

Vertical Flammability Test Chamber

Controlled vertical flame exposure for textile evaluation



PW-VFT-01 provides a vertical test chamber for evaluating textile afterflame, afterglow and charring behaviour. The instrument is configured with method-specific burners and specimen holders.

4.3-inch

Touchscreen PLC/HMI

Two method sets

ASTM and CFR configurations

Timed exposure

Method-specific flame application

Textile laboratories • Quality control • R&D

Request a quotation

STANDARDS AND TEST CAPABILITY

Standard / method	Application	Required configuration
ASTM D6413/D6413M	Vertical flame resistance of textiles; afterflame, afterglow and char length.	ASTM set: vertical pilot burner and ASTM specimen holder.
16 CFR 1615 §1615.4	Children's sleepwear flammability (sizes 0-6X); fabric and garment specimens.	CFR set: sliding burner inclined 25° from vertical and CFR holder.
16 CFR 1616 §1616.5	Children's sleepwear flammability (sizes 7-14); fabric and garment specimens.	CFR set with the procedure and evaluation sequence for 1616.

Test capability depends on the selected burner, holder and accessory set. ASTM and CFR tests require different burner/holder configurations. The requested method, edition and supplied accessories are specified in the quotation.

TECHNICAL SPECIFICATIONS

Control	4.3-inch touchscreen PLC/HMI
ASTM configuration	76 × 300 mm specimen; 10 mm burner bore; 12 s flame exposure
CFR configuration	89 × 254 mm specimen; 11 mm burner bore; 3 s flame exposure
Flame height	38 mm for both method sets
Gas	Methane; 99% purity for ASTM, at least 97% for CFR
Construction / viewing	Stainless steel enclosure; glass observation door
Controls	Gas pressure gauge, fine adjustment, manual shutoff, emergency stop
Power supply	230 VAC, 50/60 Hz

OPERATION AND RESULTS

1. Fit the required method set; prepare and mount the specimen.
2. Select method settings and apply the flame for the specified time.
3. The operator marks the end of afterflame/afterglow. Char length is measured manually after the prescribed weighted tear procedure.

LABORATORY AND ACCESSORIES

Select the method-specific holders, burner, gauge and weight/hook set. A methane source and external hood are required; avoid drafts at the specimen during testing. CFR procedures also require preparation equipment such as an oven and desiccator.

Standard references identify test methods; they are not product certification.

Method references: ASTM D6413/D6413M · 16 CFR 1615.4 · 16 CFR 1616.5