

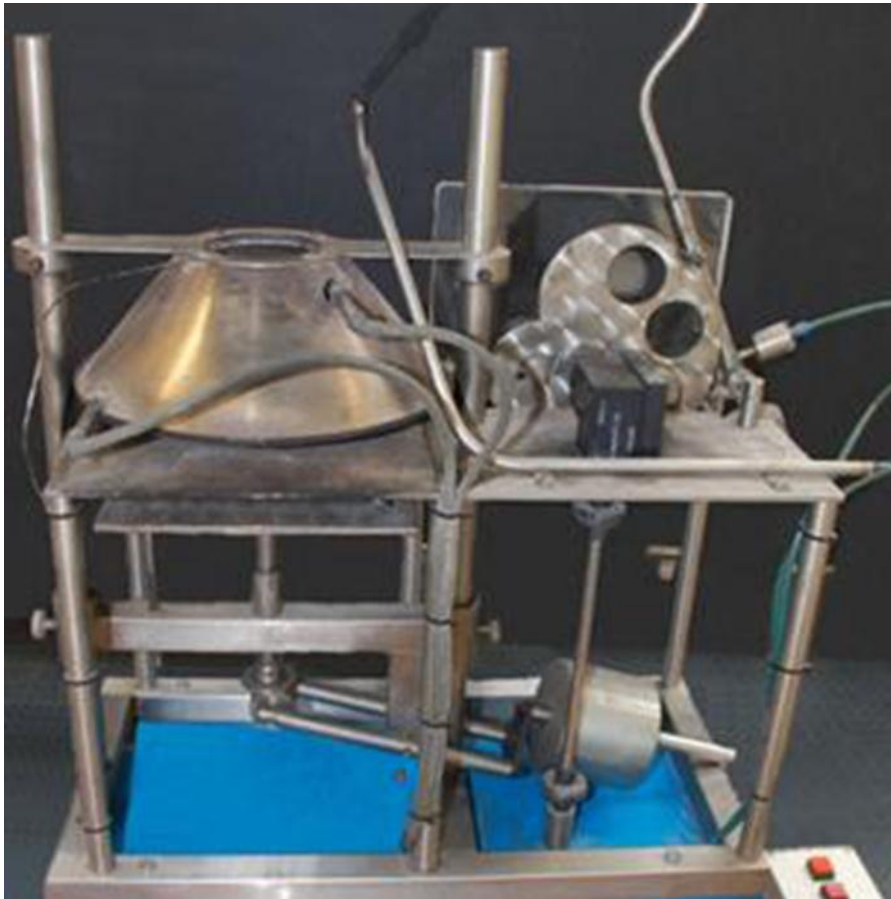
# RADIANT IGNITABILITY TEST

(BS 476:13:1987 & ISO 5657:1986)

Measures ease of ignition, with a pilot flame onto a horizontal surface during radiant heating.

Specimens are mounted horizontally on the pressing plate and exposed to thermal radiation on their upper surfaces at selected levels of constant irradiance within the range 1 to 5 W cm<sup>-2</sup> (10-50 kW m<sup>-2</sup>). At regular intervals a pilot flame is raised, and lowered to a position 10 mm above the centre of each specimen, to ignite any volatile gases given off.

The time at which sustained surface ignition occurs is reported. Other types of ignition may also be observed. Products suitable for testing should have an essentially flat exposed surface, or an evenly distributed surface irregularity, falling within defined limits.



The main advantage of the apparatus over the cone calorimeter is the use of a larger sample area (150 x 150 mm) and the central point of ignition. This effectively eliminates edge ignition. In the cone calorimeter, edge ignition is prevented by using a heavy gauge stainless steel frame, with a high heat capacity, which changes the air flow around the sample.