Soil Compression Testing
Load Cell

Industry: Infrastructure

Summary

Customer Challenge

Soil compression testing, or soil compaction testing, is used to assess soil and if it is able to withstand external loads without cracking or deformation. This is especially needed for construction applications and other foundational design testing. A force measurement system is needed during this test.

Interface Solution

Interface suggests using the 2161 High Capacity Column Compression Only Load Cell for this application. The 2161 can be used in the large compression test frame, where it will compress a block of solidified soil. Force results during the test will be sent and displayed to the customer's control center when connected to the 9840 Calibration Grade Multi-Channel Load Cell Indicator.

Results

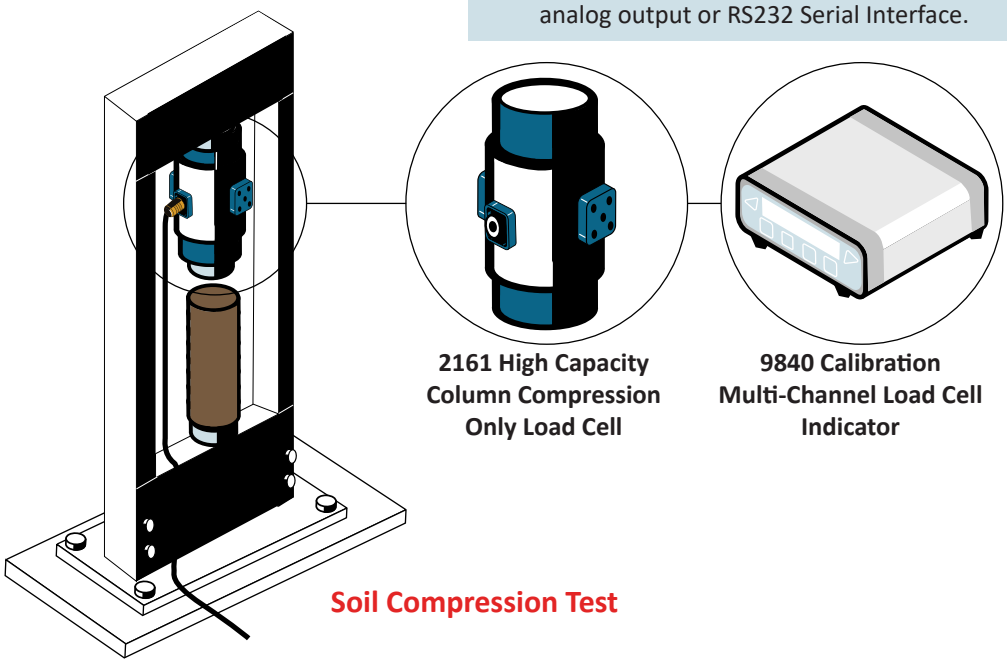
Interface's compression column load cell successfully measured the forces it took to deform a soil sample during the soil compression test.

Materials

- 2161 High Capacity Column Compression Only Load Cell
- 9840 Calibration Grade Multi-Channel Load Cell Indicator
- Soil Compression Test Frame

How It Works

1. The 2161 High Capacity Column Compression Only Load Cell is installed into the soil compression test frame.
2. A soil compression test is performed.
3. The compression results are displayed and reviewed when the 9840 Calibration Grade Multi-Channel Load Cell Indicator is connected to the customer's system though the analog output or RS232 Serial Interface.



2161 High Capacity Column Compression Only Load Cell

9840 Calibration Multi-Channel Load Cell Indicator

Soil Compression Test

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