

HM 160.72

Sediment trap



Sediment trap in the tank below the outlet element of HM 160.

Description

■ bed-load transport in open channels

Flow in rivers, canals and coastal areas is often associated with sediment transport. Bed-load transport is the main transport mechanism. During bed-load transport, solids are moved along the flume bottom.

HM 160.72 enables experiments on bed-load transport and consists of a sediment trap and a shovel for sediment feed. The sediment trap prevents the sediment of entering into the pump or the flow meter of the experimental flume HM 160.

The sediment trap consists of a fine mesh screen inserted into the water tank below the outlet element to capture the sediment. The sediment is manually removed and taken back to the feed.

HM 160.72 is not suitable for suspended load transport.

HM 160 can be extended with HM 160.72 at any time.

Learning objectives/experiments

- observation of bed-load transport along the flume bottom
 - ▶ rolling and saltation bed-load transport
- influence of flow velocity on bed load transport
- together with HM 160.29 or HM 160.46
 - ▶ fluvial obstacle marks

Specification

- [1] experiments on bed-load transport in the experimental flume HM 160
- [2] fine mesh screen inserted into the water tank of HM 160 as sediment trap
- [3] manual sediment feed using a shovel filled with sand
- [4] optionally available: sediment feeder HM 160.73 for an even sediment feed using a vibrating conveyor
- [5] HM 160 can be extended with HM 160.72 at any time

Technical data

Screen

- aperture size: 0,3mm (49mesh)

LxWxH: 1080x640x130mm (trap)

Weight: approx. 20kg

Required for operation

sediment: sand (1...2mm grain size)

Scope of delivery

- 1 sediment trap
- 1 set of accessories
- 1 manual

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Required accessories

HM 160 Experimental flume 86x300mm

Optional accessories

HM 160.73 Sediment feeder
HM 160.29 Sluice gate
HM 160.46 Set of piers, seven profiles