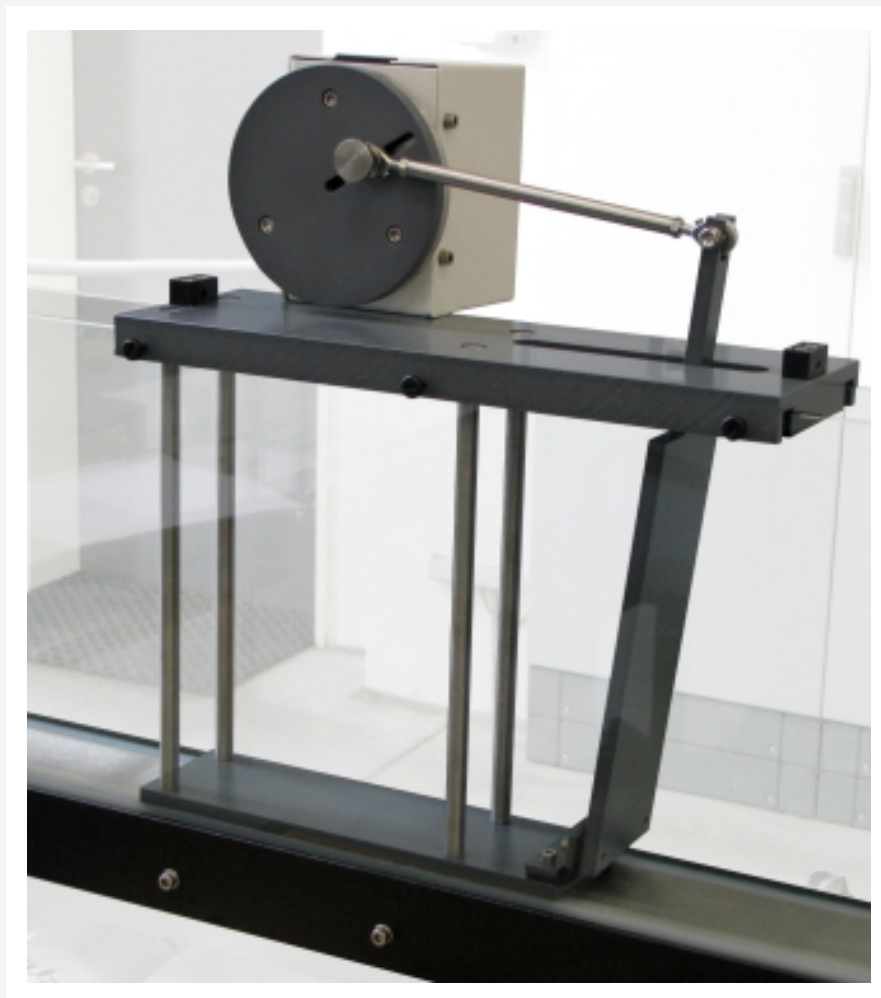


# HM 160.41

## Wave generator



### Learning objectives/experiments

- observation of waves: different wave shapes
- together with accessories:
  - ▶ absorption and reflection of wave forces at a plain beach (HM 160.80)
  - ▶ behaviour of waves at piers (HM 160.46)

### Specification

- [1] wave generator for the experimental flume HM 160
- [2] generation of surface waves via paddle swinging back and forth
- [3] drive of the paddle via crank mechanism and motor with gear
- [4] adjustable crank mechanism stroke
- [5] motor with variable speed via frequency converter

### Technical data

#### Motor

- power output: 40W
- output speed: 31...310min<sup>-1</sup>
- stroke: 120mm

230V, 50Hz, 1 phase  
 230V, 60Hz, 1 phase  
 120V, 60Hz, 1 phase  
 UL/CSA optional  
 LxWxH: 440x280x500mm  
 Weight: approx. 10kg

### Scope of delivery

- 1 wave generator
- 1 sealing plug
- 1 set of accessories
- 1 manual

### Description

#### ■ generation of surface waves

Surface waves are generated by a paddle that swings back and forth. A motor with frequency converter and a crank mechanism are used to drive the paddle. The stroke of the crank mechanism can be adjusted continuously. The motor is placed on the experimental section of the experimental flume HM 160 and fixed in place using bolts.

The frequency of the paddle is set and directly indicated at the switch box of the experimental flume.

In addition, the device contains a sealing plug to seal the opening in the outlet section of the HM 160 experimental flume. This means that waves can also be generated without flow through the measuring section. Experiments on waves are only performed without flow.

# HM 160.41

## Wave generator

### Required accessories

HM 160                    Experimental flume 86x300mm

### Optional accessories

#### Wave absorption

HM 160.80            Set of beaches

#### Other experiments

HM 160.46            Set of piers, seven profiles