



DRILLING FLUIDS EQUIPMENT

For over 30 years OFI Testing Equipment (OFITE) has provided instruments and reagents for testing drilling fluids, well cements, completion fluids, and wastewater. In addition to these product lines we also offer a range of instruments for core analysis. From our manufacturing facility in Houston, TX we provide customers all over the world with quality products and exceptional service.

Our drilling fluids product line includes innovative designs such as the Model 900 Viscometer, which showcases our ability to develop new technology to meet customer and industry demands. We also offer Retorts, Aging Cells, Roller Ovens, Mud Balances, Filter Presses, and all other instruments required to evaluate drilling fluid properties according to API Recommended Practice 13B-1 and 13B-2.

As an independent manufacturer and supplier, OFITE has one priority, our customers.



Recording Calcimeter with Data Acquisition

The Calcimeter is used to determine the amount of Calcium Carbonate (CaCO_3) and Magnesium Carbonate (Dolomite) in a sample of alkaline earth carbonates such as oil well cores or drilled cuttings. Calcite buildup in drilling fluids and in water treatment processes causes scaling problems. Data from the Recording Calcimeter can help determine the proper chemical treatment.



Features

- Comprehensive software includes calibration, test procedure, and all calculations
- Rugged, waterproof carrying case with rollers
- Complies with ASTM D 4373 - 84 (Reapproved 1990) Standard Test Method for Calcium Carbonate Content in Soils

Included Items

- Reaction Cell with Transducer
- Sample Cup
- Mortar and Pestle
- Graduated Cylinders
- Brush for Graduated Cylinder
- Spatula
- Handheld Balance
- Hydrochloric Acid
- Calcium Carbonate (for calibration)
- Carrying case

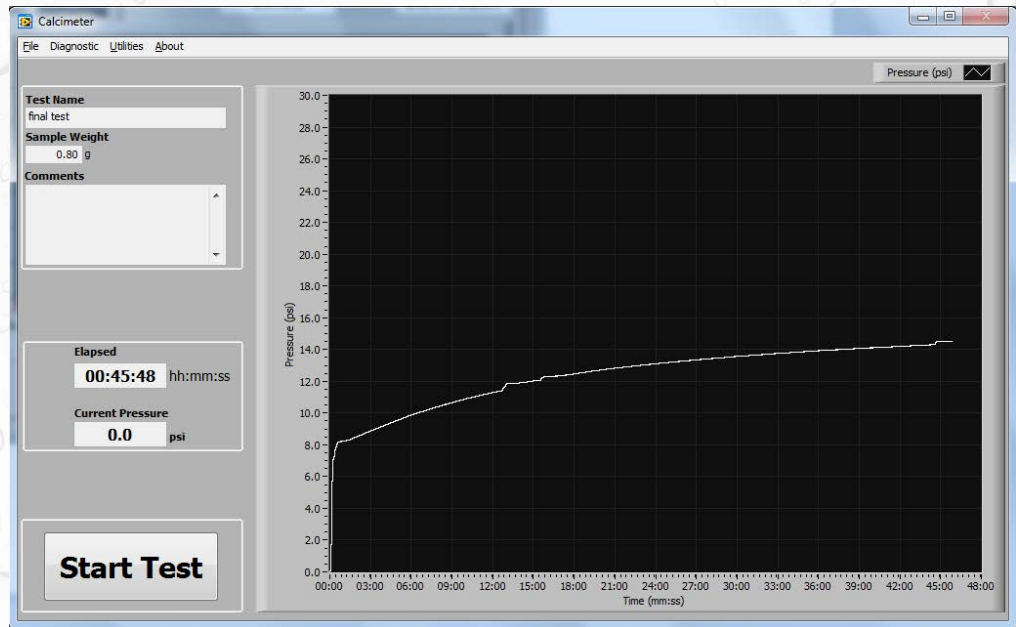


Part Numbers

- #152-97 Recording Calcimeter with Data Acquisition
- #152-97-C Recording Calcimeter with Data Acquisition and Laptop Computer

Software Features

- Built-in calibration
- Automatically calculates percentages of CaCO_3 and Dolomite in the sample



Intro

The OFITE Calcimeter is used to determine the amount of Calcium Carbonate (CaCO_3) and Magnesium Carbonate (Dolomite) in a sample of alkaline earth carbonates such as oil well cores or drilled cuttings. Calcite buildup in drilling fluids and in water treatment processes causes scaling problems. Data from the Recording Calcimeter can help determine the proper chemical treatment.

This instrument complies with the ASTM D 4373 - 84 (Reapproved 1990) Standard Test Method for Calcium Carbonate Content in Soils. This test method is under the jurisdiction of ASTM Committee D-18 on Soil and Rock and is the direct responsibility of Subcommittee D -18.13 on Marine Geotechnics, published July 1984.

Description

In the Calcimeter, calcium carbonate and magnesium carbonate are reacted with 10 percent hydrochloric acid in a sealed reaction cell to form CO_2 . As the CO_2 is released, the pressure buildup is measured using a pressure transducer connected to a computer. During the calibration process, the software creates a calibration curve by reacting HCl with pure, reagent-grade CaCO_3 . By using a known weight of CaCO_3 reagent, the software determines the relationship between the amount of pressure released and the weight of CaCO_3 in the sample. Since all reaction cells are slightly different, this relationship will be different for each cell. Therefore a calibration curve is required to obtain accurate results.

The calcium carbonate content of soil (ASTM Procedure D 4373) is determined by treating a 1 g dried soil specimen with HCl in the reactor cell. The resulting pressure increase is then measured and compared to the calibration curve to determine the total weight of CaCO_3 in the test sample.

Components

#142-54	O-ring for Bleed-Off Screw
#152-95-1	Gauge with Cover, 30 PSI, 4" Diameter
#152-95-2	Bleed-Off Screw
#152-95-3	Cell Cap
#152-95-4	Reaction Cell
#152-95-5	O-ring for Cap
#152-95-6	Sample Cup
#152-96-6	Mortar, 65 mL, Porcelain
#152-96-7	Pestle, Porcelain
#153-02	Brush, Graduate, 1.5" × 10.75"
#153-18	Graduated Cylinder, 10 mL × .2 mL, Glass
#153-55	Stopcock Grease, Silicone
#166-03	Hand-held Balance, 0 - 320 g × .1 g
#275-03	Hydrochloric Acid, 10%, 8 oz UN 1789
#285-00-1	Calcium Carbonate, 100 g