

# **KAPLAN TURBINE - BRAKE FRICTION**



The system simulates a small scale Kaplan turbine, especially designed for educational purposes. It is delivered with 3 impellers with different angles of input and output, which can be exchanged in a fast and simple way.

The trainer is designed for the study and the demonstration of the behavior and the characteristics of a Kaplan turbine.

### **DL DKH014**

#### TRAINING OBJECTIVES

- Characteristic curves of the turbine:
- Torque speed (M -n)\*.
- Brake power rotational speed (Pe-n)\*.
- Performance rotational speed (η- n)\*.
- o Torque U (M- U)
- Brake power U (Pe-U)
- Performance U (η-U)
- Curves of Iso-yield.
- \*For speed measure, a tachometer or stroboscope is required (not supplied)

### **TECHNICAL DATA**

### Gauge:

Bourdon with glycerin.

#### Brake Type:

Friction brake.

#### Turbine

- Type: Kaplan
- Number of fins: 4
- Fins angle: manually adjustable
- Fins vanes

# Dynamometers

2 x dynamometers: 5kg x 25g

#### **Necessary accessory:**

## DL DKL017 - High Flow Hydraulic Bench

This hydraulic bench is a simple, mobile, self-contained equipment that allows a supply of "hydraulic energy", i.e., an accurately controlled and measurable flow of water.

It includes two volumetric tanks, two pumps, a stopwatch, with a mobile framework on wheels.

