

MTE - ACID SPENDING UNIT

MODEL No. ST-006

DESCRIPTION

The MTE Acid Spending Unit is utilized to determine the time necessary for an acid to react on a rock core sample. The core sample is placed in a special tray which is inserted into a corrosive-resistant sealed test cell that contains acid. The acid is stirred via an agitator assembly and the test begins when the core is released into the acid solution. The amount of carbon dioxide which evolves from the reaction is measured via an electronic mass flowmeter. This gas flowrate and totalized amount of gas are printed on a strip chart recorder which yields the amount of carbon dioxide released as a function of time.

The mass flowmeter measures flowrate in standard cubic centimeters per minute (sccm), and this can easily be converted into the quantity of carbon dioxide moles which were released from the reaction. The amount of carbon dioxide moles released, incorporated with the time required to generate this quantity of CO₂, enables the operator to determine the rate of the reaction by stoichiometric means.

SPECIFICATIONS

- Maximum Operating Temperature of 200° F
- Magnetic Agitator Assembly Insures Against Test Cell Leakage
- High Precision Electronic Mass Flowmeter
- Electronic Temperature Controller
- Two Channel Strip Chart Recorder
- Corrosion Resistant Test Cell

CERTIFICATION

The MTE Acid Spending Unit is performance checked by Messina (prior to shipment) and is guaranteed against manufacturing defects. An easy to follow instruction manual, one year's spare parts, and detailed spare parts list are included with each unit.