

Pelton turbine

DESCRIPTION

- The Pelton turbine unit is delivered complete with instrumentation, and includes a technical and instruction manual.
- Designed and manufactured to industrial standards.
- This unit is designed for different levels and fields of study.



SUGGESTED APPLICATIONS

Study of main characteristics of a Pelton turbine: injector, deflector, bucket wheel.

Torque curves, mechanical power, hydraulic power, and efficiency while varying the flow, pressure, injector diameter, and wheel angular velocity parameters.

Pelton wheel

- Pelton circle : 122 mm
- 18 buckets
- In polyurethane resin
- A horizontal axis

Injector

- A stainless steel mobile needle valve
- The jet diameter can be adjusted by multi-rev manoeuvres
- Display of the jet creation by a transparent element

Deflector

- Stainless steel construction
- Manual manoeuvring

Tank

- Transparent acrylic fabrication
- Working capacity : 20 litres

Brake

- Band type and dynamometric shaft
- Torque change by addition of mass

Pump

- Centrifugal type
- Electric engine power : 1.1 kW
- Electric engine velocity : 2900 r.p.m
- Flow : from 0 to 100 L/min.
- Pressure : from 5.4 to 2,4 bars

Instruments

- Variable section flow meter and 10 rev adjusting valve
- Manometer
- Magnetic induction detector and numerical indicator of rotation velocity

UTILITIES

Electricity : 230 V single phase - 6 A

DIMENSIONS

Length: 1300 mm - Width: 700 mm - Height: 1320 mm - Weight :120 kg