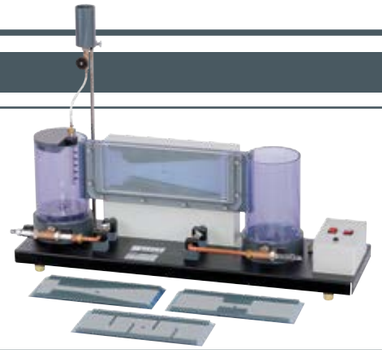
Various methods for 2D visualisation of stream lines with GUNT equipment

Using a contrast medium

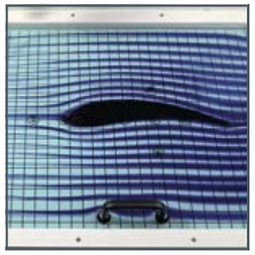
HM 153 Visualisation of different flows

- optimum visibility through transparent, illuminated experiment area
- many interchangeable models, for flow around, through or against
- water supply either through closed water circuit or connection to the laboratory supply



HM 152 Potential flow

- Hele-Shaw cell with screening in the bottom glass panel for optimal observation of the streamlines
- two-dimensional, inviscid potential flows
- influence of sources and sinks on the streamlines
- various models: drag bodies and changes in cross-section



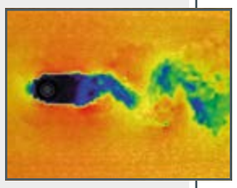
Using electrolytically generated hydrogen bubbles

HM 133 Visualisation of flow fields

- illuminated test track for optimal observation of the flow conditions
- experiments with low flow velocity for better observation of flow processes
- visualisation of Karman vortices

HM 132 Vertical visualisation of flow fields

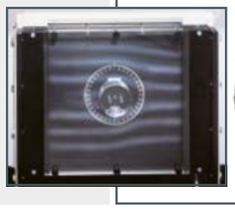
- visualisation of two-dimensional flows
- in conjunction with a special camera (i.e. PCO Pixelfy) and suitable software (i.e. ImageJ): image processing evaluation of the experiments (particle image velocimetry, particle tracking velocimetry)



Using fog

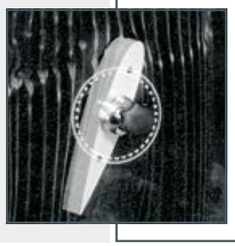
HM 226 Wind tunnel for visualisation of streamlines

- transparent, illuminated viewing area for optimal observation of streamlines
- streamline field is generated by injecting fog from multiple nozzles
- fog generator is included in the scope of delivery
- various models: drag bodies and changes in cross-section



HM 225 Aerodynamics trainer

- visualisation of streamlines with the HM 225.08 accessory
- homogeneous flow through flow straightener and carefully shaped nozzle contour
- various models: drag bodies and change in cross-section



HM 170 Open wind tunnel

- experimental section visible from all sides
- the HM 170.52 Fog generator produces highly dense fog, which is injected to the wind tunnel through a lance
- wide range of drag and lift bodies available as options

To demonstrate two-dimensional phenomena in supersonic flow, GUNT provides the HM 172 Supersonic wind tunnel.