

Constructing Boreholes with a Modular Rig

The parts that the rig is broken down into are shown below:



The Modular Rig consists of a hydraulically driven drop hammer on a mast with feed generated by a hydraulic cylinder. The mast is raised, lowered and adjusted by hydraulic cylinders and the unit is mounted on a rubber tracked crawler chassis which is powered by an integral hydraulic power pack. The mast at full extension is 2.95m and an on-site assessment of the location will be carried out by the foreman to ensure the rig is not set up within 9m of overhead cables or obstructions to avoid collision.

The dynamic sampling system comprises a chain driven drop weight which is used to drive sampling tubes into the ground to recover soil samples in a plastic sleeve. Casings are installed to keep the borehole open whilst drilling through overburden and other unconsolidated formations which might otherwise collapse and impair progress. Standard penetration tests (SPT) and undisturbed sampling will be carried out as and when required.