**Video: HDL-VLT\_7-4-Soil Compaction Station.mp4**

**YouTube Information:**

Title: Virtual Hydraulics Lab Tour – Soil Compaction Station

Description: A brief overview of the soil compaction station which produces lab soil samples with similar properties to field soils for erosion experiments.

Video: mp4

Captions: attached

Thumbnail file: attached

Public Listing Type: Unlisted (we only want people to discover this video through our website and the virtual tour.)

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Video: The entire video is FHWA-owned.

Music: Typical by Liquify. Licensed from Artlist. See attached PDF: Typical\_License\_719099 - 2020-2021.pdf

**Script:**

The soil compaction station reproduces lab soil samples that have similar strength to field soils. An intelligent industrial robot featuring a 7-axis robotic arm and mobile platform is programmed to carry soil samples between the compaction station and the various testing devices while utilizing sensors to avoid obstacles.

**508 Caption Description:**

The video shows the soil compaction station, which is a framework with three linear driven pistons that can compact cylinders of laboratory soils. Industrial equipment to the right of the pistons power their movement. The mobile robot sits in front of the soil compaction station with a Shelby sample resting on its mobile platform. The robotic arm picks up the sample and places it one of the compaction areas, then drives away for a moment. The robot pauses then returns to the station and picks up the sample, placing it back in the holder on the mobile platform.