



Infinity Series STA Simultaneous DSC-TGA

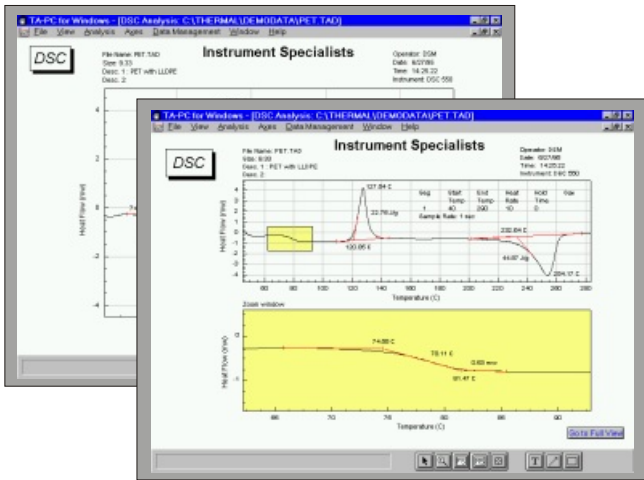
System Profile

The Infinity Series STA is a combined DSC/TGA that can simultaneously collect DSC and TGA data. These techniques detect thermal transitions of a sample when exposed to a temperature program. It measures both enthalpy changes and weight gain/loss during sample transitions as a function of temperature or time. The STA is a cost effective instrument ideally suited for research or quality control applications.

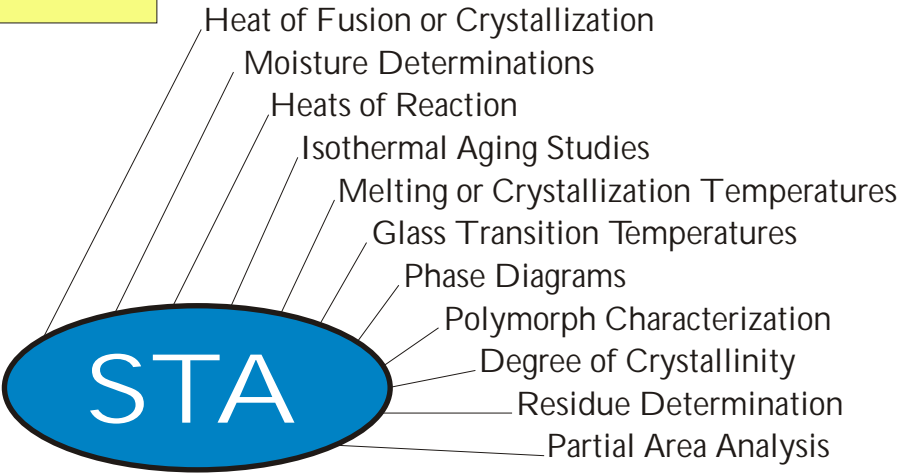


Features

- Windows software to control the DSC/TGA, collect data, and calculate results
- Combined DSC and TGA experiments
- Independent DSC and TGA experiments
- DTA capabilities
- Vacuum capabilities
- High sensitivity heat flux plate.
- Choice of two types of sensor materials.
- A stable and reproducible baseline over the entire operating range



Common uses



Infinity Series

Description

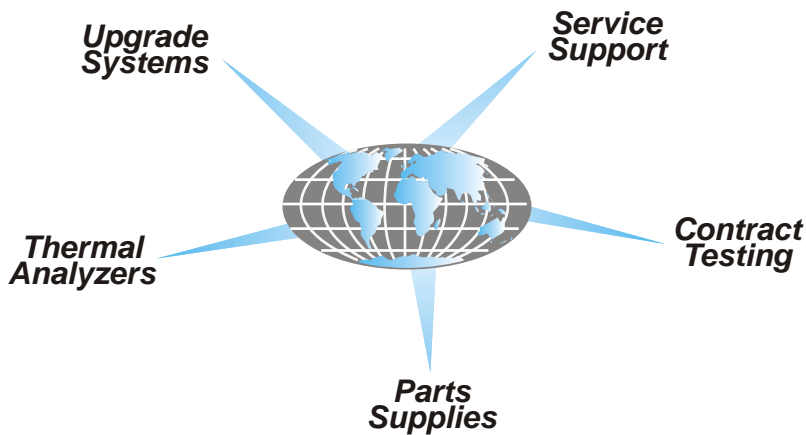
The DSC Differential Scanning Calorimeter measures heat flow of a sample as a function of temperature or time. The heat flow plate monitors the temperature differential between the sample and an inert reference as the sample undergoes a transition or reaction. This temperature differential is proportional to the heat absorbed or given off by the sample during a temperature program. The calorimeter is calibrated with reference standard materials and the thermal analysis software applies calibration factors to precisely and accurately determine the temperature range of a sample transition and the enthalpy of the transition.

The TGA measures weight changes as a function of a precisely controlled temperature profile. The system allows for multiple heating, cooling and isothermal segments to be linked together to achieve a complex temperature program. Gas switching is also supported when setting up the temperature program. The vertical hangdown design offers stable and smooth weight readings to be recorded during the experiment. The STA's small mass furnace responds quickly to changes in the temperature profile and cools down quickly for fast turn around between experiments.

Software Features

- Real-time color display of data collection
- Auto and manual scaling
- Time vs. temperature profiles
- First and second order derivative plots
- Analysis save feature
- Background data collection
- On-line help manual
- Individual segment display
- Annotation and drawing tools
- Copy to clipboard function
- Post collection editing
- Multiple curve/module overlay
- Split screen zoom mode
- Quadratic temperature and ordinate correction
- ASCII export
- Data smoothing
- Baseline file subtraction
- Y-axis shift operation
- Subfile operations
- Custom display configuration
- User selectable units

Mdel	Infinity 650	Infinity 1000	Infinity 1500	Infinity 1640
Temperature	-125C to 650C	Ambient to 1000C	Ambient to 1500C	Ambient to 1640C
Programmed Rate	0.1-100C/min	0.1-100C/min	0.1-100C/min	0.1-100C/min
Sensitivity	< 5uW	< 5uW	< 5uW	.2uV
TGA Capacity	0-40,0-400mg	0-40,0-400mg	0-40,0-400mg	0-40,0-400mg
TGA readability	1ug	1ug	1ug	1ug
Thermocouple	Type K	Type R	Type R or S	Type B
High Capacity TGA	n/a	Yes-5 grams total wt	Yes-5grams total wt	n/a
DSC mode	Yes	Yes	Yes	Yes



Other Products Include:

DSC 550 DTA System

TGA Systems Upgrade Systems

Thermal Analysis Supplies

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