

Cone Calorimeter

SPECIFICATIONS

The device is used to determine the rate of heat release under an adjustable thermal radiation load up to $100 \text{ kW}\cdot\text{m}^{-2}$. At the same time, the weight of the test sample of material is recorded. Heat evolution is evaluated from the loss of oxygen in combustion products. The device has a built-in photometer for measuring the optical density of smoke in dynamic mode. It includes a PC with special software for test management and evaluation.

MEASURING METHODS

ISO 5660-1:2015 Reaction-to-fire tests - Heat release, smoke production and mass loss rate - Part 1: Heat release rate (cone calorimeter method) and smoke production rate (dynamic measurement).

OVERVIEW OF MEASURABLE PARAMETERS/ OUTPUT INFORMATION

Output is a number of dynamic and static characteristics, such as the rate of heat release, total heat released, smoke characteristics, production of CO , CO_2 and many others.

TYPES OF SAMPLES SUITABLE FOR ANALYSIS/ MEASUREMENT CONDITIONS

Solid materials and products measuring $100 \times 100 \text{ mm}$. Thickness up to 50 mm .

