# **School-Master Top-Loading Kilns made for K-12 Schools**

The School-Master Kiln Series was designed with the One-Touch™ Intuitive Kiln Control specifically with busy school teachers in mind. One touch and you are ready to fire the bisque and glaze programs most often used in K-12 schools. No programming is necessary. Simple adjustments are easy (like cone level, heating and cooling speed, hold time and delay time), yet sophisticated programming is also possible.

# **FIVE YEAR** WARRANTY



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ilns.com sales@hotkilns.com • hotkilns.com

### **Unique Features**

- Ceramic Element Holders
- Simple Control
- Easy-Service Panel
- Protected Thermocouple
- Spring Hinge
- Super-Strong Stand
- Extended Five-Year Warranty

#### **KILNS BUILT TO LAST**

# **Unique Features - Lasting Benefits**

#### **CONE 6 TEMPERATURE RATING**

Cone 6, 2230°F, 1220°C (cone 5 on SM28T-3, 208 volts, single phase)

#### **3" OF K23 FIREBRICK**

3" K23 firebrick.

#### PATENTED CERAMIC ELEMENT HOLDERS

Protect brick from loading damage, keep elements from falling out of grooves, make changing elements easy, and optimize heat transfer to load. Kiln lasts longer! No pins. (hotkilns.com/ceramic-holders)



#### **HEAVY-DUTY LARGE ELEMENTS**

Six heavy-duty elements. Elements are graded for uniformity.

#### **EXTRA CASE CLAMPS**

Stainless worm gear case clamps keep case together and allow for adjustment over time. Three per 9" ring, Two on the top and bottom. **(hotkilns. com/case-clamps)** 

#### "EASY-OPEN, EASY-LOAD" SPRING-LOADED LID OPENS WIDE FOR LOADING

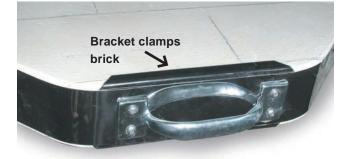
The whole kiln supports the lid (not just one section). Our positive safety pin secures the lid safely. No support bars get in the way of loading when the lid is fully tilted back. **(hotkilns.com/spring-hinge)** 



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#### LID BRICK IS SECURED WITH CLIPS

Stainless Steel clips secure lids - not friction. (hotkilns.com/ lid-clips)



# EASY ASSEMBLY WITH SECTIONAL CONSTRUCTION

Three 9" sections stack on top of each other. Easy to assemble or disassemble for moving. Bottom is reversible. (hotkilns.com/sectional-easy-fire)

#### **CORROSION RESISTANT CONSTRUCTION**

Stainless steel wrapped around brick. All stainless screws on case. Stand is galvannealed. Vent parts are stainless steel. Hinge is stainless steel. Control box is powder coated steel. **(hotkilns.com/case)** 

#### SOLID PEEPHOLE PLUGS

Non-fragile solid ceramic with heat-locked head. 1" diameter full-view non-tapered. (hotkilns.com/peephole-plugs)



#### **HEAVY-DUTY FULL-SUPPORT STAND**

Heavy-duty 14 gauge solid stand with multiple bends for strength. Bolt on legs. Feet protectors included. Optional Vent Bypass Collection Box bolts onto bottom of stand with included studs. (hotkilns.com/full-stand)





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#### **ONE-TOUCH PROGRAM CONTROL**

Control: One-Touch<sup>™</sup> Intuitive Kiln Control easily fires the bisque and glaze programs typically used in schools. It is also easy to adjust simple parameters like cone, delay, hold, heat-up and cool-down rates. Also four custom ramp/hold programs with 8 segments each. (hotkilns.com/one-touch)



#### HEAVY-GAUGE TYPE K THERMOCOUPLE

Type K 8 gauge thermocouple is protected by a open ceramic protection tube. This allows the thermocouple to accurately read the kiln temperature but protects the delicate tip of the thermocouple from damage while loading. Also any metallic flakes from the thermocouple will tend to drop inside the tube where they can be vacuumed out during normal maintenance. (hotkilns.com/ protected-thermocouples)



#### **POWER CORD & PLUG INCLUDED**



50 Amp NEMA 6-50 six foot cord included for one phase.

50 Amp NEMA 15-50 six foot cord included for three phase. (All Non-USA kilns are direct wired).

Same price for all voltages and phases.

#### SEPARATED COOL-FIRING CONTROL PANEL

All controls and components are mounted in a separate control panel that is piggy-backed to the element connection box. In addition a layer of insulation keeps the controls cool - which is critical for long term health of the electronics.

The control panel and element box are hinged for easy access and maintenance. The control box can be easily removed for servicing. On/off switch and control fuse are included.

(hotkilns.com/easy-fire-panel)



#### **CERAMIC ELEMENT CONNECTIONS**

Proprietary all-ceramic element connection block makes changing elements easy. (hotkilns.com/ceramic-terminal)



#### **MERCURY FREE RELAYS**

Mercury free relays are standard.

#### **COMPLETE VISUAL INSTRUCTIONS**

No one has a better or more complete instruction manual. Our visual instructions address the needs of the artist, the installer, and the repair person. You get a fully illustrated operation and service manual. Various instructional videos are available. (hotkilns.com/videos)

#### L&L KILNS ARE EASY TO TROUBLESHOOT

Open up any L&L kiln control panel and see how easy it is to check amps, element resistance, and voltage. No other kiln can be serviced as quickly, easily, or inexpensively as an L&L kiln.

#### **IN-DEPTH SUPPORT**

One customer said: "I am truly impressed with your website, it is more than informative and your products are well designed. The fact that all the information, including repair manuals, are listed, speaks well of your dedication to customer service." Our website has thousands of pages of technical help - all easily searchable - plus we provide expert support with phone and email.

#### SPECIAL FIVE-YEAR WARRANTY

See **hotkilns.com/warranty.** Email, web and phone support.

#### SUSTAINABLE MANUFACTURING

We use solar energy as our primary energy source.

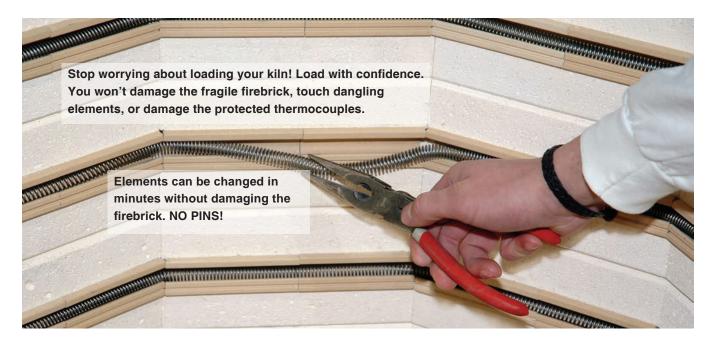
#### SUPERIOR PACKAGING

Kilns are securely packed with tubes of foam molded to the kiln. Kilns are shipped in skidded cartons.

#### **MET UL499 LISTING**



c-MET-us listed to UL499 standards assures highest safety standards. (hotkilns.com/met)



800-750-8350

sales@hotkilns.com

Bulletin No: SM-0222

# **Kiln Furniture, Electrical & Stand Options**

#### **HIGH ALUMINA FURNITURE KITS**



Shelves are high alumina cone 11 shelves. Each post kit includes six each 1/2", 1", 2", 4", 6" and 8" high 1.5" square cordierite posts. All furniture kits include one pair heat-resistant gloves.

(hotkilns.com/kiln-furniture)

#### **OPTIONAL CORDS**

All single phase models can get a 12 foot NEMA 6-50 cord. (hotkilns.com/cord-options)

#### **ROLLING STAND WITH LOCKING CASTERS**

Allows kiln to be moved out of the way while not firing. L&L's rolling kiln stand features heavy gauge (14 ga) galvannealed steel construction with multiple bends for extra strength, steel swivel locking casters, integrated vent collection box support, and guide rails for the kiln. (hotkilns.com/ rolling-stands)



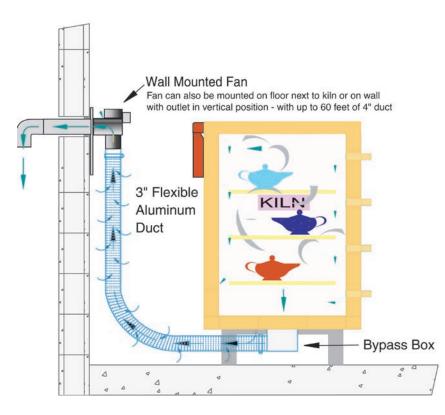
#### SEISMIC BRACE

This special stand is designed to prevent a top-loading sectional kiln from falling over during an earthquake. (hotkilns.com/ seismic-brace)

# **Ventilation Options & Accessories**

#### **DOWNDRAFT VENT SYSTEM**

Vent-Sure downdraft vent vents fumes from kiln out of room and away from kiln. (hotkilns.com/vent)



#### **VENT DOUBLER**

This accessory allows you to connect two kilns to a Vent-Sure vent system. It can be added to an existing vent system or can be ordered with a new vent. In some cases you may be able to fire two kilns

at once. The Vent-Sure has enough force to vent at least 25 cubic feet of kiln. That means, for instance, that two SM28T-3 kilns could be vented while firing at the same time. (hotkilns.com/ doubler)



#### **VENT-SURE FEATURES**

Downdraft venting pulls air down to bottom of kiln

Improves temperature uniformity inside the kiln

Powerful 130 CFM fan motor, typically mounted on wall, allows fumes to be under vacuum in your studio

The strong fan motor helps overcome static pressure in long exhaust lines. The duct may be up to 60 feet in length, and include up to four 90° bends

120 volts with on/off switch on cord (240 volts available)

15 foot long flexible aluminum duct

Bypass collection box mounted on kiln allows adjustment of venting.

Fan motor, mounted away from the kiln, stays cool and no vibration is transmitted to the kiln

The included Multi-Mounting Bracket allows you to mount the vent on the floor or, alternately, to mount the vent on a



wall so that the output of the vent is pointing up.

**Three-year Limited Warranty** 

c-MET-us Listed to UL499 standards for use on c-MET-us L&LKilns

### **Electrical Specifications**

| Model Numbers   | Part        | Voltage/ | Cone  | Watts  | Amps | Wire  | Fuse    | Power         |  |  |  |
|-----------------|-------------|----------|-------|--------|------|-------|---------|---------------|--|--|--|
|                 | Number      | Phase    | Limit |        |      | Size  | Size    | Connection    |  |  |  |
| SM23T-3-240     | K-S-23T3/31 | 240/1P   | 6     | 11,500 | 48.0 | 6 ga  | 60 Amps | 6-50 Cordset  |  |  |  |
| SM23T-3-240-3P  | K-S-23T3/32 | 240/3P   | 6     | 11,500 | 27.8 | 8 ga  | 40 Amps | 15-50 Cordset |  |  |  |
| SM23T-3-208     | K-S-23T3/21 | 208/1P   | 6     | 9,980  | 48.0 | 6 ga  | 60 Amps | 6-50 Cordset  |  |  |  |
| SM23T-3-208-3P  | K-S-23T3/22 | 208/3P   | 6     | 11,000 | 30.7 | 8 ga  | 40 Amps | 15-50 Cordset |  |  |  |
| SM28T-3-240     | K-S-28T3/31 | 240/1P   | 6     | 11,500 | 48.0 | 6 ga  | 60 Amps | 6-50 Cordset  |  |  |  |
| SM28T-3-240-3P  | K-S-28T3/32 | 240/3P   | 6     | 16,620 | 40.2 | 6 ga  | 60 Amps | 15-50 Cordset |  |  |  |
| SM28T-3-208     | K-S-28T3/21 | 208/1P   | 5     | 9,980  | 48.0 | 6 ga  | 60 Amps | 6-50 Cordset  |  |  |  |
| SM28T-3-208-3P  | K-S-28T3/22 | 208/3P   | 6     | 14,340 | 40.0 | 6 ga  | 50 Amps | 15-50 Cordset |  |  |  |
| WORLD VOLTAGES  |             |          |       |        |      |       |         |               |  |  |  |
| SM23T-3-220     | K-S-23T3/41 | 220/1P   | 6     | 10,560 | 48.0 | 6 ga  | 60 Amps | Direct Wire   |  |  |  |
| SM23T-3-380-3PY | K-S-23T3/42 | 380/3PY  | 6     | 11,400 | 17.7 | 12 ga | 25 Amps | Direct Wire   |  |  |  |
| SM28T-3-220     | K-S-28T3/41 | 220/1P   | 6     | 10,560 | 48.0 | 6 ga  | 60 Amps | Direct Wire   |  |  |  |
| SM28T-3-380-3PY | K-S-28T3/42 | 380/3PY  | 6     | 15,058 | 24.2 | 8 ga  | 40 Amps | Direct Wire   |  |  |  |

MET UL499 Listing: All models are c-MET-us listed to UL499 standard. .

**Power connection:** A six foot cord with a 50 amp NEMA 6-50 for single phase units or a 15-50 plug for 3 phase units is included. (No neutral is necessary). World voltage kilns do not include a cord - they are direct wired. All kilns may be direct wired.

Wiring Diagrams: See hotkilns.com/wiring-diagrams for wiring diagrams.

**Other voltages** for any country in the world are available. Examples are 200V/3 Phase Delta, 220V/3 Phase Delta, 415V/3 Phase Wye and 400V/3 Phase Wye. CE Listing available in some countries. See 380 Volt diagrams for electrical specifications for 400V/3 Phase Wye and 415V/3 Phase Wye.

| Model                               | Inside          | Cubic | Brick | Furniture                     | Furn Kit    | Outside               | Shipping              | Ship         | Ship          |  |
|-------------------------------------|-----------------|-------|-------|-------------------------------|-------------|-----------------------|-----------------------|--------------|---------------|--|
| Number Dimensions                   |                 | Feet  | Thick | Kit                           | Part No.    | Dimensions            | Dimensions (w Kit)    | Wght         | Wght          |  |
|                                     |                 |       |       |                               |             |                       |                       | Kiln<br>Only | Kiln +<br>Kit |  |
| SM23T-3                             | 22.3"D x 27"H   | 6.7   | 3"    | (2) 20" full, (4) half        | H-E-K23T/30 | 30" W x 68" H x 40" D | 48" W x 61" H x 40" D | 380 lbs      | 470 lbs       |  |
| SM28T-3                             | 28"D x 27"H     | 10.2  | 3"    | (8) 25.5" half                | H-E-K28T/00 | 35" W x 74" H x 46" D | 48" W x 61" H x 40" D | 480 lbs      | 615 lbs       |  |
| METRIC DIMENSIONS (CM, LITERS & KG) |                 |       |       |                               |             |                       |                       |              |               |  |
| SM23T-3                             | 56.6 D x 68.6 H | 190   | 7.62  | (2) 50.8 cm full, (4)<br>half | H-E-K23T/30 | 76 W x 173 H x 102 D  | 122 W x 155 H x 102 D | 172 KG       | 213 KG        |  |
| SM28T-3                             | 71.1 D x 68.6 H | 289   | 7.62  | (2) 50.6cm full, (4) half     | H-E-K28T/00 | 89 W x 188 H x 117 D  | 122 W x 155 H x 102 D | 218 KG       | 279 KG        |  |

### **Dimension & Weight Specifications**

**MORE:** See each model page on *hotkilns.com* to download PDF General Dimension Drawings for more outside and inside dimensions, minimum space requirements, BTU ventilation requirements, and kiln weight. See the Shipping Tab on the model page for complete shipping dimension and shipping weight information.

**Moving and installation:** The kiln comes assembled but can be quickly disassembled and reassembled to move through any door or up stairs. It comes packed in a skidded carton with secure foam-in-place packaging.



SM23T-3

#### SM28T-3

# **SM23T-3**

Temperature Rating: Cone 6 Volume: 6.7 Cubic Feet Brick Thickness: 3" Brick Inside: 22.3" Diam x 27" High Outside Dimensions: 30" W x 68" H x 40" D Shipping Dim with Vent & Furn Kit: 48" W x 61" H x 40" D Ship Weight (Kiln): 380 LBS Ship Weight (Kiln, Vent & Furn Kit): 470 LBS



#### FURNITURE KIT FOR SM23T-3

Part Number: H-E-K23T/30

Includes: Two 20" (50.8 cm) full shelf and four half shelves, One post kit with 6 each 1/2", 1", 2", 4", 6", and 8" square posts, and one pair heat resistant gloves.





L&L Kiln Mfg Inc

# **SM28T-3**

Temperature Rating: Cone 6 (except for 208 volt, single phase) Volume: 10.2 Cubic Feet Brick Thickness: 2.5" Brick Inside: 28" Diam x 27" High Outside Dimensions: 35" W x 74" H x 46" D Shipping Dim with Vent & Furn Kit: 48" W x 61" H x 40" D Ship Weight (Kiln): 480 LBS Ship Weight (Kiln, Vent & Furn Kit): 615 LBS



#### FURNITURE KIT FOR SM28T-3

Part Number: H-E-K28T/00

Includes: Eight 25.5" (25.5 cm) half shelves, One post kit with 6 each 1/2", 1", 2", 4", 6", and 8" square posts, and one pair heat resistant gloves.





L&L Kiln Mfg Inc

# What Makes **School-Master Kilns Built to Last?**

Protected Thermocouple (open tube design) **Piggy-Back Control** Panel makes servicing easy and safe, keeps electronics cool.

Intuitive One-**Touch Control** for easy firing in a school environment.

Spring Assisted Lid for easy opening. Includes safety pin for securing in up

position. No side supports makes loading easy.

#### Hard Ceramic Element

Channels protect elements and fragile firebrick. Improves kiln life dramatically. Provides wider and more reflective surface for infrared heat transmission.

> Heavy-Duty Full-Support Stand makes kiln sturdy.

Chest Handles make lifting rings easy when moving or setting up kiln.

#### Extra insulation in panel keeps electronics cool.

**Molded Ceramic Element Terminals** make connecting elements easy and trouble free.

Solid Ceramic Peephole Plugs with 1" diameter straight view have wide viewing area and won't easily fall out or break.

### School-Master Kilns come with a FIVE-YEAR Warranty



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#### **KILNS BUILT TO LAST**

Bulletin No: SM-0222