

NBS SMOKE CHAMBER

FEATURES

- The most widely accepted apparatus for the measurement of smoke given off from burning materials. The instrument measures specific optical density under flaming and non-flaming conditions. It is also used for the extraction of toxic gas.
- The instrument currently available from Concept incorporates all the necessary features and software needed to complete tests, in as simple, ergonomic and user friendly way as possible.
- Standard equipment complies with the mandatory requirements of both BS 6401 and ASTM E662 specifications.
- Heated chamber walls.
- Chamber door, including an observation window and covering door.
- Instrument panel to the left of chamber for ease of operation.
- Fixed irradiance vertical oriented heater (25kW/m²).
- Vertical photometric optical system to BS6401/ASTM E662 using state of the art PMT module.
- Push button sample positioning system.
- Push button pneumatic lower vent assembly with high capacity extraction fan to efficiently extract smoke following a test.
- Push button pneumatic upper vent.
- Multi-tip, multi-angle stainless steel pilot burner.
- Precise furnace control for easy furnace calibration.
- Bespoke radiometer for furnace calibration as per BS6401 and ASTM E662.
- Easy to replace blow-out panel.
- Built in ports to take gas sampling tubes.
- Control and data acquisition system including DAQ hardware, Laptop and extensive software package.
- Full operating instruction manual.



SPECIFICATIONS

BS 6401

ASTM E662

ISO 5659 Part 2

NBS SMOKE CHAMBER

TECHNICAL DATA

Electrical:

110V AC 60Hz / 230V AC 50Hz

Ambient Temperature:

Operating 10°C to 35°C

Dimensions:

1560mm (W) x 2220mm x (H) x 1060mm (D – incl. laptop)



SERVICES REQUIRED

Gas Supply:

The preferred fuel gas used in the test is a mixture of air & propane.

Propane: The flow needs to be capable of delivering 20ml/min at a minimum pressure of 5 KPa.

Compressed Air: The flow needs to be capable of delivering 750ml/min at a nominal pressure of 400 Kpa.

This is required to obtain flame stability for testing.