Duplex Screw Efficiancy Apparatus (SMT-TM-29)

Screw Jack SMT-TM-29 is based around a bench-mounted base incorporating a turntable fitted with a metric square pitch screw jack thread. The apparatus is stood on a firm bench and a cord is wound around the periphery of the turntable. The free end of the cord is threaded over a pulley and then hangs vertically to accept the load hanger supplied. A set of calibrated weights is supplied which are suspended from the load hanger thus producing a known torque on the system. To adjust the experimental parameters further the calibrated weights can also be applied to the top surface of the turntable. A comprehensive instruction manual for lecturer and student, giving full details on apparatus assembly and operation as well as example results. All necessary assembly and operational tools are provided

TECHNICAL SPECIFICATIONS

Specification:

- Compact unit to study screw efficiency.
- The effort can be applied to raise or lower the load.
- Pulley and hanger assembly.
- Jack with heavy base and anchored to a base plate.

Technical Data:

- Approximately 200 mm turntable is secure to the screw thread.
- 20mm outside diameter thread.
- 2.5mm thread pitch.
- Set of weights.
- Comprehensive instruction manual provided

Experimental Data:

- Efficiency of screw thread
- Mechanical advantage
- Determination of the coefficient of friction
- Comparison of lubricated and un-lubricated screw threads
- Comparison of actual results with theoretical

Web: http:// www.esolsengineering.com, Email: esolsengineering@gmail.com