

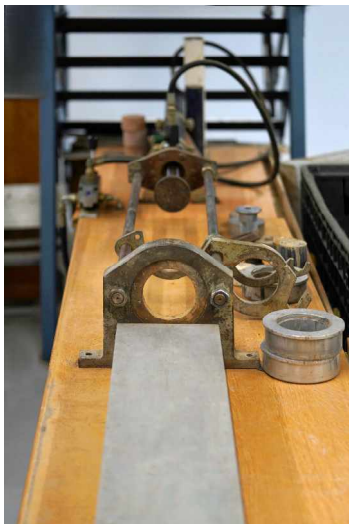
Liner Cutting

Cutting core liners without causing disturbance

The Geolabs liner cutter has been custom designed for horizontally cutting PVC or similar liners which contain undisturbed soil samples.

The powerful, motorised cutting head precisely and safely cuts along both sides of the plastic liner causing no disturbance to the soil inside. This allows the top half of the now neatly split liner to be easily removed to expose the pristine core within for description and photography, as well as permitting easy sub-sampling for other laboratory testing.

The sharp cutting blades are adjustable to allow for different liner thicknesses between 1 mm to 5 mm and can accommodate core liner lengths up to 1.5 m and core diameters from 60 mm to 125 mm.



Horizontal & Vertical Extruding

Extruding undisturbed soil samples

Geolabs have two 1.5 m electro-hydraulic, horizontal extruders for extruding undisturbed samples from 70 mm to 110 mm in diameter. As well as horizontal extruders, we have vertical extruders that can extrude undisturbed samples from different core sizes from 38 mm to 250 mm diameter.

Soil lathing and other sub-sampling

Preparing quality soil and rock specimens

Geolabs have a wide range of other sub-sampling apparatus to obtain undisturbed samples from block samples or to reduce the diameter of specimens to comply with required standards or specifications.

We have soil lathes to obtain specimens from 38mm, 50mm, 70mm and 100mm.

Our precision water-lubricated recoring and end-grinding equipment can core hard soils, rocks and concrete to provide specimens from 38 mm to 145 mm in diameter.



Sample Description & Photography

Geolabs have a dedicated team of experienced, degree-qualified Laboratory Engineers and Geologists to conduct examination and description of soil samples and rock cores in accordance with BS5930. We are also capable of logging chalk to CIRIA C574 (2002). All samples are photographed with a colour chart, grey scale and specimen identification.



Our team can perform index testing (such as Torvane and pocket penetrometer) for rapid assessment of shear strength and unconfined compression strength of cohesive soils. We can also undertake undisturbed and disturbed sub-sample preparation for other laboratory testing requirements (such as Triaxial, Oedometer, Laboratory Vane, Shearbox, Particle Size Distribution and Atterberg limits etc).

SAMPLE DESCRIPTION			
EH / TP No.	Sample ref.	Sample depth (m): 0.00 - 1.00	Sample type: C
Depth (m)	Visual description	Depth (m)	Lab Test:
0.00	0.00-0.33m: Loose to medium dense brown (10YR, 5/3) fine to medium SAND.	0.00-1.00	TD, TD
0.10		0.00-0.15	PSD, UC
0.20			
0.30	0.25-0.30m: pocket of dark grey (2.5Y, N4) fine sand.		
0.40	0.33-1.00m: Medium dense dark grey (2.5Y, N4) and greyish brown (2.5Y, 5/2) fine to medium SAND with occasional pockets and lenses of black (10YR, 2/1) organic silt.	0.50	WC
0.50	0.35-0.45m: up to 2mm lenses of black (10YR, 2/1) organic silt.		
0.60			
0.70	0.75-0.78m: occasional pockets of black (10YR, 2/1) organic silt.		
0.80			
0.90			
1.00	END OF SAMPLE (1.00m)	1.00	T _v = 5.3 kPa PP = 281 kPa
Comments: T _v value indicates shear strength while PP value represents unconfined compression strength.			
Key: BD: Bulk Density DD: Dry Density PP: Pocket Penetrometer PSD: Particle Size Distribution T _v : Torvane WC: Water Content UC: Organic Content			
Processed by: IT	Project Number: GEO / 30961		
Checked and Approved by:	Project Name: EXAMPLE PROJECT		

Logging

Logs are presented using our in-house sample description sheet containing the following information as a minimum:

- Project name
- Core reference number
- Sample depth and type
- Photograph of the sample in JPEG format with colour chart, grey scale and specimen identification
- Visual description of the material
- Depth of any changes in the sample
- Geological classification of the material
- Depth of any sub-sample collected and corresponding laboratory test

If you have any particular requirements that are not listed above, please do contact us; we would be happy to discuss adapting our sheet to produce a custom format that would exactly meet your needs.



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