

# **Cone 10** Dependable Kilns for the Value-Conscious Potter

# **The Dragon** State Double wall construction, easy to load, powerful

Better

Designed Kilns™



Dragon Digital Automatic 24" wide x 27" high x 24" deep



The Orton Ceramic Foundation makes 3-key and 12-key controllers to Paragon's exact specifications.

The Dragon is an industrial furnace designed for the potter. And considering its features, it is surprisingly affordable. The Dragon exudes power. Its 16,500 watts heat the 24" wide, 24" deep, 27" high interior to cone 10 with ample power to spare. Dropped, recessed grooves seat industrial-gauge elements.

### **Extra Insulation & Slow Cooling**

The 4" thick walls, top and door are made of 3" firebrick backed by 1" of ceramic fiber block insulation. The floor is 4 <sup>1</sup>/<sub>2</sub>" thick firebrick. The extra insulation not only saves energy but also cools slowly. This gives the micro-crystalline structure and color of the glaze sufficient time for full development.

### Heavy Duty Mercury Relays

Long-lasting mercury relays power the elements. A bank of built-in NEC/UL compliant high-amperage fuses protects the kiln and circuit wiring.

### Easy to Load

Potters who struggle with top-loading kilns will enjoy the Dragon. The

### **Sentry Digital Controllers**

The Paragon Dragon is UL Listed to U.S. and Canadian safety stan-

Both controllers fire in Cone-Fire and Ramp-Hold. (Cone-Fire fires to a cone with simplified operation; Ramp-Hold is for customized firings such as crystalline glazes.) In addition, the 12-key includes advanced features such as the following:

- Cone-Fire candling feature to dry the ware completely
- Better temperature stability
- 30 month warranty on the Sentry
- A cool down segment, available in Cone-Fire programs at every speed. Use Slow Cooling to achieve dramatic shifts in glaze color and crystalline development.
- Select Cone-Fire Slow, Medium and Fast firing speeds. Customize these

door swings open wide on a heavy <sup>3</sup>/<sub>4</sub>" steel rod with sealed bearings. Two spring-loaded latches press the door tightly closed.

- · Saves electricity with extra insulation
- Cone 10, 2350°F
- 3" insulating firebrick and 1" non-organic block insulation in walls, top and door: 4" total thickness
- 4 <sup>1</sup>/<sub>2</sub>" thick firebrick bottom
- Long-lasting mercury relays
- Type-K thermocouple with 1/4" sheath, or optional Type-S
- Sentry 2.0 controller made for Paragon by the Orton Ceramic Foundation
- Case temperature at cone 10: 170°F (compared to 400-500°F for standard firebrick kilns)
- Two peepholes in the side
- UL/CUL & NEC compliant fuses for safety
- Available in 200, 208, 220, 240, 480 v, 1 & 3 phase
- Proportional power elements for even heating

speeds within Cone-Fire without having to use Ramp-Hold.

- Up to 20 segments in Ramp-Hold
- Supports types K, S and R thermocouples
- 14-segment display instead of standard 7 segment. Prompts are easier to read.
- Go back a step in programming with each press of the Stop/Back key to easily correct programming mistakes.
- The Add Time key adds five minutes to the current hold during firing.
- Skip Segment skips 1) Ramp-Hold segments and 2) Cone-Fire Pre-Heat and Hold.
- More uniform multiple-zone firing
- LED lights show when the relays are powered.



ENTER/ OPTIONS STOP/ START OPTIONS

dards.

# The Iguana & Super Dragon Front loading, fast, cone 10

### **Heavy Duty Elements**

As with all our potter's kilns, the Iguana and Super Dragon front-loading kilns have power to spare. This results in long element life, because the elements do not "struggle"



to reach high temperatures. Dropped, recessed grooves seat industrial-gauge elements.

### Easy to Load

The door swings open wide on a heavy steel rod with sealed bearings. Spring-loaded latches press the door tightly closed.

### Extra Insulation & Slow Cooling

The Iguana features 3" thick insulating firebrick—1/2" thicker than standard. The Super Dragon has 4" thick walls.

### The Kiln Stand

The Iguana 22" tall stand is priced separately from the kiln. Specify whether the stand is to ship separate from the kiln or to ship pre-installed on the kiln as one unit. The Super Dragon is priced with the stand.

A fully-assembled Iguana will fit through a 31 ¼" opening.

- Cone 10, 2350°F
- Type-K thermocouple or optional Type-S
- Sentry 2.0 controller with programmed cool-down
- Available in 200, 208, 220, 240, 480 v, 1 & 3 phase
- Proportional power elements for more even heating



#### Super Dragon Digital Automatic 27" wide x 36" high x 27" deep

- Two tapered peepholes in the left side
- 1/2" heavy steel door hinge rod with sealed bearings

# Kiln Specifications

Certified —							Approx. Shpg.		Outside Dimensions	Doorway
Model	to CSA &	Max.		Cubic	Firing Cha	amber	Wei	ght	W. X D. X H.*	Clearance
No.	UL Std 499	Temp. °F	Cone	Feet	Opening	Depth	Kiln	Furn.		Needed
Dragon	Yes	2350°	10	9	24"W x 27"H	24"	905	130	43 ¾" x 39¼" x 50"*	39 1/4/34"
Super Dra	<b>gon</b> No	2350°	10	15.18	27"W x 36"H	27"	1,550		44" x 42" x 78"	42"
Caldera	Yes	2350°	10	.25	8" x 8"	<b>6</b> ¾"	45	5	13" x 19½" x 11¾"	
Caldera-S	Yes	2350°	10	.25	8" x 8"	<b>6</b> <sup>3</sup> ⁄4"	45	5	13" x 19½" x 11¾"	
Caldera-X	Yes	2000°	03	.16	8" x 8"	<b>4</b> ½"	23		13" x 13" x 4½"	
Iguana	No	2350°	10	4.2	18"W x 22 ½"H	18"	483	50	36" x 31¼" x 60"*	<b>31</b> ¼"
TnF-27-3	Yes	2350°	10	8.11	28"	<b>22</b> <sup>1</sup> / <sub>4</sub> "	415	145	36¼" x 49¾" x 40"¶	12"
TnF-23-3	Yes	2350°	10	5.10	<b>22</b> <sup>1</sup> / <sub>2</sub> "	<b>22</b> <sup>1</sup> / <sub>4</sub> "	313	77	30½" x 43¾" x 41½"¶	33"
Viking-28	Yes	2350°	10	10.57	28" 12-sided	29"	430	172	36¼" x 49¾" x 48"*	12"
Viking-24	Yes	2350°	10	7.10	221/2" 10-sided	29"	342	95	301/2" x 433/4" x 48"*	33"

\*Exterior height includes the following: optional Dragon 24" tall stand; optional Iguana 22" tall stand; Viking 9 ½" tall stand included with Viking

### **Outside Kiln Dimensions**

For safety, at least 12" of additional clearance are required on all sides of kiln during operation. Fire kiln in a well-ventilated area.

### **Firing Chamber Depth**

Top loading kiln: Measure depth from top to bottom. Front loading kiln: measure depth from front to rear.

### **Doorway Clearance**

Clearance may vary from specifications for special-order kilns.

Viking-28: when disassembled, the Viking-28 can fit through a 12" space. Assembled, the Viking-28 fits through a 37" space.

# <text>

Digital Automatic 12-sided Firing Chamber: 28" wide x 29" deep

### Mercury Relays

The Viking kilns have heavy-duty mercury relays, which outlast the standard mechanical contactor relays many times over.

### **Heavy Duty Elements**

The Vikings have power to spare. They are 14,400 watt kilns and fire on a 70 amp,

We reserve the right to change product specifications without notice or obligation.

Elec	trical P	ower	Circuit Copper	NEMA	
Volts	Amps	Watts	Wire	Size	Config.
240	69	16,500	4	75	Direct
240	90	21,600	2	100	Direct
120	14	1,680	12	20	5-15R
120	14	1,680	12	20	5-15R
240	45	10,800	6	60	6-50R
240	48	11,520	6	60	6-50R
240	40	9,600	6	60	6-50R
240	60	14,400	4	70	Direct
240	60	14,400	4	70	Direct

Dragon: Fully assembled, a Dragon requires 39 <sup>1</sup>/<sub>4</sub>" of doorway clearance. If you remove the element cover (on back of kiln) and the KilnVent, the Dragon will fit through a 34" doorway. Dragons with door elements will fit through a 36" doorway if you also remove the door element cover. 240 volt circuit. The extra amperage increases element life, because the elements fire to higher temperatures without strain.

### **High Amperage Fuses**

UL/CUL & NEC compliant high amperage fuses protect the kiln and circuit wiring. These fuses are built into the kiln switch box.

### 2" Top Row of Blank Brick

The top row of brick in the Viking-28 is 2" high and without element grooves. It is

### Drop-down Switch Box on Vikings, TnF-23-3 & TnF-27-3

To open the switch box, simply remove two screws at the top. Hinged at the bottom, the switch box opens forward. A folding support arm holds the box open for easier maintenance. Changing the thermocouple takes only minutes.

The electrical system stays cool for long life: louvers cover the sides and top of the switch box. The box is over-sized—8" deep and 8 ½" wide—with an air gap between the box and the kiln. And the kiln has a double heat-shield. Relay-to-element lead wires are routed to the heating elements from the bottom of the box. This eliminates straining the element wires when the box is opened. It also helps prevent wires from touching hot element connectors. Wiring inside the box is laid out neatly and bundled with wire ties.

Mercury relays, standard on Vikings, are a welcome relief to those

less susceptible to damage during loading than a grooved brick and easy to replace.

### Viking-28 Sectional Construction

The Viking-28 is a 12-sided 3" wall digital kiln featuring sectional construction. Separate the kiln bottom and sections to repair bricks, change elements, or to move the kiln down narrow stairwells or through the narrowest doorways. Twist-lock spring latches hold the assembled collars securely.

### The Patented LiteLid

Even the most petite potter can lift mas-

sive 3" thick Viking lids. Paragon's patented LiteLid spring counter-balance reduces lid weight to several pounds of pressure without cumbersome pulleys and cords. The LiteLid prolongs sidewall brick life by elimi-



nating wall flex inherent with conventional lid supports.

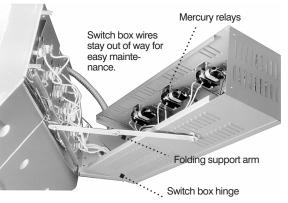
### Type-K or S Thermocouple with Your Sentry Controller

The thermocouple measures temperature inside the kiln. Choose between the heavy-duty Type-K standard thermocouple, or the deluxe platinum Type-S when you order your kiln.

The Type-K, hermetically sealed in a 1/4" metal sheath, comes standard on Paragon digital kilns shown in this brochure. The optional Type-S platinum lasts many times longer than the Type-K, especially at cone 4 and above.

who work for extended periods around kilns. Mercury relays are not only silent, but out-last the standard mechanical contactor relays by a wide margin.

Viking element wattage is finely tuned to produce optimum heat distribution throughout the firing chamber. You will marvel at firing results even in a single zone kiln. Dropped, recessed grooves seat industrial-gauge elements.



Call Toll Free 800-876-4328 / 3

# **Caldera Test Kilns** *Test glazes with digital accuracy*

Caldera Digital Automatic Firing Chamber: 8" x 8" Opening x 6 ¾" deep

### **Completely Portable**

Fire silver clay, china, ceramics, and glass in Paragon's Caldera kilns. They make glass compatibility and color tests fast and easy. They fire rapidly on 120 volts to 2350°F/1287°C. With a separate top and bottom, they are stackable and completely portable.

### **Manual-Fire and Digital Versions**

The digital version, called the "Caldera," comes with the Sentry Xpress controller. It fires in either Ramp-Hold or Cone-Fire. Control both heating and cooling with simple 3-key operation.

The Caldera-S manual version comes with an infinite control switch, pilot light, and a convenient pyrometer.

Add  $4\frac{1}{2}$ " of height to the Caldera or Caldera-S with a collar.



- Caldera: Digital 3-key Sentry Xpress with Cone-Fire and 8-Segment Ramp-Hold; on/off safety switch
- Caldera-S: infinite control switch, pyrometer, and safety pilot light
- 2 <sup>1</sup>/<sub>2</sub>" insulating refractory firebricks
- Dropped, recessed brick grooves
- Louvered switch box, heavy duty wiring
- The Caldera and Caldera-S, even with a collar, still fire to 2000°F/1093°C

## **TnF-23-3 & TnF-27-3** Short, easy to load studio kilns



**TnF-23-3 Digital Automatic** 10-sided Firing Chamber: 22 ½" wide x 22 ¼" deep

© 2001, by Paragon Industries, L.P. PA-105/2-05 4 / Toll Free Fax 888-222-6450 If you have difficulty loading deep kilns, we recommend the 10-sided TnF-23-3 and 12-sided TnF-27-3. They are only 22 <sup>1</sup>/4" deep yet large enough for studio production.

Rated to 2350°F, they fire porcelain and stoneware on a 240 volt, 50 amp circuit.

In a top-loading kiln, the bricks subjected to the most wear are those in the top row. To solve this problem, we use 2" high blank bricks in the top row of both kilns. Since these 2" bricks are without element grooves, they are far less likely to break. They are also easy to replace.

The TnF-23-3 and TnF-27-3 are similar to the Vikings on page 3. The TnF-27-3 is a sectional kiln. Both models have the easy-access switch box for easy maintenance. However, they do not have the mercury relays and built-in fuses of the Viking kilns.

**Better** Designed Kilns™



**Caldera-S** Infinite Control Firing Chamber: 8" x 8" Opening x 6 <sup>3</sup>/<sub>4</sub>" deep

- 120 volt 5-15R outlet, 1800 watts
- Heavy duty stand, complete with mar-proof plastic feet, is included with each Caldera.
- The Caldera-BC and Caldera-X collars have no heating elements.

**TnF-27-3 Digital Automatic** 12-sided Firing Chamber: 28" wide x 22 ¼" deep



### built-in fuses of the Viking kilns. *Paragon* Industries, L. P.

2011 South Town East Blvd. Mesquite, Texas 75149-1122 800-876-4328 / 972-288-7557 Toll Free Fax: 888-222-6450 paragonind@att.net www.paragonweb.com