



13.51 SEDIMENT LEVEL STAVE

OPERATING INSTRUCTIONS

What is a sediment level stave?

A sediment level stave is a sounding rod used for sounding the sediment layers in surface waters. Either a point or a sediment grid can be mounted to the bottom.

Determination of the transition between water and sediment

A sediment grid is used to determine the transition between water and sediment. The sediment grid has a surface area of 15 x 15 cm. When taking a sounding, this sediment grid rests on top of the sediment, allowing a good estimate to be made of the transition between water and sediment.

Determination of the transition between sediment and the solid bed of the water course

The bottom of the sediment level stave is used to determine the transition between the sediment and the solid bed of the water course. To protect the screw thread, a solid short point is screwed into it, which has the same surface area as the extension rods themselves. Due to the small surface area, it is normally possible to force the point through the sediment layer and to feel the transition between the sediment layer and the solid bed of the water course. This can be determined by feel, in particular for sandy and clay soils. For peat and unripened clay soils, this will be difficult to feel correctly and supplementary sampling will be necessary; for instance using a Multisampler or Beeker Sampler.

Using an elbow

A short elbow can be used to take sediment depth measurements from the bank of a narrow ditch or brook. As the measuring rods will then be at an angle, it will not be possible to force them into the sediment. When the elbow is used, only the top of the sediment layer can be sounded.

If the surveyor is in a boat or on a bridge, the elbow is not needed and pressure can be exerted. It is possible to increase the standard length (4 m) to for instance 6 metres. If you extend this any further, there is an excessively high risk of the stave bending when pressure is exerted. When more than six rods are used (and/or if a current is flowing) you can only use the sediment level stave to determine the top of the sediment layer.

Safety and maintenance



**When required use gloves.
After use rinse with clean water.**

Sediment level stave, standard set

The sediment level stave is part of the standard kit to measure the depth of sediment down to a depth of 4 m. The set contains four extendable measuring rods made of anodised aluminium with threaded connections. The rods are 1 m long and are 25 mm in diameter. The sediment measuring rods are marked every 5 cm. The kit is supplied including a stainless steel sediment grid, core point and carrying bag.



Sediment level stave, standard set



Sediment grid



Using the sediment level stave with elbow

All it takes for environmental research

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