LAB ENGINEERING

Email : purchase@elabengineeringequipments.com
Phone: +91-9811375383

Product Name : Tension Coefficients Apparatus	**Product Code :** ELABBFA0013

Description :

Tension Coefficients Apparatus

Technical Specification :

Tension Coefficients Apparatus Features Low cost, effective teaching. Self-contained. Wall mounted. Direct reading of jib and tie loads using spring balances. Demonstrates the application of tension coefficient to evaluate forces in three dimensions. Range of Experiments To determine experimentally forces induced in individual frame members. To calculate the theoretical forces induced, using the method of tension coefficients. To compare the experimental and theoretical results. To repeat for other frame configurations. Description The apparatus consists of a jib restrained by two chain ties making a triangulated three dimensional structure. The jib and both ties are fitted with spring balances so that the internal forces can be measured. The bottom of the jib is pivoted to the wall mounted plate and the tie attachment locations can be varied independently at their wall ends. A load is hung from the jib end, and the geometry returned to its unloaded state using a knurled collar before taking the spring balance readings. This equipment is part of a range designed to both demonstrate and experimentally confirm basic engineering principles. Great care has been given to each item so as to provide wide experimental scope without unduly complicating or compromising the design. Each piece of apparatus is self-contained and compact. Setting up time is minimal, and all measurements are made with the simplest possible instrumentation, so that the student involvement is purely with the engineering principles being taught. A complete instruction manual is provided describing the apparatus, its application, experimental procedure and typical test results.

Elab Engineering Equipments Manufacturers