



## TGA-A1200 Thermogravimetry Analysis



### Features:

- Pressure, 4 Bar
- High Vacuum,  $1 \times 10^{-3}$  torr
- Up to 800°C
- Samples up to 20 g in mass
- corrosive gas atmospheres
- 5 gas inlets

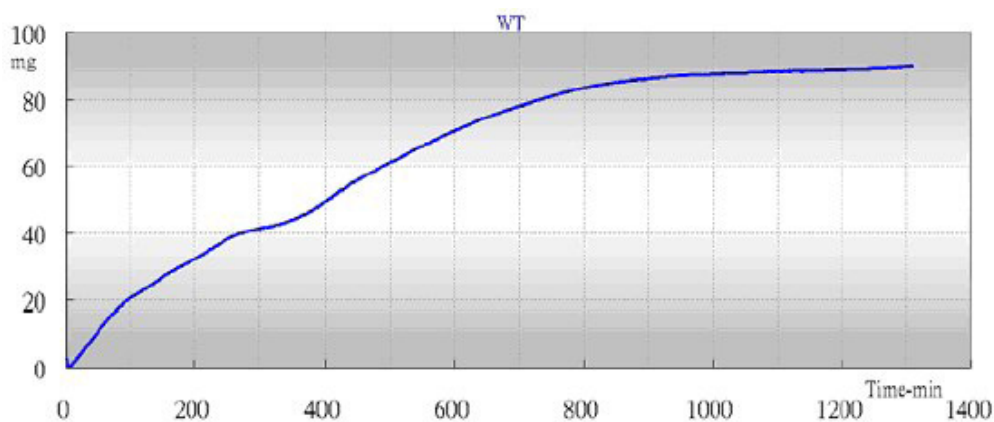
### Applications:

- Thermal stability
- Quantitative
- Pyrolysis
- Oxidation/Reduction
- Water and Volatiles
- Adsorption/Desorption
- Additive and Filler
- Kinetics
- Composition

- Estimated lifetime
- Oxidative stability

### Description:

Thermogravimetric Analysis measures the amount and rate of change in the weight of a material as a function of temperature or time in a controlled atmosphere.





## TGA-A1200 Thermogravimetry Analysis

### Specification:

- Advance Instrument Inc. TGA-A Series are special gravimetric analyzers designed to provide with unique capabilities for Pressure, High Vacuum, and High-Temperature under static or dynamic reactive atmospheres.
- The TGA-A1200 is our standard system, employing a high-sensitivity balance in a robust design. The TGA-A1200 can accommodate samples up to 20 g in mass, with a sensitivity of 10 microgram. The TGA-A1200 is the instrument of good choice for pressure studies (up to 4 Bar) at measurement temperatures up to 800°C, and can accommodate a variety of gas compositions under high-pressure static or optional dynamic flow. The standard vacuum accessory provides for measurement at reduced pressures down to  $1 \times 10^{-3}$  torr.
- The TGA-A1200 is recommended for pressures or corrosive gas atmospheres are required. This top-of-the line model provides with static pressures up to 4 Bar, and utilizes an advanced balance with a 20 g capacity. This allows the reaction chamber to be completely sealed and also allows for aggressive gas chemistry while isolating the microbalance assembly. The TGA-A1200 can be operated up to 750°C at the maximum pressure, or equipped with the standard vacuum accessory for low-vacuum studies.
- The TGA-A1200 is a specialized instrument designed for both high temperature and pressure at the same time. The maximum temperature 1200°C is achieved safely in a unique double-wall reactor. The TGA-A1200 is equipped with a steam generator which makes it ideal for coal gasification studies, and 5 gas inlets for the maximum flexibility in dynamic reactive atmospheres.
- The rugged, reliable, TGA-A offers exceptional value as a compact, general-purpose thermogravimetric analyzer that typically outperforms a competitive research-grade model. Its integral mass flow control, gas switching capability, superb software, and ease-of-use make the TGA-A ideal in basic research, teaching, or in industrial laboratories that need qualified results.
- Compensated Temperature Thermo balance Included:
  - Maximum Sample Weight: 20 g
  - Sensitivity: 10  $\mu$ g
  - Furnace Heating Resistance Wound
  - Temperature Range: Ambient to 900 C
  - Isothermal Temp Accuracy:  $\pm 2$  C
  - Isothermal Temp Precision:  $\pm 0.5$  C
  - Controlled Heating Rate: 0.1 to 20 C/min
  - Furnace Cooling (forced Cooler Water ): 900 to 50 C <30 min
  - Temperature Calibration Curie Point
  - Software Included

3-3

Special Purpose or Application

