

HM 160.34

Ogee-crested weir with pressure measurement



Description

■ pressure distribution along the downstream side of an ogee-crested weir

Ogee-crested weirs are fixed weirs and form part of the control structures. They are often used to dam a river. The weir itself consists of a massive damming body. The outer weir contours roughly correspond to a triangle. The downstream side of the weir is often designed to improve flow, in order to achieve the largest possible discharge.

The pressure distribution along the downstream side of the weir is studied with HM 160.34. The pressure measurement is realised via bores perpendicular to the surface of the downstream side of the weir. The heads are directly indicated on the integrated manometer tubes.

Learning objectives/experiments

- hydrodynamic overfall at the ogee-crested weir
- pressure distribution along the downstream side of the weir for different discharges
 - ▶ nappe separation
- together with a water level and a velocity meter:
 - ▶ determination of discharge and head
 - ▶ comparison of the theoretical and the measured discharge

Specification

- [1] ogee-crested weir for the experimental flume HM 160
- [2] weir crest with chute
- [3] 7 pressure measuring points included in the downstream side of the weir
- [4] integrated manometer tubes
- [5] weir body with sealing lips

Technical data

Manometer tubes
 ■ measuring range: 290mmWC

LxWxH: 330x84x290mm
 Weight: approx. 3kg

Scope of delivery

- 1 weir
- 1 set of accessories
- 1 manual

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Required accessories

HM 160 Experimental flume 86x300mm