

Physics Lab Equipments & Experimental Setups

ME 866 - Velocity of Sound by End Correction

Objective:

- To determine the wave length of sound in air using stationary waves and to calculate the speed of sound by one resonance position and applying end correction.

Setup Consist of:

- Resonance tube apparatus
- Three tuning forks of different frequencies
- Rubber pad
- Thermometer : -10 to 110 Degree C
- Vernier caliper : Least count - 0.01cm
Range :15cm



ME 866A - Velocity of Sound By Two Resonance Positions

Objective:

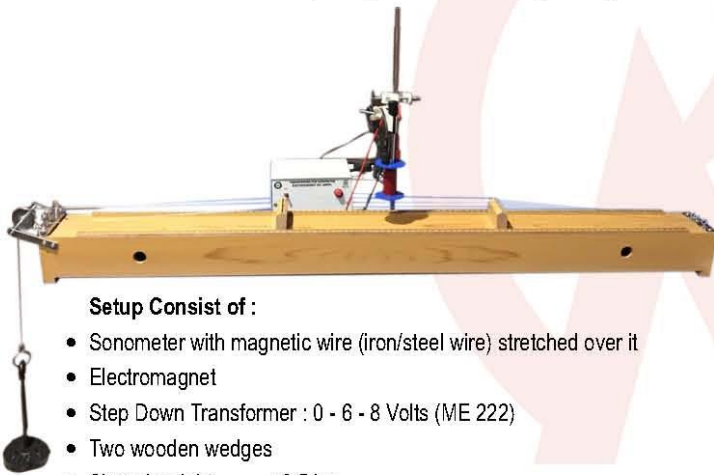
- To determine the wave length of sound in air using stationary waves and to calculate the speed of sound by using two resonance positions.

Setup Consist of:

- Resonance tube apparatus
- Three tuning forks of different frequencies
- Rubber pad
- Thermometer : -10 to 110 Degree C
- Vernier caliper : Least count - 0.01cm
Range :15cm



ME 867 - To find the frequency of A.C mains by using sonometer



Setup Consist of :

- Sonometer with magnetic wire (iron/steel wire) stretched over it
- Electromagnet
- Step Down Transformer : 0 - 6 - 8 Volts (ME 222)
- Two wooden wedges
- Slotted weight : 2.5 kg

ME 868 - Determine the dispersive power of the material of the prism for violet & yellow colors of mercury light with the help of spectrometer



Setup consist of:

- Spectrometer : 6 Inch, Least count - 30 Sec.
- Prism : 32 mm
- Mercury Vapour Lamp 80 Watt fitted in Box With Transformer

ME 869 - To verify the expression for the resolving power of a telescope

Setup consist of:

- Low power telescope
- Micrometer slit : Least count - 0.01mm
(with A rectangular adjustable slit)
- Parallel double slit scratched on glass slide
- Light source of narrow opening
- Measuring tape : 3 Meters

ME 869B - To determine the resolving power of a plane transmission grating and to verify the result.

Setup Consist of:

- Spectrometer : 6 Inch, Least count - 30 Sec.
- Diffraction Grating : 15000 lines/inch
- Light Source : 35 Watt Sodium vapour lamp housed in powder coated Steel cabinet with Transformer & Stand
- Micrometer slit : Least count - 0.01mm
(with A rectangular adjustable slit)

ME 869A - To determine the resolving power of a prism

Setup consist of:

- Spectrometer : 6 Inch, Least count - 30 Sec.
- Light Source : 80 Watt Mercury vapour lamp housed in powder coated Steel cabinet with Transformer & Stand
- Prism : Crown Glass (base 3.2cm)
- Micrometer slit : Least count - 0.01mm
(with A rectangular adjustable slit)

