SDT (Synchronous Thermohydrometric Analyser and Differential Scanning Calorimetry)

The SDT enables the synchronous measurement of the weight change of a sample as thermogravimetric (TGA) and differential heat flow (DSC) from the medium to 1500 ° C on the sample. Thermal stability, prediction of product life, kinetics of degradation, oxidative stability, additives in the material, moisture and volatile components in the material, reactions of the materials in the reactive environment are the areas where the TGA technique is used. DSC is used to measure thermal changes such as specific heat capacity, phase change temperature and reaction temperature.

SDT Applications

- Material Analysis
- Chemistry
- Construction Sector
- Food Sector

Instrument Model: TA Instruments SDT Q600

Instrument Hardware and Features:

Sample capacity:	200 mg (350 mg internal sample holder)
Thermal couple:	Pt / Pt Rh
Equilibrium sensitivity:	0.1 µg
Temperature range:	Ambient temperature to 1500 ° C
Heating rateup to 1000° C:	0.1 for 100 ° C / min
Heating rate up to 1500 ° C:	0,1 for 25 ° C / min
DTA sensitivity:	0.001 ° C
Calorimetric precision accuracy:	2% (for metal standard)