Bulk Density Soil Sampling Kit

Part # 400.80 Bulk Density Kit with Hammerhead Cross

This unique sampling kit comes with everything necessary to take accurate interval specific core samples to a depth of 3ft. The kit is ideal for sampling the soil surface, in auger holes or in profile pits. The Soil Sample Rings found in this kit are made from .062w SST tubing. These SST sample rings are ideal for laboratory studies and for undisturbed core samples. The volume of each 2” x 2” SST ring is 90.59 cubic centimeters. From this known volume and the weight of the sample liner, you will be able to calculate the bulk density of the soil sample. *An accurate determination of bulk density starts with proper sampling technique to ensure that the sample collected represents the soils natural condition.

Bulk Density Soil Core Sampler Exclusive Features:

• Standard AMS Core samplers have a 1”+ gap between the tip of the core sampler and where the sample liner internal shelf begins. The sampler included in this kit has a much shorter 5/16” gap which provides a more representative core and reduces compaction as the soil enters the sampler.
• Liners and core sampler are held to extremely tight tolerances.
• Core Sampler Cap has a built in waste barrel which provides a full 2” of relief. This helps eliminate compaction from overdriving the sampler. It also eliminates the need to load multiple rings inside the sampler, which can cause sample blow by and skew sample calculations.
Part # 400.84 Bulk Density Sampler with Compact Slide Hammer

Operation & Sample Procedure:
1) Unscrew the cap of the sampler, load a 2” x 2” sample ring inside the sampler; and screw on the top cap with built in waste barrel.
2) Avoid spots that have rocks
3) Attach the 2ft extension rod for ergonomic purposes.
4) Attach either your hammer-able cross handle or your compact slide hammer depending on which kit you have.
5) If you are taking a surface sample; drive the sampler approx. 4” into the soil. There is no need to worry about compaction with the built-in waste barrel cap. If you are sampling at the bottom of a pre-augered hole, always use the provided planer auger in the kit to remove loose soil and slough from the bottom of the augered hole. The flat, slotted design of the planer auger will pick up the excess soil and provide a flat sample surface.
6) Always; attempt to pull the sampler out of the soil gently to avoid agitation to the soil core. If the core sampler cannot be removed from the soil using your own strength, use the AMS Mini-Removal Jack to smoothly & easily extract the sampler.
7) After pulling the sampler from the ground, scrape the soil cleanly off the bottom of the core tip with a knife or spatula.
8) Carefully unscrew and remove the top cap of the sampler.
9) Use a wooden dowel to gingerly slide your liner out the top of the sample core barrel.
10) Cleanly cut your sample, top and bottom, with a knife or spatula to separate the excess soil from your sample ring.
11) If you intend to bake the sample inside the ring, firmly press on end caps on both ends of the sampler for easy transport back to the lab. Otherwise simply discard the soil from inside the ring into your sample bag.
Purpose: Use samples for testing moisture content, water permeability, weight by volume, density, soil profiling or chemical analysis. The soil core sampler cup cap in this kit is equipped with a 5/8” NC male threaded connection, so it can be connected to extension rods, the hammer head cross handle, or the compact slide hammer attachment.

Kit includes: Core sampler cup, core sampler cap, hammer head cross handle or compact slide hammer attachment, 2-1/2” open face auger, 2-3/4” regular soil bucket auger, 2-3/4” planer auger, 2ft. extension rod, 18” rubber coated cross handle, 2” x 2” stainless steel rings (25) with their own aluminum carrying case w/ foam inserts, 2” plastic end caps (50), adjustable wrenches (2), auger cleanout tool, nylon cleaning brush, impact absorbing hammer, AMS deluxe carrying case with handles and wheels for added portability.

Parts List:
- Part# 430.25 – AMS Deluxe Carrying Case 1700 Black
- Part# 400.81 – 2” x 2” Bulk Density Cup (body)
- Part# 400.82 – 2” Bulk Density Cap w/ waste barrel
- Part# 400.55 – 2-1/2” Open Face Auger
- Part# 400.07 – 2-3/4” Regular Soil Bucket Auger
- Part# 400.52 – 2-3/4” Planer Auger
- Part# 408.01 – 2ft. Extension Rod
- Part# 400.96 – Compact Slide Hammer Attachment or Part# 401.27 – Hammer Head Cross Handle & Part# 11677 Dead Blow Hammer 37oz.
- Part# 406.04 – 18” Rubber Coated T-Handle
- Part# 430.07 – 2” x 12” Tapered Nylon Cleaning Brush
- Part# 400.55 – Idaho Spoon Auger Cleanout Tool [for open face auger]
- Part# 404.281 – Bulk Density 2” X 2” SST Liner (25)
- Part# 418.10 – 2” Plastic End Caps (50)
- Part# 430.26 – Small Aluminum Carry Case
- Part# 421.10 – Adjustable Wrenches
- Part# 421.29 – Universal Slip Wrench