TEMPERATURE INDEX MODULE

FEATURES

- The Oxygen Index Module measures the oxygen index (OI, LOI or COI) for a range of samples. The Temperature index extends the range of the Oxygen Index Module, so that the oxygen index of materials can be measured at elevated temperatures
- Generally the oxygen index falls as the gas mixture is heated, so work at elevated temperatures supplements work carried out at room temperature
- This new model available from Concept Equipment utilises the very latest control technology. Selection of all variable elements is touchscreen selection and the system adjusts accordingly. This differs from most competitive products, where valves need to be adjusted manually, which is a time consuming and tedious task
- It is simple to use, like the OIM, and utilises easy to read digital displays, indicating the oxygen index directly in % O^2, as well as the Flow rate in nl/min sample temperature in °C and extensive instrument status
- A state of the art oxygen transducer, accurate to ±0.1%, is used for measurements
- A standby screen allows conditioning of the heated column
- When the user proceeds to the run page, the standby air is switched to test gas mixture automatically
- A low noise air pump is used to supply standby air into the test chamber to allow the column temperature to be pre-set prior to switching over to the oxygen/nitrogen mix for the test run, thus minimising use of cylinder gases and protecting the heating elements. The gas mix flow rate is adjustable by selection on the touchscreen and controlled automatically by the system
- A two heater system is used to ensure a stable and uniform temperature around the sample
- Sample temperature is displayed on the digital display
- The design of the heated column allows the maximum visual observation of the test
- The system also incorporates a pressure sensor and audible alarm to ensure that if the air or gas mixture flow fails during a run, the power to heaters is removed and the alarm sounded, for maximum safety

- The measured sample temperature is achieved using an adjustable temperature probe which can be positioned
- inside the heated column adjacent to the sample. The temperature is shown on the digital touchscreen display on the front of the control unit
- Calibration of the instrument is fully automatic. The “Autocal” push button is selected on the touchscreen and calibration at zero % and maximum range oxygen is then performed completely automatically by the instrument
- Ideal for use in quality control applications as well as a tool for the development and analysis of new materials.

SPECIFICATIONS

ISO 4589-3

NES715

fire@concept-e.co.uk

+44 (0) 1903 784 336

CONCEPT EQUIPMENT

TEMPERATURE INDEX MODULE

TECHNICAL DATA

Electrical:
230 volts AC 50Hz – 2.5kWatts

Operating Temperature:
Operating 10°C to 35°C

Test Temperature:
Ambient to 400°C sample temperature

Dimensions:
450mm (W) x 800mm x (H) x 450mm (D)

Control:
Two harmonised temperature controllers and heaters, provide uniform heating of the sample

Display:
Temperature display to ± 1°C

Flow:
Flow through column adjustable from 0 to 20 nl/min.

Oxygen Analyser:
Range: 0 to 100% Oxygen
Repeatability (typical): ± 0.1% Oxygen
Linearity (typical): ± 0.1% Oxygen

SERVICES REQUIRED

Instrument Gas Supplies:

Oxygen and Nitrogen at 3.0 Bar (43 psi) nominal
Minimum flow to Oxygen and Nitrogen pipe lines 20 nl/min
(normally bottled supply with bottle regulator and filter). No other restrictions should be used as this will reduce the flow rates

Ignition Burner Gas Supply:

Propane at 0.1 – 0.5 Bar.

fire@concept-e.co.uk
+44 (0) 1903 784 336