



EA05 LIMITED OXYGEN INDEX HIGH TEMPERATURE

Apparatus for determining the Oxygen Index value, for high temperatures determinations. The management of the test is obtained by reading directly from Colour Touch screen 7".

This test method may be used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions. The oxygen percentage is detected by a paramagnetic transducer and the combustion occurs inside the glass column.

The ISO 4589/3 describes a method for determining the minimum concentration of oxygen by percentage volume in a mixture of oxygen and nitrogen introduced at 23°C ±2°C that will just support combustion of a material under specified test conditions, also over a range of temperatures typically between 25°C and 150°C (although temperatures up to 400°C may be used).

The ISO 4589/3 also describe a method for determining the temperature at which the OI of the small vertical test specimen is 20.9. The temperature is monitored up to 400°C both during preheating of the gaseous mixture and inside the column through PID temperature control. This method is not applicable to materials having an OI value of less than 20.9 at 23°C.

TECHNICAL DATASHEET



Technical features:

- Pyrex column with built-in heating resistance complete with outer safety glass column
- Detection of O₂ percentage through paramagnetic transducer (O₂ accuracy <0.1%)
- Direct reading measurement 7" colour display for : oxygen %,mixture flux l/min
- Automatic Control of the flow with mass flow
- Microprocessor-governed operations
- Air addition to save consumption in O₂ high concentration mixtures
- Automatic calibration (0 and 100%)
- Propane gas regulation and cut-off valve
- Specimen surface temperature indicator complete with detection probe
- Inconel steel detection thermocouple
- Thermoregulator for the mixture pre-heating temperature control up to 400°C
- Thermoregulator for temperature control inside the glass column
- PID regulators

The test of material takes place in a heated column in which both the incoming gas and the gas passing up the column are heated. This has the advantage of providing information of the effect of a range of temperatures on the OI value, and gives a better understanding of the behaviour of materials over a temperature range

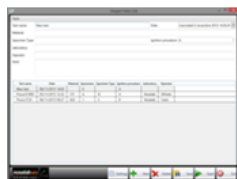
Configuration

- N. 1 U shap support with clamps
- N. 1 Clamp support
- N.1 Needle support
- Burner for the ignition of the test specimen, with direct connection
- Pliers for the positioning of the specimen



Software

- Software to manage test reports, for personalize and archive the data (Optional)



Supplies :

- Power 230 V 50Hz single phase
- Oxygen
- Nitrogen
- Propane
- 3 bar dry industrial air

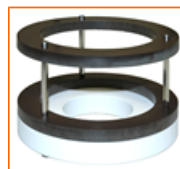
Generals:

Dimensions: 300 x 650 x 700 mm

Weight: kg 20

Power : 230V, 50Hz

Optional Accessories:



Lighter with Gas Cartridge

Adapter in order to use the type-A pyrex column (450 mm high) + cap of the EA04 ISO 4589-2 model instead of the supplied one.



Reference Standards

ASTM	D 2863
ISO	4589 -3

Code	Description
10095105	EA05 High temperature oxygen index
17101002	Column in protective glass (450 mm)
17101006	Column, resistance device and thermocouple
17101007	Adapter for type-A standard column of the model EA04
17101000	Type-A pyrex column (450 mm high) + cap
00100203	Software DataLink INDOX
10004055	Lighter with propane gas cartridge
10004053	Torch burner with regulation and gas tube
10004056	Propane / butane gas cartridge

