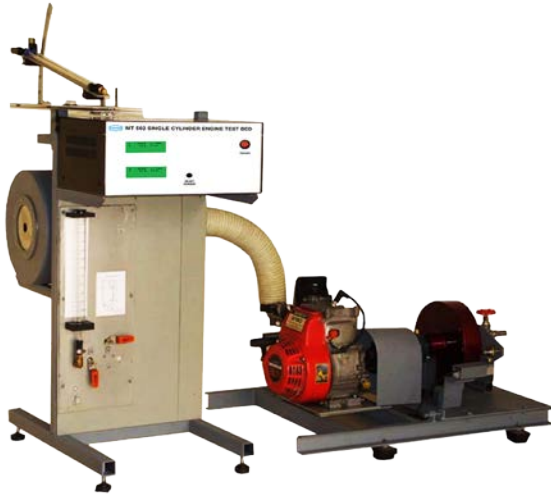


MT 502 SINGLE CYLINDER ENGINE TEST BED



MT 502 with water brake absorber



MT 502 with eddy current absorber

GENERAL DESCRIPTION:

This is a standard test bed for a single cylinder gasoline or diesel engine.

The engine is connected to a dynamometer on the test bed by a direct coupling with a safety guard. Instruments are provided for measurement of dynamometer torque and speed, fuel flow rate, air flow rate, and temperatures. Dynamometer load and engine throttle are manually controlled. The fuel tank and the air box are on a stand next to the engine. The test bed requires outside water supply for cooling.

TYPICAL TESTS:

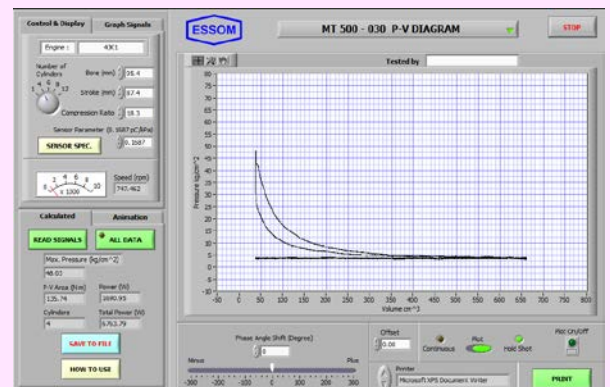
- Torque vs engine speed at various throttle setting.
- Engine brake horsepower and efficiency vs speed.
- Specific fuel consumption.
- Air/fuel ratio.
- Volumetric efficiency.

TECHNICAL DATA:

- Dynamometer : Water brake absorber.
 - Maximum torque : At 2500 rpm. over 110 Nm.
 - Maximum speed : 8000 rpm.
- Engine : Gasoline engine 3.7 kW power, or as required.
- Measuring instruments
 - Fuel flow rate : Graduated cylinder and stopwatch.
 - Air flow rate : Air box with orifice plate and inclined water manometer.
 - Sensors with digital display : Torque and speed.
 - : Temperatures for absorber water outlet, ambient air and exhaust gas.
- Accessories : Fuel tank and coupling guard.
- Power supply : 220 V, 1 Ph, 50 Hz. Other power supply is available on request.

OPTIONAL EQUIPMENT:

- Additional interchangeable diesel engine.
- P-V diagram set for selected engine.
- A air cooled eddy current absorber instead of water absorber.
- MT 502-041 Torque arm with standard weights for torque calibration.
- MT 502-044 Water manometer for differential pressure calibration.
- MT 502-050 Computer Interface
 - This includes sensor(s), computer interface unit, and software for data display and analysis by computer (separately supplied).



Net (unpacked) shipping dimensions WxLxH : 75x 150 x 100 cm
Net weight : Approx. 180 kg