**Multi-Stage Sludge/Sediment Sampling Kit**

**APPLICATION:**
Hand sampling saturated, soils, sludges, sediments and wastes at the surface or below water.

**DESCRIPTION:**
This stainless steel sampler features a vented top cap with a one way valve, extendable body and coring tip with an optional basket retainer. AMS stainless steel extensions, cross handle and slide hammer are used for deployment.

The stainless steel Top Cap has multiple 1/4-in ports covered with a flexible Viton® valve washer to allow air and water to leave the sampler body as it is deployed and to assist in sample retention as the filled sampler is recovered. The upper surface is provided with a 5/8-in NC Threaded connection for Extension or Slide Hammer attachment. The lower end is male square threaded for attachment to the sampler Multi-Stage Base Section.

The Multi-Stage Base Section is made from 2 3/8-in diameter 300 series stainless steel. Each end is internally square threaded. The 2-in internal diameter allows use of 2-in Liners.

The Multi-Stage Section is similar to the Base Section except that it is male square threaded on one end and female square threaded on the other.

The Core Tip is made form hardened 400 series stainless steel with external square threads for attachment to the Multi-Stage Base Section or the Multi-Stage Body Extension. Alternative Tips are available separately including a Core Tip with butterfly valve and an Auger Tip with or without a butterfly valve.

The Basket Retainer (Core Catcher) fits inside the lower end of the Liner. It is made from soft white plastic. The fingers allow the sample to enter the Liner and assist in preventing loss of sample as the Multi-Stage Submerged Sediment Sampler is recovered.

This Sampler is available as a kit including the basic items described above.

**USE:**
Assembly should always be done with clean sampler components. Take particular care to ensure that the treads are not contaminated. When necessary use sufficient PPE to protect the user from possible site contaminants; as may be specified in a site safety and sampling plans.

Thread the Core Tip onto the lower end of the Multi-Stage Base Section. Place a Basket Retainer inside the lower end of a Liner and then put the Liner inside the Multi-Stage Base Section. Attach the Top Cap to the upper end of the Sampler Multi-Stage Base Section. Use the provided Slip Wrench to ensure that the Top Cap and Core Tip threads are tight. Note, it may be necessary to remove about 1/8-in from the Liner length to accomodate the Basket Retainer. The Multi-Stage Sludge Sampler is now ready for deployment.

Push or drive the sampler into the material to be sampled for the length of the sampler, using a Cross Handle or Slide Hammer with an available Extension. If sampling below water insert a suitable number of Extensions between the sampler and the driving device to allow the sampler to be driven from above the surface of the water. Ensure that all threaded connections are tight, using available adjustable wrenches.

Recover the sampler by lifting using the Cross Handle or by reverse hammering with the Slide Hammer. Keeping the sampler vertical remove the top cap using the slip wrench on the sampler body and an adjustable wrench on the Top Cap threaded Extension connection. Decant of any water from the top of the sampler carefully. Push the liner up for an inch or so and place on of the supplied Plastic Caps on the end. Remove the Liner from the Multi-Stage Base Section, then remove the Basket Retainer and attach a Plastic Cap to this end. Mark or label the sample, noting the orientation of the Liner on the Plastic Caps and Liner.

The sampler should be cleaned and decontaminated between sampling events. At a minimum it should be soaked in water with a suitable detergent and brushed to remove soil or waste particles. A second rinse in clean water should be done before drying and re-assembly. The Multi-stage Sludge Sampler is made from stainless steel with a Viton® Check Valve and may therefore be acid bathed for decontamination, if this is specified in the site sampling plan.

**AVAILABILITY:**
The Multi-Stage Sludge Sampler (MSS) is available as a kit or individual components.

The Complete Kit includes a Top Cap w/ flap Valve, Multi-Stage Base Section and Core Tip. A clear plastic Liner, 2-in Basket Retainer, two plastic End Caps and Slip Wrench are also included.

The Multi-Stage Sludge Sampler is sized by the sampler OD of 2 3/8-in, Liners used are 3/8-in smaller.

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<th>Multi-Stage Sludge/Sediment Sampling Kit</th>
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<tr>
<td>Size</td>
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<tr>
<td>2 3/8&quot; OD 2&quot; ID</td>
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<td>Part # 209.41</td>
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MULTI-STAGE SLUDGE SAMPLER COMPONENTS

Component | Part #
--- | ---
Regular Slide Hammer 5/8” NC Thread | #400.99
18” Rubber coated cross Handle 5/8” NC Thread | #406.04
2 3/8” Multi-Stage Flap check Cap 5/8” NC Thread | #403.21
2 3/8” MS Base Section | #403.24
(3) 2 3/8” x 12” Multi-Stage Extension Section | #403.23
(3) 4” Stainless Extension 5/8” NC Thread | #409.09
2 3/8” MS Core Tip | #403.19
12” x 2” Clear Plastic Liner | #405.10 (ea)
2” White Basket Retainer | $404.00 (ea)
(2) 2” Plastic End Caps | #418.10 (ea)
(2) Crescent Wrench | #421.10
Slip Wrench | #421.29
AMS Deluxe Carrying Case | #430.01

ACCESSORIES

MS Auger tip (No valve) | #403.26
MS Core Tip w/ Butterfly Valve | #403.28
MS Auger Tip w/ Butterfly Valve | #403.29
2 3/8” x 12” Multi-Stage Section | #403.23
Slide Hammer 5/8” NC Thread | #400.99

ANCILLIARY ITEMS

Component | Part #
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1’ Stainless Extension 5/8” NC Thread | #409.06
2’ Stainless Extension 5/8” NC Thread | #409.07
3’ Stainless Extension 5/8” NC Thread | #409.08
4’ Stainless Extension 5/8” NC Thread | #409.09
5’ Stainless Extension 5/8” NC Thread | #409.10
12” Adjustable Wrench | #421.10 (ea)
24” x 2” Plastic Liner | #425.20 (ea)
Fluoropolymer Swatches (50) | #418.17

Note: The Multi-Stage Sludge Sampler is not available with the Signature Series thread design.