

# KESTNER CHEMICAL PUMPS LIMITED

## INSTALLATION AND INITIAL START-UP INSTRUCTIONS HORIZONTAL CENTRIFUGAL PUMPS

### PLEASE READ CAREFULLY BEFORE START UP

#### CHECK AS FOLLOWS:-

- A) **ELECTRICAL SUPPLY:** The supply voltage against the information on the electric motor nameplate. The phasing of the supply is in accordance with the information plate on the motor.
- Check the direction of rotation of the motor before coupling the pump to the motor. (MH and KSI PUMPS). This must agree with the direction arrow indicated on the bearing housing. In order to prevent serious damage to the pump which would occur due to incorrect rotation, the pump is supplied with the coupling bolts reversed or the coupling tyre disconnected. Only after checking the rotation, may these bolts or the tyre be fitted correctly in accordance with the instructions provided and correctly tightened.
- B) **OIL LEVEL (MH and KSI PUMPS):** The constant level oiler should be filled with the correct grade of lubricating oil as specified in the relevant table in the maintenance instructions. The initial filling of the bearing housing may require more than one filling of the constant level oiler.
- C) **SEAL FLUSHING:** Certain types of mechanical seal require a water, product or other liquid flushing supply. This connection must be made and the flush checked to ensure the specified flowrate and pressure are available before start-up. Consider using 'Lockshield' type valves to ensure that the sealant flush supply cannot be interrupted during pump operation or damage to the seals will result.
- D) **MECHANICAL SEAL COMPRESSION:** This and the clamping of the seal to the impeller shaft must be checked before start-up. Where cartridge type mechanical seals have been used the settings are pre-set, and it is only necessary to ensure that the clamping grub screws are fully tightened. (See also separate sheet for mechanical seal notes).
- E) **ALIGNMENT:** The alignment of the electric motor and pump should be checked, also make sure that there are no excessive pipe loadings which could pull the pump out of alignment. For the same reasons, check that the bedplate feet are properly packed on the foundations before tightening the holding down bolts. It is beneficial to use flexible compensators capable of accepting axial movement and compatible with the pumped fluid. These should be mounted as close as possible and in-line with the pump suction and discharge branches.
- F) **START-UP:** The pump must be primed with liquor before starting, it is detrimental to the pump to run at 'shut valve' with no flow through the pump for a period exceeding two minutes.
- G) **LONG TERM STORAGE:** The pump unit should be rotated by hand at least weekly.