

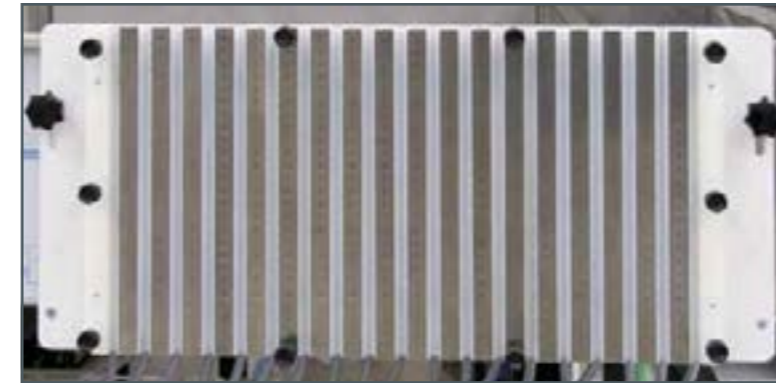
## HM165 Studies in hydrology

Hydrological studies are conducted in connection with the design, construction and operation of hydraulic engineering systems and water management functions. These studies focus on topics such as seepage and flow of water in the soil and the use of groundwater resources.

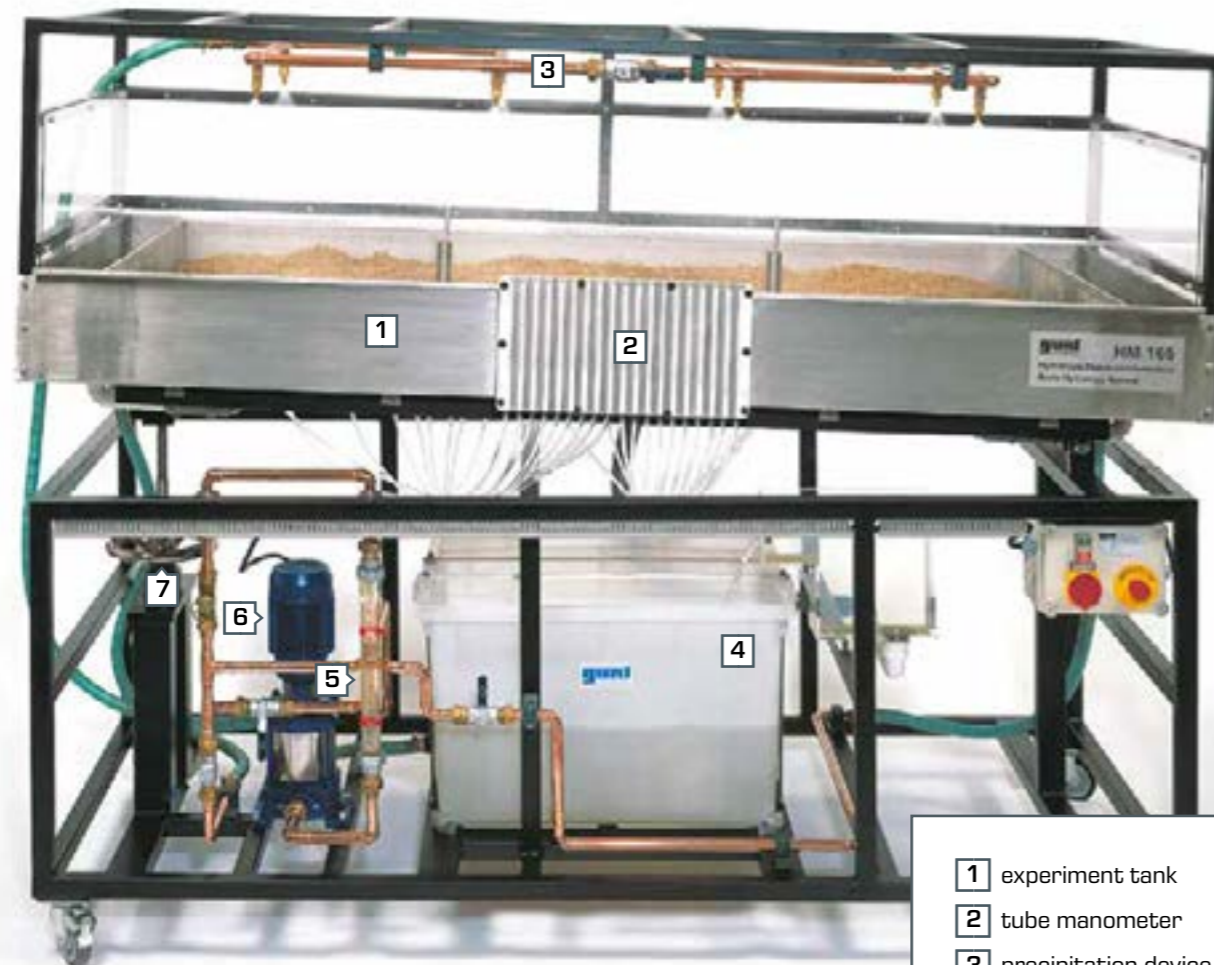
This device can be used to study seepage and groundwater flows after precipitation. In particular, the permeability and storage capacity of soils can easily be observed. Many adjustable parameters allow a wide range of experiments.



Precipitation device with nozzles for realistic simulation of rainfall



19 tube manometers allow very detailed measurement of the groundwater level.



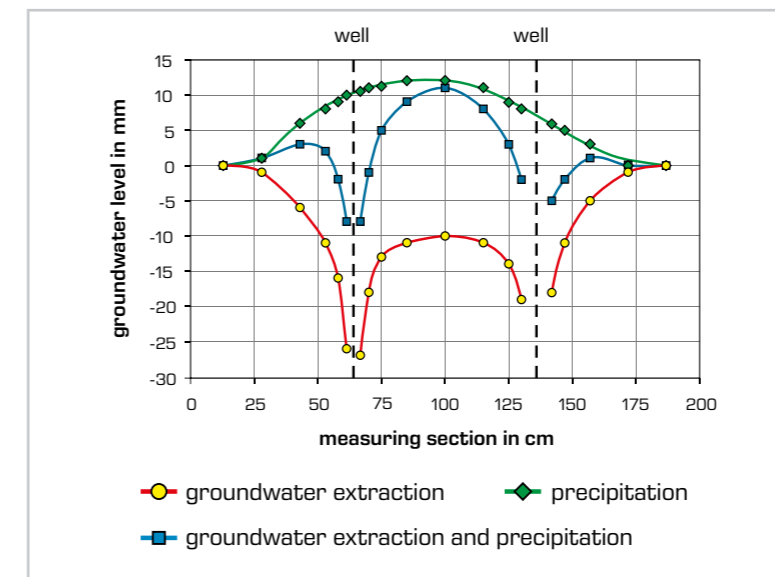
- 1 experiment tank
- 2 tube manometer
- 3 precipitation device
- 4 storage tank
- 5 flow meter
- 6 pump
- 7 inclination adjustment

About the product:



To illustrate groundwater flow, the water is supplied to the experiment tank via two side-mounted chambers. A precipitation device is available for studying precipitation. There are two wells with perforated tubes or two side-mounted chambers with drainage screens available for the investigation of various drainage systems. At the bottom of the experiment tank are 19 connections for measuring groundwater levels which are indicated on tube manometers.

With this device you also receive comprehensive instructional material. A detailed description of selected experiments enables you to quickly incorporate the device into your teaching.



Excerpt from the HM165 manual: measured island groundwater levels for three different scenarios.

### Learning objectives

- investigating transient processes
  - ▶ studying how precipitation of varying duration affects drainage
  - ▶ storage capacity of a soil
- investigating steady processes
  - ▶ investigating the seepage flow
  - ▶ effect of different soil saturation levels