



**Porous Material Inc. (USA)**

## **Mercury Pycnometer**



### **Description :**

PMI's Mercury Pycnometer provides the user with a measurement of bulk density. While the Mercury Pycnometer requires manual operation, it is easy-to-use, provides accurate results in less than 10 minutes, and accommodates a wide range of samples.

### **Principles of operation :**

Mercury pycnometry is a volume displacement technique based on the fact that mercury at atmospheric pressure will not enter pores smaller than 15microns in diameter. By determining the weight of the sample chamber with and without mercury, the density of mercury (known), and the weight of the sample, one can determine the difference in the volume of mercury in the sample chamber with and without the sample present. The difference in the volume of mercury correlates exactly to the volume of the sample. Since one knows the weight of the sample, and has determined the bulk volume, the bulk density can be deduced.

### **Applications / Features :**

The primary use of the Mercury Pycnometer is quality control as it offers a quick and relatively accurate bulk density measurement. The Mercury Pycnometer serves industries ranging from batteries to non-wovens to pharmaceuticals. Specific examples include the bulk density of electrode powders and green ceramics.

- ✚ Length of test approximately 10 minutes
- ✚ Wide range of acceptable sample sizes and types
- ✚ Minimal maintenance required

**Specifications :**

<b>Pore Size Range</b>	<b>0 - 15 microns</b>
<b>Sample Size</b>	<b>2 cm H x 3 cm D</b>
<b>Maximum Pressure</b>	<b>Vacuum - 1 Atm</b>
<b>Power Requirements</b>	<b>110/220 VAC, 50/60 Hz</b>
<b>Dimensions</b>	<b>23" H x 11" W x 15" D</b>
<b>Weight</b>	<b>30 lbs</b>

**Taiwan and China Area:**

**Chia Yun Instrument Inc.**  
**佳允股份有限公司**

TEL: +886-2-25419192    FAX: +886-2-25411553

**E-mail: [chiayun@cyi-pmi.com](mailto:chiayun@cyi-pmi.com)**

**Web site : [www.cyi-pmi.com](http://www.cyi-pmi.com)**

**Southeast Asia Area:**

**Porous Measurement Int'l Sdn. Bhd.**

**Kuala Lumpur Office:**

TEL: +60-3-42958324    H/P: +60-126954957

**E-mail: [info@cyi-pmi.com](mailto:info@cyi-pmi.com)**