

Ranger series

Push-in Soil Sampling Systems

Geomil
equipment

*World's first manufacturer
of CPT equipment*



Geomil Equipment's Ranger series is a range of push-in soil samplers deployed using CPT push equipment.

The Ranger allows the user to acquire soil samples using any kind of CPT rig. This enables a more complete ground investigation program without the need for extra machines to be mobilised to site.

The Ranger-46, Ranger-66 and Ranger-96 acquire 46, 66 mm and 96 mm diameter samples respectively. The extracted samples are suitable for a variety of lab tests, ranging from simple shear tests to triaxial stress tests, subject to sample size.

Sampling is typically carried out at discrete depths in discontinuous lengths of 0.5 or 1 m. The sampler is pushed to the required depth using the CPT push frame and either CPT or casing tubes.

The Ranger-46 can be advanced using 36 mm CPT tubes, while the larger Ranger-66 and Ranger-96 are preferably pushed with 55 mm casing tubes.

Once the required depth is reached the sampler is unlocked using a wireline overshot that is lowered through the pushing tubes. To collect the sample the Ranger is then slowly advanced using the CPT push frame while the conical tip remains stationary.

The outer barrel is lined with a sample tube of either stainless steel, PVC or translucent PMMA. When retracted to surface the tube is removed from the barrel without disturbing the sample and then sealed to retain moisture content.

Split tube liners are also available to allow easy removal of the sample from the tube.

Coupled with existing CPT equipment the Ranger series provides high quality soil sampling at a relatively small investment. It allows geotechnical contractors to efficiently extend their ground investigation capabilities compared to using a stand-alone soil sampling system.

The main features of the Ranger are:

- high quality soil samples
- versions for 46, 66 and 96 mm sample diameter
- takes 0.5 or optionally 1 m samples
- easy to set up and operate
- no need to extract the sample from the liner
- can be deployed with almost all CPT rigs
- soil retainer basket ensures excellent sample recovery even in unconsolidated materials

For more technical information or a quotation based on your specific requirements please contact sales@geomil.com or call us at +31 172 427 800.



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