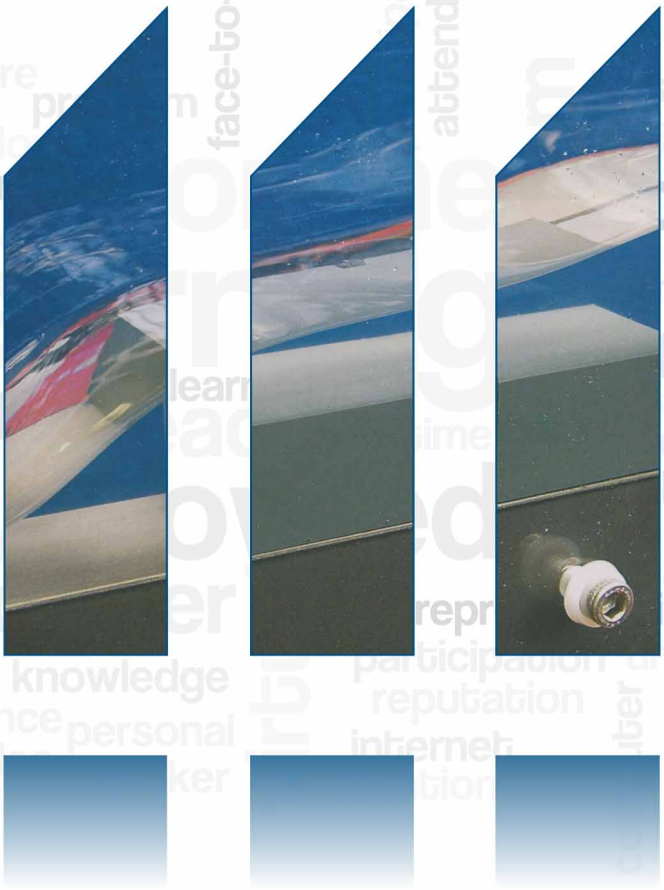

Fluid Mechanics

infoWERK
medien & technik

H23 2.5-Metre Flow Channel

Shows clearly the flow around weirs and other objects in an open channel. Supplied with model weirs, gates, blocks and a Venturi.

- Inclinable acrylic channel providing maximum flow visualisation
- Inlet includes baffle section to provide steady flow conditions
- Works with TecQuipment's Volumetric Hydraulic Bench (H1D) for easy installation
- Includes:
  - Depth gauge
  - Pitot tube
  - Submerged narrow-crested weir
  - Crump weir
  - Calliper gauge
  - Stopwatch
  - Sluice gate
  - Drum gate
  - Venturi
  - Square jump block
  - Radius jump block

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An ISO 9001 certified company

TecQuipment

H23 2.5-Metre Flow Channel

Description

The apparatus consists of a floor-standing 2.5-metre flow channel fabricated from transparent acrylic and anodised aluminium, together with various gates, weirs and blocks, enabling the phenomenon of flow channels to be easily demonstrated and studied.

The equipment is designed primarily for use with TecQuipment's Volumetric Hydraulic Bench (H1D, available separately) which provides the necessary water supply, drain and volumetric flow-measurement facilities. Alternatively, the customer may arrange their own water supply and flow-measurement facilities, if desired.

Standard Features

- Supplied with comprehensive user guide
- Five-year warranty
- Made in accordance with the latest European Union directives

Experiments

- Study of sluice and drum gates including investigation into hydraulic jump, specific energy and the determination of discharge coefficient.
- Study of submerged narrow-crested and crump weirs revealing the relationship between head over a weir and discharge.
- Study of a broad-crested weir (by combining the square and radius jump blocks) and the effects of changing the profile of the weir.
- Study of uniform flow in an inclined channel with investigations into the Chezy factor and coefficient.
- Study of a Venturi flume to indicate the discharge and surface profile, thus the derivation of the discharge coefficient.

Essential Base Unit

- Volumetric Hydraulic Bench (H1D)

Operating Conditions

Operating environment:
Laboratory

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

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

Essential Services

Floor space needed:
4 m x 2 m floor area (includes space for H1D)

The apparatus is for use with the H1D Volumetric Hydraulic Bench (see separate datasheet for details).

Specification

Nett Dimensions and weight:
2800 mm long x 1460 mm high x 410 mm wide and 65 kg plus 2 kg for models.

Approximate Packed Dimensions and weight:
2.26 m^3 and 100 kg

Working section:
2500 mm long x 120 mm high x 53 mm wide

Set of models supplied:

- Sluice gate
- Drum gate
- Submerged narrow crested weir
- Crump weir
- Venturi flume
- Square jump block
- Radius jump block

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infoWERK is a leading expert in the development of eLearning courseware, learning system solutions, teaching and AV equipment.

Furthermore infoWERK is the representative and system integrator of "TecQuipment".

TecQuipment is one of the global leaders in technical teaching equipment for engineering. If you are interested in one of TecQuipment's products feel free to contact us at:

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