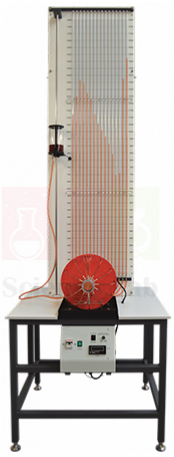
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Product Name :

Journal Bearing Demonstration

Product Code :

SLE/ETM/03



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Description :

Journal Bearing Demonstration (Product Code: SLE/ETM/03) is a floor-standing lubrication apparatus used to show how an oil film builds pressure around a rotating shaft in theory of machines and tribology laboratories. A motor-driven steel shaft turns inside a clear acrylic bearing with an extra-large clearance, and 16 pressure tappings feed a rear manometer panel so the oil pressure head at every point is visible at once. It is produced by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, an OEM manufacturer of engineering lab equipment in India, at its own factory in Ambala, as part of its lab equipment for technical institutes.

Specifications

Parameter	Detail
Construction	Floor-standing
Shaft	Plain steel, directly driven by an electric motor
Bearing	Clear acrylic shell, freely supported on the motor shaft and sealed with a rubber diaphragm
Clearance	Especially large, to show the oil in the bearing clearly
Pressure tappings	12 equi-spaced around the circumference plus 4 along the topside and on a vertical radial plane (16 in total)
Manometer	Rear manometer panel connected by light, flexible plastic tubes; shows the oil pressure head at all 16 points
Loading	Weights attached to arms connected to the bearing
Speed control	Control unit adjusts motor speed in both directions; display shows motor speed
Oil supply	Adjustable reservoir feeding the low-pressure region at both ends of the bearing
Supplied with	A container of suitable oil
Product code	SLE/ETM/03
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Journal Bearing Demonstration Used For?

Students load the bearing with weights on its arms, run the shaft at a set speed and read the oil pressure head on all 16 manometer tubes at once. The 12 circumferential readings give a polar plot of pressure around the journal, showing where the film pressure peaks and where it falls away, while the four extra tappings show how pressure varies along the top of the bearing and on the vertical plane.

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