CME Stabilized Continuous Sample Tube System*

High quality samples

The patented CME Continuous Sample
Tube System provides an extremely positive
method for obtaining full recovery, high quality soil
samples. Since sampling is performed in conjunction with the hollow stem auger drilling process, this
system is fast and efficient. The sample tube positively does not rotate with the augers, so you get
excellent, representative samples.

You can even document the sample orientation and determine directional trends of fractures or contaminates.

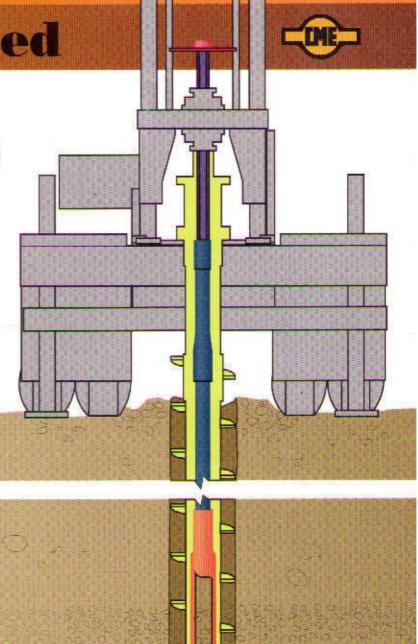
Positive sample retrieval

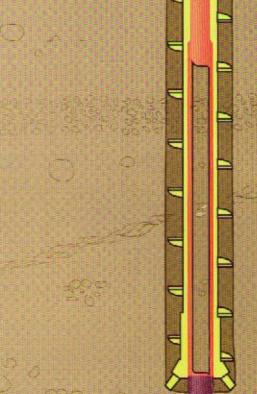
The CME Continuous Sample Tube System uses hex rods to push and retrieve the sampler. It has several advantages over wireline sampling systems that use cable to retrieve the sampler. You can always tell the precise depth of the sampler in the hole because of the rigidity of the rods. Also, there's no latching mechanism to cause problems. And if you get in a bind while bringing the sampler out of the hole, you don't have to worry about broken cables and lost samples.

The hex rods can also be used with our hollow stem auger, center hexagon drive system.

Effective in difficult formations

The CME Continuous Sample Tube System works well in many difficult formations such as glacial drift, hard clays and shales, lignite, peat, coal, mine tailings and loess.





Continuous Sample

Tube System*

Positively prevents sampler from rotating



The sample tube is connected to a string of hex rods that extends up through the augers and the bearing assembly. A locking rod at the top of the string is attached to a horizontal locking plate. This plate fits between the feed pull-down rods and positively prevents the sample tube from rotating as the augers turn.

Downward pressure is transferred from the drill rotary box through a bearing assembly attached to the bottom of the spindle. The locking rod, which extends through this bearing assembly, can slide approximately 6 inches (15.2 cm) axially.

As drilling advances and augers and rods must be added, you simply uncouple an auger connection and

raise the feed system 6 inches (15.2 cm). The auger connection will separate, giving you access to the hex rod connection inside the auger column.

Adjustable sample tube extension

A 5 foot (1.5 m) capacity solid or split-tube sample barrel fits within the lead auger of the hollow auger column. The extension of the sample tube is adjustable. For sampling soft materials, the tube can be positioned beyond the auger teeth. In harder materials, such as shales, it can be positioned behind the auger teeth.

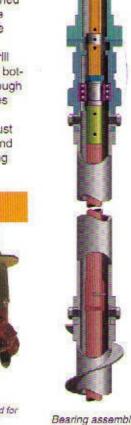
The positioning is accomplished through an adjustment rod that connects the sampler to the hex rods. A drive pin locks the parts together at the desired length. Adjustments are available in one inch (2.5 cm) increments.



Sampler retracted for



Sampler extended for soft material



Bearing assembly in drilling position



Bearing assembly in raised position

Clear plastic liners available

Clear plastic liners can be run inside split tube samplers. Upon removal from the sample tube, the liners containing samples can be sealed with plastic end-caps. These liners allow visual inspection of the sample in the field, while keeping it intact for transport to a lab for further analysis.

Sample shoe with basket retainer

A sample shoe with basket retainer is also available. The basket retainer helps contain the specimen within the sampler as it is withdrawn from the borehole.



*patented

CENTRAL MINE EQUIPMENT COMPANY



