TECHNICAL SPECIFICATION

Francis turbines are usually good at mid-stage water falls and large flows. Some of the potential energy of the water in the inlet is converted to kinetic energy. The water velocity through the diffuser is the highest value at the inlet of the impeller. The reaction occurs when the water comes out rapidly and the impeller is rotated. In these turbines, the stator (snail) sends the mass of water around the wheel. The water orbit is parallel to the center of the impeller at the inlet, and parallel to the axis of rotation at the outlet.

GENERAL EXPLANATION

Francis turbines are widely used for medium water drops. In these turbines, the angle of the water entering the wheel can be changed with the help of guide blades. By means of this training set, basic structure and properties of such turbines can be learn.

EXPERIMENTS

1. Finding turbine efficiency
2. Variation of turbine outlet power in different flows
3. Variation of turbine efficiency at different guide blade angles
4. Electric energy exchange produced in different flows

DIMENSIONS

A x B x H : 1100 x 700 x 1500 mm
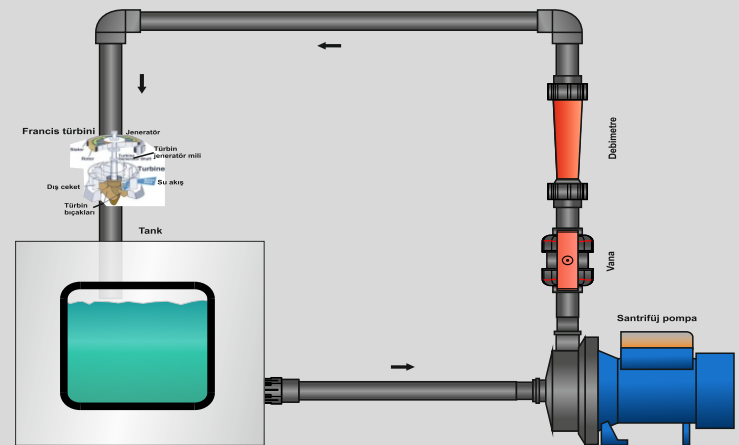
OPTIONAL FEATURES

- Touch LCD Display
- USB Computer Connection
- Computer Control

PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog

TECHNICAL DETAILS

- Francis turbine
- Pressure manometer
- Digital cycle indicator
- Electrical data are measured digitally
- Water tank and centrifugal pump
- Rotameter type water flowmeter
- Stainless ball valve
- Turbine output power 50W
- Turbine wheel diameter 250 mm
- Torque measurement
- Alternator
- Wing angle adjustment
- Turbine housing transparent plexi glass

ARGEMSAN