



**SAKARYA**  
ÜNİVERSİTESİ

**Civil Engineering Department, Faculty of Engineering, Sakarya University**  
**Test Equipment's Catalog of Geotechnical Laboratory**



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ÜNİVERSİTESİ

**Geotechnical Laboratory**

**LABORATORY COORDINATOR: Assoc. Prof. Dr. Sedat SERT**

Civil Engineering Geotechnical Program works on the following topics:

- Soil mechanics
- Soil dynamics
- Rock mechanics
- Site investigation
- Slope stability
- Shallow and deep foundations
- Deep excavations
- Soil retaining systems: shoring structures, retaining wall etc.
- Tunnels
- Soil improvement

There are several test equipments that provide physical, mechanical and field tests of the soils in the geotechnical laboratory in Civil Engineering Department in Engineering Faculty.

*Casagrande Device:* It is used for determination of liquid limit of soils.



*Fall Cone Test Device:* It is used for determination of liquid limit of soils.



*Hydrometer:* It is used for determination of grain size distribution of fine grained soils.



*Water Content Measuring Device* : It is used to determine the water content of the samples.

*Standard Proktor Device (2,5 kg Mass)*: It is used to determine the compaction behavior of soils.

*Modified Proktor Device (4,5 kg Mass )*: It is used to determine the compaction behavior of soils.

*Consolidation Test Device*: It is used to determine the consolidation behavior of soils.



*Los Angeles Test Device*: It is used to determine the abrasion resistance of the samples.

*Point Load Test Device*: It is used to determine the compressive strength of samples.

*CBR Test Device*: It is used to determine the California Bearing Ratio (CBR) value of soils.



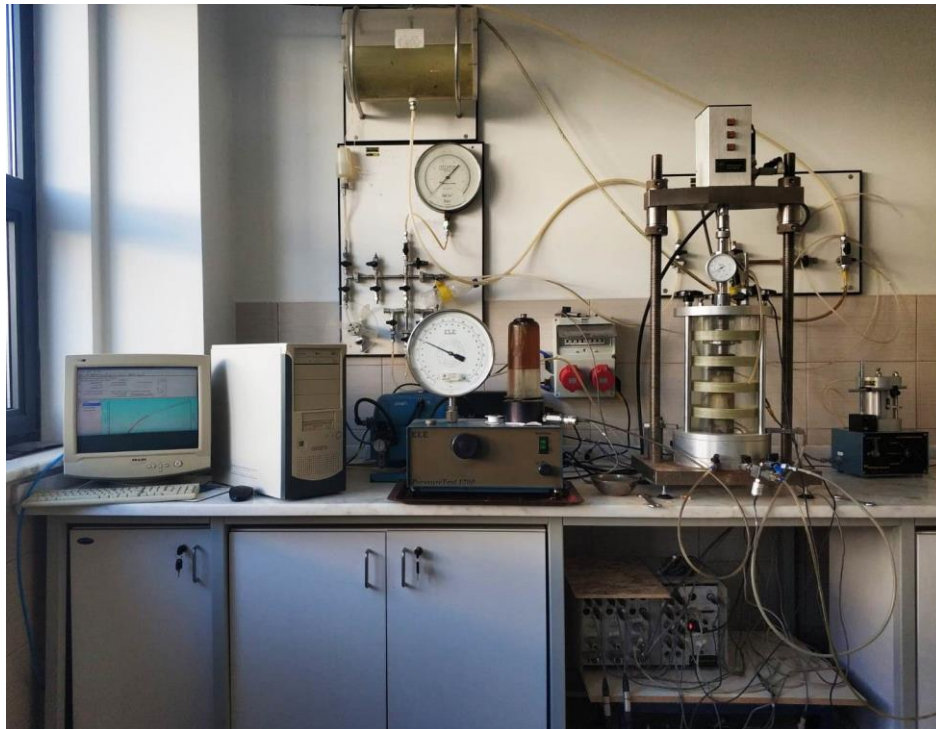
*Triaxial Shear Test Device:* It is used to determine the shear strength parameters of soils.



*Shear Box Test Device:* It is used to determine the shear strength parameters of soils.



*Dynamic Triaxial Shear Test Device:* It is used to determine the shear strength parameters of soils under dynamic conditions.



*Unsaturated Dynamic Triaxial Shear Test Device:* It is used to determine the shear strength parameters of soils under dynamic and unsaturated conditions.



*SCPTU-Seismic Cone Penetration(Pore Pressure Measurement):* It is a device for measuring various parameters of soil in the field.

