## INSTRUCTIONS FOR INSTALLATION OPERATION AND MAINTENANCE



## 3. START PUMP WITH CARE

Like all machinery, centrifugal pumps are dangerous if used improper.

It is not possible to list all the conceivable misuses. The following list is not meant to be complete and is provided only as a guide and as a example of types of misuses which can damage a pump and cause injury. The list also gives you the idea of the kinds of misuses which will void all warrantees.

- Do not run a pump with discharge valve closed.
- Do not connect the pump to the drive system without first checking to see that the drive system is running in correct direction of rotation.
- Do not start a pump which is 'windmilling' in the reverse direction due to fluid flowing back down the discharge pipe and into the suction pipe.
- Do not continue to run a pump which give an indication of overheating.
- Do not continue to operate a pump when there are indication that something is rubbing, binding or knocking.
- Do not operate a pump that is vibrating, surging or making abnormal notise.
- Do not work on a pump unless the drive systems is locked out and pump is disconnected from the drive system.
- Do not run a pump in the reverse direction.
- Do not rely in the factory's alignment of pump and drive system.
- Do not hit a pump with any object.
- Do not examine a pump without using proper eye & face protection.