

**Product Name :**  
Single Cylinder Air Cooled Two Stroke Petrol Engine Test Rig (2.5hp @ 2800 Rpm) With Mechanical Brake Or A.C Alternator Or D.C Generator Or Eddy Current Dynamometer

**Product Code :**  
IC Engine0001



**Description :**

Single Cylinder Air Cooled Two Stroke Petrol Engine Test Rig (2.5hp @ 2800 Rpm) With Mechanical Brake Or A.C Alternator Or D.C Generator Or Eddy Current Dynamometer

**Technical Specification :**

The test rig is designed to provide self-contained facility for teaching spark Ignition engine principles. The unit is instrumented so that the following experiments can be carried out.

BHP MEASUREMENT  
BRAKE THERMAL EFFICIENCY  
FUEL CONSUMPTION MEASUREMENT  
AIR INTAKE MEASUREMENT

The Engine Test Rig Facilitate To Evaluate The Following:

Performance at various throttle position  
BHP measurement from no load to full load

Description Three main components from main parts of the test rig. Welded steel base plate, complete with Mechanical Brake or A.C. Alternator or D.C. Generator or Eddy Current Dynamometer, Drive coupling and with

safety guard, anti vibration mounting.

Resistance loading (Resistance bank) with selector switches to load the engine from no load to full load (Only for A.C. Alternator & D.C. Generator) Panel board positioned over the base plate consisting of fuel system with flow measurement by burette, air flow measurement system, temperature indicator.

Dynamometer (As Applicable)

The dynamometer used is a mechanical Brake capable of absorbing a maximum load of 2.5 HP at a speed to 2800 RPM.

The Loading device use din an AC alternator of matching capacity to load the engine up to 2.5 HP at 2800 RPM along with Resistance loading arrangement for alternator.

The Loading device used is DC Generator of matching capacity to load the engine up to 2.5 HP at 2800 RPM along with Resistance loading arrangement provided with selector switches.

The loading device used is and Eddy Current Dynamometer of matching capacity to load the engine up to 2.5 HP at 2800 RPM.

Instrumentation (as applicable) The following instrumentation is provided. 'U' tube manometer for air flow rate

Burette for fuel flow rate

Speed indicator-Digital

Digital Temperature Indicator-Multi point indicator with thermocouples.

Digital Voltmeter, Ammeter

Controls

The test rig is arranged for manual control of the engine with a kick start arrangement for engine starting & manual throttle control. Fuel measuring arrangement: Fuel Measuring Arrangement consists of fuel tank, burette and suitable cock all mounted on a suitable frame work and panel board and supplied with fuel piping from fuel tank to Engine.

Air intake measurement & heat carried away by exhaust gas Consisting of an air tank mounted on an iron stand fitted with a suitable orifice plate, manometer, Thermocouple for measuring the exhaust gas temperature with pocket connection with instruments suitably mounted on a panel board.

Engine

Single Cylinder two stroke Air Cooled Petrol Engine to develop 2.5 HP @ 2800 RPM

Services

Electrical supply of 230V, Single Phase, 50Hz AC

We are well-known manufacturers, OEM suppliers of Single Cylinder Air Cooled Two Stroke Petrol Engine Test Rig (2.5hp @ 2800 Rpm) With Mechanical Brake Or A.C Alternator Or D.C Generator Or Eddy Current Dynamometer for IC Engine Lab Equipments. Contact us for high quality Single Cylinder Air Cooled Two Stroke Petrol Engine Test Rig (2.5hp @ 2800 Rpm) With Mechanical Brake Or A.C Alternator Or D.C Generator Or Eddy Current Dynamometer for IC Engine Lab Equipments for schools lab, college lab, universities, research labs, various teaching and workshop training laboratories and industries in India.

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