HMT03.xls
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SINGLE CYLINDER FOUR STROKE PETROL ENGINE TEST RIG MODEL: HMT03

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 petrol engines. The engine and dynamometer are mounted on a bedplate. The 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. Petrol Engine
2. Dynamometer
3. Temperature Indicator
4. Tachometer
5. Fuel Consumption Measuring Unit
6. Air Flow Measuring Unit
7. Control Panel
8. Exhaust gas calorimeter

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