GENERAL COMMENTS/PROPOSALS TO INSTALLATION OF EJECTORS.

When installing ejectors it is of utmost importance that the pipe dimensions connected to the ejectors have minimum sizes corresponding to the connection flange sizes on the ejectors.

When a common line is used for driving liquid supply or at the discharge side for ejectors of same size, the pipe diameter should be at least 1,41 x individual pipe diameter for each ejector.

The ejectors can be installed horizontally, vertically or inclined and in order to achieve the maximum performance, the ejectors should be installed as low as practical possible in the hull to keep the suction lift at a minimum. In addition it is of great importance for the performance that a straight pipe length is fitted prior to the suction inlet of the ejector (see fig.1).

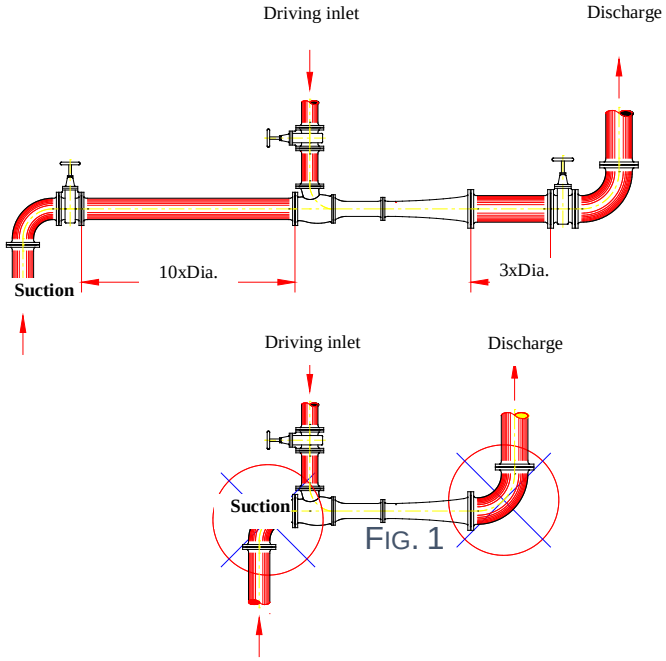

FIG. 1

This straight length of pipe will prevent turbulence in the suction inlet to the ejector thus securing the maximum suction performance.

A bend fitted prior to the suction intake on the ejector will reduce the suction capacity equal to 2 mwc increased suction lift.

At the discharge outlet of the ejectors we recommend a straight pipe length at minimum 3 x pipe dia. before the first bend/valve is fitted.

This length is of no importance to the function of the ejector but it will prevent pitting inside the bend if the bend is fitted direct to the discharge flange on the ejector.

In case the above recommendation cannot be met due to practical reasons, the requested suction capacity can be obtained with shorter straight length of pipe – subject to investigations of; fluid velocity, pressure drop, turbulence, bend radius and driving water pressure in the actual installation onboard.

Bends, T pieces and valves on the driving liquid line are of less importance as long as one calculates the pressure drop they will create in the system thus making sure that the required driving pressure will be obtained at the ejector inlet.

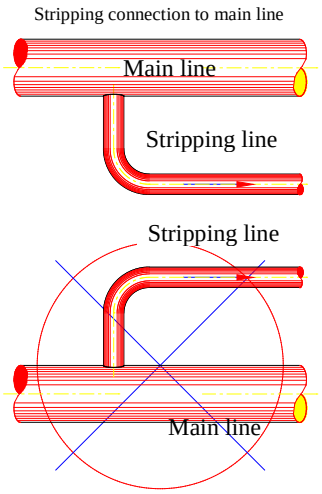

Fig. 2

When a stripping line is connected to a main line the connection must be fitted to the lower part of the main line (fig. 2).

When two ejectors are discharging into a common line it is recommended to have a sloped connection as showed in fig. 3.

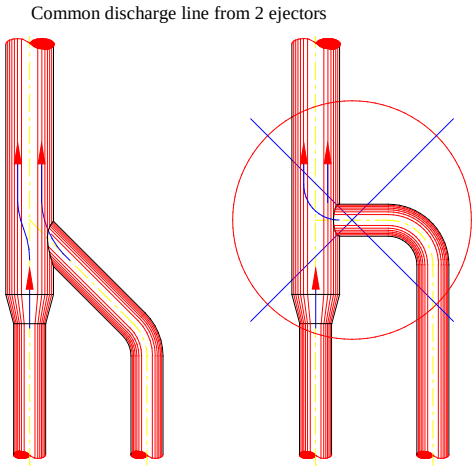

Fig. 3