

HM 141 Hydrographs after precipitation

Hydrographs are an important tool for the representation of hydrological data such as precipitation, groundwater levels or drainage. Furthermore, a hydrograph is the basis for the design of sewer systems. In this case, the progress of the amount of precipitation over time is just as important as the quality of the soil.

i Hydrograph

A hydrograph is defined as the graphical representation of drainage (for example in m^3/h) at a particular measuring point as a function of time.



About the product:

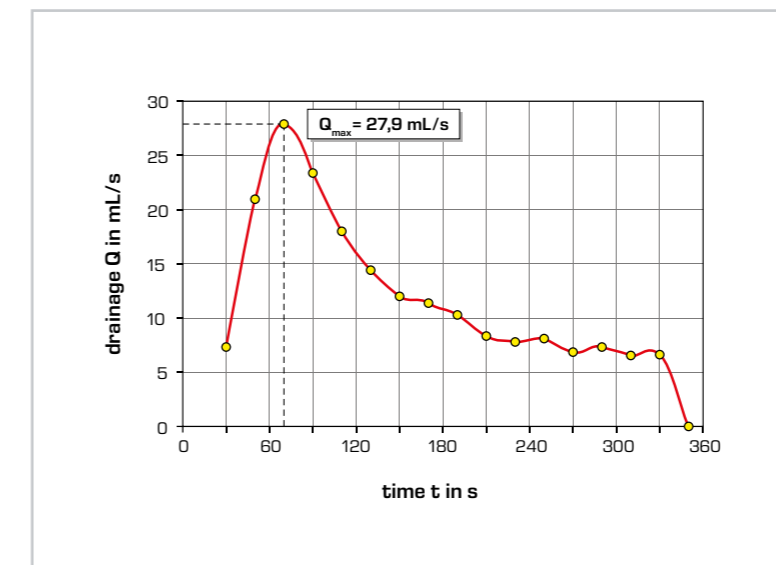


The core element of HM 141 is an experiment tank filled with sand or gravel. Using timers, you can apply precipitation to the experiment area with varying duration and intensity. The drainage of the experiment area can be implemented either with a drainage tube or a drainage chamber located at the side of the experiment tank.

The water draining from the experiment tank is filled successively into 17 measurement chambers controlled by time. Determining the amount of water in the individual measurement chambers allows you to determine the timing of drainage from the experiment area, i. e. the hydrograph.



The measuring chambers are filled successively in a time controlled manner.



Excerpt from the HM 141 manual: typical hydrograph curve with drainage via lateral outflow chambers. The maximum drainage occurring in this precipitation event can be determined from the hydrograph.

Learning objectives

- effect of precipitation of varying duration or intensity on soils with different saturation
- record hydrographs after precipitation
- compare natural dewatering with dewatering via drainage pipe
- influence of rainwater retention basin on the hydrograph