

KESTNER CHEMICAL PUMPS LIMITED

REMOVING THE COMPLETE SEAL

- (A) Remove the seal unit from the equipment. Any adapter ring/abutment collar can be left on the shaft, located in its correct position. The seat and its sealing component(s) can also be removed. The seat is to be cleaned and de-greased before being coated in a film of oil and sealed in Polythene wrapping. All PTFE and Elastomer parts can be disassembled, dried and stored in black plastic bags before being kept in a cool, dark area. The seal unit is to be totally dried and stored in polythene wrapping or a bag containing a moisture absorbing agent, (eg a bag of silica gel). The rotating shaft and seat recess/abutment on the equipment should be thoroughly cleaned, de-greased and dried before being protected from corrosion for the duration of its time in storage.

- (B) **Leaving the seals in the equipment:-**

Pumps equipped with double seals:-

The seal chamber is to be filled with ethylene glycol with an inhibitor to prevent corrosion. Suction and discharge flanges are to be covered to exclude the ingress of dirt. Covers should be marked:- **DO NOT REMOVE UNTIL EQUIPMENT IS INSTALLED.** The open area between the glandplate and shaft or shaft sleeve, it to be protected from airborne dirt, (eg with masking tape or suitable glued in rubber gasket ring, that has a close clearance with the shaft / sleeve O.D). If at all possible, the shaft should be rotated slowly by hand in the direction of the normal equipment approx once every week.

Pumps equipped with single seals:-

The seal chamber should be completely dry. The seal faces should ideally be assembled dry also. If hydrostatic or acceptance testing is to be done by the equipment manufacturer, then the seal area must be flushed clean and totally dried afterwards. Pumps on cryogenic duties should be drained from the lowest point and then blown through with dry, hot air or Nitrogen for at least 30 minutes. Suction and discharge flanges are to be covered to exclude the ingress of dirt. Covers should be marked:- **DO NOT REMOVE UNTIL EQUIPMENT IS INSTALLED.** The open area between the glandplate and shaft sleeve is to be masked to exclude dirt. All open ports in the gland, adapter plate and stuffing box are to be plugged and sealed. Clamp bolts can be loosened off approximately 3 turns of the thread to relax the spring loading. The corresponding gap left between the stuffing box face and the glandplate should be masked to exclude dirt. If the shaft has to be rotated by hand occasionally to comply with the bearing manufacturers recommendations, then the sealing faces should be coated with a light film of clean lubricating oil.

IF THE PUMP IS TO BE STORED IN SITU, THEN IT IS RECOMMENDED TO DISCONNECT ALL ELECTRICAL CONNECTIONS TO THE PUMP MOTOR OR AT LEAST EARTH THE PUMP CASING.