

HM 162.72

Sediment trap



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 162.72 enables experiments on bed-load transport and consists of a sediment trap and a bucket for sediment feed. The sediment trap prevents the sediment of entering into the pump or the flow meter of the experimental flume HM 162.

The near-bottom flow containing the sediment is fed into the trap, where the sediment sinks to the bottom and accumulates. The sediment-free water continues to flow into the outlet element.

The sediment is manually removed using a gate valve and taken back to the feed.

HM 162.72 is not suitable for suspended load transport.

The sediment trap is mounted between experimental section and outlet element during the setup of the experimental flume. It is not possible to install the trap at a later date.

Learning objectives/experiments

- observation of bed-load transport along the flume bottom
 - rolling and saltation bed-load transport
- formation and migration of ripples and dunes
- together with HM 162.29 or HM 162.46
 - ▶ fluvial obstacle marks

Specification

- [1] experiments on bed-load transport in the experimental flume HM 162
- [2] sediment trap permanently mounted between experimental section and outlet element of HM 162
- [3] sediment removal from the trap using a gate valve
- [4] manual sediment feed using a bucket filled with sand
- [5] optionally available: sediment feeder HM 162.73 for an even sediment feed using a vibrating conveyor

Technical data

Sediment trap made of stainless steel

■ capacity: approx. 85L

LxWxH: 1000x430x1300mm Weight: approx. 240kg

Required for operation

sediment: sand (1...2mm grain size) collecting tank, water connection, drain

Scope of delivery

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



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Required accessories

HM 162 Experimental flume 309x450mm

Optional accessories

HM 162.73 Sediment feeder HM 162.29 Sluice gate

HM 162.46 Set of piers, seven profiles