

**Department of Mechanical Engineering
Indian Institute of Technology Delhi**

20 March 2015

Quotations are invited for the supply of following items as per the specification detailed below.

Specification for non-contact rotor vibration sensor (2 Nos.) for rotor vibration measurements

1. The sensor should be able to measure gap as well as vibrations of a stationary shaft or rotating shaft up to 10,000 rpm.
2. Frequency range of interest: 0 to 25 KHz (-3dB)
3. Resolution: 0.05 μm or better
4. Measuring range: 1.0 mm
5. Linearity: $\pm 0.25\%$ of Full scale output or better
6. Sensitivity: may be specified in volt/micron
7. Temperature range for sensors and cables: -50°C to 150°C ; Temperature compensation range: 10° - 650°C
8. Cable length: minimum 3 meters.
9. Electromagnetic compatibility: EN 61326-1
10. Target Material: Steel EN-353. However, the same sensor system should be adjustable for other ferro or non-ferromagnetic materials.
11. Synchronization of separate channels should be possible.
12. Protection class: Electronics IP 54 Sensors IP 65

In addition appropriate connector cables and conditioners may be quoted.

The sealed envelopes containing separate sealed technical and commercial bids may be sent to:

Dr A K Darpe
Department of Mechanical Engineering
IIT Delhi, New Delhi – 110016