

- Accessories for 32448 Aerodynamics Trainer

Streamlines can be visualized in steady flow in the wind tunnel by using fog, smoke or tufts. In this way, a clear impression of an instantaneous flow field flow can be presented and problematic flow areas, such as stall, can be shown.

Visualization of Streamlines Attachment 32448VS experimental unit - used in the 32448 Aerodynamics Trainer - allows the streamlines to be visualized using fog. In the fog generator supplied a fog fluid is evaporated and inlet into the wind tunnel via a slotted pipe. A model (aero-foil, cylinder, orifice plate) is located in the measuring section, around and through which the fog flows. The flow course for the flow around and through becomes visible, as does flow separation.

The measuring section has a black background and a transparent front plate for better observation of the streamlines. The aerofoil model's angle of attack is adjustable. The fog fluid is non-toxic, water soluble and the precipitate does not affect common materials. Precipitates can be easily wiped off with a cloth.

The experimental unit is attached to the air outlet of the 32448 trainer, simply and precisely with quick release fasteners.

The well-structured instructional material sets out the fundamentals and provides a step-by-step guide through the experiments.



### Specifications

- Visualisation of streamlines by using fog
- Accessories for 32448 Aerodynamics Trainer
- Vertical measuring section with transparent front plate and black background
- Fog generator, operation with non-toxic and water-soluble fog fluid
- Three models for insertion into the wind tunnel
- Aerofoil with adjustable angle of attack
- Scale for displaying the angle of attack

### Technical Specifications

- Measuring section
  - Cross-section in the viewing area: 252x42mm
- Models
  - Aerofoil, adjustable angle of attack
  - Orifice plate
  - Cylinder

### Experiments

- Illustrative demonstration without detection or analysis of measured values
- Flow patterns in real fluids when flowing around and through models
  - Aerofoil with adjustable angle of attack
  - Cylinder
  - Orifice plate for change in cross-section
  - Flow separation and stall

### Scope of Delivery

- Experimental unit
- Set of models
- 5L fog fluid

Note: Specifications are subject to change.

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