SPECIALIZED EQUIPMENT SPECIFICATIONS

Fenn R&D Institute (FRDI)
Fenn College of Engineering, Cleveland State University

Name:	Du Pont Instruments 951 Thermogravimetric Analyzer
Description/Use:	measures the amount and rate of weight change of material, either as a function of temperature or time
User fee:	Call, Email
Fee basis:	per sample
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DETAILED DESCRIPTION:

The 951 Thermogravimetric Analyzer (TGA) constantly measures the amount and rate of weight change of material, either as a function of increasing temperature or isothermally as a function of time, in a varied but controlled atmosphere. The TGA can be interfaced with other analytical instruments for multiple measurements and can be readily modified isolated for special applications.

or

OPERATION:

The system is not automated. The heating rate and temperature of the furnace are set by the operator. Trained assistants or technicians perform the experiments. Experimental protocol can be adjusted to requirements.

SPECIFICATIONS:

Capacity:	500 mg including sample pan
Weight Ranges:	0.020 to 500 mg full scale
Temperature Range:	Ambient to 1200 °C
Suppression:	110 mg electronic tare, stepped and continuously variable; mechanical tare to 500 mg
Suppression Accuracy:	±0.4 % of suppression
Precision of Weight Measurement:	0.4 % of full scale
Accuracy of Weight Measurement:	±1.0 % of full scale
Derivative Range:	0.020 to 50 mg/minute
Time Constant:	0 (direct), 1, 2, 5 seconds
Pressure:	Atmospheric to 100 Pa (1 torr)
Purge Rate:	Up to 1 L/min
Control Thermocouple:	Platinel II
Sample Thermocouple:	Chromel-Alumel