

**HOW TO START DEHYDRATION UNITS IN COLD WEATHER:**

Kimray pumps are designed for maximum efficiency of the power available together with a minimum loss of gas. For this reason the maximum discharge pressure Kimray pumps will develop against a blocked discharge line is 1.25 times the absorber pressure. This feature also prevents the possibility of pressure damage to piping as is the case of overpowered pumps.

In very cold weather difficulties in starting a cold dehydration unit may be encountered because of the high viscosity of glycol at low temperatures. This problem can be eliminated by using a bypass between the pump dry glycol discharge and the reboiler.

**METHOD OF OPERATION:**

1. Close all valves.
2. Fire reboiler and heat to desired temperature.
3. Open Valves A, E and two control valves on pump.

4. Pressure absorber, 100 to 150 lbs.
5. Just crack Valve D to start pump. Continue to open Valve D for pumping rate of 50 to 75% of maximum capacity. Control the pump at this rate with Valve D until glycol in accumulator is at operating temperature.
6. Close Valves D, A and two control valves on pumps.
7. Pressure absorber to full operating temperature.
8. Open Valves D and C. (wide open)
9. Slowly open the two control valves on pump for the proper rate for dehydration.

**SERVICE NOTE:**

If a glycol dehydration unit has been shut in for a few weeks or for the summer months, the pump check valve caps and darts should be removed. The check valve cavities should be cleaned, if necessary, and the darts checked for free movement in the cap guide. Glycol has a tendency to dry and crust in check valve cavities when the pumps are inoperative for a period of time. As a result, some of the check valves may stick if not cleaned.

