

## Rock Deformation Device (DEF-5000)

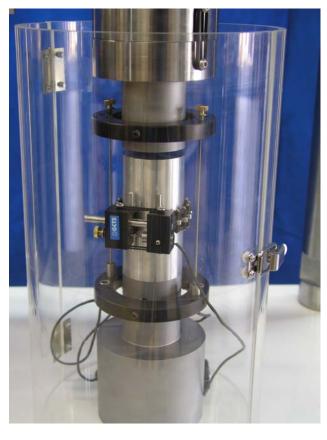


- Available sizes for specimen diameter from 25 mm to 150 mm (optional sizes available)
- Measures axial and lateral strain directly on the test specimen
- Two axial sensors & one circumferential sensor
- Uses LVDT's for ease of operation
- Models for up to 200 MPa pressure and up to 150 °C temperature testing
- Very easy to set up and use

## **DESCRIPTION**

The GCTS Rock Deformation Device measures axial and lateral strain directly on the specimen providing accurate results. The device consists of an upper and lower support ring machined with a low weight, high strength design. The rings include spring-loaded set screws to allow for specimen expansion during loading. A set of perforated rods with preset lengths is included to position the axial rings at pre-defined gage lengths without difficulty.

The circumferential device is built with small, high precision rollers and stiff linkages for high accuracy strain measurements. Thumb screws are also provided to easily null the LVDT sensors.



The GCTS Rock Deformation Device is available in standard sizes and also in custom sizes and is available with LVDT ranges from 2 to 10 mm.

This device can be used within our high-pressure triaxial cell and also used for elevated or cold temperature testing. Elastic constants such as Young's modulus and Poisson's ratio can be determined as well as inelastic strains that occur after sample failure (post failure analysis). Direct servo control of axial or radial strains can be performed with this device.

## **SPECIFICATIONS**

Model	Specimen Size	. LVDT Range
	. (Diameter in mm) .	(mm)
DEF-5100	25 to 55	5
DEF-5200	50 to 75	5
DEF-5300	70 to 100	10

For High Pressure append the letter "A" and for high temperature add the letter "T" to the model number (i.e. DEF-5100AT).

## **SHIPPING**

Weight: . . . . . . . . . . . 4 kg Dimensions (meters): . . . . 0.3W x 0.3D x 0.3H

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