



YUYANG INDUSTRIAL CO., LIMITED

China Manufacturer of Fire Testing Equipment

Professional Fire Test Chamber Laboratory Spread Flame Test Apparatus



- **Product Details:**

- Place of Origin: **China**
- Brand Name: **YUYANG**
- Certification: **ISO 5658-2 IMO Resolution A.653(16) ASTM E1317 ASTM E1321**
- Model Number: **YY411**

- **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 :

IMO Resolution A.653 Fire Testing Equipment Laboratory Spread of Flame Test Machine

Application:

This instrument uses a gas-fired radiant heat panel with pilot flame ignition to ignite a test specimen.

Following ignition, any flame front which develops is noted and a record is made of the progression of the flame front horizontally along the length of the specimen in terms of the time it takes to travel to various distances.

The results are expressed in terms of the flame spread distance/time history, the flame front velocity versus heat flux, the critical heat flux at extinguishment and the average heat for sustained burning.

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

The apparatus is supplied with all necessary controls, flux meter and specimen holder. The complete test apparatus consists essentially of three main components, a radiant panel support framework and a specimen support framework which are linked together to bring the test specimen into the required configuration in relation to the radiant panel, and the specimen holder, which carries the test specimen.

The radiant burner system is fully automatic, with spark ignition and safety interlocks.

Description:

It's suitable to evaluate burning characteristics of construction materials and measure the spread of flame, flame condition of ignition at multiple distances, critical flux, and total heat release value. It can also measure the burning characteristics of vertical specimen. After recording time of ignition and extinguishment at each distance, we can calculate the flame spread rate.

Other test results include: ignition heat (MJ/m²), continuous burning heat (MJ/m²), critical flux (MJ/m²), average heat of continuous burning (MJ/m²), total heat release value (kW).

Standards:

ISO 5658-2: Reaction to Fire Tests-Spread of Flame

Part 2: Lateral Spread on Building and Transport Products in Vertical Configuration

ASTM E 1321 Standard Test Method for Determining Material Ignition and Flame Spread Properties

Features:

1. All controlling system is Ex-proof;
2. Cylinder type pilot burner can support automatic flame impingement by IMO standard;
3. Dual layers grid and enlarged lenses make users easy to inspect the flame spread situation;
4. Temperature controller of radiant panel can be used to measure internal temperature of light source plate. It can close Solenoid valve automatically when flame reflux;
5. Large flow controller can easily measure methane content when measuring critical heat flux of gas;
6. All Ex-proof parts in radiant panel combustion controlling system can prevent gas reflux, like check valve and solenoid valve;
7. Camera can observe and store test procedures at certain program;
8. Measure heat flux condition of radiant panel in 50mm;

- 9. Data acquisition system can store images of flame spread length and burning characteristics;
- 10. 19°analyzing frame can measure flame spread rate,critical flux,heat release rate;
- 11. IMO program makes all calibration,test and test result printed (IMO,ISO) easier.

