



DORMER SOIL SAMPLERS

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Sediment Samplers Comparison - with pros and cons of each

We have 3 wet sediment samplers and each is made from stainless steel.
Prices are shown in our price list.

1. The Gouge Auger is best for mud or cohesive sediments. It is made from a tube with the side cut away and then is hand beaten into a taper. The edges are sharpened and depth marks are etched into one side. It is pushed into the mud and turned >90 degrees to cut the sample. The taper helps release the sampler when pulled upwards and also helps retain the sample (the taper is smaller at the bottom). It connects to a standard T-handle (supplied separately) and to our standard extension rods if required. It comes as either 1.0m or 1.5m long and is 50mm OD at the top and tapers to 28mm OD at the bottom. We do make some other bigger sizes mainly for use on hydraulic push rigs. Pros: Is quick and easy to use; and displays the full side view of the sample. Cons: Relatively small sample; sampler has sharp edges; and sampler can be twisted if the bottom embeds in hard materials (roots or clays) without the user feeling it before the handle is turned (forced).
2. The Piston Sampler is best for saturated sediments below the water table. It is a thin walled tube with an aluminium piston inside with 2 rubber o-rings on it and attaches to a rope through a pulley that slips over the top of the tube or the extension rod. It comes in 2 versions, the surface type and the down hole type. The surface type was the first one developed by us and can sample saturated sediments from ground level to a depth equal to the length of tube used (maximum is 6.0m). The down-hole type has a threaded connector welded to the top to attach extension rods for use down a hole or from a boat. These tend to be only 1.0m or 1.5m long. The down-hole type has several sub-versions relating to sample length and the piston rod offset so discuss these before ordering. Pros: Various diameters and lengths; can sample underwater; and the sample is undisturbed. Cons: The surface types are heavy when full of sample and long lengths are very hard to transport; sloppy sample can drop out the bottom; the offset piston rod can jam if it twists.
3. The UWS sampler is best for the more sloppy saturated sediment samples. It is made from a 50mm OD tube in either 1.0m or 1.5m lengths. It has a threaded removable nose-cone (cutter shoe) and a yellow plastic core retainer (core catcher or core basket) and soft clear plastic liner to capture and transport the sample in. The top has a welded connector to attach our standard T-handle/extension rods. It comes with a c-spanner to undo the nose-cone when it become too slippery for hands after getting wet and muddy. Pros: Retains very sloppy samples; the liner can be used to transport samples and is easy to cut open with scissors or knife; the retainers are very durable and only need replacing if stepped on or lost. Cons: Only one diameter; not good in clean sand because is too hard to penetrate; not good in firm clay.