PRODUCT INFO:

GOUGE AUGER (product code = GA):

The **Gouge Auger** is used to take undisturbed samples from soft soil conditions such as wet loamy sand, marine mud etc. They are widely used by Acid Sulfate Soil sampling agencies in the wet coastal areas of New South Wales and Queensland.

The standard Gouge Auger is manufactured from 48mm OD stainless steel tube which is cut in half lengthwise, then shaped to form a taper over the bottom 1 metre of its length. It has the bottom and sides sharpened to cut the sample as it is pushed in then rotated. The tapered shape holds the sample as it is withdrawn. We mark the sides in 100mm increments to help accurately plot the sample. They come with either our coarse threaded connection or with a hexagonal fitting with pin. The hexagonal fitting allows the Gouge Auger to be rotated in either direction, which is sometimes useful and also reduces the twisting distortion caused when continuously rotated in one direction only, in firm conditions.

The Gouge Auger is now also available in 60mm OD x 3.9mm wall thickness or 73mm OD x 5.2mm WT with a proportionally larger sized taper and can be made to a length to suit your requirements.

They all can be used on the surface or down an augured hole. The larger ones are more for hydraulic rig use but can still be used by (strong) people power.

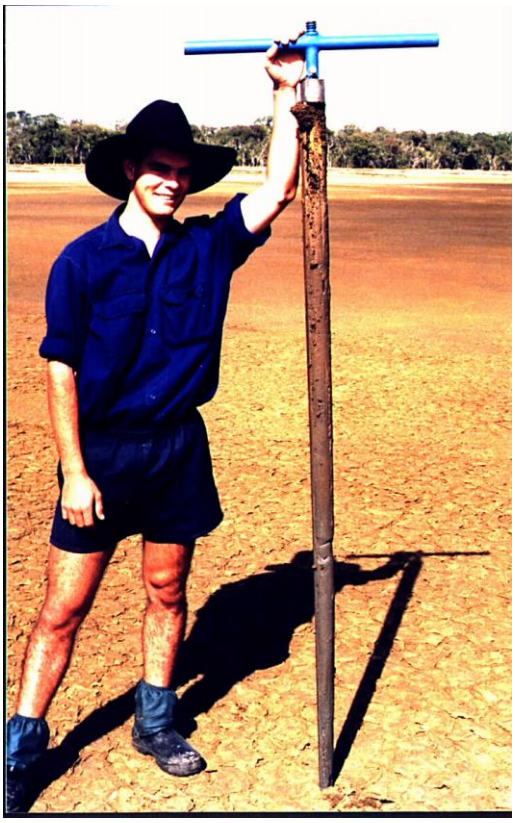
Re-sampling deeper in the same hole is severely limited by the taper and the hole collapsing. It is better to take the depth required as one sample or you may need to use casing.

The Gouge Auger pushes easily into sediments or saturated soils. Wetting the sampler before use helps reduce friction and aids sample removal. If high resistance is felt while pushing in or turning the handle it may have encountered tree roots or compacted soils. Stop and remove the sampler rather than risk twisting or damaging it, then try a new location. When at the desired depth rotate the handle 180 degrees clockwise to cut the sample, then pull out the sampler. The tapered shape holds the sample in.

A gap left at the top helps with sample removal.

The sample profile can be viewed and logged against the 100mm increments cut into the edge of the sampler.
For more accurate assessment the surface should be cut away to remove any contamination from the side of the hole as it was pulled out (the taper reduces this problem).
Be very careful of the sharpened edges when handling the sampler, removing sample or cleaning it.

The sample can be removed in pieces when the material is plastic enough by inserting a spoon or blade and sliding sections of sample toward the bigger end.
An old spoon is very useful when removing sample and a narrow, long bristled, stiff brush is very useful for cleaning.



This is a 73mm x 1.8m long Gouge Auger we made for a hydraulic push rig which was now being used by hand in mangrove mudflats in North Queensland where the rig could not access.