Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Strain Gauge Trainer

Product Code :

SLE/ETP/12



Description :

Strain Gauge Trainer (Product Code: SLE/ETP/12) is a compact bench or desktop trainer used to show how resistance strain gauges work on three different structures in engineering and technical education labs. Bending, torsion and tension systems are loaded with a small and a large set of masses, and students compare measured strains with values calculated from theory. It is made by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, a technical educational equipment manufacturer and OEM, at its own factory in Ambala, India.

Key Details

Parameter	Detail
Format	Compact trainer that fits on a bench or desktop
Structures	Three: bending system, torsion system and tension system
Bending system	Gauges measure direct tensile and compression strain
Torsion system	Demonstrates shear/torque strain gauges
Loading masses	Small set of masses for the bending and torsion systems; large set of masses for the tension system
Bridge connections	Quarter, half and full-bridge connections can be made and compared on each structure
Contents	Everything needed to show students how resistance strain gauges work on the three structures
Product code	SLE/ETP/12
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Strain Gauge Trainer Used For?

Strain gauges sit inside load cells, torque sensors and structural monitoring systems, so every mechanical or instrumentation engineer needs to know how they behave. On this trainer, students hang masses on each structure, use the known dimensions to calculate stress and strain by hand, and then check their answers against the gauge readings. The bending beam shows tension on one face and compression on the other, while the torsion system shows how gauges set at an angle to a shaft pick up shear strain.

The most valuable exercise is rewiring the same structure as a quarter, half and full bridge and comparing the outputs, which shows why multi-gauge bridges give larger signals and better temperature compensation. Load and unload in equal steps to check that readings return to zero, and use the small masses for bending and torsion and the large ones only for tension.

OEM Manufacturer

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