



Email : sales@laboratoryinstrumentindia.com

Product Name :
Operating Principle of a Pelton Turbine

Product Code :
LBNY-0005-10300020



Description :

Water turbines are turbomachines utilising water power. The water jet is redirected by approximately 180° in the blades. The impulse of the water jet is transmitted to the Pelton wheel. The Pelton turbine is a type of impulse turbine; such turbines convert the pressure energy of water into kinetic energy entirely in the distributor. During the conversion, the water jet is accelerated in a nozzle and directed onto the blades of the Pelton wheel tangentially.

Learning Objectives And Experiments:

Graphical representation of characteristic curves for torque, power and efficiency
Design and function of a Pelton turbine
Determination of torque, power and efficiency.

Technical Specification :

Function of a Pelton turbine
Flow rate determination by base module
Loading the turbine by use of the band brake
Transparent front panel for observing the operating area
Instruments: spring balances for determining the torque, manometer shows pressure at turbine inlet
Adjustable nozzle needle for setting different nozzle cross-sections
Marking on brake drum for non-contact speed measurement
Water supply using base module or via laboratory supply.



Laboratory Instrument India