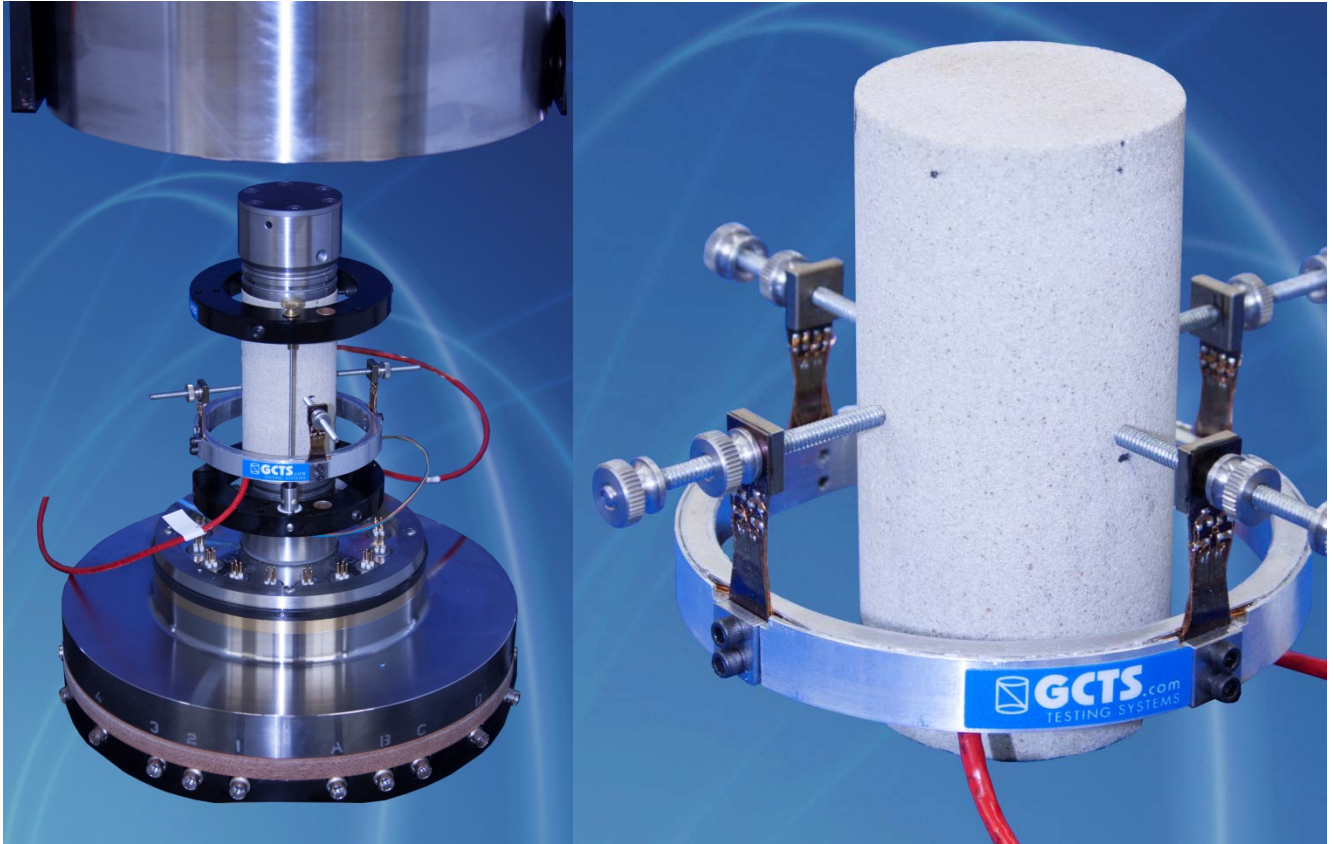


Cantilever Bridge Deformation Device (DEF-CAN)



- Direct measurement of specimen diametral deformation
- Accommodates a large range of specimen diameters from 0.5 inch and up
- Can be used inside a GCTS triaxial cell at high confining pressures up to 210 MPa (30,000 psi)
- Measures diametral changes at two points perpendicular to each other
- Sturdy construction to prevent device damage
- Easy setup

DESCRIPTION

The GCTS DEF-CAN Diametral Deformation Device is used to measure specimen diameter changes in order to calculate radial strains. This device mounts directly onto a specimen through the use of long screws attached to the arms of the device that press onto the specimen. By using these long screws, the device can be quickly and easily adjusted to fit a large range of specimen diameters. If the screws do not provide a fully stable connection, springs can be added to hold the arms onto the specimen.

This device consists of a single ring connected to four sensor arms, each located 90 degrees apart. Each arm has a strain gage and is paired to the opposite arm. This allows two diametral deformations to be measured. The two pairs of gages are wired to two connectors that attach to the electrical feedthrough connectors used in GCTS triaxial cells.

The DEF-CAN device can measure diametral deformations up to 4.06 mm (0.160 in.). The calibration is performed by applying deformation to and reading the response of the pairs of sensors, which eliminates the need for addition when obtaining diametral strains. This device requires strain gage and load cell conditioning and has a full-scale output of approximately 3.5mV/V.