

STUDY BENCH OF TWO CENTRIFUGAL PUMPS

REFERENCE : MP73CR

Non contractual photo

**SERVICE : POWER SUPPLY: 220V -50 HZ
SINGLE PHASE - 2 KW WATER SUPPLY
NEAR THE BENCH FOR FILLING AND
EVACUATION AT GROUND LEVEL FOR
EMPTYING.**

DIMENSIONS : 1485 X 600 X 1600 MM

WEIGHT : 95KG

The MP73CR bench allows the study of an industrial centrifugal pump alone or two pumps mounted either in series or in parallel. Designed to operate in a closed circuit, it is a complete experimental tool for studying the performance and characteristics of centrifugal pumps. With its feed tray, it is hydraulically autonomous and requires only a power supply. It can be easily used in a workshop or classroom.

The bench has two similar centrifugal pumps. The speed of both pumps is regulated by an electronic dimmer with display of speed and power consumption. Complete instrumentation with pressure gauges and flowmeters allows you to determine the hydraulic power and plot the characteristic curves of the pumps.

Educational Objectives :

- Study of two centrifugal pumps
- Determination of performance and characteristics of the pumps :
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 - Measurement of total head as a function of flow
 - Measurement of the electrical power absorbed as a function of the flow rate and the speed of the pump
 - Determination of hydraulic efficiency plot of characteristic curves
 - Study of the series coupling of the two pumps
 - Study of the parallel assembly of the two pumps

Technical specifications :

The bench is built on a stainless steel frame and consists of :

- A feed tray with emptying, two rackings
- Two industrial single-phase centrifugal pumps with asynchronous motor with three-phase cage and external ventilation. The parallel connection allows to obtain flow rates close to 6 m³ / h and the assembly in series of the pressures higher than 2 bars.
- Two dimmers with speed display, display of frequency, power consumption, current and voltage.
- A float flowmeter
- Four Bourdon pressure gauges, two at suction and two at pumps
- An electrical cabinet for the control of the pumps, and porthole for access to the displays of the drives
- PVC piping and valves
- Technical and pedagogical manual