

# LIMITED OXYGEN INDEX LOI-100

#### **STANDARD**

#### ASTM D2863, ISO 4589-2

Limited Oxygen Index widely used to measure burning performance of plastics, rubber, fiber, foam, softening sheet, film etc.,

The Oxygen Index is, perhaps, the most economical and precise quality control test of combustible materials. Its ease of use together with high levels of precision has made this technique a primary characterizing and quality control tool to the plastic and electric cable industries and it has been specified by several military and transport groups. The technique measures the minimum percentage of oxygen in the test atmosphere that is required to marginally support combustion. Widely used for Plastic material, cable insulation, duct insulation, laminate, printed circuit board, foam, rubber, film etc.







### **TEST PROCEDURE**

A small test specimen is supported vertically in a mixture of oxygen and nitrogen flowing upwards through a transparent chimney. The upper end of the specimen is ignited and the subsequent burning behaviour of the specimen is observed to compare the period for which burning continues, or the length of the specimen burnt, with specified limits for such burning. By testing a series of specimens in different oxygen concentrations, the minimum oxygen concentration is estimated.

Test Sample information: Complete test series: Sample quantity: 20 samples Dimensions: 80 - 150 mm x 10 mm, thickness 4 or 10 mm.

Reduced test series, one specified oxygen concentration Sample quantity: 8 samples Dimensions: 80 - 150 mm x 10 mm, thickness 4 or 10 mm.

### **FEATURES**

- Reasonable structure, easy to operate, consist by main control box and burning tube.
- Adopt high accuracy oxygen sensor, digitally display the result, no manual calculation, eliminated personal error.
- High accuracy, long working life, easy operation etc.
- Front panel is ash black plasticvneree frosting face, 304 SS decorate strip surrounding, with beautiful appearance.
- > LOI-100A is dial gauge pressure indication, LOI-100D is digital gauge pressure indication.



## **TECHNICAL SPECIFICATIONS**

Model	LOI-100A	LOI-100D
Pressure display	Dial gauge	Digital meter
Limitation Oxygen index value	Digital reading directly	
Buring tube inner diameter	100mm	
	75mm (optional)	
Buring tube height	450mm	
Flow meter accuracy	2.5 calss	
Pressure meter accuracy	2.5 calss	
Gas source	Oxygen, Nitrogen	
Input pressure	0.2~0.3Mpa	
Working pressure	0.05~ 0.15Mpa	
Oxygen concentration resolution	0.1%	
Sample type	Self-supporting, or non-self-supporting	
Weight	Frame: 52Kg	
	Gross weig	nt: 65Kg
Dimension	Frame: 590*480*560mm	
	Package: 690*5	80*790mm
Power	220V, 50Hz/110V, 60HZ, single phase	

## ACCESSORIES

Item	Quantity
Frame	1 set
Burning tube	1 set
Igniter	1 pc
Sample clip	2 pcs
Tube clip	1 pc
Stopwatch	1 pc
Strengthen plastic tube	1 pc
Glass ball	2 bags