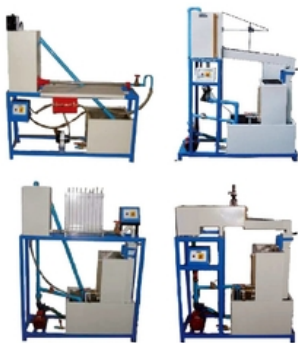


Kaplan Turbine Test Rig



Product Categories: [Engineering Equipment](#), [Hydraulic Lab](#)

Product Page: <https://www.labappara.com/product/kaplan-turbine-test-rig/>

Product Description

Kaplan Turbine Test Rig

Description

Kaplan Turbine is an axial flow reaction turbine named in honour of Dr. B. Kaplan, a Gennan Engineer. This turbine is suitable for low head. The power produced by a turbine is proportional to QH . As the head (H) decreases the discharge (Q) must increase to produce the same power. The present set up consist of a scroll casing housing a runner. Water enters the turbine through the stationery guide vanes and passes through the runner axially. The runner has a hub and airfoil vanes, which are mounted on it. The water is fed to the turbine by means of centrifugal pump. The runner is directly mounted on one end of a central SS shaft and other end is connected to a brake arrangements. A transparent hollow cylinder made of acrylic is fitted in between the drought tube and the casing for observation of flow on the airfoil vanes. This runner assembly is supported by thick cast iron pedestal. Load is applied to the turbine with the help of this brake arrangement so that the efficiency of the turbine can be calculated. The set-up is complete with guide mechanism. Pressure and vacuum gauges are fitted at the inlet and outlet of the turbine to measure the total supply head on the turbine.

Technical Details:

Output Power	:	1 kW
Dynamometer	:	Mechanical Dynamometer, complete with Torque sensor.
Discharge Measurement	:	Differential Pressure Transmitter with Pitot Tube
Pressure Measurement	:	Pressure Transmitter, Output 4-20 mA
Load Measurement	:	Load Cell with Transmitter (2 Nos.)
RPM Measurement	:	Proximity Sensor
Water Circulation	:	Centrifugal Pump, Standard make.
Control Panel Comprises of	:	L&T make, Starter, Mains Indicator, MCB for overload protection.

Tanks will be made of Stainless Steel.

An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus

The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint.

Features:

Hassle free functioning

High speed rotating of turbine

Higher capacity

Requires less maintenance

Extremely precised readings of the tests performed

Available at very cost efficient prices