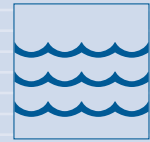


FOOT VALVE PUMPS FOR GROUNDWATER RESEARCH



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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 electrically powered foot valve pumps.

12.13 Hand-operated foot valve pump, standard set

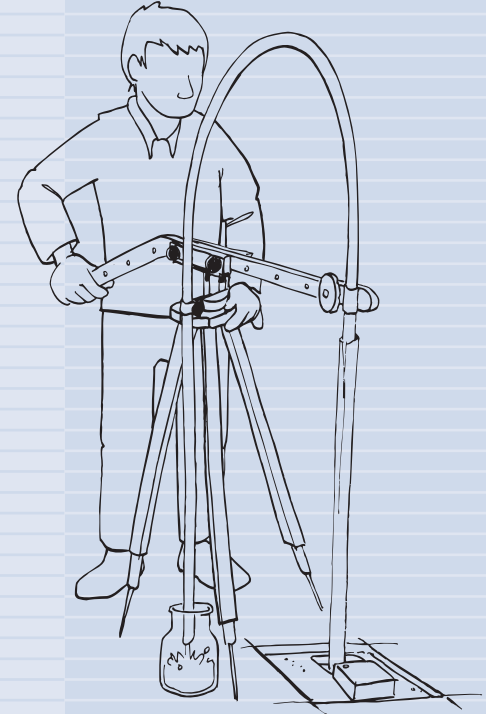
Two tubes, with a diameter of 10 or 16 mm, can be fitted on the hand-operated foot valve pump. The lever hinges on a tripod of which the height can be adjusted. In this way it is possible to take samples from wells fitted with a shaft type well cover as well as street type well covers.

The hinge point of the lever can be moved quickly, in this way the stroke x lever ratio can be adjusted which makes it possible to work efficiently at all times.

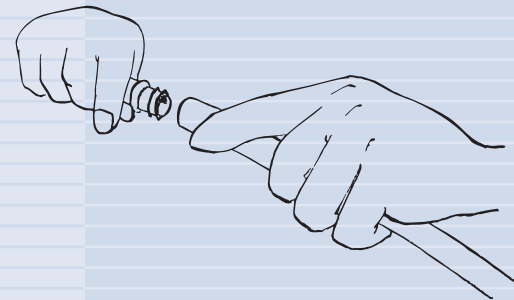
The advantage of the lever is that it reverses the weight of the water filled tubes so that you need not carry the weight; on the contrary, your arm will be lifted slightly. This way pumping is little effort and can be sustained much longer.

You can stand upright during the operation.

Taking water samples with the hand operated foot valve pump.



Mounting a ball valve in a tube.

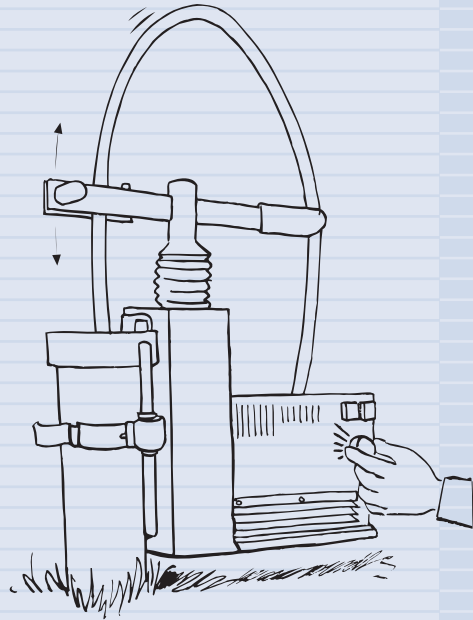


Hand-operated footvalve pump

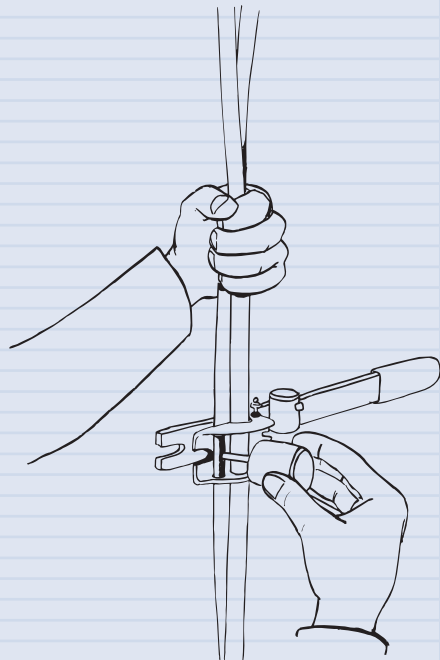


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The pumping speed is adjusted.



Two pumping tubes are clamped.



FOOT VALVE PUMPS FOR GROUNDWATER RESEARCH



Advantages

- Light weight.
- Easy to install.
- It can be applied to take samples from wells fitted with shaft type well covers as well as from street type well covers.

Among other items the standard set contains a foot valve pump suitable for two pumping tubes, tube guides, ball valves, polyethylene tube and an aluminium tripod.

12.15 Foot valve pump 220 V, standard set

The pump has a delivery of up to 12 liter per minute (depending on the diameter of the ball valve) and a sampling depth exceeding 50 meters. The pump can be used standing as well as suspended from a monitoring well protection shaft. Among other items, the standard set contains: the electrical foot valve pump, tube guides, a generator, insulation protection, PE tube and ball valves.

Advantages

- Light weight and yet very powerful.
- Designed for field work.
- Stroke frequency can be set effortlessly and continuously variable.
- Rapid coupling from pumping tube.

Applications

- Well development, purging and sampling monitoring wells for pumping (slug) tests and other pumping applications.
- Excellent sampling of very volatile components in the groundwater (as required by the NNI Draft standard 5745) by anaerobe activity without cavitation, turbulence or under-pressure.

N.B.: The diameter of the sampling filter should not exceed 125 mm. The reason being that otherwise the tube would back and forth too much. It is possible, if needed, to place an extra 40 mm guide pipe in the sampling filter.



Foot valve pump 220 V