Phone: +91-0171-2643080, 2601773
Email : sales@naugraexport.com

Product Name :	**Product Code :**
Pelton Wheel Turbine Test Rig for engineering schools	Fluid Machinery001

Description :

Pelton Wheel Turbine Test Rig, technical teaching equipment for engineering

We are among the listed manufacturers, exporters and suppliers of the best quality **Pelton Wheel Turbine Test Rig.** The offered range is manufactured using the best grade raw material and sophisticated technology under the supervision of skilled professionals following the set industry parameters. This product is tested on well defined parameters of quality using advanced testing machines. In addition to this, we offer this product to our precious clients at a market leading price.

Description:

- Pelton Wheel Turbine is only impulse water turbine now in common use named in honour of Sir L. A. Pelton (1829-1908) of California, USA. It is a tangential flow impulse turbine. The water strikes the buckets along the tangent of the runner.The energy available at the inlet of the turbine is only kinetic energy.The pressure at the inlet and outlet of the turbine is atmospheric.This turbine is used for high heads.

- The present set-up consists of a runner. The buckets are mounted on the runner. The water is fed to the

turbine, through SS nozzle with a SS spear, by means of Centrifugal Pump, tangentially to the runner. Flow of water into turbine is regulated by adjusting the spear position by the help of a given hand wheel. The runner is directly mounted on one end of a central SS shaft and other end is connected to a brake arrangement.

- The circular window of the turbine casing is provided with a transparent acrylic sheet for observation of flow on to the buckets.This runner assembly is supported by rigid MS structure. Load is applied to the turbine with the help of this brake dynamometer so that the efficiency of the turbine can be calculated. Pressure gauge is fitted at the inlet of the turbine to measure the total supply head to the turbine.

Experimentation:

- To study the operation of a Pelton Wheel Turbine.
- To determine the Output Power of Pelton Wheel Turbine.
- To determine the Turbine Efficiency

Utilities Required:

- Water Supply and Drain.
- Electricity 5 kW, 440V AC, Three Phase.
- Floor Area 1.5 x 0.75 m

Technical Details:

- Output Power: 1 kW.
- Discharge: 400 LPM (Approx.)
- Supply Head: 25 m
- Speed: 1000 RPM (Approx.)
- Nozzle: Material Stainless Steel.
- Spear:Material Stainless Steel.
- Dynamometer: Rope Brake type.
- Sump Tank: Capacity 200 Ltrs.
- Water Circulation: Centrifugal Pump, Standard make,Capacity 5 HP, 3 Phase, 2800 RPM
- Discharge Measurement: Pitot Tube with Manometer
- Control Panel Comprises of: L&T make Starter, Mains Indicator, MCB for overload protection.
- Instruction Manual: An ENGLISH instruction manual will be provided along with the Apparatus
- Tanks will be made of Stainless Steel.
- The whole set-up is well designed and arranged in a good quality painted structure

Technical Specification :

Pelton Wheel Turbine Test Rig

Naugra Export

Website: www.naugraexport.com, **Email:** sales@naugraexport.com

Address: 6148/6, Guru Nanak Marg, Ambala Cantt, Haryana, India, **Phone:** +91-0171-2643080, 2601773