

# Paragon Front Loading GL Series

## Glass Studio "Work Horse" Kilns

**Large, tapered peepholes** offer a wide view of the firing chamber with little heat loss. (Page 2)

**Dust-free coating** The peepholes and firebrick top are hardened and sealed with a special refractory coating. Helps protect the glass from dust.

**Spring-loaded door latch** (Page 2),.....

**Slotted base dissipates heat.**

**No extra charge for crating** Inquire about the crating cost of a competitive kiln when figuring prices. Most Paragon round and square kilns are packed in wooden crates at no extra charge.

**Dropped, recessed brick grooves** used in the sidewall elements were introduced to the industry by Paragon. (Page 3)

**Heavy duty elements** are coiled from the finest high temperature wire available. (Page 4)

**Long-life electrical system** You'll enjoy confidence in your Paragon. It's designed to give you years of pleasure with very little maintenance. Costly nickel-plated copper wire inside the switch box is covered with high temperature glass-braided insulation. Wires are fastened to the elements with heat-dissipating connectors refined and proven over many years in Paragon kilns. A stainless steel heat shield inside the box protects wiring from the hot case.



The element connector, proven over many decades.

**Element terminal box** used on models with the optional ceramic fiber roof

**Hand lifts**

**Simple Maintenance** The electronic board can be removed in minutes for upgrade or repair.

**Ventilated switch box** is generously louvered for air circulation around kiln wiring. Yet dust is kept to a minimum.

**Electronic Controller Fuse** (not illustrated) is located in a fuse holder on the switch box for easy replacement.

**Support for Kiln Bottom** A solid sheet of steel supports the brick bottom.



**UL/CUL Listing** Paragon kilns with the prestigious UL Listing have been rigorously tested to U.S. and Canadian safety standards.

**Replacement parts and service** available for many years on new Paragon kilns.

**Optional deluxe stand** raises the kiln a convenient 28". Begin firing your new kiln without having to find a heat-resistant table strong enough to support over 300 lbs.

**GL-24ADTSD**  
**Digital Automatic**  
24" wide x 15" high x 22½" deep  
Shown with optional deluxe stand  
and ceramic fiber roof.

**"I've fired your kilns all over the country during my seminars. I never hear complaints about your kilns. They are reliable and last a hell of a long time."**

**Dan Fenton, Fenton Glass Studio, Oakland, California**

**A**fter the GL-22A square front loading kiln was introduced in 1984, it quickly became a favorite in glass studios. It is high enough inside to bend glass for curved windows or cabinet doors and to repair lamp shades. Make huge glass-fused platters. Crack the door to drag a rod across the softened glass or emboss designs in the surface. The possibilities are endless in this exciting kiln!

## Basic Features

Paragon's GL-series are made for years of rigorous firing, as artists all over America can attest. For extra strength, the insulating firebrick, wrapped in heavy-gauge steel, are cemented together in wall sections. Walls are notched in the back corners. Top and door elements are seated in firebrick grooves hardened with a dust-free



Infinite control switches balance heat between the top and sides/door.



A steel rod, welded to the door, swivels inside heavy-duty hinge blocks. No wonder Paragon kilns last so long.

coating. Insulating firebrick, used throughout the firing chamber, soak up heat for slow, even cooling.

The spring-pressure latch and a 1/2" door recess seal the door tight. The door remains rock-steady on a heavy hinge shaft.

Four hand lifts aid moving. The base is open in the back and slotted to dissipate heat.

Watch the red-hot glass through two tapered peepholes, drilled one above the other in the wall opposite the switch box. Plugs included.

## Digital and Manual Controls

GL-series square kilns come with infinite control switches or digital controller. On a tight budget? Buy an infinite control kiln now; add a portable TnF 2 digital controller later.



Tapered peepholes offer a wide view. The spring-loaded door latch helps hold in the heat.

## Top, Side and Door Elements

The basic GL-series kiln comes with top-mounted heating elements for even glass expansion. The basic model uses 2 1/2" thick wall firebricks. Models with optional side elements use 3" wall bricks. Thus, the interior size varies:

### Interior Dimensions

#### Kilns With Top Elements Only

	Width	Height	Depth
GL-22A & GL-22AD	22"	13 1/4"	21 1/2"
GL-24A & GL-24AD	25"	15"	23"

#### Kilns With Optional Sidewall Elements

	Width	Height	Depth
GL-22A & GL-22AD	21"	13 1/4"	21"
GL-24A & GL-24AD	24"	15"	22 1/2"

(Door elements do not affect firing chamber size.)

Use side heat for taller projects such as drop-out vases (sagging through a ring mold). Side elements, seated in dropped, recessed brick grooves, span the three walls in horizontal rows:

GL-22A and GL-22AD:	four rows
GL-24A and GL-24AD:	six rows

Optional door elements offer unsurpassed heat distribution.

Manual-fire and digital GL-series with top and side/door elements use infinite control switches to balance the heat between top and side heat. For instance, to direct a little extra heat to the shelf outer edges, adjust the infinite controls so the top elements receive full power and the side/door elements receive less power. On electronic kilns with side/door elements, first adjust the heat between the top and side elements using the infinite controls. Then regulate overall heating with the DTC 1000 controller.

# Kiln Specifications and Prices

Model Number	Controls	Kiln Price	Furniture Price	UL/CUL Listed	Max. Temp. °F	Firing Chamber Opening	Depth	Cubic Feet
<b>Kilns with TOP Elements</b>								
GL-22A	Manual	\$960.00	\$71.00	UL/CUL	1700°	22"w x 13 1/4"h	21 1/2"	3.62
GL-22AD	Digital	1285.00	71.00	UL/CUL	1700°	22"w x 13 1/4"h	21 1/2"	3.62
GL-24A	Manual	1250.00	71.00	UL/CUL	1700°	25"w x 15"h	23"	5
GL-24AD	Digital	1590.00	71.00	UL/CUL	1700°	25"w x 15"h	23"	5
<b>TOP and SIDE Elements</b>								
GL-22ATS	Manual	1265.00	71.00	UL/CUL	1700°	21"w x 13 1/4"h	21"	3.38
GL-22ADTS	Digital	1590.00	71.00	UL/CUL	1700°	21"w x 13 1/4"h	21"	3.38
GL-24ATS	Manual	1435.00	71.00	UL/CUL	1700°	24"w x 15"h	22 1/2"	4.68
GL-24ADTS	Digital	1775.00	71.00	UL/CUL	1700°	24"w x 15"h	22 1/2"	4.68
<b>TOP, SIDE and DOOR Elements</b>								
GL-22ATSD	Manual	1435.00	71.00	UL/CUL	1700°	21"w x 13 1/4"h	21"	3.38
GL-22ADTSD	Digital	1760.00	71.00	UL/CUL	1700°	21"w x 13 1/4"h	21"	3.38
GL-24ATSD	Manual	1590.00	71.00	UL/CUL	1700°	24"w x 15"h	22 1/2"	4.68
GL-24ADTSD	Digital	1930.00	71.00	UL/CUL	1700°	24"w x 15"h	22 1/2"	4.68

## Kiln Options

Fiber top with embedded elements: Call for price Door cutoff switch: \$55.00 Deluxe stand, ST-8 (see page 1 for photo): \$275.00 Deluxe

\*These models will fit through a 32" doorway. Models with side/door elements: remove door from doorway. There must be enough room to

## New! Optional Ceramic Fiber Top



The optional ceramic fiber top (shown above) comes in three sections. The sidewall and door elements are mounted in firebrick grooves.

The standard GL-series front loading kiln comes with an insulating firebrick top, grooved for heating elements. The firebrick top has been proven reliable for glass fusing. It absorbs heat for slow cooling.

We are now offering an improved top made of ceramic fiber, a light-weight insulator. The new ceramic fiber top comes with heating elements embedded into the fiber. The advantage of the ceramic fiber is that it helps keep the glass cleaner during firing. The fiber top comes in three sections, each containing elements. It can be ordered only for new kilns. Call for pricing.

## Optional Door Switch

Include the optional door safety cutoff switch when ordering side/door elements. When the door opens, the switch shuts off the elements, leaving the temperature controller on. (Keep foreign objects away from heating elements. Wear firing safety glasses and protective clothing when working with hot glass.)

## Optional Deluxe Stand

The deluxe stand, pictured on page 1, raises your GL-22 or GL-24 kiln to a convenient working height. Begin operating your new kiln without having to find a heat-resistant table strong enough to support over 300 pounds. The table itself is 147 pounds of rock solid construction. Store firing supplies and tools under the kiln on the two shelves.



The door cutoff switch turns the elements off when the door is opened, yet the controller remains powered. The switch is housed in the box shown above.

Deluxe GL Stand, ST-8:  
30¼" square x 28¼" high, 147 lb.

Deluxe GL Stand with 2" steel casters, ST-8-1:  
30¼" square x 30¾" high, 150 lb.

## The Paragon DTC 1000 Electronic Controller

Paragon was one of the first manufacturers to popularize the electronic kiln. In 1988 we introduced the DTC 100 controller. Since then our controllers have evolved through three generations. The hard-won lessons from as far back as the DTC 100 are built into our current DTC 1000 controllers. When you buy a Paragon kiln, you are buying over a decade of experience.



## Electronic Components

The heart of the digital kiln is the DTC 1000 control board, small enough to fit in the palm of the hand. Replacing or upgrading one takes only minutes. Simply remove four screws and disconnect color-coded wires.

Over the years, electronics have improved in reliability and accuracy. The DTC 1000, natu-

Kiln	Approx Shpg. Weight Furn.	Outside Dimensions W. X D. X H.	Doorway Clearance Needed	Electrical Power			Copper Wire	Fuse Size	NEMA Config.
				Volts	Amps	Watts			
300	28	37½" x 31" x 25½"	31	240	25.2	6060	10	30	6-30R
333	28	37½" x 31" x 25½"	31	240	25.2	6060	10	30	6-30R
397	28	40½" x 32" x 26¼"	33*	240	37.5	9000	6	50	6-50R
397	28	40½" x 32" x 26¼"	33*	240	37.5	9000	6	50	6-50R
316	28	32" x 31" x 25½"	32*	240	37.2	8940	6	50	6-50R
337	28	32" x 31" x 25½"	32*	240	37.2	8940	6	50	6-50R
397	28	35" x 32" x 26¼"	33*	240	43	10400	6	50	6-50R
397	28	35" x 32" x 26¼"	33*	240	43	10400	6	50	6-50R
316	28	37½" x 31" x 28½"	32*	240	38.2	9160	6	50	6-50R
337	28	37½" x 31" x 28½"	32*	240	38.2	9160	6	50	6-50R
397	28	40½" x 32" x 29½"	33*	240	45	10800	6	50	6-50R
397	28	40½" x 32" x 29½"	33*	240	45	10800	6	50	6-50R

stand with 2" steel casters, ST-8-1 \$315.00 Extra 20" x 20" x 5/8" shelf, C-20: \$66.00 1½" wide posts, each: 6": \$1.80; 8": \$2.25; 10": \$2.55 pivot the kiln after door element switchbox passes through doorway.

rally, is the most reliable controller we have ever offered.

The thermocouple (temperature sensor) is hermetically sealed in a 1/8" diameter metal sheath for long life. According to our tests, thermocouple temperature drift is only a few degrees after firing 1,000 hours at 2300°F. The thermocouple is so sensitive that at around 80°F, it shows temperature rise when you hold the tip in your hand.

### Accurate Repeatability

The DTC 1000 controller fires in up to eight segments, each with a target temperature, rate, and hold (or soak). Change the firing rate eight times in a single firing. New to the DTC 1000 is 16-segment firing, for complex projects. Segments can control both heating and cooling. Thus, you can slow-cool difficult, thick glass pieces. With accurate repeatability, you can alter firings precisely and observe the effect after each firing. The DTC 1000 is a learning tool that will excite you for many years.

Store up to six programs in memory—even with the kiln unplugged. Temperature displays throughout firing and cooling in your choice of degrees F or C. Use the audible temperature alarm to remind yourself to close a vented door or to check the kiln near firing completion. Error messages report mechanical problems such as a disconnected thermocouple, stuck relay or broken element.

### Delay Fire

Delay Fire starts the firing to suit your schedule or to take advantage of lower electric rates at night. The display shows time left before firing begins. You do not have to be present throughout the firing. It is important, however, that you are near the kiln before the expected shut-off time.

### Power Failures

The DTC 1000 responds intelligently to power failures. It resumes firing or shuts down after power returns, depending on the type of fir-

ing, when the power failed, and the duration of the power failure.

### Ordering Check List

- |   |  |
|---|--|
| <b>Size</b>                                 | <b>Electrical</b>                                  |
| <input type="checkbox"/> GL-22              | <input type="checkbox"/> 240                       |
| <input type="checkbox"/> GL-24              | <input type="checkbox"/> 208                       |
| <b>Controls</b>                             | <input type="checkbox"/> Other voltage             |
| <input type="checkbox"/> Manual             | _____  |
| <input type="checkbox"/> Digital            | <input type="checkbox"/> Single phase              |
| <b>Elements</b>                             | <input type="checkbox"/> Three phase               |
| <input type="checkbox"/> Top only           | <b>Options</b>                                     |
| <input type="checkbox"/> Top and side       | <input type="checkbox"/> Door cutoff switch        |
| <input type="checkbox"/> Top, side and door | <input type="checkbox"/> Deluxe stand              |
|   | <input type="checkbox"/> Deluxe stand with casters |
|   | <input type="checkbox"/> Ceramic fiber top         |

# Paragon Kiln Limited Warranty

Paragon kilns are warranted to the original purchaser by Paragon Industries, Inc. (herein "Paragon"), subject to the listed exclusions below, to be free of defects in workmanship for the periods specified below. The warranty period begins from date of shipment from the Paragon factory unless date of original purchase from an authorized Paragon distributor or dealer can be established.

### Warranty Period

Paragon GL series kilns with a maximum temperature rating of 2000°F or lower: two years. This warranty period applies unless otherwise agreed to in writing.

This warranty excludes: **1)** Kilns or furnaces damaged by overfiring (exceeding the melting temperature of the material being fired) regardless of cause of overfiring; **2)** Ware, tools, kiln furniture, or anything inside damaged by overfire; **3)** Kilns allowed to exceed the maximum temperature shown on kiln's nameplate, regardless of cause; **4)** Kilns subjected to abuse, neglect, freight damage or improper storage; **5)** Kilns used for either reduction or salt firing; **6)** Kilns damaged by improper electrical installation; **7)** Kilns used for purposes other than firing ceramics, glass, heat treating, or the purpose for which it was intended; **8)** Element burnout caused by contact with foreign materials; **9)** The patented Dawson Kiln Sitter and/or Limit Timer

manufactured by W.P. Dawson, Inc., 399 Thor Place, Brea, California 92621.

**WARRANTY COVERAGE EXTENDS ONLY TO THE ORIGINAL PURCHASER AND DOES NOT COVER REPLACEMENT OF PARTS THAT ARE, BY THEIR NATURE, EXPENDABLE. THIS WARRANTY IS VOIDED IF THE PRODUCT IS ADVERSELY AFFECTED BY ATTACHING ANY FEATURE OR DEVICE TO IT, OR IS IN ANY WAY TAMPERED WITH OR MODIFIED WITHOUT EXPRESS WRITTEN PERMISSION FROM PARAGON INDUSTRIES, INC.**

Paragon Industries, Inc., will repair or replace any parts that become defective under normal and proper use during the specified period for the kiln purchased, providing the kiln has not been subjected to misuse or the listed exclusions. Paragon will furnish and install replacement parts at the factory with transportation costs to and from the factory paid by the owner; or upon receipt of defective parts at the factory, and after factory examination of the defect, Paragon will furnish replacement parts, complete with installation instructions, shipped postpaid to owner. The warranty on the repaired and/or replaced parts will be limited to the unexpired term of the original warranty.

Any claim for adjustment under this warranty must include name and address of dealer from

whom kiln was originally purchased. Repair or replacement of any defective parts shall fulfill all obligations of Paragon. No other obligations or liabilities are assumed in connection with Paragon kilns nor does Paragon Industries, Inc. authorize its distributors or dealers to assume any other obligations or liabilities on its behalf.

**THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL PARAGON INDUSTRIES, INC. BE LIABLE FOR ANY LOSS OF PROFITS OR ANY INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY SUCH DEFECT IN MATERIAL OR WORKMANSHIP. NOTE: SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

This agreement is made in the State of Texas and its validity, construction, and all rights under it will be governed by the laws of the State of Texas.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

**Sold By**

  
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