



The PMI Advanced

Gas Adsorption Isotherm

System (GISORP-10KA)

Not just products...solutions!

# DESCRIPTION

PMI's Gas Adsorption Isotherm System, model GISORP-10KA is fully automated high pressure adsorption isotherm equipment which is designed to measure the gas adsorption isotherm of a shale and Coal sample. it determines the maximum volume that a sample can store under equilibrium conditions at a given pressure and temperature.

The GISORP-10KA, is configured with four samples test chamber. Each sample cell can be used to test pressures up to 10,000 psi and to test temperatures up to 200°C, digitally controlled gas injection, adsorption cells, Gas Booster, Pressure measurement and Data Acquisition system.

## **APPLICATION**

PMI's Gas Adsorption Isotherm System has a multitude of applications in Oil & Gas Industry/Geoscience industries worldwide.



# ADSORPTION & DESORPTION ISOTHERM

Adsorption and desorption of gasses on samples can be accurately measured using our Gas Adsorption Isotherm System. The user has independent control over the quantity and spacing of pressures used in both adsorption and desorption testing. Many different kinds of analyses are available to interpret data using the supplied report generation software.

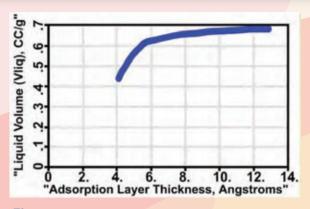


Figure 1
T - Plot Method - Micropore Volume Analysis

### **F**EATURES

- Advanced fully computer controlled system that allows the operation for both automatic and manual modes where can provide precise monitoring and data acquisition
- Display of full adsorption and desorption isotherms
- Graph overlays
- In situ outgassing: (No need for extra outgassing stations)
- Max Pressure: 10,000psi
- Max Temp: 200°C
- Sample cell Volume: 100ml
- Reference Cell Volume: 200ml
- Automated Temperature Control and Automated Pressure Control
- Material: Machine made out of corrosion resistant materials such as High Grade stainless Steel, Hastelloy, Viton, Teflon, Vacuum Pump and Booster pump

#### **Exclusive features of PMI's GISORP-10KA:**

PMI's GISORP-10A uses the same sample chamber for micropore & mesopore analysis. The same sample chamber is used for Outgassing & testing.

- Adsorption & Desorption Isotherms
- Chemisorption

# SOFTWARE

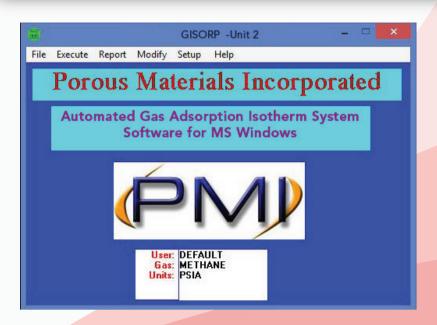


Figure 3
Software Main Screen

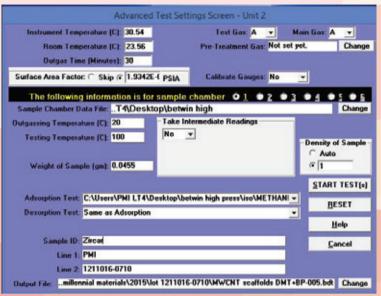


Figure 4
GISORP Advanced Test Screen

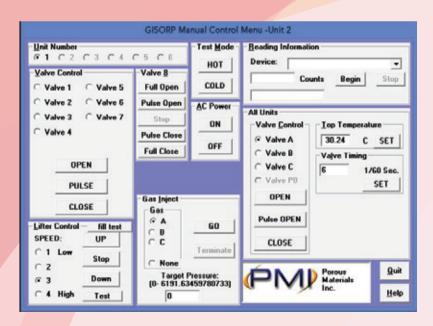


Figure 5
GISORP Manual Control Screen

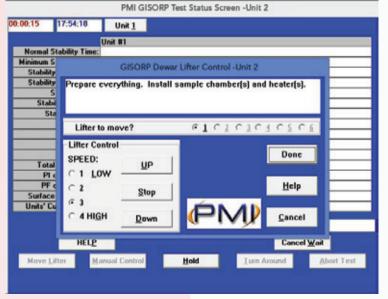


Figure 6
GISORP Test Status Screen

## **S**PECIFICATIONS

- Pressure Transducer :
  - For manifold 10,000 PSI
  - 1 for every Sample Chamber 10,000PSI
- Resolution: 1 part on 60,000
- Accuracy: 0.15% of FS
- Analysis Gases methane and non-corrosive gases
- Dead-end & Through-pores
- Power Supply: 110-220VAC, 50/60 Hz

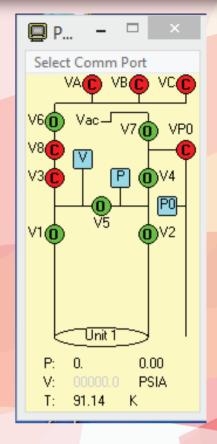


Figure 2
Schematic

# SALES & SERVICES

We at Porous Materials Inc., have dedicated sales team helping thousand's of our customers identify the right solution for their scientific problems. We are also proud to offer customized instruments for your unique needs. Our service and applications team is committed to effective support with short response times, we offer comprehensive range of solutions from new and customized systems, calibration and maintenance to testing services. Explore more about us at www.pmiapp.com



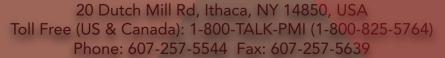
Customize your machine today!

**Disclaimer:** \*Other specifications of this product are also available.
\*Design subject to change without notice.

# The most advanced, accurate, easy to use and reproducible Gas Adsorption Isotherm System in the world.







Email: info@pmiapp.com

www.pmiapp.com

