

MULTI PURPOSE FLOW CHANNEL Mod. HB20/EV



HB-20-5.0 version

DESCRIPTION

The equipment consists of an open flow channel, with rectangular section available in lengths of 2.5 m and 5 m and made of acrylic transparent material. The channel is mounted on a rigid framework and it can be tilted. The inlet tank is designed to ensure a uniform flow. The level inside the working section of the channel is controlled by an overshoot weir placed at the discharge end. A lot of objects are supplied that can be fixed to the channel base, for a better studying of fluids mechanic. A longitudinal scale available at the top of the channel allows to position the depth gauges and Pitot-static tubes in different points along the channel, in order to perform the speed measurement. The channel has been designed to be used with the hydraulics bench that provides the pumped water flow, the flow control valve and a volumetric tank for flow measurement.

TRAINING PROGRAM:

- Studying the channel flow
- Studying the flow of a tilted channel
- Determining the height of a free surface in relation to the rate and inclination
- Studying the flow on the elements immersed in the channel

TECHNICAL CHARACTERISTICS:

- AISI 304 stainless steel structure
- Dimensions

	HB-20-2.5	HB-20-5.0
- length:	3.2 m	5.7 m
- width:	0.5 m	0.5 m
- height:	1.7 m	1.7 m

- Channel dimensions:

- width:	70 mm	70 mm
- height:	250 mm	250 mm
- length:	2500 mm	5000 mm

Channel slope: adjustable between -1% and 3%



• **Models supplied:**

- Venturi flume
- Triangular weir
- Sharp crested weir
- Broad crested weir
- Adjustable undershot weir
- 2 Vernier level gauges



• **Optional models available:**

- HB-20-1: Pitot tube and pressure gauge
- HB-20-2: Culvert fitting, one edge square, one rounded
- HB-20-3: Flow splitters of different shape
- HB-20-4: Spillway ski jump
- HB-20-5: Syphon spillway
- HB-20-6: Radial gate
- HB-20-7: Wave generator and wave absorbing beach
- HB-20-8: False floor
- HB-20-9: Artificially roughened bed section with length of 2.5 m
- HB-20-10: Set of weirs (triangular, Cipolletti, Bazin)
- HB-20-11: Broad crested weir
- HB-20-12: Parshall's device

REQUIRED

**HYDRAULIC BENCH
MOD. HB/EV OR HB-E/EV
- NOT INCLUDED -**



SUPPLIED WITH

**THEORETICAL-EXPERIMENTAL
HANDBOOK**



OPTIONAL

**SPREADSHEET SOFTWARE
For fluid mechanics equipment
Mod. SW-HB20/EV**

