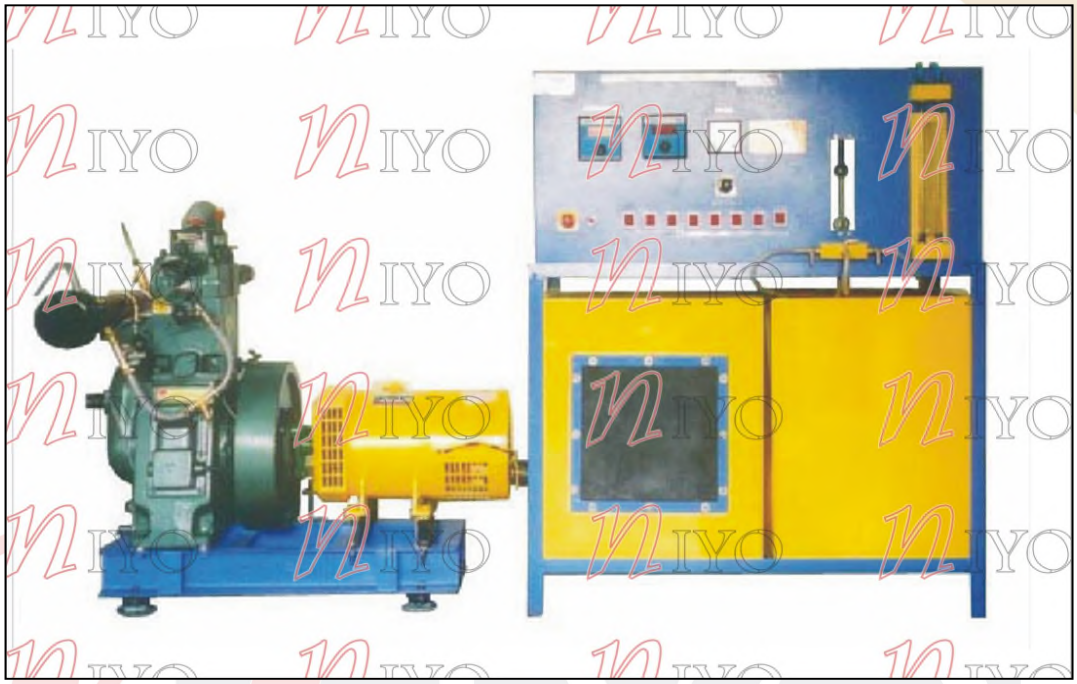
HMT05.xls
Revision No: 03
Date: March 13, 2021

TWO CYLINDER FOUR STROKE DIESEL ENGINE TEST RIG

MODEL: HMT05



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 mechanical efficiency
4. To determine engine brake thermal efficiency
5. To determine engine specific fuel consumption
6. Complete energy balance using exhaust gas calorimeter.
7. Determining air/ fuel ratios

COMPONENTS

1. Diesel 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
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

NiYo Engineers
Unit 1B, Devgiri Industrial Estate, S. No. 17/1B Plot No. 14, Kothrud, Pune 411 029
INDIA, Tel-91 20 2546 5004, 2546 8051, 2546 7296 Telefax - 91 20 2546 8051
e-mail- sales@niyoindia.com Web: www.niyoindia.com

ISO9001:2015

(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