

Four Cylinder Four Stroke Petrol Engine Test Rig



Product Categories: [Engineering Equipment](#), [Thermo Dynamic Lab](#)

Product Page:

<https://www.labappara.com/product/four-cylinder-four-stroke-petrol-engine-test-rig/>

Product Description

Four Cylinder Four Stroke Petrol Engine Test Rig

Description:

The test setup consists of Four Cylinder Petrol Engine coupled to Eddy Current / Hydraulic Dynamometer. The engine is advanced MPFI Petrol Engine with Electronic Control Unit (ECU). The dynamometer provides a variable load on the engine to study engine performance under variable load conditions. The engine can be operated at different throttle settings enabling investigation of engine performance at different speeds. Exhaust gas calorimeter is used for estimation of heat carried away by exhaust gases for determination of heat balance of the engine. Air is supplied to the engine through an air box, fitted with orifice plate. The arrangement has been made to conduct Morse Test of the engine to determine its frictional power.

The instrumentation console includes measuring instruments for Engine Speed, Torque, Air consumption, Fuel Consumption & temperature of water, gases.

Engine:

Four Cylinder Petrol Engine, with MPFI System complete with ECU, starter. Capacity 1200 cc, Output Power 73 hp ; 6000 RPM, Torque 100 RPM

Dynamometer Options:

Eddy current dynamometer: Water Cooled, Capacity 30 kW with the electronic controller.

Hydraulic Dynamometer: Sluice Gate Type, Capacity 50 hp ; 6000 RPM

Features:

Exhaust Gas Calorimeter: Shell & Tube Type Heat Exchanger

Air Box: Made in M.S. with damper & Orifice Plate

Morse Test Arrangement: Switches to cut off ignition or fuel supply of each cylinder.

Instrumentation Console:

Load cell with digital indicator for Load Measurement, Range 0-50 Kg

Non-contact type sensor with Digital indicator for Engine speed, Range 0-9999 RPM

U Tube Differential Manometer for Air, Range 0-300 mm

'K' Type Thermocouples & 8 channel digital temperature indicator, Range 0-600 °C

Volumetric Fuel Measurement Unit with digital indicator