



# DORMER SOIL SAMPLERS

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## PRODUCT INFO

### Hand Auger Intro:

We specialise in the design and manufacture of hand operated soil sampling equipment and we export it to 76 countries.

We have several different types of soil samplers ranging in diameters from 50mm to 100mm. The basic open spiral augers are available in 2 main sizes, 50mm and 62mm x either 1.0M or 1.5M long and these attach to plain tubular extension rods to go incrementally deeper (friction becomes too high to have > 1.5m of continuous spiral). We have several other 'shell type' soil samplers that use a hollow tube design with different cutter styles for different soil types to incrementally sample soils and these come in a nominal 50mm or 62mm or 75mm or 100mm size. These 'shell type' sampling heads are 450mm long and are welded to a tubular shaft that make each either 1.0M or 1.5M long to create a more comfortable length to operate and to enable easier logging of depths. Of the 'shell type' the SOS is the general purpose, the SA is for sand, the SON is better than the SOS in gravel, the SOD is better in hard dry clays and the SOC is only for soft sticky soils and the JA is a smaller sampler for shallow sampling. See pics below and on our website [www.dormersoilsamplers.com](http://www.dormersoilsamplers.com) which also has a price list.

The minimum diameter of our samplers is governed by the diameter of our plain tubular extension rods used to incrementally go deeper than the 1.0 metre length of the sampler itself. Our extension rods are made from 40mm diameter lightweight tube with a male connecting thread on the bottom and a corresponding female thread at the top and we have spring steel Tommy Bars (breaker bars) that insert into holes adjacent to each threaded end to undo those threaded connections.

Stones or gravel are the biggest problem for hand operated samplers because the cutters can't cut the stones and therefore must displace each stone inside or outside the sampler and in gravelly soils there are many stones which cause the cutters to bounce off each stone causing the sampler to bounce around uncontrollably and this reduces penetration greatly. A drill rig has the power to hold the auger steady and force the stones away but a man cannot. Even using our motorised unit, the Drillmite, it does not solve this problem because a man can't hold it steady when it hits stones – the motorised unit has more power than a man or even 2 men can hold so they can get moved more than the stones. With strength and perseverance a man can achieve it but it can be a battle. We also have several sizes of Star Drill and Stone Catcher attachments to displace stones or to pulverise them where necessary, most prefer to just relocate the hole in hope of missing the stones.

We have 7 different auger styles and most of them are specialised for different soil conditions:

SOS is a general purpose soil sampler.

SA is a sand sampler (standard are for clean sand and Heavy Duty for when debris in the sand).

SON is our previous GP sampler and now is preferred for gravelly soils.

SOD is for hard dry clays and has more aggressive cutters; can be used on all soils but is harder to turn.

SOC is for soft wet soils only and has larger side opening to be easier to clean sample out but this makes them too weak for normal soils.

JA is a short open top style sampler for shallow sampling (less than 1m deep).

SP is an open spiral auger more commonly used to drill holes or to penetrate hard layers.

We also have some other specialised samplers for undisturbed samples or wet sediment sampling.



SOS - general purpose soil sampler

SOD - GP plus better in hard dry soils

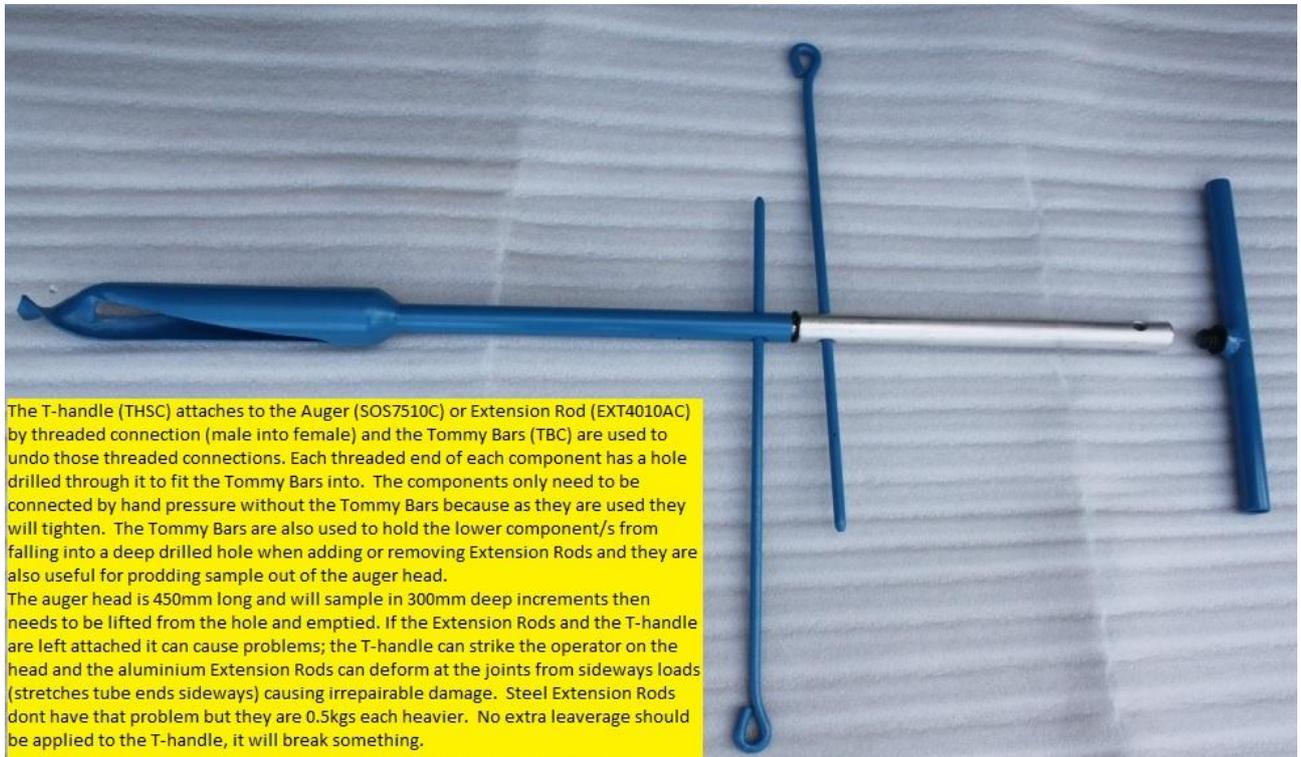
SOC - soft wet soils only

SA - sand only

SON - old GP now for gravelly soil

SP - spiral auger, best for drilling holes or breaking hard layers.

JA - Jarret style, GP soil for shallow sampling.



The T-handle (THSC) attaches to the Auger (SOS7510C) or Extension Rod (EXT4010AC) by threaded connection (male into female) and the Tommy Bars (TBC) are used to undo those threaded connections. Each threaded end of each component has a hole drilled through it to fit the Tommy Bars into. The components only need to be connected by hand pressure without the Tommy Bars because as they are used they will tighten. The Tommy Bars are also used to hold the lower component/s from falling into a deep drilled hole when adding or removing Extension Rods and they are also useful for prodding sample out of the auger head. The auger head is 450mm long and will sample in 300mm deep increments then needs to be lifted from the hole and emptied. If the Extension Rods and the T-handle are left attached it can cause problems; the T-handle can strike the operator on the head and the aluminium Extension Rods can deform at the joints from sideways loads (stretches tube ends sideways) causing irreparable damage. Steel Extension Rods dont have that problem but they are 0.5kgs each heavier. No extra leverage should be applied to the T-handle, it will break something.



**SOIL AUGER (75mm SOS type) - as the soil changes to clay the pieces get bigger. The hole is shown with arrow.**