

# Flammability

TESTING EQUIPMENT



# Flammability Testing Equipment

INNOVATIVE INSTRUMENTS

Apparel, curtain and drape, and upholstery flammability testing is critical to your customer's safety and in complying with your market regulations. These regulations may vary in significant points depending on the market area. SDL Atlas offers a wide range of testers to meet your needs and is ready to assist you in choosing the correct flammability tester, accessories, and consumables for precise, standards compliant flammability testing.



## M233G 45° Automatic Flammability Tester

The 45° Automatic Flammability Tester meets USA flammability regulations for general wearing apparel to determine the fabrics burning characteristics under controlled conditions. It is offered in a stainless steel cabinet with a glass observation window and provides automatic timing of flame spread for 0.1 second time intervals. Automatic or manual flame impingement times of 1, 5, or 20 seconds is accommodated. A brushing device to meet the standard requirements for preparing pile fabrics prior to testing is available. Packs of burners and specimen holders are also available.



### M233B & M233B/1 Auto Flamm Flammability Tester + Optional Radiator Assembly

The Auto Flamm Flammability Tester meets the needs of those testing general apparel fabrics and vertically oriented fabrics such as curtains and drapes to European standards. This automatic model has a accurately adjustable gas burner, micro switch operated trip threads and automatic gas ignition capabilities. These features are controlled by the included hand-held touch screen operating system. The computer software provides an extensive pre-programmed library of current BS EN and ISO standards together with data analysis, storage and report generation on different accessories, burners, and configurations, these are quoted optionally as required. The M233B/1 Optional Radiator Assembly for testing curtains and drapes is designed to the BS EN 13772:2003 standard.

### M233M Vertical Flammability Tester

The Vertical Flammability Tester, designed for USA standards, permits the user to determine the vertical flame spread of children's sleepwear, and fabrics or resilient filling materials used in upholstered furniture. Manual gas controls are located in a separate metal enclosure that can be located away from the flammability test cabinet for the operator's convenience. Each specific test standard will require specific specimen holders, burners, and associated hardware. These are available as optional accessories. Also available is an optional Automatic Gas Control System to replace the Manual control. This system provides convenient solenoid operated gas supply valve with automatic ignition timer and controls.





### M233F & M233F1

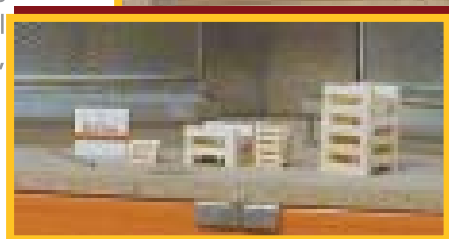
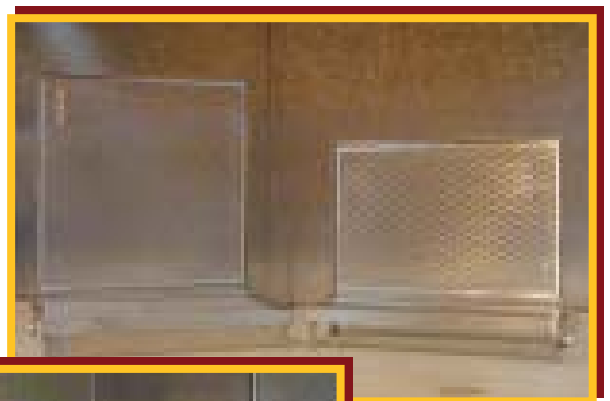
## Horizontal Motor Vehicle Flammability Tester + Automatic Gas Control System

The Horizontal Motor Vehicle Flammability Tester provides manufacturers of automotive interior textiles and plastics a device to meet the testing requirements of the USA Federal Motor Vehicle Safety Standards 302 and similar USA and international standards. It is comprised of a draft free stainless steel cabinet, large observation window, sample holder, and door mounted burner. An optionally available Automatic Gas Control System with solenoid control gas valve, automatic ignition timer, and controls can be provided.

### M233P1

## Upholstery Flammability Test Rig

The Upholstery Flammability Test Rig is supplied with both large and small test rigs for European Union standards. When used, the test rigs are covered with either standard foam or user selected foam and the fabric under test. The assembly is then ignited using one of the standard ignition sources and the combustion process is monitored. In addition to the two test rigs, a timer, a gas flowmeter and 10 Wooden Ignition cribs are included. Optional accessories include additional wooden ignition cribs, foam pads, burner tube, specimen cutting template, and standard cigarettes.



# Flammability Standards Matrix

|                                | 45° Automatic Flammability Tester | Auto Flammability Tester | Vertical Flammability Tester | Upholstery Flammability Test Rig | Horizontal Motor Vehicle Flammability Tester |
|--------------------------------|-----------------------------------|--------------------------|------------------------------|----------------------------------|--|
| ASTM D1230                     | ●                                 |                          |                              |                                  |  |
| ASTM D5132                     |                                   |                          |                              |                                  | ●  |
| ASTM D6413                     |                                   |                          | ●                            |                                  |  |
| 16 CFR parts 1615 & 1616       |                                   |                          | ●                            |                                  |  |
| 16 CFR part 1610               | ●                                 |                          |                              |                                  |  |
| BS 5438: 1976, Test 1, 2 and 3 |                                   | ●                        |                              |                                  |  |
| BS AU 1690                     |                                   |                          |                              |                                  | ●  |
| BS 5438: 1989                  |                                   | ●                        |                              |                                  |  |
| BS 5852: 2006                  |                                   |                          |                              | ●                                |  |
| California TB 117:2000         | ●                                 |                          | ●                            |                                  |  |
| EN 13772: 2003                 |                                   | ●                        |                              |                                  |  |
| EN ISO 6940: 1995              |                                   | ●                        |                              |                                  |  |
| EN ISO 6940: 2004              |                                   | ●                        |                              |                                  |  |
| EN ISO 6941: 1995              |                                   | ●                        |                              |                                  |  |
| EN ISO 6941: 2003              |                                   | ●                        |                              |                                  |  |
| EN 1101: 1996                  |                                   | ●                        |                              |                                  |  |
| EN 1102: 1996                  |                                   | ●                        |                              |                                  |  |
| EN 1103: 1996                  |                                   | ●                        |                              |                                  |  |
| EN 532: 1995                   |                                   | ●                        |                              |                                  |  |
| EN ISO 15025: 2002             |                                   | ●                        |                              |                                  |  |
| FMVSS 302                      |                                   |                          |                              |                                  | ●  |
| FTMS 191-5908                  | ●                                 |                          |                              |                                  |  |
| NFPA 702                       | ●                                 |                          |                              |                                  |  |
| JIS D 1201                     |                                   |                          |                              |                                  | ●  |
| SAE J369                       |                                   |                          |                              |                                  | ●  |
|                                |                                   |                          |                              |                                  |  |

Note: Additional accessories or configurations may be required to meet specific standards. Visit [SDLAtlas.com](http://SDLAtlas.com) or contact an SDL Atlas office for full solutions to standards testing.

## Consumables for Flammability testing

Several of the standards for flammability testing require special consumable supplies such as, polyurethane foam pads, wooden ignition cribs, cotton batting, and standardized fabrics. These and hundreds more standard textile laboratory consumables are available from Textile Innovators a division of SDL Atlas.



Wherever people test textiles, you'll find SDL Atlas.

Solutions by SDL Atlas: Instrumentation. Installation. Calibration. Training. Support. Service. Distributors, Agents and Service Centers in Over 100 Countries.

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