

# TIPS FOR THE SUCCESSFUL OPERATION OF SUMP PUMPS

## PUMP SIZE

Should be considered since it determines the frequency of pump operation. Oversize your sump when possible to keep the pump operating for longer periods, rather than constantly stopping and starting, to avoid torque vibration and possible misalignment.

## LENGTH x SPEED

Pumps should be specified as short as possible and driven as slowly as possible, since the longer the pump, or the faster the RPM, the greater the radial load on the bearing surfaces.

## ABRASIVE CONDITIONS

Cantilever shaft, bearing-free pumps are recommended for pumping solutions containing abrasives. However, on bearing containing pumps, abrasive conditions may be met if a separate, clean, compatible liquid can be used for flushing to lubricate and cool the bearings. This is especially required when more than one bearing is used.

## FLOAT SETTINGS

Make certain adequate liquid is above the pump's impeller to begin pumping, but low enough to prevent damage to the motor. If it is necessary to pump to a greater depth than the length of the pump, continue to pump to a level below the intake with a suction extension. However, on bearing containing pumps using a product flush to cool and lubricate the bearing(s), the pump shut-off must be set above the impeller level to prevent the pump from continuing to run after the reservoir level has dropped too low to provide the necessary product flush for the bearing(s).

## ALIGNMENT

Although factory aligned and inspected, positioning of the pump and motor should be checked initially and after periodic operating intervals to assure that misalignment has not occurred, which would place undue wear on the bearing or seal ring surfaces.

## AUXILIARY PUMP

For standby operation, design for the possibility of pump operating interruptions. Employ two or more pumps for continuous or partial operation. For example, for a 100 GPM requirement, employ two pumps at 100 GPM each or three at 50 GPM each, keeping one ready for service.

**Select accessories individually to complete your chemical collection, treatment or transfer system.**

