

Flow Over Weirs (Sharp crested, V-notch) (EDC-FM-115W)

EXPERIMENTAL DATA:

- Study of head against discharge and Coefficient of discharge
- Study of Rectangular and different angled V-notches
- Investigation of characteristics of flow over rectangular and V-notches
- Comparison of theoretical and measured discharge.



DESCRIPTION:

The apparatus determines Discharge measurement in open channels using 2 measuring weirs. Measuring weirs for installation in the experimental flume of the base module for experiments in fluid mechanics, Thomson weir with V-profile, Rehbock weir with rectangular profile, Level gauge with scale for determining the head, Level gauge can be positioned anywhere along the experimental flume. Flow visualization using prepared CFD simulations. Digital multimedia teaching material online in the Media Center: E Learning course, prepared CFD simulations, worksheets, videos,

Flow weirs and Notches Apparatus allows students to do tests on relationships between upstream water level and weir discharge for different shaped notches. Trainer contains two different plate weirs as sharp-crested weirs. The two weirs are typical measuring weirs with defined weir openings: in the Thomson weir the opening is triangular; in the Rehbock weir it is rectangular.

The weirs are installed and screwed in place into the base module (Hydraulic Bench EDC-FM-100HB). The weir can be installed and replaced quickly and easily. Water from the small experimental flume in it flows over the weir being investigated. A level gauge for detecting the head is included in the delivery. The head is used to determine the discharge, which is then compared to the measured values from trainer.

SCOPE OF DELIVERY:

- 2 weir plates
- 1 level gauge
- 1 set of instructional material



TECHNICAL DATA:

Weirs:

- Material: Stainless steel
- Self-sealing design
- Rectangular profile
- Minimum section size: 60mm (L x W)
- V-profile angle: 90°
- Section height: 60mm

Measuring Ranges:

- Head measurement range: 0 to 200mm

Dimensions & Weight:

- Weir plates: 230 x 190 x 2mm (L x W x H)
- Level gauge: 290 x 190 x 290mm (L x W x H)
- Total weight: Approx. 4kg