

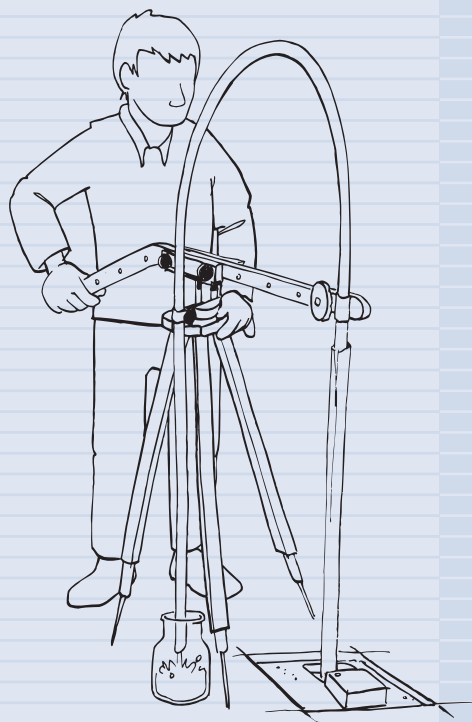


# FOOT VALVE PUMPS FOR GROUNDWATER RESEARCH

You will return to the contents of P2 WATER by clicking the pictogram

## P2.51

### Taking water samples with the hand operated foot valve pump.



Foot valve pumps are first of all intended for pumping groundwater that needs to be analyzed for purposes of environmental research. The operation is such that the escape of volatile organic substances is limited to a minimum. Cross contamination can be avoided; it is simple and inexpensive to replace the tube and the stainless steel valve can easily be decontaminated. The pumps can be applied for monitoring wells with a diameter from 15 mm, while the depth of the water may exceed 50 meter. Due to its characteristics the pump is perfect for well development and purging.

A foot valve pump consists of a tube fitted at the bottom end with a ball valve. Once submerged in the water, the water enters the tube through the valve. If the tube is then moved up- and downward making use of the inertia of the water, new water is sucked into the tube and the water is pushed upward at the same time.

The program of Eijkelkamp Agrisearch Equipment

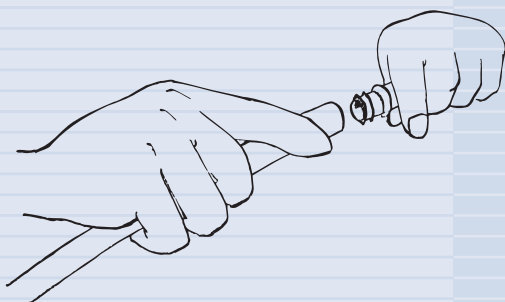
includes hand-operated as well as powered foot valve pumps.

### 12.13 Hand-operated foot valve pump, standard set

Two tubes, with a diameter of 10 or 16 mm, can be fitted on the hand-operated foot valve pump. The lever hinges on a tripod of which the height can be adjusted. In this way it is possible to take samples from wells fitted with a shaft type well cover as well as street type well covers.

The hinge point of the lever can be moved quickly, in this way the stroke lever ratio can be adjusted which makes it possible to work efficiently at all times. The advantage of the lever is that it reverses the weight of the water filled tubes so that you need not carry the weight; on the contrary, your arm will be lifted slightly. This way pumping is little effort and can be sustained much longer. You can stand upright during the operation.

### Mounting a ball valve in a tube.



Hand-operated footvalve pump