

- **ORIFICE AND MOUTHPIECE**

Orifice:

It is a small opening of any Cross section (Such as Circular, Triangular, rectangular etc) on the side or at bottom of a tank, through which a fluid is flowing.

Mouthpiece:

A **mouthpiece** is short length of a pipe which is two to three times its diameter in length fitted in a tank or vessel containing the fluid.

Classification of Orifices:-

The Orifices are classified on the basis of their size, shape, nature of discharge and shape of upstream edge.

The following are the important classifications:-

The Orifice are classified as **Small Orifice or Large orifice depending upon the size of Orifice and head of liquid from the centre of the Orifice**. If the head of liquid from the centre of the Orifice is more than five times the depth of Orifice, the Orifice is called Small Orifice. And if the head of liquids is less than five times the depth of Orifice, it is known as Large Orifice.

The Orifices are classified as **i) Circular Orifice, ii) Triangular Orifice, iii) Rectangular Orifice and iv) Square Orifice depending upon their cross-sectional areas.**

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- The Orifices are classified as **i) Sharp-edged Orifice and ii) Bell-mouthed orifice** depending upon the shape of upstream edge of the Orifices.
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- The Orifices are classified as **i) Free discharging Orifices and ii) Drowned or Submerged Orifices** depending upon the nature of discharge. The Submerged Orifices are further classified as **a) Fully Submerged Orifices and b) Partially Submerged Orifices.**