

**Product Name :**  
Computerized Axial Flow Pump Test Rig

**Product Code :**  
NLAB-MECHANICALAB220010



**Description :**

Computerized Axial Flow Pump Test Rig

**Technical Specification :**

In an axial-flow pump the pumping medium flows through the impeller (here a propeller) in the axial direction. In axial-flow pumps, the pressure build-up is not achieved by the centrifugal force but like the aerodynamic principle, by the propeller blade. Therefore these pumps are also known as propeller pumps. They are not self-priming and the propeller must always be covered by the pumping medium. Axial propeller pumps are used when high flow rates and a small head are needed. The typical areas of application for propeller pumps are drainage systems, wastewater treatment plants and cooling water supply systems.

The trainer includes an axial propeller pump, a tank and pipelines with generously designed pipe cross-sections. The pump is powered in conjunction with the Universal Drive and Brake Unit. The closed water circuit means that the trainer can be used independently of the water system.

Axial Flow Pump Test Rig

The trainer is equipped with measuring elements for the pressures at the inlet and outlet of the pump. A temperature sensor measures the water temperature. The flow rate is measured with an electromagnetic flow meter. The measured values are read from digital displays and can be transmitted simultaneously via USB

directly to a PC, where they can be analysed using the software included

#### FEATURES:

Closed water circuit

Digital display of flow rate, pressure and temperature

Determination of the pressure/volume characteristics

Determination of the power requirement of the pump

Determination of the hydraulic power

Determination of the efficiency

Determination of the head

Determination of the system characteristics

#### SPECIFICATIONS:

Pump

Output: 1000W at 1000min<sup>-1</sup>

Max. Flow rate: 700L/min

Max. Head: 1,75m

Tank: 160L

Measuring ranges

flow rate: 0...1200L/min

Temperature: 0...100°C

Pressure (inlet):  $\pm 1$ bar

Pressure (outlet): 0...0,6bar

230V, 50Hz, 1 phase

## Naugralabequipments

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