

## Kaplan Turbine Apparatus (EDC-FM-143)

### EXPERIMENTAL DATA:

- Design and purpose of a Kaplan turbine.
- Resolution of torque, power and efficiency.
- Graphical illustration of characteristic curves for torque, power and efficiency.



### DESCRIPTION:

Kaplan turbines are categorized by an axial flow through adjustable blades. The angle of the water inlet into the turbine and the cross-section of flow are altered by adjusting the director vanes. The adjustment of the blades permits the velocity at the rotor to be modified. The combination of both adjustment options optimizes efficiency.

### SPECIFICATIONS:

- Purpose of a Kaplan turbine.
- Rotor with adjustable blades for setting different velocities at the rotor.
- Loading the turbine by use of the band brake.
- Instruments: spring balances for defining the torque.
- Flow rate and water supply are fortitude by base module EDC-FM-100.

### DIMENSIONS AND WEIGHT:

- L x W x H (mm): 400 X 400X 650 approx.
- Weight: 22 kg approx.

### SCOPE OF DELIVERY:

- 1 x EDC-FM-143
- 1 x Instructional Manual

### TECHNICAL DATA:

- Turbine:
  - output: approx. 7W at 600 min<sup>-1</sup>.
- Rotor:
  - Blades, adjustable.

