



Features

- Natural frequencies of a free vibrating bending bar
- Rayleigh's method to evaluate the natural frequency of a bar

The bending bar in Tesca Free Vibration of a Bar Apparatus can be mounted vertically (standing or hanging) or horizontally into the frame. By varying the free clamping length or moving additional weights, the natural frequency of the bar is changed. The bar is deflected manually to start damped vibrations. A non-contact position sensor measures the corresponding amplitudes. The signal can be displayed on an inter-laboratory oscilloscope.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tescaglobal.com

Specifications

- Investigation of the free vibration of a bar
- Elastic bending bar with movable weight
- Bar can be mounted to all 4 sides of the frame
- Inductive position sensor to measure oscillation amplitudes
- Fixable meter rule
- Storage system to house the components

Technical Specifications

- Bending bar
 - LxWxH: 635x20x3mm
 - Material: AlMgSi0.5F22
- Set of weights: 10x100g
- Sensor output signal
 - Analogue voltage level, proportional to position

Experiment Possibilities

- Free vibration of a vertical bending bar
- Free vibration of a horizontal bending bar
- Determination of natural frequencies according to Rayleigh
- Influence of free clamping length and weight on natural frequency

Scope of Delivery

- 1 beam
- 1 sensor
- 1 set of weights
- 1 clamp fixing
- 1 ruler
- 1 position sensor with supply module
- 1 storage system with foam inlay
- 1 instruction manual