

Product Name :
Single Cylinder Four Stroke Diesel Engine Test Bench

Product Code :
CHINAELABC2630014



Description :

Single Cylinder Four Stroke Diesel Engine Test Bench

Technical Specification :

The experimental test stand, which includes a drive and brake unit, the four-stroke diesel engine is highly suitable for use in teaching the fundamentals of engine functioning and measurement. The engine used here is an air-cooled single-cylinder four-stroke diesel engine with direct injection. The diesel engine is started and slowed down by an electric motor mounted in the unit. A flywheel fan affects the air-cooling. The brake unit is connected by way of a elastic claw coupling. The engine is prepared for measurement of the cylinder pressure for indication. It includes a sensor to measure the exhaust gas temperature and a connection to measure the intake pressure. Both sensors, ignition cut-off and fuel supply are connected to the test stand.

The full load and partial load characteristic curves of the engine are plotted in experiments.

- Familiarization with a four-stroke diesel engine
- Engine mounted on base plate
- Force transmission to brake via elastic claw coupling
- Fuel hose with self-sealing quick-release coupling
- Plotting of torque and power curves
- Determination of specific fuel consumption
- Determination of volumetric efficiency and lambda (fuel-air ratio)
- Determination of engine friction loss



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