

B SERIES

PROGRAMATIC

QUALITY - CHOICE - VALUE



- ✓ **UNIQUE DYNA-GLOW ELEMENT HOLDERS**
Now with enlarged groove to hold "professional" heavy duty optional elements!
- ✓ **CHOICE OF STANDARD ELEMENTS OR HEAVY DUTY ELEMENT OPTION - Upgrade anytime!**
- ✓ **MANUAL, TURN UP CONTROL OR FULLY PROGRAMMABLE CONTROL :YOU CHOOSE!**
You can change controls or upgrade easily in the field. Buy an inexpensive kiln and upgrade anytime! Plug & Play simplicity.
- ✓ **TWO KILN SHUT OFF SAFETY BACK UP CONTROLS INCLUDED:**
Better than a kiln sitter/timer combination!
- ✓ **2350°F - CONE 10 - 1287°C**
Hot enough to fire stoneware.
- ✓ **BALANCED CONTOURED ELEMENTS:** Excellent top to bottom temperature uniformity.
- ✓ **SIZES TO 11.3 CUBIC FEET**
- ✓ **STAINLESS STEEL CASE AND ALUMINIZED STEEL STAND:** Resists corrosion!
- ✓ **OVER FIFTY YEARS OF ENGINEERING LEADERSHIP**

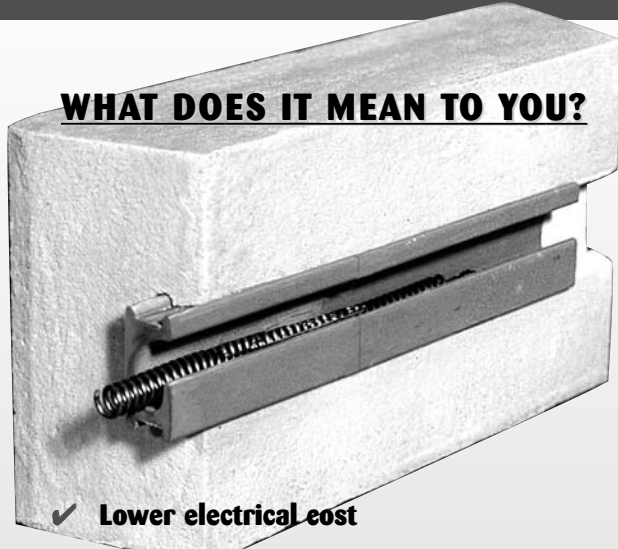


FOR OVER 50 YEARS... THE KILN TECHNOLOGY LEADER

6B Mt. Pleasant Drive ♦ P.O. Box 2409 ♦ Aston, PA 19014

PHONE: (610) 558-3899 ♦ FAX: (610) 558-3698

DYNA GLOW ELEMENT HOLDERS



WHAT DOES IT MEAN TO YOU?

- ✓ Lower electrical cost
- ✓ Cleaner Kiln
- ✓ Easier element replacement
- ✓ Better Heat distribution
- ✓ Better Gradient Uniformity
- ✓ Add Years to Kiln Life
- ✓ Longer Element Life
- ✓ Longer Firebrick Life

The new design of the **Dyna Glow** element holders allows a larger diameter element to be used. This also makes it easier to remove old elements during replacement.

Any number of element replacements will not affect the hard ceramic element holders or brick walls, unlike other kilns where elements are pinned into the soft firebrick grooves. All pinning problems are eliminated and full firing space is always insured.

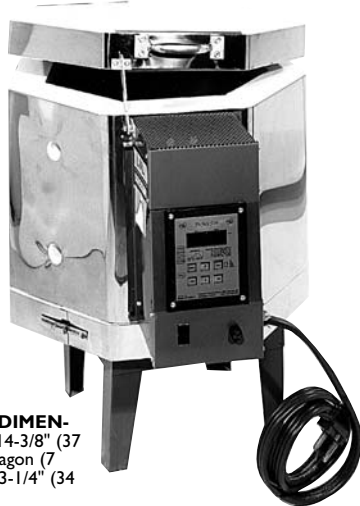
Dyna Glow element holders secure and protect the elements so that the elements can not accidentally come out and cause damage to themselves, the kiln or your ware. Yet, replacement is simple.

Dyna Glow element holders reflect the infra-red heat instantly into the kiln and therefore operate at a lower temperature relative to the internal kiln temperature. They require less firebrick insulation to be cut out. This means L&L Kilns are more efficiently insulated than other kilns of this type. This results in better, more accurate firing, lower electrical cost, lower case temperatures and, most significantly, longer element life.

Dyna Glow element holders have a hard smooth surface. This allows the elements to expand and contract freely. No loose particles will fall in the kiln and ruin ware. Element life is longer because elements do not get easily snagged and bunched up (which causes hot spots and burn outs.)

MODEL B14C

14-13/8" Heptagon X 13-1/4" Deep



INSIDE DIMENSIONS: 14-3/8" (37 CM) heptagon (7 sides) x 13-1/4" (34 CM) high

EXTERIOR DIMENSIONS: 21" (53 CM) wide x 25-1/4" (64 CM) high x 29-1/2" (75 cm) deep

FIRING CAPACITY: 1.35 Cubic Feet, 2333 cubic inches, .038 Cubic Meters

POWER SUPPLY REQUIRED: 30 Amp, Fuse 20 Amps, 50 amp 6-50P cord supplied

240 VOLT, 1 PHASE POWER: 3.23 K.W., 3236 watts, 13.5 Amps

208 VOLT, 1 PHASE POWER: 3.23 K.W., 3236 watts, 15.5 Amps

3 PHASE POWER: Not Available

FIRING TO CONE 05/1915oF: 3-1/2 hours, 10.9 K.W. Hours, \$.76 at \$.07 per K.W.H.

SHIP WEIGHT: 90 pounds, 41 KG

MODEL B18C

17-1/2" Octagon X 22-1/4" Deep



INSIDE DIMENSIONS: 17-1/2" (45 CM) octagon (8 sides) x 22-1/4" (57 CM) high

EXTERIOR DIMENSIONS: 23" (59 CM) wide x 34-1/4" (87 CM) high x 32" (83 CM) deep

FIRING CAPACITY: 3.27 Cubic Feet, 5646 cubic inches, .092 Cubic Meters

POWER SUPPLY REQUIRED: 50 Amp, Fuse 50 Amps, 50 amp 6-50P cord supplied

240 VOLT, 1 PHASE POWER: 7.2 K.W., 7200 watts, 30.0 Amps

208 VOLT, 1 PHASE POWER: 7.2 K.W., 7200 watts, 34.6 Amps

240 VOLT, 3 PHASE AMPS: 26.0 Amps

208 VOLT, 3 PHASE AMPS: 30.0 Amps

FIRING TO CONE 05/1915oF: 3-1/2 hours, 24.5 K.W. Hours, \$1.72 at \$.07 per K.W.H.

SHIP WEIGHT: 170 pounds, 77 KG

MODEL BA23C

23-3/8" Decagon X 22-1/4" Deep



INSIDE DIMENSIONS: 23-3/8" (60 CM) decagon (10 sides) x 22-1/4" (57 CM) high

EXTERIOR DIMENSIONS: 30" (76 CM) wide x 34-1/4" (87 CM) high x 38-1/2" (98 CM) deep

FIRING CAPACITY: 5.74 Cubic Feet, 9914 cubic inches, .16 Cubic Meters

POWER SUPPLY REQUIRED: 50 Amp, Fuse 50 Amps, 50 amp 6-50P cord supplied

240 VOLT, 1 PHASE POWER: 9.6 K.W., 9600 watts, 40.0 Amps

208 VOLT, 1 PHASE POWER: 9.6 K.W., 9600 watts, 46.2 Amps

240 VOLT, 3 PHASE AMPS: 26.0 Amps

208 VOLT, 3 PHASE AMPS: 30.0 Amps

FIRING TO CONE 05/1915oF: 3-1/2 hours, 31.5 K.W. Hours, \$2.21 at \$.07 per K.W.H.

SHIP WEIGHT: 210 pounds, 95 KG

CHECK THESE IMPORTANT FEATURES !

✓ TWO BACK UP SAFETY CONTROLS

Two pyrometric cone type shut off controls in series shut off the kiln if you are using the manual or turn up control. They act as back up safeties for the automatic controls. Most automatic kilns have no safety back up. This is more reliable than a kiln sitter and timer combination because a timer can never be as accurate as a pyrometric cone. With a timer as a back up you have to calculate how long it will take to heat up the kiln. If you are wrong you could overfire or underfire. Easier to adjust than a Dawson Kiln Sitter!

✓ POWER RELAYS

All power is switched to the elements with power relays.

✓ POWER CORD INCLUDED (ON MOST MODELS)

All single phase B Models except the B299C are rated under 50 amps and include a 50 amp 6-50P power cord. 3 phase units and B299C are direct hook up. Full power for high temperature firing is assured.

✓ CONTOURED ELEMENTS FOR UNIFORMITY

Elements are contoured for power output from top to bottom to provide good temperature uniformity without adjustment of zone switches. Elements are the finest grade of iron-aluminum-chrome alloy available.

✓ FULLY OPENING LID WITH SAFETY CHAIN

The lid opens completely past the back edge to allow full access to the inside of the kiln for loading. A safety chain allows you to secure the lid to prevent accidental closing.

✓ BRICK HARDENED WITH SPECIAL FACING

L&L uses a special coating on the firebrick to help prevent brick dusting from ruining your ware. This also helps energy reflect back into the kiln which improves the energy efficiency and gradient uniformity.

✓ LARGE DIAMETER PEEPHOLES

One inch diameter peephole with insulating ceramic plugs are supplied for ventilation and cone sighting. These are full diameter all the way through the firebrick which allows greater visibility into kiln.

✓ STURDY ALUMINIZED STEEL STAND

Aluminized steel resists dangerous corrosion at high temperatures. The B299C kiln stand has a full plate of aluminized steel under the bottom brick. This allows the bottom brick to move freely while expanding and contracting.

✓ SOLID STAINLESS STEEL CASE

Stainless Steel is both attractive and resists corrosion.

✓ ADJUSTABLE LID PROP

For adjustable manual venting.

✓ HEAVY DUTY LIFTING HANDLES

This makes the kiln easy to lift and move.

✓ KILN ON/OFF SWITCH IS STANDARD

✓ OPTIONAL "VENT-TORR" VENT SYSTEM (See below)

Vent fumes outside your studio.

MODEL B239C

23-3/8" Decagon X 29" Deep



INSIDE DIMENSIONS: 23-3/8" (60 CM) decagon (10 sides) x 29" (74 CM) high

EXTERIOR DIMENSIONS: 30" (76 CM) wide x 42-1/2" (108 CM) high x 38-1/2" (98 CM) deep

FIRING CAPACITY: 9.28 Cubic Feet, 16,031 cubic inches, .26 Cubic Meters

POWER SUPPLY REQUIRED: 60 Amp, Fuse 60 Amps, 50 amp 6-50P cord supplied

240 VOLT, 1 PHASE POWER: 10.8 K.W., 10,800 watts, 45.0 Amps

208 VOLT, 1 PHASE POWER: 10.0 K.W., 10,000 watts, 48.0 Amps

240 VOLT, 3 PHASE AMPS: 29.2 Amps

208 VOLT, 3 PHASE AMPS: 31.2 Amps

FIRING TO CONE 05/1915oF: 4-1/2 hours, 37.8 K.W. Hours, \$2.67 at \$.07 per K.W.H.

SHIP WEIGHT: 255 pounds, 116 KG

MODEL B299C

29" Dodecagon X 29" Deep



INSIDE DIMENSIONS: 29" (74 CM) dodecagon (12 sides) x 29" (74 CM) high

EXTERIOR DIMENSIONS: 34" (87 CM) wide x 42-1/2" (108 CM) high x 43" (110 CM) deep

FIRING CAPACITY: 11.32 Cubic Feet, 19,553 cubic inches, .32 Cubic Meters

POWER SUPPLY REQUIRED: 70 Amp, Fuse 70 Amps, Direct Hook up with 4 gauge wire. Kiln includes branch fusing. No power cord.

240 VOLT, 1 PHASE POWER: 13.5 K.W., 13,500 watts, 56.2 Amps

208 VOLT, 1 PHASE POWER: 13.5 K.W., 13,500 watts, 64.8 Amps

240 VOLT, 3 PHASE AMPS: 36.5 Amps

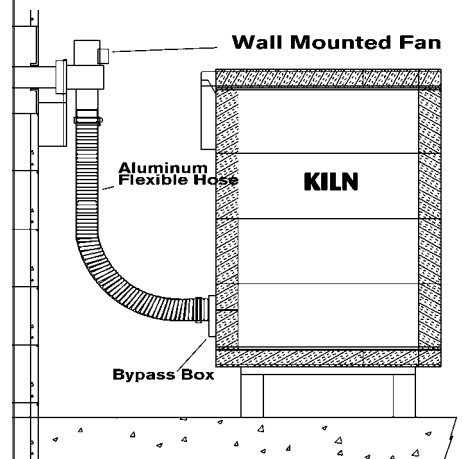
208 VOLT, 3 PHASE AMPS: 42.2 Amps

FIRING TO CONE 05/1915oF: 4-1/2 hours, 52.9 K.W. Hours, \$3.70 at \$.07 per K.W.H.

SHIP WEIGHT: 350 pounds, 159 KG

VENT-TORR VENT

Optional Kiln Ventilation System



The L&L VENT-TORR powered vent system vents fumes to the outside. The vent attachment is mounted on the bottom side for a downdraft effect. The blower is mounted on the wall rather than under the kiln to improve blower life. A port allows you to adjust the amount of vacuum in the system. 15 feet of duct is included. Can be added anytime! The VENT-TORR downdraft ventilation system is produced under license from The Edward Orton Jr. Ceramic Foundation and is covered by US Patent Nos. 4,863,374 and 4,978,295.

CHOICE OF CONTROLS! - "PLUG & PLAY"

CHANGE - UPGRADE - REPLACE - REPAIR - ANYTIME!

A simple but revolutionary concept! The basic control is a manual input switch. The next step up is the FireRight Automate II Turn Up Control. Or you can get a L&L **DYNA-TROL** Automatic Program Control. All control systems plug into the same four wire connector. They all control the same relays inside the kiln panel. Control service problems are quickly and easily handled. You can upgrade or change controls at anytime!

MANUAL INPUT CONTROL

This is the simplest control available. The input switch is adjustable from 22% of on time to 100% of on time. Put it on low for drying and low firing and then turn it up to a higher position to heat the kiln up to final temperature. The pyrometric cone shut off switches will then turn kiln off (one acts as a back up safety.) We suggest use of an optional pyrometer to know what temperature the kiln is at. (You can also use cones.)

FIRERIGHT AUTOMATE II TURN UP CONTROL

The "FireRight" AutoMate II turn up control is a simple, easy to use semi-manual control. It allows you to set the amount of time it will take the kiln to heat up. It is a self-incrementing percentage timer. In the beginning of the cycle the on time will be short but get longer as the cycle progresses. It also allows you to hold the kiln at various percent settings for extended periods (such as on "low" for a dryout period.) Although this is an electronic control; it does not use a thermocouple feedback and has no way of knowing what the actual temperature of the kiln is. It is an improvement over a manual input control because it allows the turn up of the kiln to be automated. It is also less expensive than the automatic program control.

DYNA-TROL CONE FIRE AND MULTI-PROGRAM DIGITAL PROGRAM CONTROL

The DYNA-TROL packs a tremendous amount of precision and power in an easy to use reliable package.

The **DYNA-TROL** features an "Easy-Fire" cone fire mode:

- 1 Press "Slow Bisque", "Fast Bisque", "Slow Glaze" or "Fast Glaze".
- 2 Enter your end cone number and then "ENTER".
- 3 Enter an optional "Hold" time. Enter an optional "Delay Start" time.
- 4 Press "START" and you are on your way!

Or use the separate sophisticated "Vary-Fire" Programmer:

This allows you to have 6 separate repeatable storable programs with up to 8 segments (cooling or heating ramps, temperature setpoint and an optional hold time per segment). The **DYNA-TROL** allows you to soak at a low temperature for a long time (i.e. you can have an automatic drying period) and then automatically ramp up to your high fire at different rates. It also allows a controlled cool down to avoid heat shock.

- Additional Features:**
- ✓ Cone/temperature equivalent look up table
 - ✓ Audible Temperature Alarm
 - ✓ Program Review
 - ✓ Segment Review
 - ✓ Change of Program During Firing
 - ✓ Thermocouple Burnout Protection
 - ✓ Automatic Restart after brief power interruption
 - ✓ Kiln temperature is digitally indicated in either degrees F or C
 - ✓ Adjust a "cone offset" to match your own firing characteristics
 - ✓ Delay start up by up to 99 hours and 99 minutes
 - ✓ Dust sealed panel is graphically designed to be user friendly
 - ✓ The **DYNA-TROL** control is made under license from Orton (Patent #4,461,616 and 4,730,101)

Now with Four Cone Fire Programs!



CHOICE OF ELEMENTS!

STANDARD ELEMENTS

The standard elements are finest grade Iron-Aluminum-Chrome alloy. They will offer good life under normal conditions.

OPTIONAL HEAVY DUTY ELEMENTS

The new larger cross-section Dyna Glow element Holders allow L&L to offer a larger diameter, heavier gauge and lower watt density element for demanding applications such as constant production firing, long soaks and very high temperature firing. Elements can be upgraded at anytime. Power ratings (watts and ohms) are the same for both types of elements making them interchangeable.

CHOICE OF VOLTAGE

Either 240 or 208 volts in single or three phase can be ordered. It is critical to order the correct voltage and phase. Kilns can not be easily or cheaply changed in the field. L&L uses different elements for the two voltages. A 240 volt kiln will have about 25% less power than it should if operated on 208 volts resulting in slow heat up times. Special 220 volt single phase and 380 three phase versions for overseas are available.