STATIC COMPRESSIVE PILE LOAD TEST

ACTION-REACTION THEORY

ASTM/D1143 (2020)

Standard Test Methods for Deep Foundations Under Static Axial Compressive Load

Top-Loaded static pile load tests in foundation piles consist of constructing a kentledge blocks above the test pile (or anchored piles around the test pile) and incrementally loading the pile, with a hydraulic jack.

Test Procedure

Procedure A: Static Quick Load Test (QLT), maintain < 24hrs.

Procedure B: Static Maintain Load Test (MLT), maintain \geq 24hrs.

Procedure E: Constant Rate of Penetration (CRP), rate 1 mm/min.

Procedure C, D, F, G: Optional Tests.

Static Compressive Pile Load Test

Static Compressive Pile Load Tester (SCPLT) is a state-of-the-art testing equipment to perform static load test on deep foundation piles. This automation system is to record applied load (Q) vs pile displacement (D) in static load test for static compressive (SC), static tensile (ST) and static lateral tests (SL).



Static Compressive (Top-Loaded)

Data Logger

Similarly to static compressive, static tensile (or uplift) and static lateral (or horizontal) load tests are performed by modifying the reaction system and loading (jacking) the pile in the desired direction.



*Pictures are from Internet



