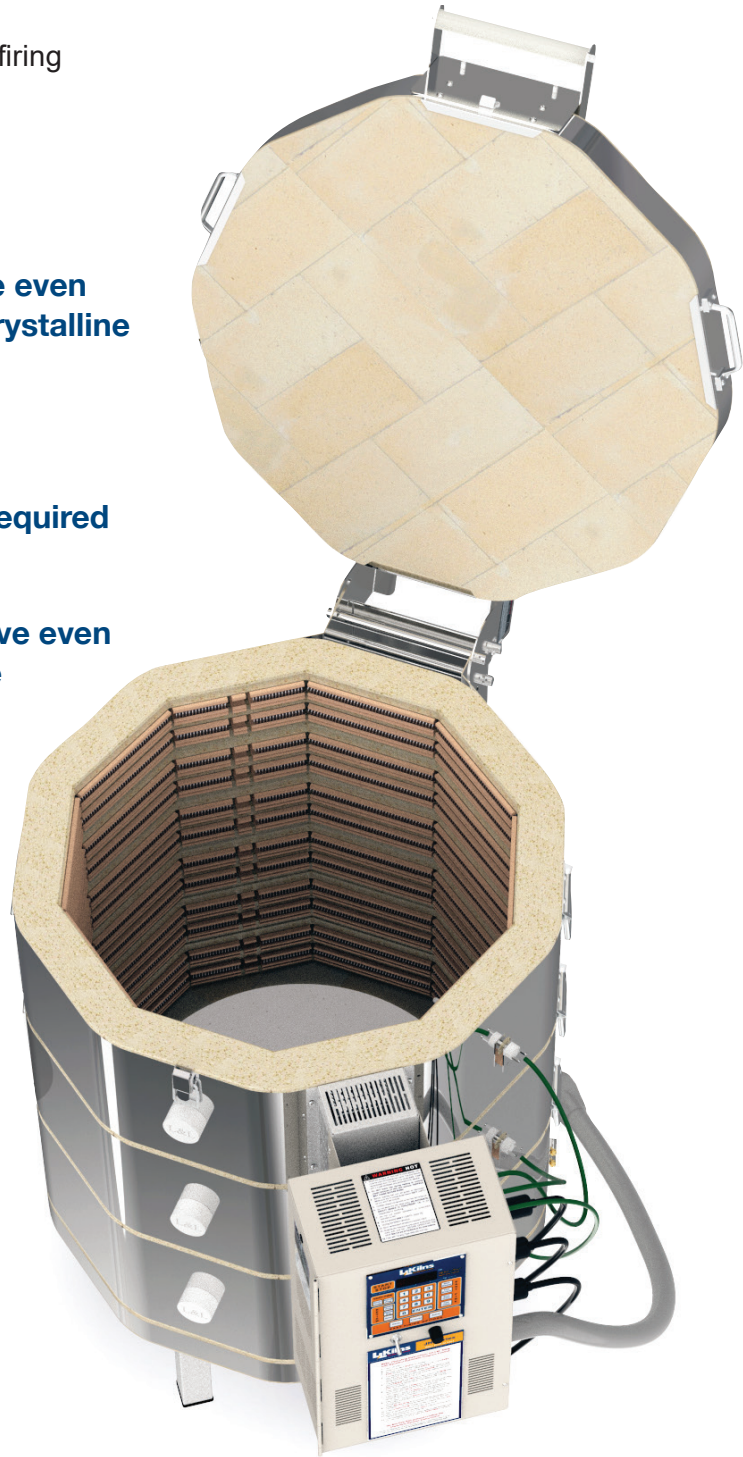


JH Series

Crystalline Glaze Cone 12 Kilns

The JH kilns were designed specifically for firing crystalline glaze.

- Cone 12
- Quad Elements for long element life even with the punishing cycles used in crystalline glaze firing
- Type S Platinum Thermocouples
- Extra Power for fast heating rates required for crystalline glaze firing
- 2500F Firebrick - balanced to achieve even firing and fast cool-downs to freeze crystals
- Hard Ceramic Element Holders protect brick and make element changes fast and easy
- Dynamic Zone Control keeps temperatures uniform throughout kiln
- Remote or Drop-Down Piggy-Back Panel protects electronics and makes servicing easy
- Customize to meet your exact needs. *Every kiln is built to order*



Unique L&L Features with Lasting Benefits

CONE 10 TEMPERATURE RATING

Temperature Rating: Cone 12, 2400°F, 1315°C

POWER LOADING

These kilns come with approximately 25% more power than a regular kiln of similar size.

SPECIAL HIGH TEMPERATURE INSULATION

2-1/2" K25 2500F firebrick on side and bottom, 3" K25 on top. This design is optimized to fire crystalline glaze. The balance of thicknesses aids uniformity.

QUAD ELEMENT DESIGN

The combination of 1/2" diameter element coils, the doubled surface area of the Quad element design, and superior heat transfer of L&L's patented ceramic element holders, make this the best element system in the world today. (hotkilns.com/quad-option)



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)

PLATINUM THERMOCOUPLES

The very best thermocouple for constant high fire applications is a Type S platinum thermocouple with an alumina sheath. Type S thermocouples are composed of a positive leg which is 90% platinum and 10% Rhodium, and a negative leg which is 100% platinum. Since they can be used up to 2700°F. (1480°C) they will not drift or degrade in these kilns. (hotkilns.com/platinum)

EXTRA CASE CLAMPS

Stainless worm gear case clamps keep case together and allow for adjustment over time. Three per 9" ring, Two per 4.5" ring and two on the top and bottom. (hotkilns.com/case-clamps)

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

On e23S-JH, JD230-JH and JD2927-JH models the whole kiln supports the lid (not just one section). Our positive safety pin secures the lid safely. Because of the 2.5" thick sides on the JD2927-JH we use a side support bar. (hotkilns.com/spring-hinge)

Note the backward angle for easy loading. JD2927-JH does have a support bar.



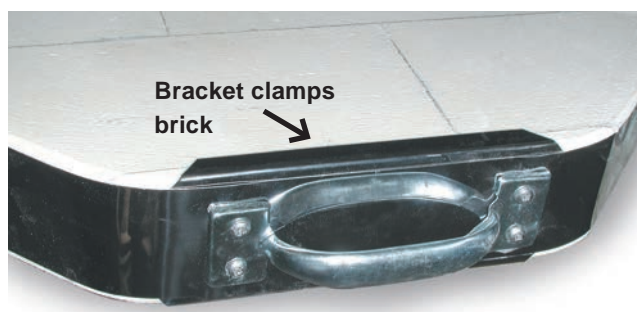
STAINLESS HINGE ON JD18-JH MODEL

Chains secure the lid in place when open.
(hotkilns.com/simple-hinge)



LID BRICK IS SECURED WITH CLIPS

Stainless Steel clips secure lids - not friction.
([hotkilns.com/ lid-clips](http://hotkilns.com/lid-clips))



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. *Rolling stand is optional. See page 5.*
(hotkilns.com/full-stand)



EASY ASSEMBLY WITH SECTIONAL CONSTRUCTION

Two or three 9" sections. Sections stack on top of each other. Easy to assemble or disassemble for moving. Bottom is reversible. For JD18-JH, JD230-JH and JD2927-JH: Sections are completely separate from the control panel. Each section has its own plug that plugs into a special receptacle in the control panel.

(hotkilns.com/sectional-jupiter)

(For e23S-JH: hotkilns.com/sectional-easy-fire)

CORROSION RESISTANT CONSTRUCTION

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

SOLID PEEPHOLE PLUGS



Solid (non-fragile) ceramic plug with heat-locked mushroom head. 3/4" diameter full-view non-tapered.
(hotkilns.com/peephole-plugs)

EASY MULTI-PROGRAM DYNATROL



The time-tested DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics. Control is mounted on an angled panel for easy viewing. *Optional Genesis control (see page*

8) features touch screen and free Wifi App for monitoring kiln. (hotkilns.com/dynatrol)

DYNAMIC ZONE CONTROL

This is a *standard* feature with either a DynaTrol or touch-screen Genesis control. The control separately measures temperatures in the bottom, middle, and top of the kiln and automatically adjusts the heat of three zones during the firing. Kiln temperatures are automatically equalized to within 1/2 cone or better. Zone control automatically compensates for many loading issues and element resistance changes. Additionally, L&L kilns are fundamentally uniform because the element holders radiate the heat more evenly. (hotkilns.com/zone-control)

SEPARATE COOL-FIRING CONTROL PANEL

All controls and components are mounted in a separate control panel that is mounted to either the element connection box or is floor mounted. Cords from the kiln sections plug into the panel. There is an air space between the panel and the kiln which keeps the controls cool - which is critical for long term health of the electronics. (On the e23S-JH 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.)

BRANCH FUSING

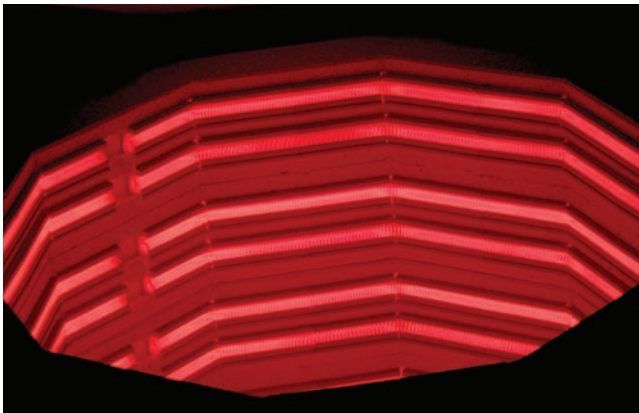
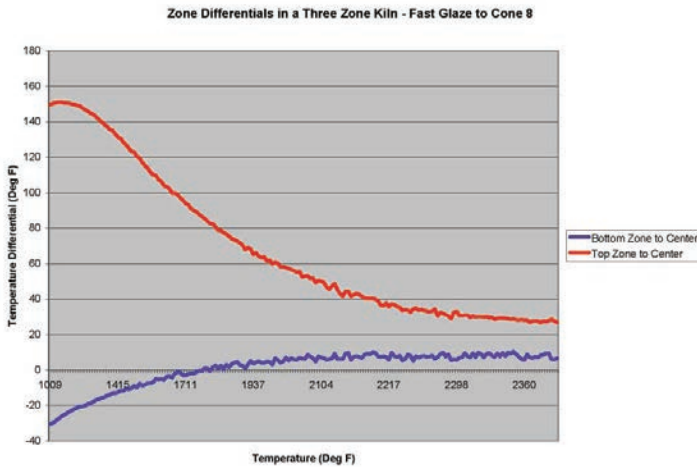
Some models have branch fusing to accommodate the heavier power load of these kilns.

MERCURY FREE RELAYS

Mercury free relays are standard. See Page 7 for optional electronic SSRs for extra long element life and quiet operation.

CERAMIC ELEMENT CONNECTIONS

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



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. Many 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.

THREE-YEAR LIMITED WARRANTY

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

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.

GREEN MANUFACTURING

L&L Kiln Mfg., Inc. uses solar energy as its prime energy source.

SUPERIOR PACKAGING

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

NOTE ABOUT LISTINGS

JH Series kilns are not listed to UL499 at this time because their power specifications fall outside our normal range.

Furniture, Rolling Stands, Element Options

CONE 11 FURNITURE KITS

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



APM ELEMENTS

Special sintered alloy provides the ultimate in element life. The special sintered alloy inhibits grain growth and this resistance change in the elements. (hotkilns.com/apm)

ROLLING STAND WITH LOCKING CASTERS

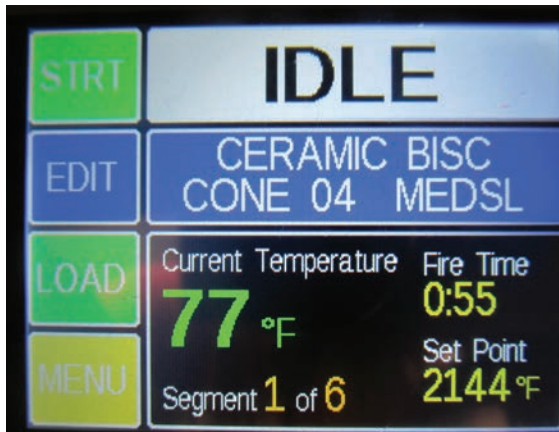
Allows kiln to be moved out of the way while not firing. L&L's rolling kiln stand features heavy gauge (14 ga) galvanized steel construction with multiple bends for extra strength, steel swivel locking casters, integrated vent collection box support, and guide rails for the kiln. (hotkilns.com/rolling-stands)



Genesis Touch Screen Control with App

GENESIS TOUCH SCREEN CONTROL

The Genesis control includes a touch screen interface and WIFI connectivity added to the proven software of the DynaTrol. More programming options and memory. Free App available to monitor kiln via WiFi. (hotkilns.com/genesis)



The Genesis control fits right into the control box to replace the DynaTrol. That means you can upgrade anytime!

GENESIS FEATURES

Touch-screen intuitive technology for easy user interface.

Easy-to-follow screen descriptions.

Different user-interface levels, which can be set to match the user's firing knowledge.

Graphical display of the firing process right at the controller. This means you can graph the firing in real time and compare the program with actual results.

Glass programs included.

Store up to 12 custom user programs.

Up to 32 segments per program.

Ability to make adjustments during a firing such as add segments, add temperature, and skip segments.

Built in diagnostics testing

Alarm

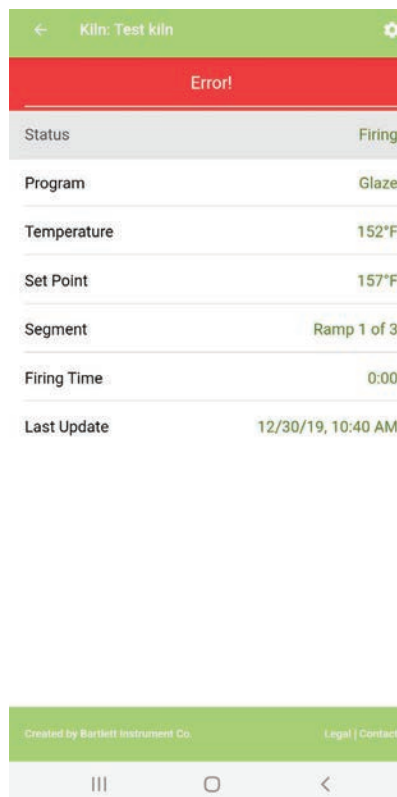
Error Codes

WiFi enabled for easy software updating.

Included Phone App allows you to monitor kiln operation remotely.



See a graph of your firing!



This shows the view you get on your phone with the Kiln Aid Phone app. Simply download the Kiln Aid phone app from your Google Play Store or Apple App Store, add your kiln, and begin monitoring as your kiln progresses through a firing. See temperatures, where you are in a program cycle, what program you are firing and error notifications.

More Control & Power Options

SOLID STATE RELAYS

Industrial Grade Solid State Relays are quiet and result in longer element life because the switching time is so fast the elements don't expand and contract as much. The whole system includes extra large heat sinks, special fast acting fuses, cooling fan and extra safety relays. (hotkilns.com/ssr)



*JD230-JH
shown with
the special
control panel
that houses
the SSRs and/
or High Limit
Control*

120 VOLT POWER SUPPLY

If there are problems with short power outages, voltage spikes, voltage drops, or excessive environmental line noise, this can cause unpredictable behavior in the electronic control. With this option the control is powered by a separate 120 volt line (with a standard 6 foot long cord) and that voltage is filtered through an EMI (Electrical Magnetic Interference) noise filter. (hotkilns.com/noise)

OPTIONAL CORDS

All single phase models that are not direct wired can get a 12 foot NEMA 6-50 cord. (hotkilns.com/cord-options)

HIGH LIMIT BACK UP CONTROL

Bartlett High Limit Control with latching relay acts as a back up to the main control. If the main control fails for any reason then this acts as a "back stop" and shuts the kiln down.

(hotkilns.com/high-limit)

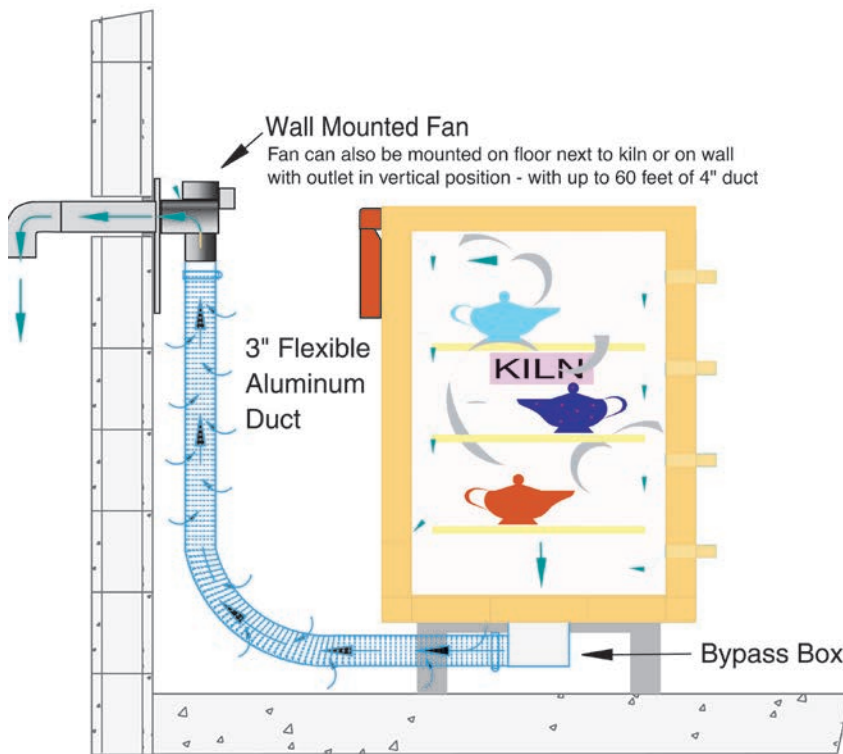
BACK UP CONTACTORS

Actuated by the High Limit Back Up Digital Control, back up contactors are completely redundant power contactors so that if one or more contactors fail in a closed position, then the kiln still cannot climb above the High Limit set point. (hotkilns.com/high-limit)

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-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.



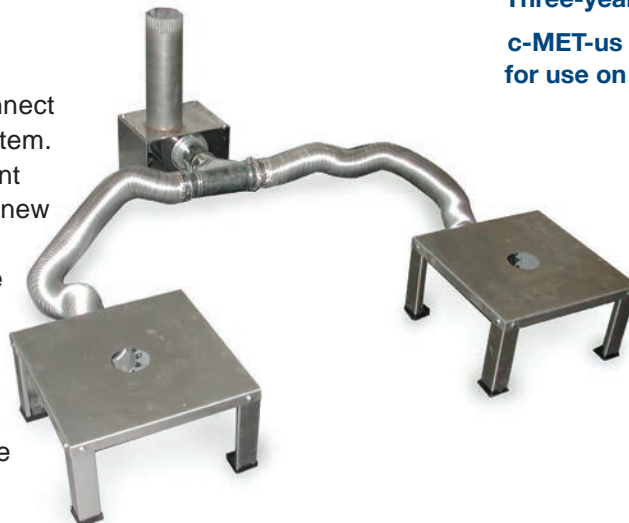
VENT CONTROL

Allows vent to be controlled with an event switch in the DynaTrol or Genesis. (For use with one kiln.) (hotkilns.com/vent-control)



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 JD2927-JH kilns could be vented while firing at the same time. (hotkilns.com/doubler)



Three-year Limited Warranty

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

Electrical Specifications

Model Number	Part Number	Volt/Phase	Watts	Amps	Wire Size	Fuse Size	Power Connection	Number of Zones
JD18-JH-240	K-A-180J/31	240/1P	8,800	36.7	6 ga	50 amps	Cord with NEMA 6-50 Plug	2
JD18-JH-240-3P	K-A-180J/32	240/3P	8,800	31.8	8 ga	40 amps	Cord with NEMA 15-50 Plug	2
JD18-JH-208	K-A-180J/21	208/1P	8,800	42.3	6 ga	60 amps	Cord with NEMA 6-50 Plug	2
JD18-JH-208-3P	K-A-180J/22	208/3P	8,800	36.6	6 ga	50 amps	Cord with NEMA 15-50 Plug	2
e23S-JH-240	K-E-23SJ/31	240/1P	11,500	47.9	6 ga	60 amps	Cord with NEMA 6-50 Plug	2
e23S-JH-240-3P	K-E-23SJ/32	240/3P	11,500	41.5	6 ga	60 amps	Cord with NEMA 15-50 Plug	2
e23S-JH-208	K-E-23SJ/21	208/1P	9,984	48.0	6 ga	60 amps	Cord with NEMA 6-50 Plug	2
e23S-JH-208-3P	K-E-23SJ/22	208/3P	9,984	41.6	6 ga	60 amps	Cord with NEMA 15-50 Plug	2
JD230-JH-240	K-A-231J/31	240/1P	13,680	57.0	3 ga	80 amps	Direct to Fused Disconnect	3
JD230-JH-240-3P	K-A-231J/32	240/3P	13,680	32.9	6 ga	50 amps	Cord with NEMA 15-50 Plug	3
JD230-JH-208	K-A-231J/21	208/1P	12,480	60.0	3 ga	80 amps	Direct to Fused Disconnect	3
JD230-JH-208-3P	K-A-231J/22	208/3P	12,480	34.6	6 ga	50 amps	Cord with NEMA 15-50 Plug	3
JD2927-JH-240	K-A-292J/31	240/1P	18,039	75.2	1 ga	100 amps	Direct to Fused Disconnect	3
JD2927-JH-240-3P	K-A-292J/32	240/3P	18,039	43.4	6 ga	60 amps	Cord with NEMA 15-50 Plug	3
JD2927-JH-208	K-A-292J/21	208/1P	18,039	86.7	1 ga	110 amps	Direct to Fused Disconnect	3
JD2927-JH-208-3P	K-A-292J/22	208/3P	18,039	50.1	4 ga	70 amps	Direct to Fused Disconnect	3
WORLD VOLTAGES								
JD18-JH-220	K-A-180J/41	220/1P	8,800	40.0	6 ga	50 amps	Direct to Fused Disconnect	2
JD18-JH-380-3PY	K-A-180J/52	380/3PY	8,806	20.0	12 ga	25 amps	Direct to Fused Disconnect	2
e23S-JH-220	K-A-23SJ/41	220/1P	10,500	47.7	6 ga	60 amps	Direct to Fused Disconnect	2
e23S-JH-380-3PY	K-A-23SJ/52	380/3PY	10,500	23.9	10 ga	30 amps	Direct to Fused Disconnect	2
JD230-JH-220	K-A-231J/41	220/1P	12,540	57.0	3 ga	80 amps	Direct to Fused Disconnect	3
JD230-JH-380-3PY	K-A-231J/52	380/3PY	12,540	19.0	12 ga	25 amps	Direct to Fused Disconnect	3
JD2927-JH-220	K-A-292J/41	220/1P	18,039	82.0	1 ga	110 amps	Direct to Fused Disconnect	3
JD2927-JH-380-3PY	K-A-292J/52	380/3PY	18,039	27.3	8 ga	40 amps	Direct to Fused Disconnect	3

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

Cone Rating: All models are rated to Cone 12.

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

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

Elements: All elements are of equal resistance value. There are four Quad elements on the JD18-JH and e23S-JH and six Quad elements on the JD230-JH and JD2927-JH.

Other voltages for any country in the world are available. Examples are 200V/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.

Dimension & Weight Specifications

Model Number	Inside Dimensions	Cu-bic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
JD18-JH	17.5" Diam x 18" H	2.6	(1) 15.5" full, (4) half shelves	H-J-K180/00	31" W x 55" H x 33" D	36" W x 55" H x 36" D	255 lbs	305 lbs
e23S-JH	23.3" Diam x 18" H	4.7	(1) 21" full, (4) half shelves	H-E-K23S/00	30" W x 59" H x 40" D	44" W x 55" H x 44" D	335 lbs	415 lbs
JD230-JH	23.3" Diam x 27" H	6.7	(2) 21" full, (4) half shelves	H-J-K23X/00	30" W x 68" H x 43" D	44" W x 60" H x 44" D	410 lbs	510 lbs
JD2927-JH	29" Diam x 27" H	10.3	(8) 25.5" half shelves	H-J-K292/00	36" W x 74" H x 49" D	48" W x 60" H x 44" D	510 lbs	645 lbs
METRIC DIMENSIONS (CM, LITERS & KG)								
JD18-JH	44.5 D x 45.7 H	74	(1) 39.4 full, (4) half	H-J-K180/00	71 W x 139 H x 89 D	122 W x 130 H x 102 D	116	139
e23S-JH	59.2 D x 45.7 H	134	(1) 53.3 full, (4) half	H-E-K23S/00	76 W x 150 H x 102 D	122 W x 130 H x 102 D	152	189
JD230-JH	59.2 D x 68.6 H	199	(2) 53.3 full, (4) half	H-J-K23X/00	76 W x 173 H x 109 D	122 W x 153 H x 102 D	186	232
JD2927-JH	73.7 D x 68.6 H	292	(8) 64.8 half shelves	H-J-K292/00	91 W x 188 H x 124 D	122 W x 171 H x 102 D	232	293

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.



JD18-JH

Temperature Rating: Cone 12

Volume: 2.6 Cubic Feet

Brick Thickness: 2.5" Brick

Inside: 17-1/2" Diam x 18" High

Outside Dimensions: 31" W x 55" H x 33" D

Shipping Dim with Vent & Furn Kit:

Ship Weight (Kiln): 255 LBS

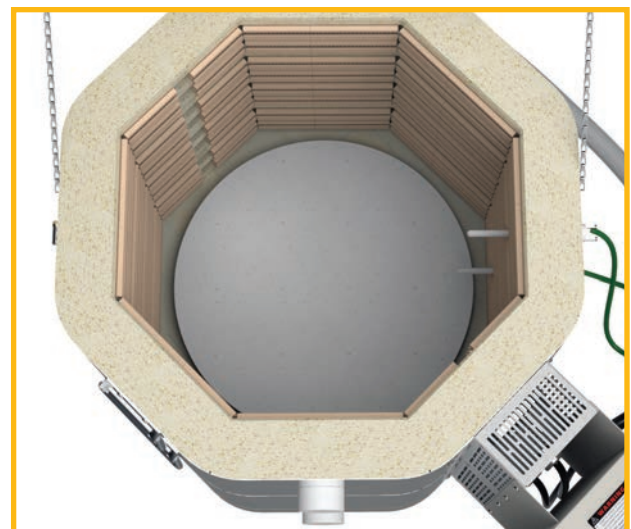
Ship Weight (Kiln, Vent & Furn Kit): 305 LBS



FURNITURE KIT FOR JD18-JH

Part Number: H-J-K180/00

Includes: One 15.5" (39.4 cm) full 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.



e23S-JH

Temperature Rating: Cone 12

Volume: 4.7 Cubic Feet

Brick Thickness: 2.5" Brick

Inside: 23.3" Diam x 18" High

Outside Dimensions: 30" W x 59" H x 40" D

Shipping Dim with Vent & Furn Kit:

Ship Weight (Kiln): 335 LBS

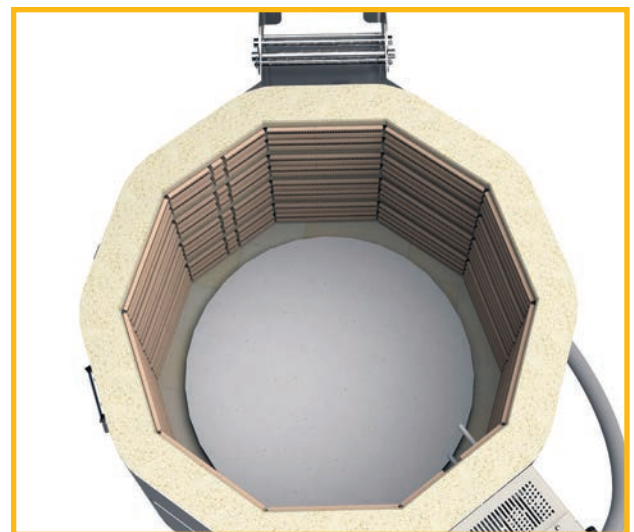
Ship Weight (Kiln, Vent & Furn Kit): 415 LBS



FURNITURE KIT FOR e23S-JH

Part Number: H-E-K23S/00

Includes: One 21" (53.3 cm) full 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.



JD230-JH

Temperature Rating: Cone 12

Volume: 6.7 Cubic Feet

Brick Thickness: 2.5" Brick

Inside: 23.3" Diam x 27" High

Outside Dimensions: 30" W x 68" H x 43" D

Shipping Dim with Vent & Furn Kit:

Ship Weight (Kiln): 410 LBS

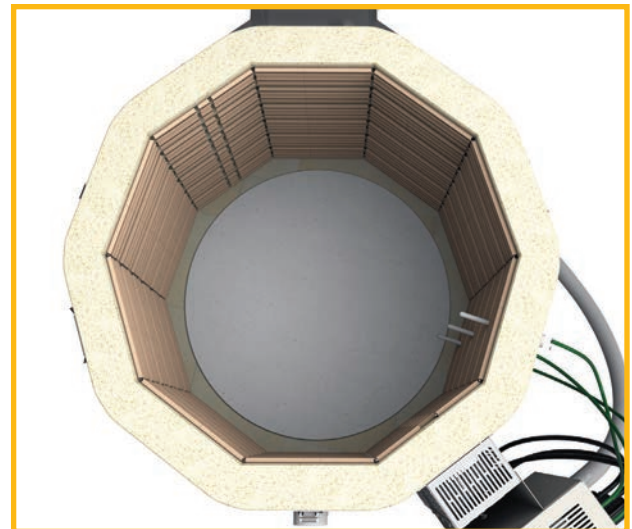
Ship Weight (Kiln, Vent & Furn Kit): 510 LBS



FURNITURE KIT FOR JD230-JH

Part Number: H-E-K23X/00

Includes: Two 21" (39.4 cm) full 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.



JD2927-JH

Temperature Rating: Cone 12

Volume: 10.3 Cubic Feet

Brick Thickness: 2.5" Brick

Inside: 29" Diam x 27" High

Outside Dimensions: 36" W x 74" H x 49" D

Shipping Dim with Vent & Furn Kit:

Ship Weight (Kiln): 510 LBS

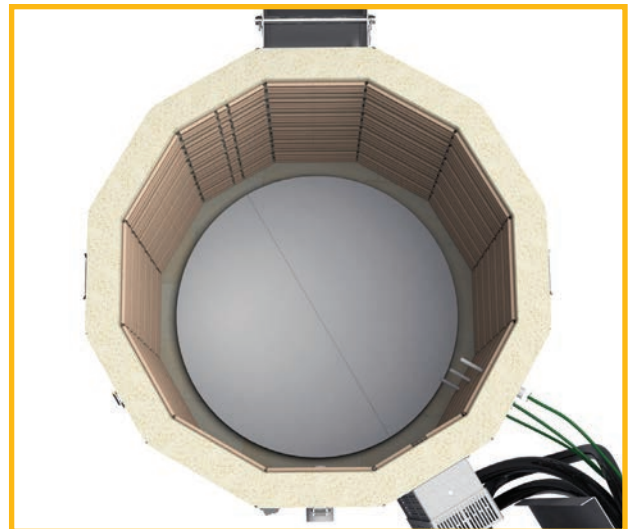
Ship Weight (Kiln, Vent & Furn Kit): 645 LBS



FURNITURE KIT FOR JD2927-JH

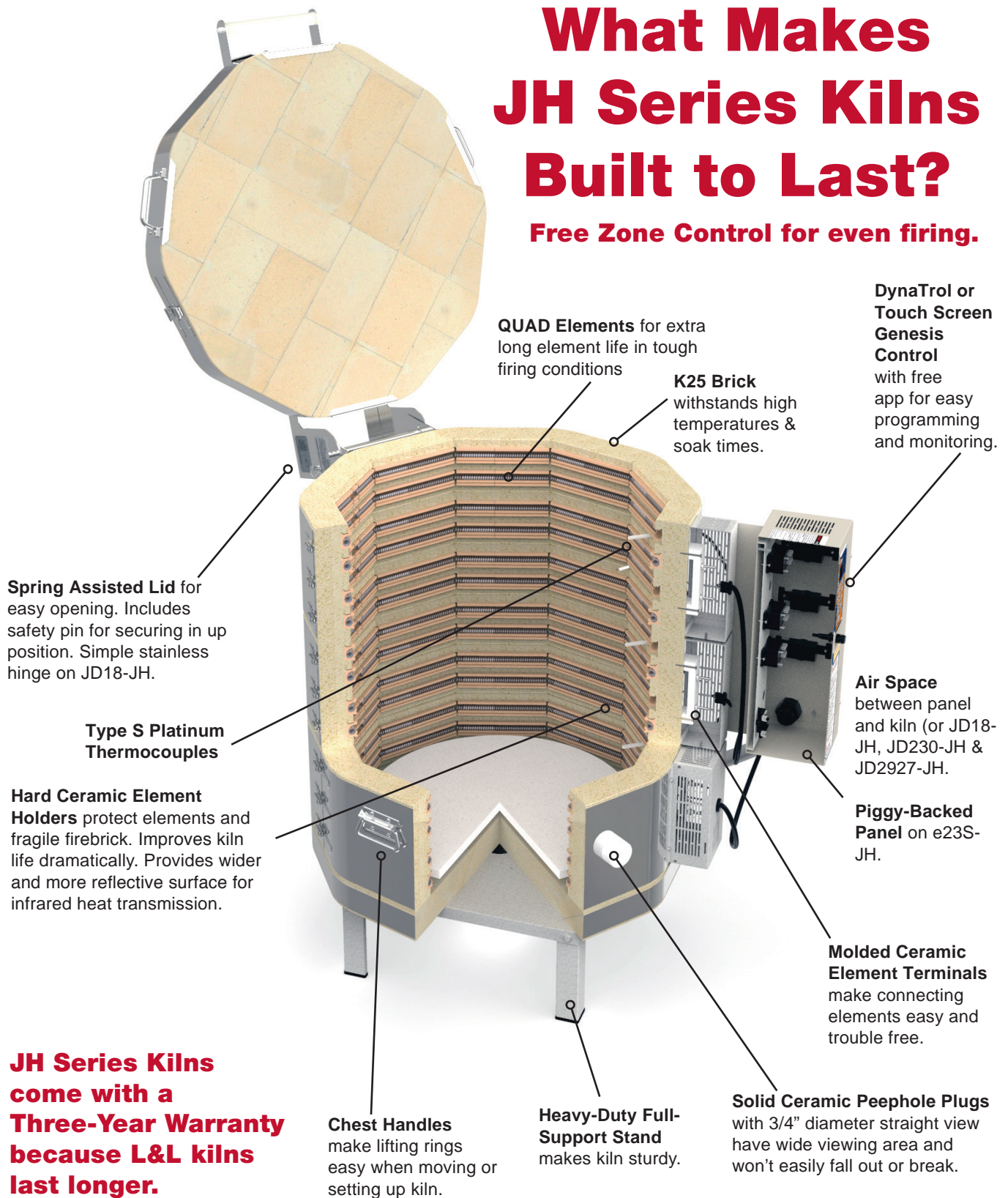
Part Number: H-J-K292/00

Includes: Eight 25.5" (64.8 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.



What Makes JH Series Kilns Built to Last?

Free Zone Control for even firing.



**JH Series Kilns
come with a
Three-Year Warranty
because L&L kilns
last longer.**



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KILNS BUILT TO LAST

Bulletin No: JH-0222