

Test on Gases Evolved During Combustion of Electric Cables

(IEC 60754 Part 1 and Part 2)

firetesting
technology



The International Electrotechnical Commission IEC 60754 Part 1 and Part 2 test is performed to determine the degree of acidity of gases evolved during the combustion of materials taken from electric cables by measuring the pH and conductivity.

Cable users have expressed concern over the amount of acid gas which is evolved when cable insulating, sheathing and other materials are burnt as this acid can cause extensive damage to electrical and electronic equipment not involved in the fire itself. It has been considered necessary, therefore, to develop an approved method (by extensive round robins) for determining the amount of acid gases evolved by burning cable components so that limits can be agreed for cable specifications. As the test is not carried out on a complete cable test piece, for a hazard assessment the actual material volumes of the cable components should be taken into consideration.

Instrument Features

- Tube furnace, support stand and thermocouples
- Quartz work tube and sample lading assembly
- Control unit with digital temperature controller for tube furnace, optional over temperature device and sample temperature indicator
- 2 gas collection bottles
- Gas cell 1 litre
- pH and conductivity measuring instruments with digital display and electrodes
- Stirrer
- Air flowmeter and all necessary tubes and connections
- 10 ceramic sample boats

Unrivalled Experience in Design and Manufacturing

FTT's site in East Grinstead, is home to the largest group of fire scientists and instrumentation design engineers working on fire testing instrumentation, and is at the heart of our design and manufacturing. For almost 30 years

FTT has provided the highest quality instruments and service for fire testing and research professionals worldwide, directly and through its extensive global sales and support network.



Quality

- World-class manufacturing in accordance with multiple international and national standards, including: EN, ISO & ASTM
- ISO 14001, ISO 9001 certified

Integrity

- A dedicated team passionate about fire testing instrumentation and continuous product improvement
- Delivering reliable, robust and easy-to-use instruments for the past 30 years

Excellence

- A world-class team made up of qualified fire scientists, mechanical, electrical and electronic fire instrument design engineers and production, installation and maintenance engineers

Global

- World-wide distribution network for global sales, installations, training, maintenance and technical support
- Leading global supplier of the Cone Calorimeter, Large Scale Calorimeter, NBS Smoke Chamber and Oxygen Index