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**Product Name :**  
Critical Speed Investigation Apparatus

**Product Code :**  
LBNY-0005-10100076



**Description :**

The rotor is held on the base frame with pivoting bearings. The weights and bearings can be placed at any location along the shaft and attached securely with quick-acting clamps. This benchtop unit is used to show the resonance and critical bending speed on rotating shafts. The construction of the rotor of a thin, flexible shaft and rigid weights facilitates the theoretical comprehension. It is possible to switch speeds during the experiment as desired. A transparent protective hood covers the rotating parts. A set of electrical vibration sensors with clamping set is also available. It is driven by a flexible coupling. Two motor speeds can be fine-adjusted and preset with ten-speed potentiometers. They are controlled electronically and displayed digitally.

**Technical Specification :**

Benchtop experiment for investigating critical bending speeds on rotors  
Rotor shaft made of high-strength steel  
Two weights for attachment at any point  
Max. Two resonance speeds, illustration of self-centering  
Adjustable speed, two speeds (can be preset), can be switched at any time, setting with two 10-speed potentiometers, digital display  
Two pendulum ball bearings for positioning at any point for support of the rotor shaft  
Elec. Motor 0.25kw, controlled electronically  
Protective hood made of transparent plastic  
Locking catch on rotor

**Technical data:**

Speed range: 300...3000rpm

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Motor output: 0.25kw  
Min. Spacing of weights: 50mm  
Support: pendulum ball bearing  
Adjustable bearing spacing: 300...470mm  
Experimental rotor shaft: d $\times$ l 6x500mm, steel  
Weights: d=80mm, 1kg, steel  
Catch play: 3mm  
Dimensions and weight:  
L x w x h: 1150 x 375 x 355 mm  
Weight: approx. 49 kg.



**Laboratory Instrument India**