

AF302a

Schlieren Apparatus

Schlieren apparatus for use with TecEquipment's Continuous Supersonic Wind Tunnel (AF302)

- Monochrome Schlieren apparatus with a high-power light source and imaging screen
- High-quality, laboratory-standard mirrors and lenses for clear images without distortion
- Shows supersonic air flow patterns around models
- Shows shockwaves and expansions
- Includes digital imaging equipment and TV monitor



Description

A monochrome Schlieren apparatus for use with the Continuous Supersonic Wind Tunnel (AF302).

The Schlieren apparatus allows students to see density gradients as variations in intensity of illumination. This allows them to see supersonic air flow patterns around models. It also clearly shows shockwaves and expansions, and students can compare their position and angle with values predicted by theory.

The mirrors and lenses are of high optic standards to reduce any possibility of optic distortions of the images.

The apparatus includes a digital imaging equipment to record the images.

The TV monitor is useful to display the images to groups of students. The imaging equipment can capture still images and any real-time changes in the image.

Standard Features

- Supplied with comprehensive user guide
- Two-year warranty
- Manufactured in accordance with the latest European Union directives

Essential Services

Floor space needed:
1340 mm x 780 mm

Electrical supply:
Single-phase 100 VAC to 230 VAC, 50 Hz to 60 Hz (usually supplied from the instrument frame of the wind tunnel)

Operating Conditions

Operating environment:
Laboratory environment

Storage temperature range:
-25°C to +55°C (when packed for transport)

Operating temperature range:
+5°C to +40°C

Operating relative humidity range:
80% at temperatures < 31°C decreasing linearly to 50% at 40°C

Specification

Nett dimensions:
Length 1340 mm x depth 780 mm x height 950 mm

Packed dimensions and weight:
0.99 m³ and 134 kg

Mirror quality:
1/4 Lambda

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