



Dewatering is a collective term for methods that are used to lower the groundwater level by removing water from the ground.

Filter dewatering

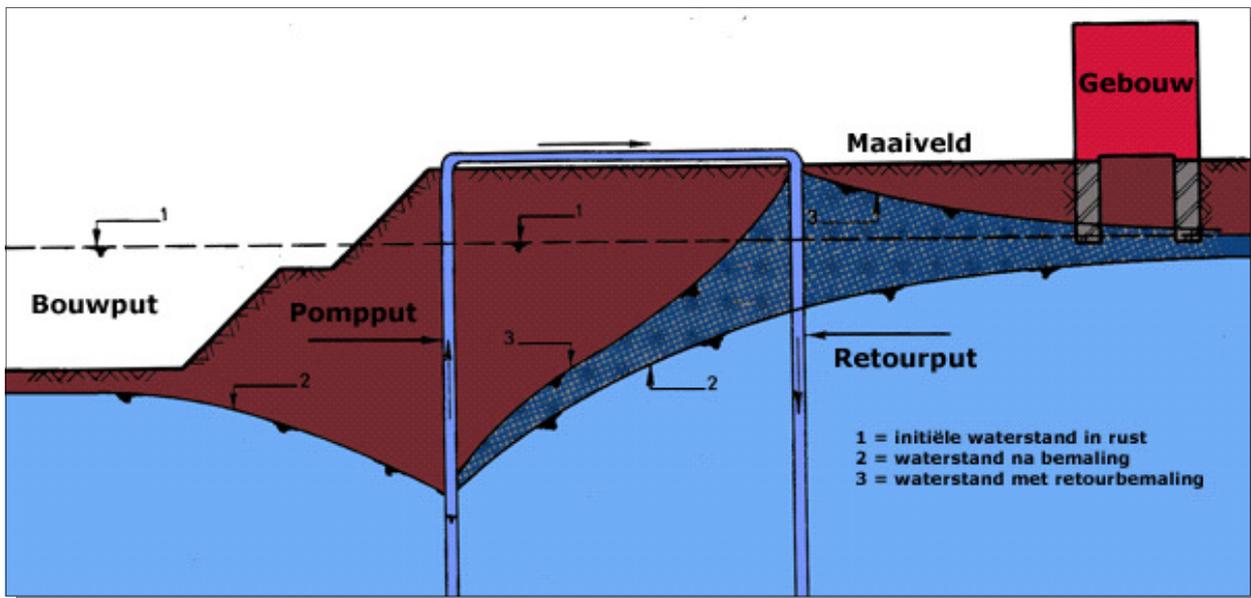
Dewatering filters are either manually jetted into the ground or mechanically bored into the ground. The filters are connected to a collector line leading to a suction pump driven by an electric motor or a diesel engine. The pump sucks the water out of the ground, thereby lowering the water level. The water is pumped through a drain line to a discharge point. Filter dewatering can only be used for limited groundwater lowering, and the effect is localised.

Deep wells

A well hole is bored mechanically and a PVC filter is placed in the well hole. The filter is surrounded by filter gravel fill. An underwater pump is placed in the well hole. The water is pumped upward through a riser pipe and discharged. As the groundwater level can be reduced much more with deep wells, this method is primarily used with large building excavations.

Return dewatering

With this method the pumped-up groundwater is returned to the ground nearby. Return dewatering is used in locations where lowering the groundwater level can have major consequences for buildings or the natural environment, or to reduce the volume of discharged water. The effect of dewatering is reduced by pumping the water back into the ground.





Horizontal drains

The drains are milled into the ground using a drainage machine. The drains are connected to a suction pump driven by an electric motor or a diesel engine, which transports the water to a discharge point. This method is often used for pipeline construction.



Vertical drains

Settlement occurs if a load, such as a roadway, railway track or embankment, is placed on weak ground strata saturated with water. This settlement occurs gradually because the water cannot escape quickly from the weak strata. To accelerate settlement, prefabricated vertical drains are placed in the ground. This is called 'accelerated consolidation'. Final earthwork can take place after consolidation.

Our strengths

- Over 100 years experience.
- An enormous pool of suction pumps (both electric and diesel), underwater pumps and accessories.
- Pumps and drilling machines are maintained and repaired in Smet-Boring's own shop.
- On-call service 24/7 for fast, effective response in case of trouble.
- Design optimisation.
- We always strive to find the most economical solution for our customers, in line with the specific conditions and constraints of the project and the hydro-geological characteristics of the sub-soil.
- Numerous references at home and abroad.

