STRAND GROUND ANCHOR

Strand anchorage for geotechnical application

Geotechnical systems, Anchors,

Anchors are always used in situations in which high tensile forces must be transferred into the ground. Typical applications include, for example, anchoring of excavation sheeting or retaining walls, slope and rock stabilization or anchoring for bridge abutments or wind turbine masts.

Anchors, Strand anchors, consist of three main components: the anchor head, a steel tendon - divided into the bond section and free length - and the grout body, The steel tendon is constructed from a number of 7-wire prestressing strands

European Approved
CE Marked

On-site testing ensures the performance of the Anchoring System. This demonstrates both the quality and adequacy of the proposed design. Depending on the application, the appropriate test method should be chosen. Some tests may be more rigorous and are therefore conducted on sacrificial trial elements, installed as replicas of the working tendons.

The testing of ground anchors generally involves three categories of tests

Investigation Tests

- Conducted on trial anchors and tested to failure
- They identify the pullout resistance and thus allow for choosing a design load from the anchored structure.
- To ensure that the anchor is bonded into the strata in an adequate distance from the structure to assure its stability

Suitability Tests

Conducted on either sacrificial or working anchors to provide a data reference against which the working
anchors can be measured.

- To document the ability to resist a proof load
- To assess creep rate or load loss
- To assess apparent free length parameters (the elastic part of the anchor)

Acceptability Tests

- Conducted on working anchors to ensure construction methods and safety.
- To document the ability to resist a proof load
- To assess creep rate or load loss
- To assess apparent free length parameters

Each test is conducted via loading and unloading cycles and increments up to a known load using a stressing jack.These are tailored to suit the respective test method chosen and capacity of the structural tendon.On completion of the test, if specific tolerances are met, the anchor can be locked off at a known load. This becomes the datum for any future monitoring

UAE: Business Bay - The Binary Tower Office No. 1012
Tel: +971043409550

Saudi Arabia: Bahrain Tower,King Fahed St., Olaia,Riyadh, Saudi Arabia
Tel: +966 (11) 201 9858

Egypt: 43 Moaz Eldawla street
Nasr City, Cairo
Tel: +202-267-10250