



Email : [sales@laboratoryinstrumentindia.com](mailto:sales@laboratoryinstrumentindia.com)

**Product Name :**  
Critical Condition Of Struts Apparatus

**Product Code :**  
LBNY-0005-1760001



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#### **Description :**

Critical condition of Struts Apparatus apparatus comprises a sheet metal frame which supports four slender spring steel struts having loading platforms at their top ends. Critical condition of Struts Apparatus apparatus shows how the buckling mechanism occurs, and the influence of the end restraint. A piece of material in compression is called a strut. If it is short and stubby it will fail by compressive stress, but if it is slender the failure mode is that of buckling. The load at which the strut buckles depends on the way in which the ends are restrained. Built-in ends resist buckling more than ends which are free to move.

#### **Experimental Capabilities:**

To compare the result with theoretical predictions, such as Euler's formula.  
To observe the behaviour of four struts of the same length but with different end constraints when subjected to buckling loads.

#### **Technical Specification :**

Bench mounted apparatus.  
Self contained unit. Demonstrates the critical buckling load for the four classical Euler conditions.  
Constructed of spring steel.  
Open end pinned the other fixed  
Both ends fixed  
Both ends pinned  
Base fixed, top free  
Allows struts to be buckled simultaneously.



**Laboratory Instrument India**