Productivity Reliability Repeatability Traceability

Density

High Precision Densimeter

The Wallace High Precision Densimeter is a cost efficient inspection instrument, calculating an accurate measurement of specific gravity. It is ideal for measuring the density or volume of rubber, plastics, sintered metals, ceramics, foods and other materials. Using the optional liquid measuring kit, the specific gravity of a liquid can also be determined.

Wallace offers two models of the Densimeter. The 22B with a resolution to 3 decimal places and the 21C with a resolution to 4 decimal places.

Features

- **Lightweight, portable design**
- **Stabilizes and displays results in seconds**
- **Specific gravity resolution to the third decimal point**
- **Can also measure material with an SG of less than 1.00**
- **Sample volume can be displayed**



WAX22B

Standard Accessories

- Wind and dust shield (WAX22B only), built in for WAX21C
- 200g calibration weight
- Stainless steel angle for measuring objects with an SG less than 1
- Thermometer
- Tweezers
- RS232C interface, AC adaptor
- USB port (WAX21C only)

Optional Accessories

- A kit to measure the density of liquids
- WAX23 Excel Add-in datalogger tool allows for collection and display of data to a PC
- High speed printer

Principle of Operation

The innovative design makes specific gravity measurement simple and results are displayed after an elapsed time which varies according to the mode selected. Zero and tare are set through touch button operation on the front panel. The angle accessory (supplied as standard) enables samples with an SG of less than 1, to be tested. Compensation for temperature and for fluids other than water can be set by the operator. A built-in accuracy check is a standard feature so that if sample weight is insufficient, the final digit will flash. A wind shield is provided to protect the instrument from draughts and dust during operation.

Test Procedure

The precision balance supports both the water container and the sample test stand. To obtain density value, first weigh the dry sample on top of the test stand, then immerse the sample in the water container and weigh the submerged sample on the platform. The instrument then displays the computed specific gravity, and if required the sample volume.

High Precision Densimeters

Specifications

High Precision Densimeters		
	Model X22B	**Model X21C**
Part Number	WAX22B	WAX21C
Dimensions (mm)	170 (h) x 190 (w) x 218 (d)	325 (h) x 260 (w) x 360 (d)
Weight	1.6kg	7kg
Scale Capacity	300g	220g
Resolution	0.001 (Density/Volume)	0.0001 (Density/Volume)
Electrical Requirements	110/120 VAC 50/60 Hz	110/120 VAC 50/60 Hz
Data Output Interface	RS232C	RS232C, USB
Operating Temperature	10 to 40°C; Altitude 2000m maximum	
Humidity Range	10 to 80% RH non-condensing	

Standards

ASTM D297-93-16, ASTM D797-00, ASTM D792-20