THERMAL ANALYSIS

Differential Scanning Calorimetry Tester

NETZSCH
DSC 214 Polyma

The DSC 214 Polyma is an instrument used to identify and characterize materials, by analysing their thermal properties. Specifically, it determines the temperatures at which a material give rise to a thermal event i.e. melting, crystallization, glass transition, chemical reaction, during a specific thermal program. Morover it allows to determine the specific heat of the material.

Those information found important application on the one and to forecast a material behaviour during technological process, while on the other hand to validate material compliance to a process or to a composition.

The DSC analysis is mainly used for polymeric materials, and polymer based composites, but it's also suitable for inorganic materials.

The analysis consists in subject a sample and a reference to a specific thermal program in a specific atmosphere. The instrument measures the difference in heat flow needed to maintain sample and reference at nearly the same temperature, indicating the occurrence of exothermic or endothermic events.

Specifications

- NETZSCH DSC 214 Polyma can work from -170°C to 600°C.
- Its equipped with a peculiar furnace which allow heating rates from 0.001 °C/min to 500 C°/min, enbling to simulate the thermal behavior of material in a particularly wide range of working conditions.
- The DSC 214 Polyma software is integrated with a wide material thermal properties database, which allows an easier and faster identification of the observed material, or behavior.