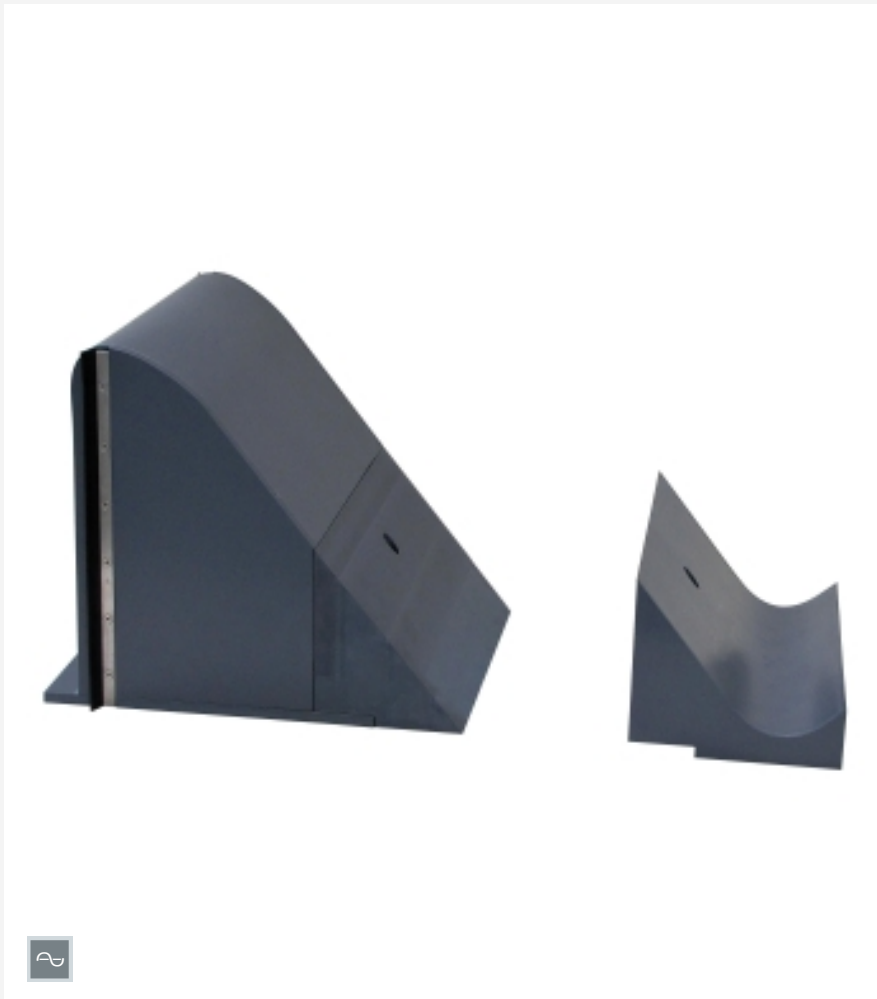


HM 163.32

Ogee-crested weir with two weir outlets



Description

■ flow over ogee-crested weirs

Ogee-crested weirs are fixed weirs and form part of control structures. A flow transition to supercritical discharge occurs during flowing over the weir body. At the end of the weir downstream side, the supercritical discharge has a high flow energy. The excess part of this energy can cause damages. Therefore, energy should be dissipated, e.g. using a ski jump as weir outlet or a stilling basin.

HM 163.32 contains an ogee-crested weir with two different weir outlets (chute only and chute with ski jump).

The optionally available accessory HM 163.35 contains elements for energy dissipation to study further ways of energy dissipation.

Learning objectives/experiments

- effect of the weir outlet on flow processes
 - ▶ chute
 - ▶ chute with ski jump
- position of hydraulic jump depending on downstream water level
- together with a water level and a velocity meter:
 - ▶ determination of the sequent depth
 - ▶ determination of discharge and head
 - ▶ comparison of the theoretical and the measured discharge

Specification

- [1] ogee-crested weir for the experimental flume HM 163
- [2] 2 different weir outlets: chute and chute with ski jump
- [3] weir body made of PVC
- [4] weir body with sealing lips

Technical data

Weir with chute

- LxWxH: 410x409x360mm

Weir with chute with ski jump

- LxWxH: 470x409x360mm

Total weight: approx. 18kg

Scope of delivery

- 1 ogee-crested weir
- 2 weir outlets
- 1 set of accessories
- 1 manual

HM 163.32

Ogee-crested weir with two weir outlets

Required accessories

HM 163 Experimental flume 409x500mm

Optional accessories

HM 163.35 Elements for energy dissipation