

## **Specifications**

	TGA P-1200	TGA P-1500
Temperature range	Amb.to 1200°C	Amb.to 1500°C / 1600°C
Temperature Accuracy	+/- 2 deg C	+/- 2 deg C
Heating rate	1°C/min to 40°C/min	1°C/min to 30°C/min
Max. Load	200grams	200grams
Sensitivity	1 mg	1 mg
Controlled temperature zone	50 mm	100 mm
Reactor tube	35 mm dia (I.D)	35 mm dia (I.D)
Gas control	Built in gas valve (two gases)	
Gas Flowmeter	1 to 100 ml	
Atmosphere control	Air,inert ,static & dynamic gas	
Dimension HxWxD (mm/in) / Weight (kg / lb)	600 x 380 x 360	700 x 400 x 450
	25 x 15 x 14	31 x 16 x 16
	26 (57)	32 (70)
Power Supply	110V/220V,50~60HZ	



# **Surface Electro Optics**

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TGA (Thermogravimetric) Analyzer TGA - 1000 series Surface Electro Optics Excellence in Surface Chemistry Analysis

## Thermogravimetric Analyzer

The Thermogravimetric Analyzer (TGA) is the branch of thermal analysis which examines the mass change of a sample as a function of temperature in the scanning mode or as a function of time in the isothermal or scanning mode.

TG test is administered in order to induce a thermal reaction, so that resulting changes in the mass or weight of the tested substance as a result of the reaction may be observed and analyzed.

1500°C / 1200°C maximum temperature combined with a sample capacity of 200g makes SEO TG 1200 / 1500 system is deal for analyzing ceramics and metal powder injection molded parts.





#### Features:

- · Corrosion resistant Quartz or Alumina reaction chamber
- · Flexible sample capabilities
- · Easy to clean reaction chamber
- · Windows software
- · Moterized furnace control
- · SEO TGA sofeware allows method storage and development, automatic calibration and a complete range of analysis

High Mass (200gram) **High Volume High Temperature** Real time & powerful data analysis tools

#### Gas flow system;

In the gas flow line of the TGA-1200 / 1500 Series, reactive gas can up-flow method the buoyancy effect of the balance is made into a minimal system. It is a method of controlling the atmosphere by flowing from the bottom of the reaction tube (1) to the top and flowing up to the top of the reaction tube (2)

The built-in gas supply unit with solenoid valve for active gases offers optimum control of the atmosphere around the sample.

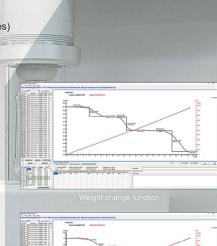
### Applications;

The extreme temperature range and high capacity make it a powerful analysis tool for complete electronic components or any large heterogeneous sample.

- · Changes in mass due to decomposition, oxidation, evaporation, or combustion
- · Characterization of Thermal stability
- · Characterization of Oxidative stability
- · Moisture and Volatiles Content of Materials
- Corrosion studies (e.g. oxidation or reactions with reactive gases)
- · Gasification processes
- Kinetic processes

#### Softwares:

- · For windows operation systems
- Multi-tasking for simultaneous measurement and evaluation
- Multi-method analysis for curve comparison and evaluation of various methods
- · Mass change in % or mg
- · Graphic and data export
- · Automatic calculation of mass change steps and characteristic temperatures
- · Extrapolated onset and end set
- · Peak temperature and value of derivatives
- · Multi-point calibration
- · General analysis etc.,



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