

THRUST TEST STAND FOR PULSE JET ENGINE

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ABSTRACT

One of the important performance parameters of a pulse jet engine is the thrust produced. Hence, for any new design, the measurement of the thrust produced is necessary. A test stand was successfully designed and fabricated from scratch using facilities available in the FKM's workshop. The test stand was designed for a pulse jet engine with maximum thrust of 25 N.

The design concept was based on balancing the moment due to the thrust of the pulse jet engine with a dead weight which is movable so as to provide a counter-moment.

Calibration was performed by applying a known force (known weight) at the line of retain of the thrust. The movement of one centimeter movable portion of the minor scale is equivalent to an increment of 0.0294 N of the produced thrust.

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