

About

The proposed Mobile Test Facility (MTF) is a roadworthy selfsufficient test facility for testing of "Expandable Turbo Propulsion system (Expandable Engines) of up to 450kgf class" and is devised for Field Tests at various altitude sites in India ranging from sea level to High Altitudes.

"MTF" is proposed with modular design concept, where in each module is built and rigidly installed on a trailer with pre-designated system based on each modules infrastructure functionally required.

It consists Four Trailer mounted Modules-

- 1. Mobile Utility Trailer Module
- 2. Mobile Control Cabin Trailer Module
- 3. Engine Test Section Unit Trailer Module
- 4. High Pressure Mobile Compressor unit Module (Under GTRE Scope)
- > Operational Environment :-
 - 1. Test Site Altitude: From10 m above MSL to 4522 m above MSL
 - 2. Test Site Temperature: -20°C to +50°C
 - 3. Test Site Atmospheric Pressure: 0.57 Atm to 1 Atm
 - 4. Test Site Humidity: 20% to 80%







TECHNICAL DETAILS

Electrical General Requirements:

- a. Voltage: 415 v ±10%, 3 phase.
- b. Frequency: 50 hz +3%, -6%.
- c. Aux voltage: 110 VAC (normal supply).
- d. UPS voltage 230 VAC for PLC Panel.
- e. 24 V DC Control Circuits.
- f. Main switch with emergency stop function.
- g. Illuminated double push-button for ON/OFF.
- h. Blue illuminated push-button for fault indication and acknowledgement.
- i. Control of the test rig and the test programs via operating computer.



KEY FEATURES

- a. GA drawings, electrical circuit diagrams with assembly plans and detailed parts lists of all components
- b. Interface descriptions.
- c. All safety sticker to be provided on Panel
- d. Acrylic sheet to be provided for Bus-bar and open wire
- e. Legend to be pasted on each component.
- f. Printed ferule to be used for wiring.
- g. Wire color code should be standard.



Application

The proposed Mobile Test Facility (MTF) is a roadworthy self-sufficient test facility for testing of "Expandable Turbo Propulsion system (Expandable Engines) of up to 450kgf class" and is devised for Field Tests at various altitude sites in India ranging from sea level to High Altitudes.

