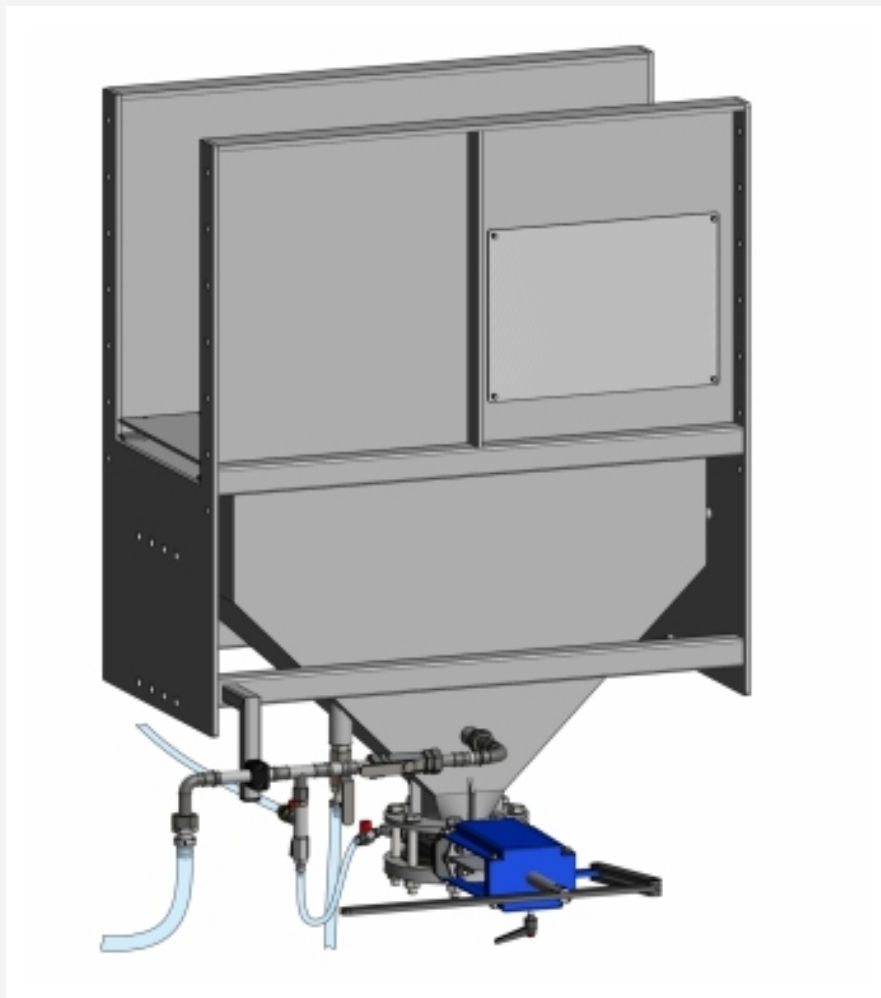


HM 163.72

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 163.72 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 163.

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 and taken back to the feed.

HM 163.72 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 163.29 or HM 163.46
 - ▶ fluvial obstacle marks

Specification

- [1] experiments on bed-load transport in the experimental flume HM 163
- [2] sediment trap permanently mounted between experimental section and outlet element of HM 163
- [3] manual sediment feed using a bucket filled with sand
- [4] optionally available: sediment feeder HM 163.73 for an even sediment feed using a vibrating conveyor

Technical data

Sediment trap made of stainless steel
 ■ capacity: approx. 115L

LxWxH: 1000x530x1300mm (trap)
 Weight: approx. 300kg

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

HM 163.72

Sediment trap

Required accessories

HM 163 Experimental flume 409x500mm

Optional accessories

HM 163.73 Sediment feeder
HM 163.29 Sluice gate
HM 163.46 Set of piers, seven profiles