

GDS Gas Adsorption Cell (GDSGAC)



Overview: The GDS Adsorption cell is a Twin Cell based system used for the Adsorption of a Gas onto a chosen sample. One chamber will have a gas with a known volume and pressure. The second chamber will hold a sample with known volume under a vacuum. The gas is then introduced to the sample chamber and the process of adsorption begins.

Overview

The system is used to find the adsorption rates and volumes of a chosen gas onto the surface of a particular solid. The use of two cells allows easy calculations of volume and pressure with each cell having its own transducer. The introduction of the gas into the sample chamber is done via a needle valve situated between the two cells.

The cell was specifically designed to conduct supercritical CO adsorption onto coal but can also be used for many other adsorption tests. Slight modifications can be made to the cell to fit your specific test requirements upon request.

Types of Tests it can perform:

- Gas Adsorption onto a sample,
- Supercritical CO adsorption onto coal.

Features:

- Small and compact for use in a temperature controlled water bath,
- Easy to clean (built in three sections).

Technical Specification:

Dimensions (mm):	126.5 x 195 x 100
Pressure range (MPa):	20
Weight (kg):	15
Standard sample sizes (mm):	38, 50
Compatible with:	CO ₂ , Nitrogen, Helium, Methane