Triaxial Test (ASTM D2850-23)

The triaxial shear strength test is a widely used method to determine the mechanical properties of soil and rock samples. This test applies stress in different directions, allowing for the measurement of properties such as shear resistance, cohesion, and dilatancy stress. It involves subjecting a cylindrical core specimen to confining pressures on all sides to evaluate its shear strength.

Triaxial test is a laboratory test used for ascertaining the shear strength parameters of soil specimens placed under confining pressure. The test is performed in two stages. The first stage involves the application of the confining stress and the second stage involves the application of the deviator stress. The results obtained from the test are used for plotting the Mohr circle for subsequent determination of shear parameters like the Cohesion, angle of shearing resistance, major and minor principal stresses, etc.

The triaxial test is a laboratory test used for the determination of the shear strength of the soil. It can be used to determine both the drained and undrained shear strength of soils. This test is an advancement over the Direct Shear test and offers a sophisticated methodology for arriving at the shear strength parameters of the soil.