



Description: A robust, floor-mounted engine test stand designed for comprehensive engine performance testing. It features modular instrumentation and a control system, allowing detailed analysis of various engine parameters.

Key Features:

- **Dynamometer:** Regenerative type with both torque and speed control, including a direct-reading digital display. Accommodates engines with up to 4 kW shaft power output.
- **Instrumentation:** Engine speed and relevant temperatures displayed on digital panel meters located on a remote instrumentation console.
- **Air Supply:** Engine air flows through an intake orifice and pulsation damper. Flow measurement is facilitated by a panel-mounted manometer for differential pressure readings.
- **Fuel Measurement:** Calibrated volumetric fuel gauge for accurate fuel flow measurement.
- **Engine Mounting:** Optional engines pre-installed on a standard mounting plate for quick and easy setup.
- **Fuel System:** Includes a suitable fuel tank and supply system with quick-release self-sealing fuel couplings.
- **Safety:** Equipped with interlocks and safety cut-out devices to ensure operator safety.
- **Engine Testing Capabilities:**
 - Measurement of torque-speed and power-speed relationships at various throttle settings.
 - Measurement of specific fuel consumption at constant speed and varying power output.
 - Measurement of air-fuel ratio and engine thermal efficiency at constant speed and a range of throttle settings.
 - Measurement of engine internal friction across different engine speeds.
 - Measurement of air-fuel ratio and engine thermal efficiency at constant speed and a range of injector settings.

Engine Specifications:

- **Type:** Vertical cylinder, 4-cycle, air-cooled, four-stroke diesel engine.
- **Maximum Output:** 4.6 HP (3.5 kW).
- **Rated Speed:** 3600 rpm.
- **Displacement:** 211 cc.
- **Bore and Stroke:** 70 x 55 mm.
- **Cylinders:** 1.

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
Sitapura Extension, Jaipur-302022, India.



info@tesca.in
www.tescaglobal.com



Additional Features:

- **Test Bed Configuration:** Single-cylinder, direct injection four-stroke diesel engine.
- **Testing Range:** Enables investigation of torque-speed, power-speed, specific fuel consumption, mechanical, and thermal efficiency over a wide range of conditions.
- **Installation:** Optional engines can be quickly installed with quick-connect couplings and braked wheels for ease of movement.
- **Operation:** Capable of testing from an adjacent room once the engine is set up and running.
- **Exhaust Extension:** High-quality, efficient exhaust extension provided.
- **Research Opportunities:** Suitable for investigating biofuels.

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.



Export Sales: +91-9829132777
India Sales: +91-9588842361



IT-2013, Ramchandrapura Industrial Area,
Sitapura Extension, Jaipur-302022, India.



info@tesca.in
www.tescaglobal.com