



YUYANG INDUSTRIAL CO., LIMITED

China Manufacturer of Fire Testing Equipment

GB/T 20286 GA111 Large Furniture Calorimeter for Surface Entity Room Fire

Products



- **Product Details:**

- Place of Origin: **Chian**
- Brand Name: **YUYANG**
- Certification: **GB / T 20286-2006 GA111-1995 GB / T 27904-2011 GB / T 25207-2010**
- Model Number: **YY135**

- **Payment & Shipping Terms:**

- Minimum Order Quantity: **1 set**
- Price: **Negotiation**
- Packaging Details: **Plywood Box**
- Delivery Time: **10-15 work days**
- Payment Terms: **T/T L/C Western Union**
- Supply Ability: **5 sets per month**

- Share to :

GB/T 20286 GA111 Large Furniture Calorimeter for Surface Entity Room Fire Products

Products:

Large furniture calorimeter is based on GB / T 20286-2006 requirements in Appendix B and C of R & D production; the device can measure exposure to an open flame ignition source under the upholstered furniture and furniture components and combustion performance tests. The device meet GA111-1995, "Standard Test Method for Surface entity room fire products" GB / T 27904-2011 and GB / T 25207-2010 part of the requirements of the test (Note: The entity room part is optional);

The equipment consists of an ignition source, conical collector, exhaust pipes, fans, weighing station and measuring device component; test system comprising: a gas collection and analysis system; gas control system; weighing measuring system; smoke density test system;

Pipeline built-in temperature sensors, gas flow meters, gas sampling probe and a multi-stage filter sampling line analytical instruments to ensure long life.

Software control system under Windows can automatically collect and perform complex data analysis and recording. Software can automatically calculate the heat release rate, mass loss rate and smoke density and other relevant parameters, and gives detailed product test reports. Equipment while providing data printing interface.

Standard:

GB / T 20286-2006 public places burning flame retardant products and components performance requirements and labeling

Entity room fire test surface material GA111-1995

Combustion performance test method of furniture and components GB / T 27904-2011 flame ignition

Technical Parameters:

- 1, Paramagnetic oxygen analyzer from 0 to 25%, accuracy not less than $\pm 0.05\%$, response time of less than 3s.
- 2, CO₂ analysis resolution $\pm 0.1\%$, range 0-10%
- 3, CO analysis resolution $\pm 0.02\%$. Range 0 to 1%
- 4, Imports of heat flow meter accuracy $\pm 2\%$, range 120KG / m, 0.5% repeatability error.
- 5, Filter precision of three soot filter system 0.2 μ m, to ensure long-term life of gas analyzers;
- 6, The gas collection system uses a compressor-type condenser, precise control of temperature of the gas collected at $4\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$; gas analysis more accurate;
- 7, Exhaust pipe exhaust rate is controlled by imported capacitive pressure transmitter 0 ~ 2000pa; calculated by computer, accurate control of exhaust rate;
- 8, Weighing systems using C3 level of imports weighing sensors; linear weighing data acquisition and automatic record store;
- 9, The gas sampling system using samples diaphragm displacement 10L / min ~ 50L / min;
- 10, Smoke density measurement system using a color temperature of $2900 \pm 100\text{K}$ and photometer white smoke density. Colorimetric detector standard function accuracy no less than $\pm 5\%$.

Features:

Independent test and gas analysis equipment console:

- 1, Touch LCD and PLC intelligent control system and data printing configuration interface.
- 2, Paramagnetic oxygen analyzer from 0 to 25%, accuracy not less than $\pm 0.05\%$, response time of less than 3s.
- 3, CO₂ analysis resolution $\pm 0.1\%$, range 0-10%
- 4, CO analysis resolution $\pm 0.02\%$. Range 0 to 1%
- 5, The color temperature (2900 ± 100) incandescent light source and photometer smoke concentration - time curve
- 6, Compressor refrigeration condenser to remove moisture, temperature control is accurate, and with a temperature alarm.

- 7, Pores with inert material intensive sampling probe to detect oxygen concentration, and CO, CO₂ concentration
- 8, Bidirectional probe and imported pressure transmitter accurately measure gas flow rate
- 9, 2900 ± 100K color temperature of white light and smoke density photometer. Colorimetric detector standard function accuracy no less than ± 5%.
- 10, 0.2um multi-stage dust filtration systems and gas dryer and CO₂ absorbents
- 11, The condenser control sample temperature 4 °C ± 1 °C
- 12, Stainless steel hoods 3m X 3m to ensure no smoke leaks
- 13, Exhaust capacity of not less than 3.5m³ / S exhaust fan to speed, to ensure that the hoods can collect all the smoke; flue gas flow meter accuracy no less than ± 5%, the response time of less than 1s.
- 14, Windows environment computer control system; experiment intelligent, easy and convenient; test data is automatically stored, automatic calculation, free retrieval; printable;

Upholstered furniture combustion performance test equipment features:

- 1, Square igniter size (250mm ± 10mm) x (250mm ± 10mm); stainless steel tube thickness 0.89mm ± 0.05mm
- 2, Ignition position adjustable; vertical distance upholstered 51mm ± 3mm; horizontal distance upholstered 25mm ± 3mm;
- 3, Independent movable time display units.
- 4, Automatic ignition system; automatic timing;
- 5, Combustion systems, weighing station, the sample holder integration design; test and measurement equipment more stable, easy to damage;
- 6, Weighing the audience set, fire protection and drainage system design.
- 7, The gas flow is automatically set; the gas emergency shut-off devices.
- 8, Each time data acquisition and data processing no more than 5s;
- 9, Test data report includes: the oxygen concentration, carbon monoxide, carbon dioxide concentration, temperature, smoke density, heat release rate, mass loss rate, etc;

Components and furniture combustion performance test equipment features:

1. Square sandbox igniter size 170mm x 170mm x 145mm; stainless steel thickness 1mm; can

2. Weighing station using imported load cell, anti weighing eccentric design and insulation designed to prevent scale drift
3. The gas valve and ignition automatic control, be sure to open the gas valve and began firing.
4. The gas supply system consists of liquid propane bottle, pressure reducer, regulators, measuring devices and gas pipeline route composition;
5. The gas emergency shut-off devices.
6. C3 grade imports weighing sensor to accurately measure the mass loss rate
7. Waterproof weighing system designed to prevent damage to the heavy fire extinguishing system.
8. Sandbox burner propane gas and equipped with emergency shut-off devices.
9. Combustion systems, weighing station, the sample holder integration design; test and measurement equipment more stable, easy to damage;
10. The test data report includes: the oxygen concentration, carbon monoxide, carbon dioxide concentration, temperature, smoke density, heat release rate, mass loss rate, etc;