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Product Name :
Regenerative Engine Test Set

Product Code :
LBNY-0005-1110006



Description :

A versatile regenerative engine test set with comprehensive controls and instrumentation. When used with one of optional single-cylinder engines, it safely and effectively enables study and demonstrations of the features and characteristics of the engine. Using this enables accurate real-time data capture, monitoring and display, calculation and charting of all relevant parameters on a computer making tests quick and reliable. In addition, optional ancillaries are available to extend the range of study, demonstrations and investigations even further. The equipment is fully compatible with Versatile Data Acquisition System.

The main components of the system are:

A fuel tank support frame that supports the fuel tank and optional fuel gauge

A heavy fabricated floor-mounting bed

An instrument console with instrument frame

The bed is held on anti-vibration mounts. It includes a robust trunnion-mounted d.c. machine. When the engine is initially mounted onto the test bed or exchanged with an alternative engine, dowels and slots locate the engine quickly, accurately and reliably. An electronic load cell connected to the machine measures the driving torque of the test engine. The engines are supplied pre-mounted on a sturdy precision base plate. Each engine includes a colour-coded fuel tank with self-sealing couplings.

Safety Features:

Emergency stops on test bed and console

Interlocks for mains power failure and engine over speed.

Technical Specification :

Air consumption measurement: Air box and orifice plate, pressure transducer and digital display
Torque measurement: Strain gauged load cell and digital display
Exhaust temperature measurement: Engine thermocouple and digital display
Fuel consumption: Precision volumetric fuel gauges
Ambient air temperature and barometric pressure measurement: Thermocouple, pressure transducer and digital display
Volume (packed total): 4.25 m³
Dynamo meter: D.C. machine with four- quadrant regenerative drive
Maximum absorption: 10 kW
Maximum Speed: 3600 rev.min⁻¹
Speed measurement: Optical encoder and digital display
Instrumentation Console dimensions: Width 1700 mm x depth 750 mm x height 1340 mm
Test Bed dimensions (without engine): Width 1150 mm x depth 500 mm x height 800 mm
Weight (packed total): 600 kg.



Laboratory Instrument India