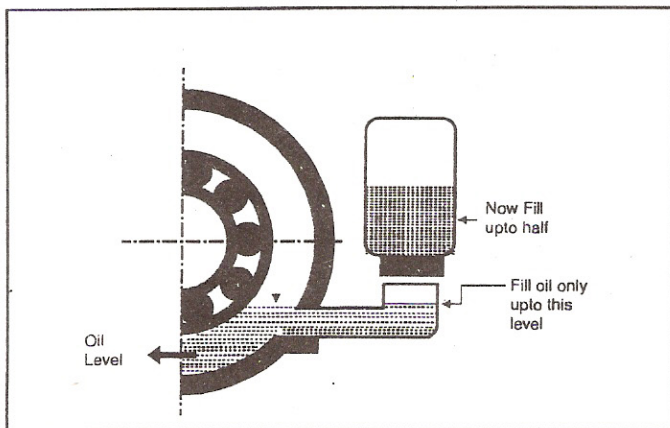


Since mechanical seals are made in a wide variety of designs, the instruction for specific seal installation are furnished which must be carefully studied and followed exactly.

All series SCP pump are oil lubricated. A constant level oiler with a clear Polycarbonate oil reservoir indicates the oil reserve. The oiler accurately maintains a fixed oil level at the 1/3 diameter the lower ball of the bearings. For filling the oilier, the bottle should be filled through the stem of the bottle. Never pour oil directly into the bearing frame. Too much oil is injurious for the bearings. Use SAE 30 or equivalent grade of oil.



**FIG. 7 CONSTANT LEVEL OLIER OPERATION**

**NOTE :** At the time of shipment all the oil from bearing housing is drain out so please fill oil before starting the pumps.

Before starting the pump, check that the suction pipe is leak tight and free of air. Air-lock in the line has a negative influence on the performance of the pump.

### 8.2 Starting

The following points should be checked before starting a pump :

1. Check the motor rotation before bolting up the coupling.
2. Couple the pump to the motor and make sure that both run freely.

3. Open the suction valve and close the discharge valve.
4. Prime the pump.
5. Start the pump.
6. Open the discharge valve until the required flow rate and head are obtained.
7. Check that the necessary external sealing and flushing connections correspond to the existing shaft sealing arrangement.

**Note :** Centrifugal pumps can be run for a short period without injury against a closed discharge. Long running of pump with close discharge valve can lead to heating up of the pump and subsequent damage.

**Valve installed in the suction line should not be used to throttle the flow.**

### 8.3 Operation

During operation, check the liquid level in the sump and the total head.

The bearing temperature can rise up to 39°C above the normal room temperature, however, it should not be higher than 80°C.

### 8.4 Stopping the pump

In the absence of a check valve, close the discharge valve and then switch off motor to reduce thrust on pump sudden.

### 8.5 Restarting

Before restarting, check that the shaft is stationary and not rotating in the opposite direction. The pump may run in the reverse direction due to the return flow. Switching on during reverse rotation can damage the shaft.

During long shutdowns, the liquid might change its concentration, crystallise or solidify. Therefore, the pump is to be drained and flushed with a suitable liquid.