

# SAMPLERS FOR SUSPENDED SEDIMENT

You will return to the contents of P1 SOIL by clicking the pictogram



Sediment is transported by running water. The lighter particles are transported by the water in a suspended state. For the sampling of this suspended sediment for calculation of the overall quantity of sediment carried by the water, various samplers are available.

## 12.02 Water sampler 'Watertrap'

The sampler 'Watertrap' has been designed to take representative samples from running water up to a depth of approx. 25 meter.

Samples are taken with the stainless steel device by catching part of a horizontal moving column at a certain moment at a certain depth.

The sampler is lowered by means of a hand winch fitted with a steel cable. The winch is fixed to a telescopic arm. The fastening clip of the telescopic arm allows fixing of the arm on the railing of a bridge or a boat. The depth at which the sampler is located can be read from a depth counter.

The valves are opened before the sampler is lowered. The valves are kept in an open position by the falling clamps.

As soon as the sampler is at the right depth the falling weight is allowed to slide down along the cable, thus thrusting the long falling clamp downwards, resulting in the closing of the downstream valve, only a moment later followed by the other clamp and the upstream valve.

Rubber rings take care of the watertight sealing of the body with the sample, during retrieval. The sample can be discharged by opening the valves.

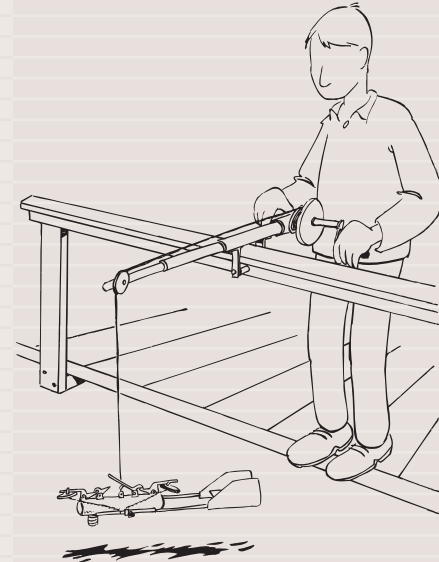
By relocating the weights and adjusting the fins, it is possible to hang the sampler in any required position relative to the direction of flow.

The standard set comprises, among other items: the stainless steel water sampler, a falling weight, a hand winch and a telescopic arm with fastening clip and depth counter.

The whole is packaged in a transport case.

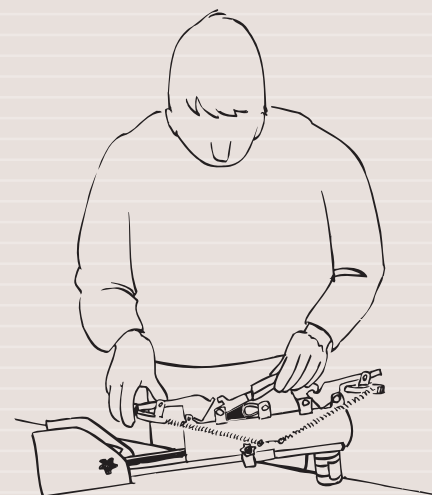
P1.42

The winch of the Watertrap is fixed to the railing of a bridge.



Water sampler 'Watertrap', complete set

The sealing valves of the watertrap are opened before the sampler is lowered (spring operated).



## BENEFITS

### 12.02 Watertrap sampler

- Lower, drop messenger and retrieve sample
- Easiest determination of sediment load
- Cable operated; works at any depth
- Stainless steel construction



www.eijkelkamp.com



You will return to the contents of P1 SOIL by clicking the pictogram

## SAMPLERS FOR SUSPENDED SEDIMENT

P1.42

The water sampler is emptied.



For correct sampling it is important that the water sampler is suspended in balance in the water.

Bringing the sampler in balance can be achieved by:

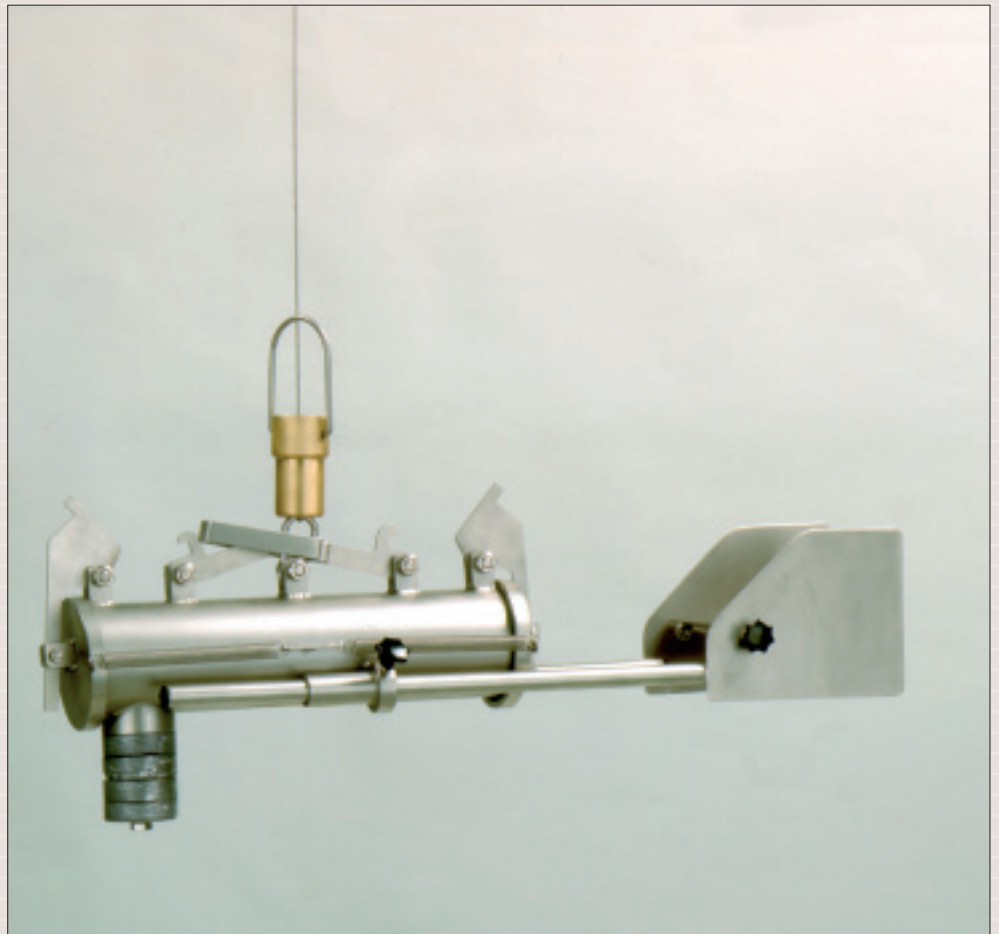
- Adjusting the horizontal tail fin on the tail.
- Sliding the tail fin rods through the guiding tubes.
- Altering the weight under the front of the stainless steel cylinder.

### Applications

The taking of representative samples (1250 cc) from any desired depth in flowing water can be effected for the benefit of:

- Chemical analysis.
- Biological- and bacteriological analysis.
- Thermal analysis (cooling water disposal).
- Mineralogical analysis.

For instance to determine the measure of mud-and/or soil transport by water).



Water sampler 'Watertrap' with closed valves