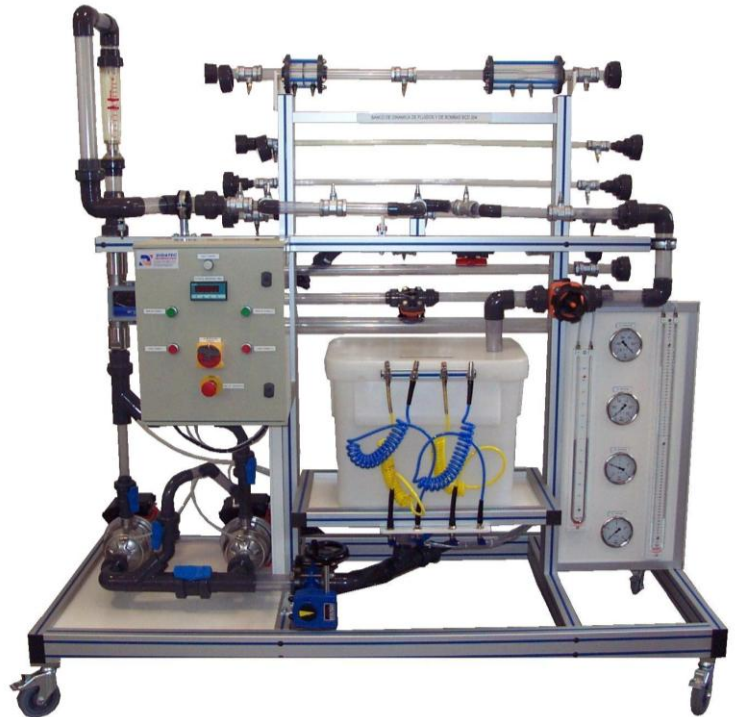


Fluid mechanics and pumps unit

DESCRIPTION

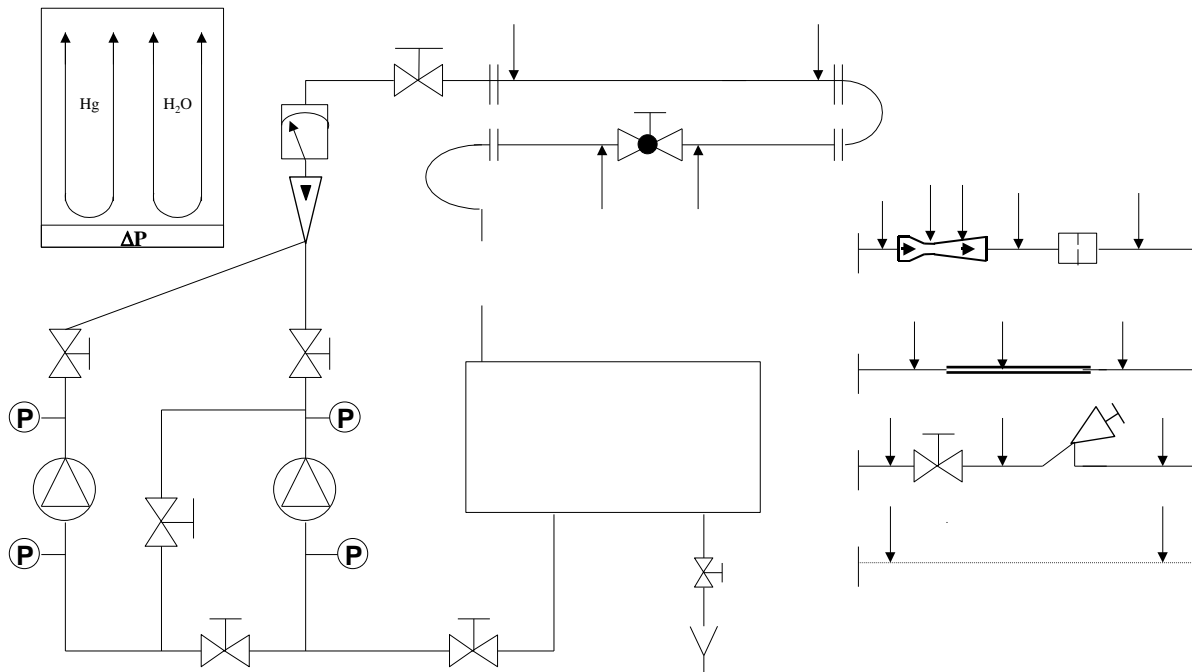
- v This unit is made up of the main components found in a typical hydraulic installation.
- v A differential pressure sensor with a display can easily be connected at various points in the circuit to take measurements.
- v Transparent tubes are used to show the flow of hydraulic fluid.
- v By adjusting the pressure or flow rate, laminar or turbulent flow can be displayed.
- v Closed circuit operation.
- v Manufactured and designed to industrial standards.



SUGGESTED APPLICATIONS

STUDY OF HEAD LOSSES

- Various diameters of pipes
- Short radius bend
- Long radius bend
- Three different types of valves
- Sudden diameter increase
- Sudden diameter decrease
- Smooth or rough pipe
- Laminar or turbulent discharge stream
- Plexiglas venturi
- Plexiglas diaphragm



TECHNICAL CHARACTERISTICS

Water tank

Volume 75 L – polyethylene

2 centrifugal pumps

0.55KW 4m³/h 45m CE – stainless steel

MEASUREMENTS

Magnetic Rotameters

U-manometers: 1 with water column, 1 with mercury column

Supplying valve

0-4bars pressure sensor

FRAME

Aluminium with 4 wheels and brakes

ELECTRIC BOX

With all the needed components for a good running and the safety of the users

COMPONENTS TO BE STUDIED

3 horizontal pipes: DN15 - DN25 – DN40

length : 1000 mm – pressure measurement for the changing of the pipe's length

1 horizontal rough pipe: DN25

Length: 1000 mm

Various bend: short horizontal radius bend - 45° bend – 90° bend - 135° horizontal bend

1 pipe with horizontal membrane valve

1 pipe with global step valve (spherical «dome»)and 1 pipe with inclined horizontal seat valve

1 pipe with horizontal diaphragm and venturi

1 pipe with reduction from DN25 to DN15 (horizontal) and increase from DN15 to DN25 (horizontal)