Email : sales@scilabexport.com
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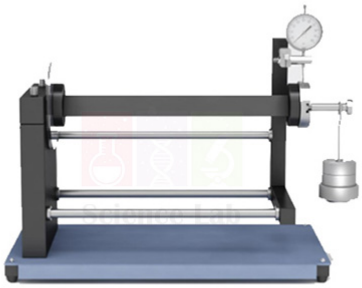
Product Name :

Cantilever Beam Apparatus

Product Code :

SLE/MCE/26



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Description :

Cantilever Beam Apparatus (Product Code: SLE/MCE/26) is an L-shaped stainless steel frame used to study moments and the equilibrium of a loaded cantilever arm in engineering mechanics and structures laboratories. A graduated 75 cm horizontal arm carries a sliding slotted weight set from 100 g to 1 kg, while a 10 kg spring balance holds the arm horizontal under any load. It is made by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, an OEM manufacturer, at its own factory in Ambala, India.

Specifications

Parameter	Detail
Material	Stainless steel
Shape	L-type frame
Horizontal arm	75 cm, graduated
Vertical arm	20 cm
Spring balance	10 kg capacity, keeps the horizontal leg horizontal under any load
Weight set	One sliding slotted weight set, 100 g to 1 kg
Display	Analog
Frequency	50 Hz
Product code	SLE/MCE/26
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Cantilever Beam Apparatus Used For?

Students hang slotted weights at chosen graduations along the 75 cm arm and adjust the spring balance until the arm is exactly horizontal again. Because the arm is level, the lever distances can be read straight from the graduations, and the spring balance reading gives the force needed to hold the loaded arm in equilibrium. Taking moments and comparing the calculated force with the balance reading verifies the principle of moments for a cantilever-type member.

Repeating the test with different weights and positions produces a set of readings for a graph of balance force against applied moment, which should form a straight line. The stainless steel frame stands up well to daily use in a teaching laboratory, and the simple analog reading suits first-year classes. It is a compact addition to mechanics lab equipment in India for civil, mechanical and polytechnic courses; always bring the arm back to horizontal before recording each reading.

OEM Manufacturer

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