

HM 161.73

Sediment feeder



The illustration shows the sediment feeder on a platform.

Description

- sediment feed using a vibrating conveyor
- operation via touch screen in HM 161

The sediment feeder essentially consists of a vibrating conveyor, via which sediment is introduced into the experimental section. The feeder is usually mounted above the inlet to the experimental section. The sediment used is sand with a grain size of 1...2mm.

The feeder is mounted on a walk-on platform that is installed next to the experimental flume. This ensures convenient operation. Another advantage of the separate platform is that the feeder vibrations do not affect the experimental section. The accessory is automatically identified by the PLC. The feeder is operated and the vibration intensity is set via the touch screen of the HM 161 PLC.

HM 161.73 is not suitable for suspended load transport.

HM 161.73 is used together with the sediment trap HM 161.72.

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 161.29 or HM 161.46
 - ▶ fluvial obstacle marks

Specification

- [1] sediment feeder for a sediment feed to the experimental flume HM 161
- [2] accessory for the sediment trap HM 161.72
- [3] automatic identification of the accessory in the PLC
- [4] mounting above the inlet of the experimental section of HM 161
- [5] walk-on platform for the feeder
- [6] operation via touch screen of the PLC in HM 161

Technical data

Feeder

- feed rate: 0,5m³/h
- frequency: 3600min⁻¹

Funnel content: 50L

Recommended room height: 5m

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase

120V, 60Hz, 1 phase

UL/CSA optional

LxWxH: 1900x500x1050mm (feeder)

Weight: approx. 320kg (feeder)

LxWxH: 1800x1300x2000mm (platform)

Weight: approx. 200kg (platform)

Required for operation

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

Scope of delivery

- 1 feeder
- 1 platform
- 1 set of accessories
- 1 manual

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Required accessories

HM 161	Experimental flume 600x800mm
HM 161.72	Sediment trap

Optional accessories

HM 161.29	Sluice gate
HM 161.46	Set of piers, seven profiles