
Carbon Content Dispersion Test Apparatus



Scope

The apparatus allows the determination of Carbon Black content in polyethylene and polypropylene, which is made gravimetrically after paralysis of the sample in pure nitrogen environment. The method is applicable only to specimens where carbon is present in a free state. According to standards, the Carbon Black content in the sample is calculated by the weight difference of the specimen before and after treatment in the apparatus.

Standard

The instrument is designed and built to meet the following standards:
ASTM D 1603 and other equivalent standards.

Technical Features

The apparatus consists of a tubular furnace capable of achieving temperatures of 550 Deg. Cent. Using a relatively low wattage heater with assures longer life of the furnace. The furnace is fitted with an imported programmable P.I.D. controller having a ramp and soak i.e. rate of rise of temp. Can be controlled and programmed apart from maintaining the same within permissible limits of +/- 5 Deg. Cent. The apparatus also consists of a nitrogen flow meter and a full set of glass parts, meeting the requirements of IS/ASTM standards. In all requests two separate flasks to hold solid ice along with stand is also provided.

The main combustion tube and boat supplied with the apparatus are made of Quartz glass and not ordinary borosil glass as normal suppliers do. Quartz glass can withstand temp. Up to 1000 Deg. Cent. In comparison to hardened glass (borosil) which can withstand temp. Only up to 570 Deg. Cent.