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Product Name :
Turbojet Trainer With Reheat

Product Code :
LBNY-0005-1650003



Description :

This product helps students to understand the use of this engine with additional exhaust nozzle control, on practical applications such as jet aircraft. A steel frame holds a gas generator, combustion chamber, oil and fuel tanks, pumps, ancillaries and guards. Above these is an instrumentation and control panel with schematic diagram. A self-contained, fully instrumented, educational single shaft gas turbine with reheat. Powered by kerosene, the experimental abilities of this high-quality apparatus enable comprehensive practical investigations into the principles, and performance of single-shaft gas turbines with reheat. The clearly labelled control panel with mimic diagram includes the instrument displays, controls and warning lights. It then passes through a variable area propelling nozzle. The exhaust gases then discharge to a suitable exhaust system. The combustion chamber gives excellent combustion, low pressure loss and good flame stability over a wide range of conditions. Air passes into an air box, through a calibrated nozzle into a compressor, then into the combustion chamber. A pump transfers fuel from the fuel tank to spray through a special nozzle into the combustion chamber. A high-energy spark ignites the air and fuel mixture that flows to a radial flow turbine, then to the reheat section. This increases the temperature and velocity of the gas. A second high-energy spark in the reheat section ignites the reheat fuel. This creates a secondary burn using some of the remaining oxygen in the hot exhaust gases leaving the turbine. A fuel flow control valve on the instrumentation and control panel regulates the turbine speed. This design reduces the possibility of over speed. A separate control adjusts the fuel flow to the reheat section.

Technical Specification :

Nett dimensions and weight: 1385 mm (wide) x 1200 mm (depth) x 1721 mm (height) and 260kg
Packed dimensions and weight: 3.8 m³ and 450 kg.



Laboratory Instrument India