Restriction Orifice

Restriction orifice or RO, in short, is a flow control instrument device whose primary function to provide a restriction to the flow so that a controlled or restricted flow is achieved. Due to this restriction by the orifice plate, a pressure head drop from the upstream of the orifice to the downstream is observed. For a specific temperature and pressure condition, the orifice area at the outlet determines the volumetric flow rate of the fluid inside the pipe. Due to the high-pressure drop at the restriction orifices, it can create acoustic-induced vibration. Hence, studies must be performed by specialists.

Single Stage Restriction Orifice: A plate with the orifice bore of required size for intended pressure loss.

Multi-hole Single Stage Restriction Orifice: To reduce the noise generated, single stage multi-hole restriction orifice plates are used. As the high velocity flow at the RO inlet is distributed through several holes, the noise is reduced. To avoid the cavitation problem, multi-hole restriction orifices are used.

Multistage Restriction Orifice Assembly: Multistage restriction orifices are widely used for very high pressure reduction when a single stage RO is not capable. It consists of a number of single stage RO devices. The design can be single-hole or multi-hole. The restriction orifices in a multistage RO are usually arranged in an eccentric manner. The minimum distance between each stage is usually the internal diameter of pipe

Multistage Restriction Orifice

Multihole Single Stage Restriction Orifice

SH-FCP
(ENI – SONATRACH – FIRST CALGARY)
PIPELINE BRN-MLE ALGERIA

We supplied to join venture **ENI, SONATRACH and FIRST CALGARY** **Restriction Orifice Multistage 10 inches 8 stage multiholes orifice** for the **Sonatrach** for PIPELINE BRN-MLE in Algeria in 2019. For this project **Mesit** also supplied Flange assembly and Thermoelements.