



**YUYANG INDUSTRIAL CO., LIMITED**

China Manufacturer of Fire Testing Equipment

## Laboratory Building Material Fire Tester / Flame Test Equipment ISO 5658





- **Product Details:**

- Place of Origin: **China**
- Brand Name: **YUYANG**
- Certification: **ISO 5658-2 IMO Resolution A.653(16) ASTM E1317 ASTM E1321**
- Model Number: **YY507**

- **Payment & Shipping Terms:**

- Minimum Order Quantity: **1 set**
- Price: **Negotiation**
- Packaging Details: **Plywood Box**
- Delivery Time: **20-25 work days**
- Payment Terms: **T/T L/C Western Union**
- Supply Ability: **5 sets per quarter**

- Share to :

## **Laboratory ISO 5658/IMO/LIFT Building Material Fire Spread of Flame Testing Equipment**

### **Introduction :**

Spread of flame apparatus is used to evaluate combustion characteristics of rail materials and ship materials and measures spread rate of flame, flame for ignition by distances, CFE (Critical Flux at Extinguishment) and total heat release.

This test method is originated from ISO 5658-2 (Reaction to fire tests Spread of flame- Part 2 Lateral spread on building products in vertical configuration) and measures combustion characteristics of vertical specimen (155mmX800mm).

### **Standards:**

ISO 5658-2 : Reaction to fire tests Spread of flame - Part 2 Lateral spread on building products in vertical configuration

IMO Resolution A. 653(16): Recommendation on fire test procedures for flammability of bulkhead, ceiling and deck finish materials

ASTM E 1317 : Standard test method for flammability of marine surface finishes

### **Features :**

1. The apparatus consists of a radiant panel having dimensions of 280 x 483 mm, mounted vertically, and making an angle of 15° with the specimen.
2. The orientation of the panel results in an incident radiant flux that decreases from 50 kW/m<sup>2</sup> at one end to approximately 1 kW/m<sup>2</sup> at the other end of the specimen.
3. The sample is ignited by a non-impinging, gas/air pilot flame.
4. Viewing rakes placed at a 50-mm spacing along the specimen.
5. Heat Flux Meter - for setting the irradiance level at the surface of the specimens, the range from 0-50KW/m<sup>2</sup>.
6. Portable water cooling system without need for waterworks and plumbing when using the Heat Flux meter.
7. The radiant burner system is fully automatic, with spark ignition and safety interlocks.
8. MFC (Mass Flow Controller) to easily measure the heat amount of methane gas in

measuring critical heat flux.

9. Camcorder to observe and save test conditions in a program during tests.

10. To meet the IMO specification a stack is fitted complete with thermopile for estimating heat release rate.

11. Records the spread rate of flame after this records ignition and extinguishment time of flame for each distance of specimens. And the other test results is Heat for ignition ( $\text{MJ/m}^2$ ), Heat for sustained burning ( $\text{MJ/m}^2$ ), Critical flux at extinguishment ( $\text{kW/m}^2$ ), Average heat for sustained burning ( $\text{MJ/m}^2$ ), Total heat release ( $\text{kW}$ ), Peak heat release rate ( $\text{kW}$ ) .

#### **Requirements :**

1. Electrical: 110V AC 60Hz / 230V AC 50Hz, 10A
2. Ambient Temperature: Operating  $10^{\circ}\text{C}$  to  $35^{\circ}\text{C}$
3. Dimensions: 1650 mm (W) x 810 mm x (H) x 1985 mm
4. Gas Supplies: Propane Gas, Methane Gas, Compressed Air
5. Optional Gas: Acetylene Gas

