank per gallon of tank capacity.

MODEL	Gallon Capacity	Discharge Time With Controlled Flow				Max. Working Pressure
		@ 0.5 GPM	@0.75 GPM	@1.0 GPM	@1.5 GPM	
HF – 15	15 Gallons	3.0 hrs.	2.0 hrs.	1.5 hrs.	1.0 hrs.	100 PSI
HF – 30	30 Gallons	6.0 hrs.	4.0 hrs.	3.0 hrs.	2.0 hrs.	120 PSI
HF – 45	45 Gallons	9.0 hrs.	6.0 hrs.	4.5 hrs.	3.0 hrs.	120 PSI
HF – 60	60 Gallons	12.0 hrs.	8.0 hrs.	6.0 hrs.	4.0 hrs.	120 PSI
HF – 75	75 Gallons	15.0 hrs.	10.0 hrs.	7.5 hrs.	5.0 hrs.	120 PSI

APPLICATION

The **Yardney application** products provide a simplified method to distribute fertilizer and other chemicals through a drip irrigation system. Since these products operate by using the irrigation line pressure and flow, they do not require a pump, motor or other mechanical injector device. A small pressure differential created by the use of a valve, filter or other line restriction creates a parallel flow through the dispenser tank.

The flow rate or amount of solution and the displacement rate (dilution) is regulated by installing flow control valve. (More precise measurement and control can be achieved by the use of flow meter.) A “batch” process is employed to measure the amount of fertilizer or chemical to be distributed to the irrigation system in a single application.

Yardney fertilizer and chemical application products are fusion epoxy lined to resist corrosion and are available in five sizes 15-30-45-60-75 gallon capacities.

