

Oxygen index tester (Limitation oxygen index)



Model: YZS-100A



Model: YZS-100B

1, General introduction

Oxygen Index Apparatus is 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 characterising 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.

Main application:

Plastic material, cable insulation, duct insulation, laminate, printed circuit board, foam, rubber, film et.c,



self supporting gripper



non-self supporting gripper



Glass ball

Key Features

- 1, Reasonable structure, easy to operate, consist by main control box and burning tube.
- 2, Adopt Imported high accuracy oxygen sensor, digital display the result, no need operator calculation, eliminated personal error. High accuracy, long working life, easy operation etc. features.
- 3, Front panel is ash black plasticvnerree frosting face, 304 SS decorate strip surrounding, with beautiful appearance.
- 4, YZS-100A is dial gauge pressure indication, YZS-100B is digital gauge pressure indication.

2, Principle & Test procedure

Principle & 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.

3, References

ISO 4589-2 " Plastics -- Determination of burning behaviour by oxygen index -- Part 2: Ambient-temperature test"

ASTM D2863 " Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index) "

NES 714, EN 45545-2. etc.,

4, Material needed when testing

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.

5, Main technical specification

Model	YZS-100A	YZS-100B
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 weight: 65Kg	
Dimension	Frame: 590*480*560mm Package: 690*580*790mm	
Power	220V, 50Hz/110V, 60HZ, single phase	

6, Main 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
Documents (Manual, packing list, certificate)	