



THE WORLD'S MOST ADVANCED THERMAL TESTING EQUIPMENT

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## FLAME - FLASH FIRE ACCESSORY MODULAR BURN CHAMBER

The modular burn chamber is an indoor/outdoor self-contained enclosure that features fire-proof construction, a computer-controlled gas delivery and burner network, as well as ventilation, fire suppression, and operator safety systems. Chamber components are highly interlocked and automated. Operator safety features are integrated with the torch controls and are in coordination with the ventilation system to prevent buildup of explosive gasses and quickly ventilate the chamber after a burn cycle is completed. Every modular burn chamber is highly customizable based on your specific needs.



### Test Methods Supported

- ASTM F-1930
- ISO 13506



## Modular Burn Chamber Specifications

- 4.9 x 4.6 x 3.2 meters high.  
Actual dimensions may vary based on site location

## ThermDAC Control Software

ThermDAC is a Windows-based application providing full device control, fault detection, data logging and analysis capabilities

## Base Products Include:


- Modular flame chamber with grated floor
- Fuel regulation and control unit
- Electric intake dampers and variable speed exhaust fan
- 6 Torch stands with 2 adjustable torches each
- Safety and monitoring sensors (pressure, temperature, propane LEL)
- Control system and Flat Panel interface for flame chamber
- User Interface PC with ThermDAC software
- System Installation and commissioning

## Modular Burn Chamber Feature Highlights & Benefits

- Available with the Thermetrics Flame Test manikin or as a stand-alone system
- A system of propane/LPG gas piping, pressure regulators, valves, and pressure sensors will be provided to safely deliver gaseous fuel to the ignition system and exposure torches
- Large viewing window to observe the status of in-progress tests
- Includes mesh screens to remove soot and particulates from the exhaust airstream
- Chamber size is larger than the ASTM F1930 minimum dimensions to provide better combustion and ventilation, more uniform flame exposure, and sufficient space for safe movement around the manikin.
- Chamber includes a gas distribution system and 12 torch array to apply a uniform flame front onto the manikin
- Chambers feature a pre-engineered ventilation system to supply fresh air for combustion, and to exhaust the chamber through mesh filter screens after completing a burn exposure
- Torch array is adjustable for position, horizontal and vertical angle, and per-torch gas flow to deliver a uniform heat flux of at least 2.0 cal/cm<sup>2</sup>•s (84 kW/m<sup>2</sup>)
- NFPA86 compliant fuel train with redundant electronic and manual gas shutoff valves provides stable fuel flow and protects the system and operators.



| 510 - Flame Test Manikin - Burnie/Burnadette | Item #   | Description  | Product Name |
|--|----------|--|--------------|
| Installation Site Options                    | 20-01293 | Chamber (Includes: Control panel, Torches & Fuel Skid) | —            |

 Don't see what you need in the above product table? Contact Thermetrics to customize your perfect system. Keep your Modular Burn Chamber in tip-top shape. Discuss service plan options and point-of-sale discounts with our team at [sales@thermetrics.com](mailto:sales@thermetrics.com).