

MultiVolume Pycnometer 1305

Features

- Easy to use
- Fast analysis
- Economically priced
- Largest sample volume range, 150 to 0.5 cm³
- No vacuum required



Description

The MultiVolume Pycnometer 1305 provides a rapid means for precisely determining the true volume of powders, porous materials, and irregularly shaped solid objects. A very wide range of sample volumes, from 0.5 to 150 cm³ can be accommodated. Absolute density can then be calculated with an assured accuracy of ± 0.1 to 0.2%.

The chamber containing the sample is first pressurized with a gas, preferably helium. Subse-

quent expansion of this gas into a precisely measured volume results in a pressure drop. The sample volume and density are then easily calculated from the two pressure readings as displayed on the digital indicator.

The unique design of the Multi Volume Pycnometer 1305 is based on three different sized sample chamber volumes, each with its own expansion volume sized to provide maximum accuracy for that range.

Applications

Pycnometer applications include density measurements for metal oxides, refractories, carbon black, activated charcoal, amorphous silica, metal powders, ceramics, graphites, cokes, catalysts, pharmaceuticals, pigments, and many more materials.

Specifications

Gas

Helium at 140 to 170 kPA (20 to 25 psig) for best performance

Vacuum

Has attachment point for optional customer-supplied vacuum pump

Electrical

Accommodates to standard power mains worldwide

Exposed Materials

Aluminum, copper, brass, Buna-N

Accuracy

0.5 to 5 cm³, solids (0.5 to 4 cm³, powders)

±0.2% (±0.010 cm³) guaranteed

±0.1% (±0.005 cm³) usually attained

5 to 35 cm³, solids (4 to 31 cm³, powders)

±0.2% (±0.070 cm³) guaranteed

±0.1% (±0.035 cm³) usually attained

35 to 150 cm³, solids (31 to 120 cm³, powders)

±0.2% (±0.30 cm³) guaranteed

±0.1% (±0.15 cm³) usually attained

In keeping with a policy of ongoing improvements, specifications are subject to change without notice.