

Measure with callipers, the total width between the two coupling halves at four points on the circumference [top, bottom and the sides, the shaft should not be turned.] The readings should be same for proper angular alignment.

A check for parallel alignment is made by placing a straight edge across both coupling halves at the top, bottom and at both sides. The unit will be in parallel alignment when the straight edge rests evenly on the coupling halves at all positions [the shaft should not be turned during this check.]

When the alignment is correct, the foundation bolts should be tightened evenly but not too firmly. The alignment is to be checked again. The permissible error should not exceed 0.05 mm.

5. PIPING LAYOUT

It is desirable to provide support to both, the suction and discharge pipes near the pumps to avoid strain to the pump casing.

In installations involving large temperature variation, expansion at the connected piping may subject the pump nozzles to significant forces and movements.

It is usually advisable to increase the size of both, suction and discharge pipes at the pump nozzles in order to decrease the friction head loss. For the same reason, piping should be arranged with as few bends as possible and even then, should be made with a long radius wherever possible.

All pipes and fittings should be cleaned thoroughly before connecting. Burrs and welding beads should be removed. Flange gaskets should not protrude into the pipe.

6. SUCTION AND INLET PIPING

The suction pipe must be kept free of air leaks. This is particularly important when the suction line is a long one or the static suction lift is high.

Between pump suction nozzle and suction pipe of unequal diameters, eccentric reducers should be used.

To avoid air pockets, the suction pipe should be laid out continually rising towards the pump and in case of gravity feed, inlet pipe should be laid out continually falling. (See Fig 5)

It is recommended that gate valve in suction line should be installed, so that the losses are minimum.

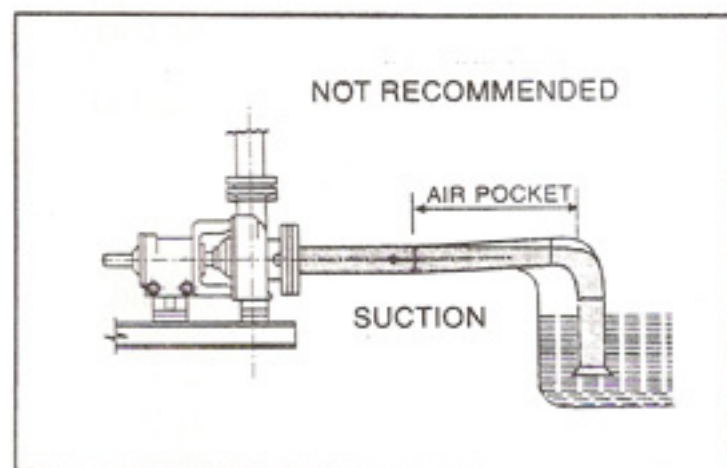
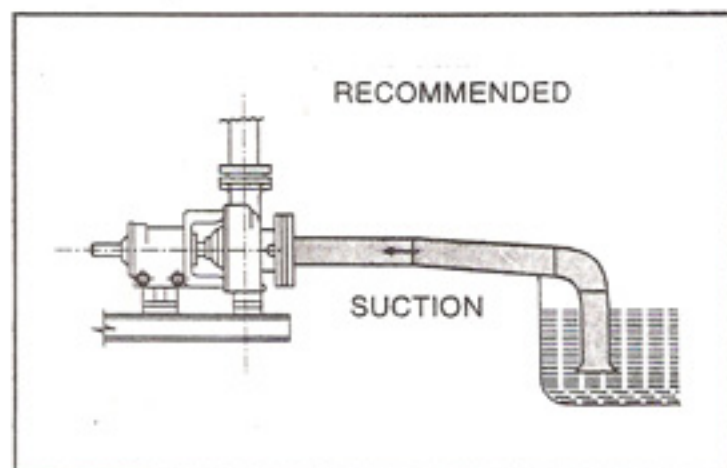


FIG. 5 SUCTION PIPE DESIGN