

Visualization of Seepage Flow (EDC-FM-148)

EXPERIMENTAL DATA:

- Defining the pressure curve at a foundation.
- Defining the pressure curve at a retaining wall.
- Groundwater levels over time in various models.
- Defining flow nets in permeable media realistically.
- Rationalizes under a sheet pile.
- Reorganizes through an earth dam.
- Drainage at an open ditch.



DESCRIPTION:

The apparatus can be used to envision streamlines in seepage and groundwater flow on different models using a distinction medium. The effects of water pressure on different structures are displayed as pressure curves.

The apparatus consists of a transparent tank with a sand filling. Various models can be placed in the sand bed to validate typical structures. The experimental segment is separated from the feed and discharge chambers by fine mesh screens.



Fluid Mechanics



SPECIFICATIONS:

- "Sheet pile" model for visualisation of streamlines.
- "Retaining wall" and "foundation" models for demo of the water pressure.
- Instruments: tube manometers, tubes on the "foundation" and "retaining wall" models.
- For Water supply EDC-FM-100 will be used.
- Picturing of two-dimensional seepage flows and examination of water pressure at various models.
- Fine-mesh screen to separate the experimental section from the feed and discharge chamber.
- Height-adjustable overflows in the feed and discharge to adjust the water levels.
- Measuring connections with filters to detect the groundwater levels in the experimental section.

TECHNICAL DATA:

- Models
 - o "Sheet pile"
 - o "Retaining wall"
 - o "foundation"
- Experimental section
 - Usable volume: 82L
 - o LxWxH: 1480x104x630mm
- Tank for contrast medium: 0.5L.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 1950 X 900 X 1900 approx.
- Weight: 80 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-FM-148
- 1 x Instructional Manual

