

ATMOSPHERIC EVAPORATOR

OPERATION AND
SERVICE GUIDE
O-375
OCT. 1990

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 with solution to be used.
3. Note temperature and pressure limitations.
4. Personnel should always wear suitable protective clothing: face mask or goggles, apron and gloves.
5. 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. Verify compatibility of materials as stated in item 2 above.

CAUTION:

Treatment of waste chemicals requires an external vent.

NOTE: Do not put any volatile solutions in evaporator. Do not put any solutions with a flash point of less than 200°F in evaporator. Equipment is designed for non-explosion locations.

Replacement parts, repair parts, and drums may be ordered from your dealer.

Heat Belt, 700 Watt (adjustable), 1750 Watt (adjustable)

Drum (30, 55 gallon) with cover and locking collar

Evaporator head assembly

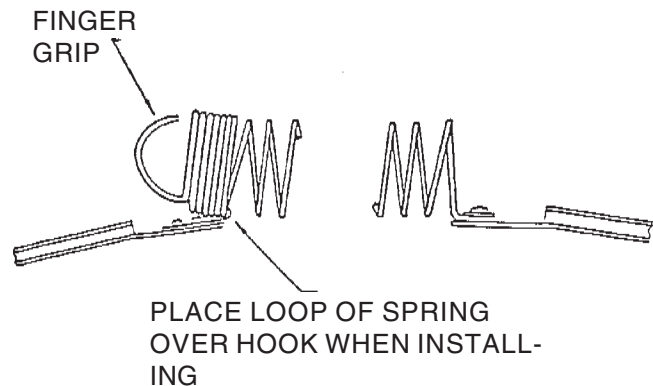
Drum liner, standard on steel units only

Thermometer strip, thermobar

NEW INSTALLATION

1. The complete assembly is shipped in three containers;
 - a. Drum with cover and clamp. Vent kit and thermometer packed inside.
 - b. Heater belt.
 - c. Evaporator Head assembly.
2. Unpack - examine for damage - check parts against packing list.
3. Remove parts from drum.
NOTE: Save drum cover and clamp for shipping full drum.
4. Place evaporator head on top of drum.
5. Instructions for attaching heat belt are enclosed in belt package.

6. External Vent - Attach vent hose to flange on evaporator head. Feed hose to external wall making sure that there are no low points where condensation may collect.
7. Plug evaporator head into standard 110 VAC rounded receptacle (fuse or circuit breaker protected at 10 amp maximum).
 - a. Wrap and clamp around drum prior to switching on.
 - b. Pull on spring, at the same time hold hook end of heater against the drum.
 - c. Place a loop of the spring over the hook as shown below.
 - d. Heater must not be clamped in dented areas of the drum.
 - e. Heater must be in full contact with the drum and well below the level of liquid while in operation.
 - f. Do not bend heater sharply as this may cause internal damage to the heating element.
 - g. Open bung to allow for expansion when heating.
 - h. Do not use outside insulation.



8. Plug heater belt into receptacle on evaporator head. Do not plug heater into any other receptacle

START-UP/OPERATION

1. Fill sump with waste chemicals. On initial start-up it is more energy efficient to wait until drum is approximately 1/2 full before starting unit.
2. Turn on unit. The chemical evaporator operates continuously 24 hours per day. It should not be turned off at night or on weekends unless drum sump is at or below the 1/3 full level.
3. To add waste chemicals to the drum - turn off power switch, tilt cover, pour waste chemical into sump - do not overfill. Close and wipe any spills and turn on power switch.
4. After processing several hundred gallons of waste chemicals the drum will accumulate solids up to the point of the maximum fill line (2/3 full). **DO NOT OVERFILL.**

CAUTION:

DO NOT POUR FLAMMABLES INTO SUMP.

Heat belt is hot - do not touch or allow contact with flammables. Do not place unit next to combustible material.

THEORY OF OPERATION:

Upon initial filling, the chemical evaporator will not reach rated capacity for at least 24 hours. The heat belt requires approximately that time to raise the average temperature of the waste chemistry in sump. For this reason do not turn off at night or over weekends unless sump level is below the heat belt.

CHEMICAL EVAPORATOR EXTERNAL VENT KIT TO INSTALL THE VENT HOOD ASSEMBLY

1. Vent outdoors, through wall or window opening. Do not exhaust into chimney, gas vent, or attic space.
2. Locate opening as close as possible to the EVAPORATOR. In order to realize maximum efficiency, it is recommended that no more than 15 feet of flexible hose be used.
3. Cut a 4¼ inch hole through the wall or through a metal window plate.
4. Snap the pipe seam together. Insert the pipe over the collar of the vent hood. Push the pipe so that the catches engage over the raised ring.
5. Insert the vent pipe through the hole from the outside. Be sure the louvers are pointed down and the pipe is level. Press tightly against the wall.
6. Slide the flange plate over the pipe to seal the hole from the inside. Use the silicone sealant provided to attach to wall.

TO ATTACH FLEXIBLE HOSE

1. Gently slide the connector end of hose over the outlet flange from EVAPORATOR. This is a friction fit so hose may be easily removed.