



The demonstration equipment of the CAVITATION phenomenon is a simple equipment that is coupled to a hydraulic bench or any other source of hydraulic power supply.

It consists of a venturi tube in which throat occurs the phenomenon of cavitation due to the depression created in it by the acceleration of the flow (Venturi effect).

For a correct observation of the phenomenon, the methacrylate venturi has been constructed.

The equipment also has two pressure gauges with which we can measure the overpressures and depressions produced. A regulating valve is used to regulate the flow rate, which allows fine adjustment of the flow.

REMARKABLE ASPECTS

- The equipment can be connected to the hydraulic bank and to the hydraulic group with flow meter.
- Optimal visualization of the phenomenon under study, for the manufacture of the venturi tube in transparent material and black background.

LEARNING OBJECTIVES

- Demonstration of Bernoulli's Theorem along a Venturi tube.
- Calculation of the pressure loss of a Venturi tube.
- Calibration and use of the Venturi tube as a flow meter.
- Cavitation study.

TECHNICAL DATA

Internal diameters

- Principal tube \varnothing interior = 21,2 mm; \varnothing exterior = 25 mm.

Manometers:

- Bourdon type pressure gauge, reading range - 10,33 mca / 25 m c.a.

Venturi tube:

- Throat dimensions 6x6 mm. Material: methacrylate.

Others:

- Includes regulating valve.
- All connections are fast and double sealed.

REQUIREMENTS

- Hydraulic bench FL 01.4; FL 01.5; FL 01.6 o FL 01.7.
Hydraulic group with flow meter.