GROUND TECHNOLOGY

Dynamic / Window Sampling

Window sampling techniques offer a way of investigating sites with difficult access or where a high volume of shallow soil samples or monitoring standpipes are required. They are typically suited to environmental applications, but can be used for geotechnical projects where access limits the use of other methods. We are able to carry out window sampling using our own tracked Dando Terrier 2000 rigs, wheeled Geotool rigs or hand held equipment. The Terrier and Geotool rigs are also capable of undertaking Heavy and Super Heavy dynamic probing.

Our tracked rigs are small enough to be driven through doorways / side gates, and are also capable of tracking up slopes of up to 35 degrees. We have developed bespoke systems for working on very steep slopes (with the rig attached to long reach excavators or telehandlers) and also have specialist equipment to enable our rigs to be cantilevered over voids for specialist applications. For more detail information see our restricted access section.

Window sampling involves driving cylindrical steel tubes (In 1m sections of up to a maximum diameter of 113mm) into the ground. Each successive tube recovers the soil it is being driven through as disturbed “core” samples retained in plastic liners. This is suitable for logging and taking environmental samples. In certain ground conditions, depths of up to 12m can be achieved using this method, although depth ranges of 3m to 7m are more common. In unstable ground conditions, duplex casing systems are also available to allow boreholes to be advanced while preventing collapse of unstable sections. Insitu SPT’s can also be performed in order to assess relative density of granular soils and provide a guide to strength of cohesive material. We also have the facility to obtain undisturbed samples within cohesive soils to allow geotechnical lab testing.