

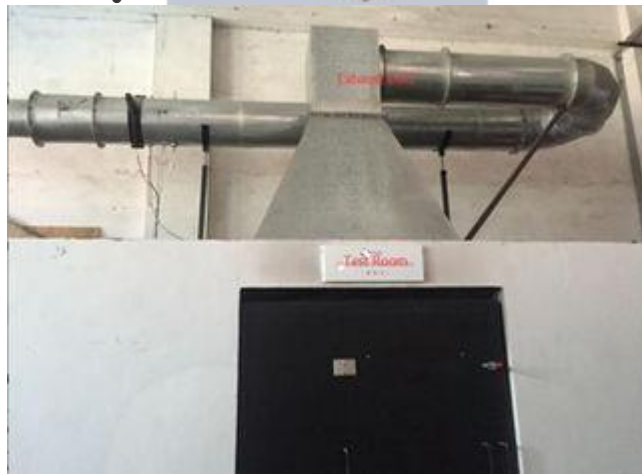
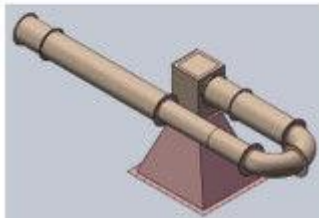


YUYANG INDUSTRIAL CO., LIMITED

China Manufacturer of Fire Testing Equipment

GB/T 20284 EN ISO13823 Construction Materials Single Burning Item Fire Test Chamber





- **Product Details:**

- Place of Origin: China
- Brand Name: YUYANG
- Certification: GB/T 20284 EN 13823

- Model Number: YY438
- **Payment & Shipping Terms:**
- Minimum Order Quantity: 1 set
- Price: **Negotiation**
- Packaging Details: **Plywood Box**
- Delivery Time: **35 work days**
- Payment Terms: **T/T L/C Western Union**
- Supply Ability: **3 sets per quarter**
- Share to :

GB/T 20284, EN ISO13823 Construction Materials Single Burning Item Fire Testing Equipment

Description:

The single burning item tester (SBI) is used to determine the performance of building materials (excluding flooring materials) under the condition of single combustion heat attack.

The sample is placed on a moving cart under the exhaust system, and the combustion reaction of the specimen is automatically visible. Mechanical properties are evaluated by calculating the heat release rate (H.R.R) and the smoke release rate (S.R.R), while other physical properties are evaluated by visual observation.

SBI's Fire Growth Rate Index (FIGRA) is the most representative measure factor. In addition, representative measurement factors are oxygen consumption, CO, CO2 generation and smoke growth rate index (SMOGR). The maximum heat release rate can reach 1MW.

Systems:

1. Ignition system

10kV spark ignition, equipped with a safety ceasefire device. The igniter is automatically positioned by a lever connected to the closing mechanism

Imported mass flow meter controls input flow.

With flame automatic alarm device, safe and reliable.

2. Gas sampling system, including particulate filter, cold trap, suction pump, drying cylinder, flow controller

3. measuring system

Paramagnetic analyzer, O₂ measurement range 0-25%, linear deviation <1%.

Infrared CO₂ analyzer; Measuring range: 0-2 / 10%, linear deviation: <± 1%.

Measurement of smoke density by laser system.

Computer control system

Embedded integrated 10.2 "touch screen

4. Control parameter setting and display; test status and fault display, query.

5. Data acquisition and preservation; screen monitoring, real-time temperature curve, real-time CO₂ / O₂ data curve display; historical curve and data query.

6. Data USB export. History curve and data query, print.

7. It can independently control the machine to complete the test.

8. There are audible alarm and alarm accident display function.

9. Control box with USB / RS232 serial port, can be an external desktop / notebook computer operation control.

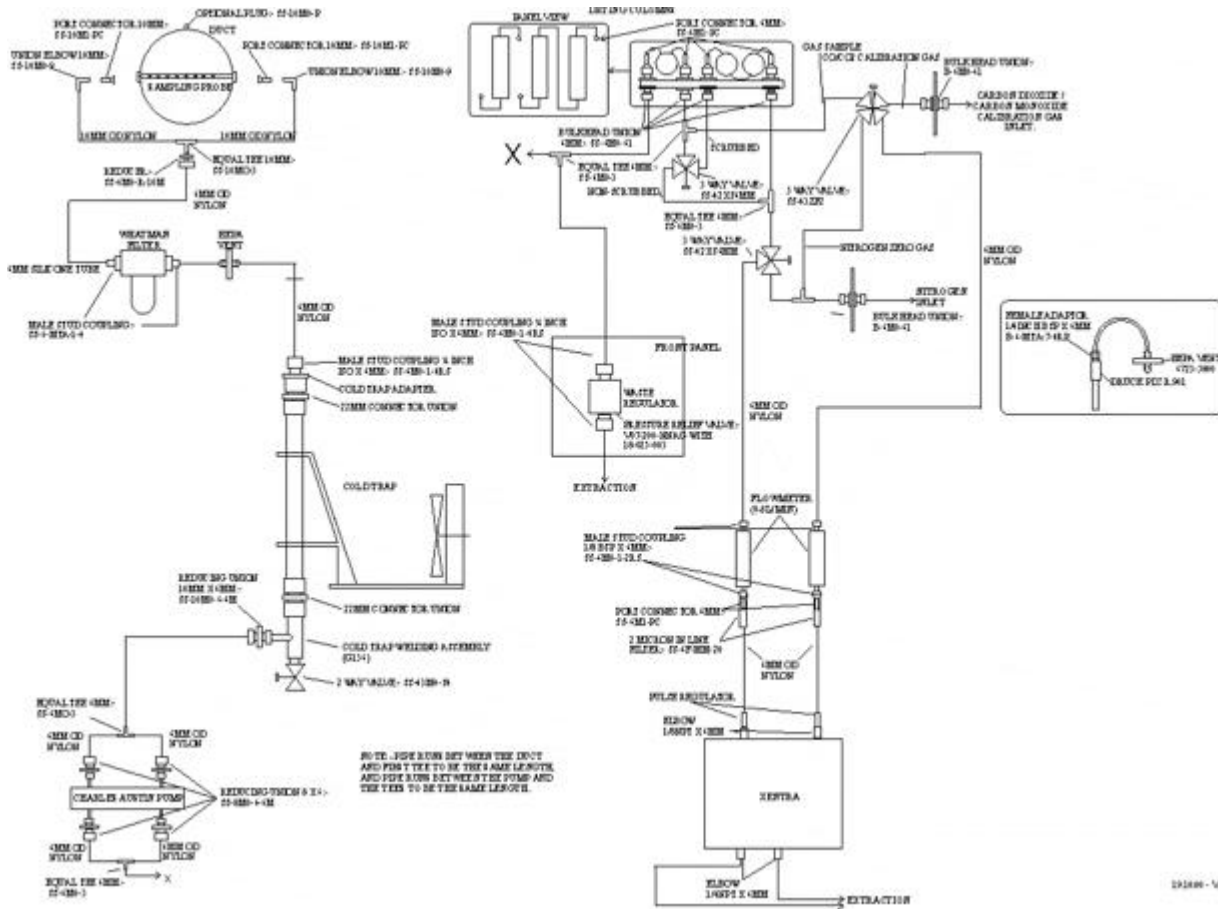
10. Programmable (PLC) control system

- Automatic ignition, ignition failure detection protection.
- Automatic Control and Display of Propane Gas Flow.
- PLC + inverter to implement automatic control and display of exhaust gas flow.
- Automatic measurement and calculation of material combustion: heat release rate (H.R.R), smoke growth index (SPR), oxygen consumption (O₂), CO₂ generation.

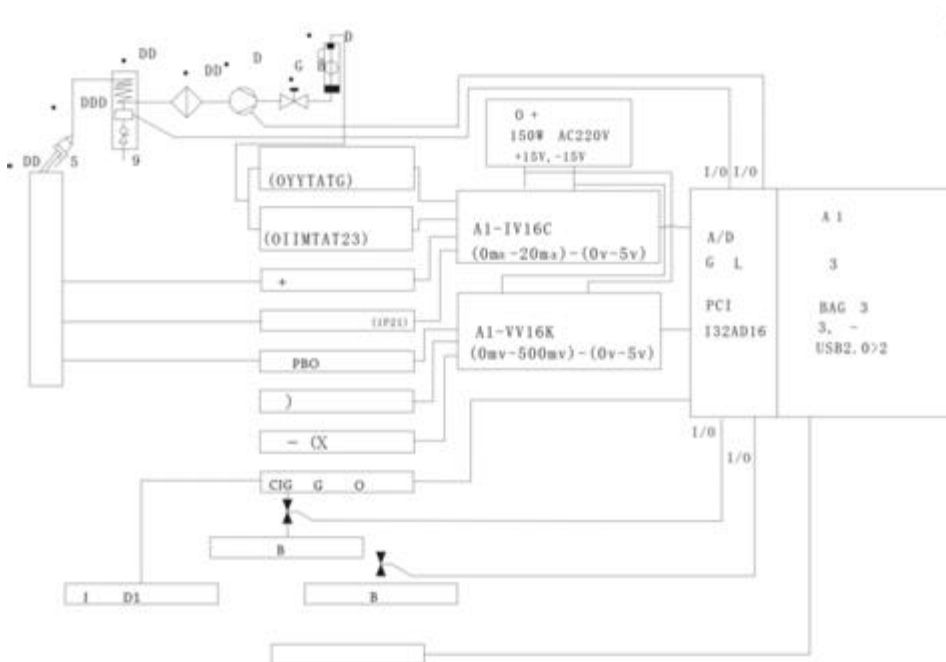
Standards:

GB/T 20284-2006 Building products-single burning item

BS EN 13823 Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item



Gas Sampling

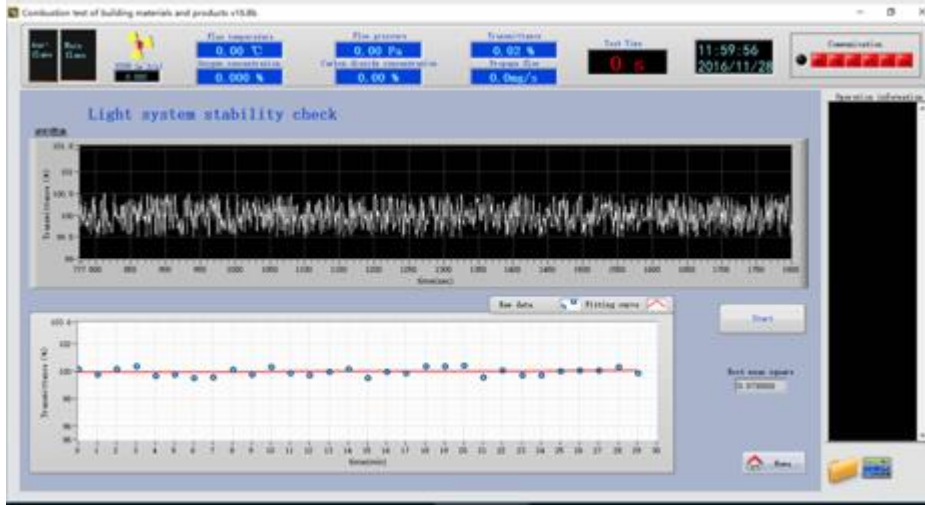


Control Principle



Gas Control Cabinet

Single Burning Item Test report							
Ambient temperature	0.000°C		Ambient humidity	50.00%			
Production unit	XXX						
Model specification	XXX		Sample name	XXX			
Sample size	(495×1500)mm (1000×1500)mm		Sample no.	1			
Test Standard	BS EN 13823		Equipment ID				
Gas type	Propane	Main burner flow:	647	mg/s	Auxiliary burner flow:	647	mg/s
Maintenance condition	Temperature: 23°C Humidity: 50%						
Product combustion performance							
HRfav auxiliary burner (kw)	29.987		TSP600s(m ³)	16.002			
THR600s(MJ)	2.950		SMOGRa(m ³ /s ²)	0.000			
FIGRA0.2MJ(w/s)	36.853		The total amount of smoke produced in the sample(m ³):	49.395			
FIGRA0.4MJ(w/s)	36.853		Standard deviation of burner(kw):	0.033			
Total heat release of the sample(MJ):	5.783						
Experimental phenomena:							
Test evaluation:							
Remarks:							
Other:							
The test results show that the combustion performance of the product is the result of the test under special conditions. In practice, they can not be used as the sole basis for evaluating the potential risks of the product!							
Test date	16-11-29 091643	Tested by		Checked by			



Flow temperature: 0.00 °C
 Flow pressure: 0.00 Pa
 Transmittance: 0.02 %
 Heat flux: 0.0
 Time: 10:11:09
 Date: 2015-12-14
 Gas concentration: 0.000 %
 Flow velocity: 0.000 m/s
 Trans. Coe: 0.00 %
 Heat flux: 0.00 W/m²

Parameter Settings

Test Name: _____
 Test Position: _____
 Test Object: _____
 Test Date: _____
 Test Product Name: _____
 Unit: _____

Test Parameters
 Humidity: 50 %
 Test Gas: CO₂ / Pa
 Test Gas Flow Rate: 0.00
 Test Gas Pressure: _____
 Test Gas Temperature: _____
 Test Gas Concentration: _____
 Test Gas Flow Rate: _____
 Test Gas Concentration: _____

Test Method
 Test Method: _____
 Test Method Description: _____
 Test Method Reference: _____

Buttons: Run, Stop, Start, Stop, Run, Stop, Run, Stop
 Right sidebar: Operation information, Run, Stop