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Product Name :

Coil Spring

Product Code :

SLE/ETP/16



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Description :

Coil Spring (Product Code: SLE/ETP/16) is a heavy-duty compression spring test accessory used to find the spring rate of a real suspension-type coil spring on a testing machine, in mechanics and automotive engineering labs. The spring shares its design with those used in vehicle suspensions and is held securely between two metal bosses while the machine compresses it. It is made by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, an OEM manufacturer, at its own factory in Ambala, India, as part of its mechanics lab equipment in India.

Key Details

Parameter	Detail
Spring	Heavy-duty coil spring of the same design as those used in vehicle suspensions
Mounting	Two metal bosses hold the spring securely in the testing machine
Loading	Spring compressed by the testing machine
Measurement	The testing machine's digital indicator measures the change in spring length (displacement) for a given change in applied force
Outcome	Actual spring rate compared with the theoretical value based on the spring dimensions; demonstrates Hooke's Law
Product code	SLE/ETP/16
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Coil Spring Test Used For?

Classroom springs are light and forgiving; a suspension spring is not. Testing a heavy-duty spring of vehicle-suspension design shows students how the same Hooke's Law relationship holds for a real engineering component, and how closely the design formula predicts its stiffness. It links strength-of-materials theory to automotive and machine design.

Students measure the wire diameter, mean coil diameter and number of active coils, calculate the theoretical spring rate, then fit the spring between the metal bosses and compress it on the testing machine. Plotting force against displacement from the digital indicator gives the actual rate as the slope of the line. Apply a small seating load first, take readings on both loading and unloading, and stay well within the elastic range.

What to Specify When Ordering

- The testing machine in your laboratory that will compress the spring, so fitting of the metal bosses can be discussed.
- The number of Coil Spring sets needed for your student groups.
- Whether you also want other spring experiments, such as the Disc Spring, in the same order.

OEM

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