

MODEL: HMT04

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SINGLE CYLINDER FOUR STROKE DIESEL ENGINE TEST RIG

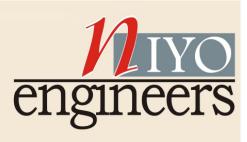


FEATURES

- Compact, comprehensive, sturdy design
- Easy and versatile operation
- Choice of dynamometers

DESCRIPTION

The system is designed for students-to conduct experiments and study the performance of diesel engines. The engine and dynamometer are mounted on a bedplate.



The test rig facilitates easy measurement of temperatures, fuel consumption, air consumption, brake-power and engine speed. Testing can be carried out at various loads.

INSTRUCTION MANUAL

Self -explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual

LIST OF EXPERIMENT

- 1. To determine Brake Power
- 2. To determine engine volumetric efficiency
- 3. To determine engine brake thermal efficiency
- 4. To determine engine specific fuel consumption
- 5. Complete energy balance using exhaust gas calorimeter.
- 6. Determining air/ fuel ratios

COMPONENTS

- 1. Diesel Engine
- 2. Control Panel
- Exhaust gas calorimeter
- 4. Dynamometer
- 5. Tachometer
- 6. Multi-point Temperature Indicator
- 7. Fuel Consumption Measuring Unit
- 8. Air Flow Measuring Unit
- 9. Calorimeter Cooling water flow measurement

OPTIONAL ADDITIONAL

- 1. Digital indicator for fuel consumption, volumetric type
- 2. Digital indicator for fuel consumption, gravimetric type
- 3. Digital indicator for air flow measurement
- 4. I. C. Engine components cut away model board.
- 5. Water supply arrangement, consisting of sump tank, pump and piping. (Required if hydraulic dynamometer or Eddy Current dynamometer is selected)

Note: Details of attachments can be made available on request.

SERVICES REQUIRED

- 1. Water supply and drainage arrangement
- 2. Electric supply
- 3. Fuel for engine

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- (1) Since research and development is an on-going activity, the specifications mentioned herein are subject to change without notice
- (2) Photographs are indicative only