## **TE-670 GAS TURBINE TRAINING SET**

# THERMODYNAMIC



## **GENERAL EXPLANATION**

The gas turbine has been developed to study dual-spindle and jet engine behavior. The main units of the training set are the gas generator and the free-running power turbine. The generator consists of radial compressor, combustion chamber and radial turbine. The compressor and the turbine are connected to the same shaft.

## **EXPERIMENTS**

- 1. Gas turbine operation experiment
- 2. Calculation of turbine inlet power
- 3. Finding turbine thermal efficiency experiment
- 4. Turbine input power and number of revolutions experiment
- 5. Turbine thermal efficiency and rotational speed relationship experiment
- 6. Turbine electrical output power and number of revolutions experiment

#### DIMENSIONS

A x B x H : 1400 x 800 x 1600 mm

### **OPTIONAL FEATURES**

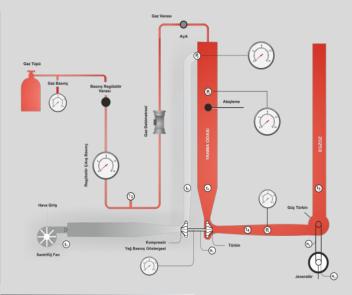
- Touch LCD Display
- USB Computer Connection
- Computer Control

#### PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog

#### **TECHNICAL SPECIFICATION**

The device works according to the principles of jet motor consists compressor, combustion chamber and radial turbine. The air taken from the compressor enters the combustion chamber in a compressed state and an air-fuel mixture is formed in the combustion chamber. The thrust force is obtained by passing the torch to the radial turbine of the flaming air fuel mixture.



#### **TECHNICAL DETAILS**

- Radial fan
- Propane tube and propane regulator
- Oil circulation pump
- Oil tank
- Temperature measurement from 5 different points
- Pressure measurement from 4 different points
- Plate heat exchanger
- Digital measurement of electrical data

