

Excelok - Venturi is extremely versatile for many applications. It can cope with a wide range of flowing medium such as Gas, Water, Crude, Oil, Slurry and Steam applications.

Excelok manufactures a complete line of Venturi Tubes and other flow elements like Orifice Plates, Flow Nozzles, Averaging Pitot tubes etc.



The classical venturi consists of a convergent cone section, cylindrical bore and divergent cone section. While the throat section produces the differential pressure the inlet and outlet cones help in high pressure recovery. This results in lower permanent pressure loss and higher flow capacity than any other differential type flow element of the same size. The outlet cone can be either long (7°) or short (15°) depending upon application.

Permanent pressure loss is 5 to 15% depending upon the selected throat diameter and the typical accuracy is 1% of flow range.

The venturi has no projections or edges in its construction, due to which it has a low susceptibility to erosion. For extremely erosive applications internal surface hardening can be provided.

Features of Venturi Tube are:

- High Pressure Recovery
- Low Permanent Pressure loss
- Short upstream straight piping
- Measurement of slurries & dirty fluid flow
- Vertical or Horizontal Installation.

Specifications:

Sizing: In accordance with ISO 5167, ASME, AGA3 standards using “Flow Consultant” software by R.W.Miller & Associates.

Accuracy: Typically within 1% at designed flow.

Pressure loss: 5 to 15% of diff pressure, dependent on the β ratio (Throat/pipe diameter ratio)

- **Line Sizes:** Standard 80mm to 1800mm NB. Venturis for larger line Sizes available on request
- **Materials:**
 1. Cost Iron-fully machined on the bore and hard chrome plated (sizes up to 500mm NB)
 2. Fabricated or Forged 316, Single and Duplex SS (Sizes from 100 to 300mm NB)
 3. Fabricated from CS (HIC complaint), MS with SS or Phosphor-Bronze (sizes up to 1800mm NB)
 4. FRP for Chlorine and other corrosive applications (sizes from 80 NB to 700 mm NB)

- **Flanges:** ANSI Standard Sizes to suite pressure rating and mating flanges.
- **Tappings:**
 - Screwed: ½", NPT/BSPT
 - Socket weld: ½"
 - Weld Nipple: ½" NB
 - Flanged: ½" NB
- **Testing/Documentation:** A full range of applicable NDT, documentation and Certification are provided.

Data Required from Customer for Sizing:

- Line Size & Pipe Schedule
- Pipe ID
- Material of Construction
- Fluid
- Flow: Maximum & Normal
- Units of Flow
- Specific Gravity
- Temperature : Operating & Base
- Operating Pressure

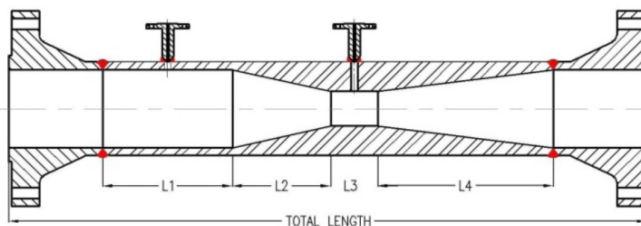
For Liquids

- Viscosity @ Operating Pressure

For Gases

- Molecular Weight
- Base Pressure
- Gas Composition / Ratio of Specific heat / Compressibility factor

MACHINED VENTURI TUBE



FABRICATED VENTURI TUBE

