

Drying and Curing Ovens

Paragon's industrial drying and curing ovens feature a heavy 12 gauge sheet metal external frame with double wall construction for extra strength. Forced air circulates uniformly from top to bottom. External dampers control air intake and exhaust. Programmable digital controllers provide close temperature control. Inconel-sheathed heating elements are under the main chamber with easy access for maintenance or replacement. Either

single or double swing doors give full access to the front of the oven.

Order racks for your oven to use as shelves to hold parts. For extra durability, specify stainless steel for both the frame and the racks. We offer a wide selection of controllers with options such as multiple programmable profiles and alarms.

SO-448
Digital Automatic
56" wide x 60" high x 30" deep



Bottom Loading Furnaces

Paragon bottom loading furnaces are used extensively in many industries. For many years they have proven to be workhorses for the most demanding customers.

Heating elements are protected in dropped, recessed firebrick grooves. The stainless steel case wraps tightly around the firing chamber for strength. The 3" thick bottom is separate.

We can customize your furnace. Change the firing chamber size or insulation thickness. Add USB communication to a PC and over-temperature protection.



The control box can be put on an umbilical to mount on a wall separate from the furnace.

BL-16223
Digital Automatic
16 1/2" wide x 22 1/2" deep

Double Heat Treating Furnaces

Paragon double furnaces save floor space and improve efficiency of operation. Both furnaces ship separately and assemble in minutes with an ingenious stackable stand. Both furnaces can reach 2400°F.

The DF18-1 double furnace shown here has swing doors; the PMTG-18 has a counter-weight guillotine door. Choose between swing and guillotine doors for your double furnace, or combine the door types in the furnace pair.

The 12-key Sentry programmable digital controller can fire in up to 20 segments. The Sentry is noted for its ease of operation and short learning curve.

We can customize your furnace. Change the insulation thickness. Select from controllers with options such as alarms, USB communication to a PC, and over-temperature protection.



DF18-1
Digital Automatic

Paragon Industries, L. P.

Better Designed Kilns™
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Paragon Laboratory / Industrial Electric Furnaces and Ovens

Paragon Industries, L.P. has manufactured electric high temperature furnaces and kilns since 1948. We have designed and manufactured over 4,000 different models for customers world-wide. We have made furnaces for jewelry, heat treating, bit brazing, laboratory testing, and hundreds of other applications. Each furnace is designed for economy, efficiency, long life, and customer satisfaction. The models in this brochure are made in the USA and are a sampling of the many furnaces we have al-

ready designed. We can also custom design a furnace for your exact needs.

We specialize in electric furnaces under 27 cubic feet rated up to 2400°F. We are a vertically integrated manufacturing facility where we cut, form and assemble all sheet metal, machine-fit all insulation, and wind our own heating elements at our Mesquite, Texas plant. Our electrical control circuits encompass the most elementary switches to computer controllers and data logging. In addition, we fully test all furnaces at a test stand that can duplicate any power source in the world from 100 volt single phase to 380 volt or 480 volt three phase.

Table Top Furnaces

Our table top electric furnaces feature superior A1 Kanthal heating elements mounted into machined side-wall grooves or embedded in ceramic fiber muffles. A 12-key Sentry or 3-key Sentry Xpress digital controller with Type-K thermocouple is standard on most Paragon furnaces.

We can customize your furnace. Optional controllers have alarms, USB communication to a PC, over-temperature protection, and Type-S or R thermocouple. Choose between swing, guillotine, or drop doors. An optional port injects inert gas into the furnace at specific temperatures and monitors the gas flow rate. There are optional door switches to turn off heating elements for personal safety.



HT-10D
Digital Automatic
Shown with optional
gas flow meter
and door switch
8 1/2" wide x 8 3/4" high x 9" deep



HT-14D
Digital Automatic
13" wide x 8 3/4" high x 13 1/2" deep



Precision Elite
Digital Automatic
Lab Furnace
with elements embedded
in ceramic fiber muffle
for fast firing cycles
8" wide x 5 3/4" high x 7 3/4" deep



Xpress-E-10A
Digital Automatic
8 1/2" wide x 8 3/4" high x 9" deep



TnF-J-14-1
Digital Automatic
With elements embedded
in ceramic fiber muffle
13" wide x 9" high x 13" deep

Sentry Digital Controllers

The 12-key Sentry and 3-key Sentry Xpress temperature controllers are standard on most Paragon furnaces. Other types of controllers are optional.

3-Key Sentry Xpress

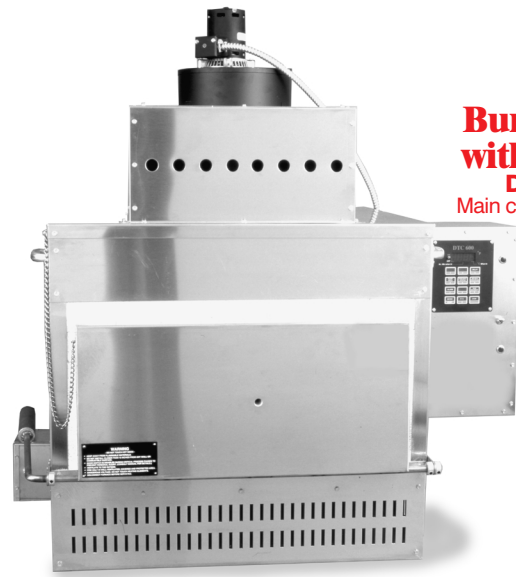
- Skip segments during firing.
- Store up to 8 programs
- Program Review
- 8 Segments
- Delay Start

12-Key Sentry

In addition to the features of the 3-key version, the 12-key controller also includes the following:

- Up to 20 segments and 9 programs
- 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.
- USB datalogging
- Thermocouple offsets for calibration

Medium Size Furnaces



Burnout Furnace with After Burner
Digital Automatic
Main chamber: 21" wide x 13 1/4" high x 21" deep

Burnout Furnaces

- An after burner with replaceable filtration media
- Rope door seal
- Automatic safety door lock



HT-22D
Digital Automatic
With drop door
21" wide x 13 1/4" high x 21" deep



PMTG-18
Digital Automatic
Guillotine door,
3" brick & 1" B-U board
13" wide x 13" high x 18" deep

Dragon

- Long-life mercury displacement relays
- NEC/UL-compliant high-amperage fuses
- Two 1" non-tapered view ports in the left side
- Case temperature at 2300°F: approximately 170°F
- 3" insulating firebrick and 1" non-organic block insulation in walls, top and door; 4" total thickness; 4 1/2" thick firebrick bottom
- 3/4" heavy steel door hinge rod with sealed bearings
- Sentry 12-key controller with sheathed Type-K thermocouple
- Strategically placed elements for more even heating



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

Paragon Furnace Specifications

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

Model No.	Max Temp. °F	Sidewall Thickness	Firing Chamber Type	Cubic Feet	Firing Chamber Opening		Approx. Shpg. Weight	Outside Dimensions W. X D. X H.			Electrical Power			Circuit Size		NEMA Config.
					Width	Depth		W.	D.	H.	Volts	Amps	Watts	Copper Wire	Fuse Size	
Table Top Furnaces																
HT-10D	2000°	2 1/2"	Firebrick	.39	8 1/2"W x 8 3/4"H	9"	71	17 1/4"	18"	17 3/4"	120	14	1,680	14	15	5-15R
HT-14D	2000°	2 1/2"	Firebrick	.88	13"W x 8 3/4"H	13 1/2"	115	21 1/2"	23"	18 1/2"	240	13	3,120	12	20	6-20R
PMT-13	2350°	4"	Firebrick	.8	13"W x 8 1/2"H	13"	160				240	13	3,120	12	20	6-20R
Precision Elite	2000°		Fiber	.198	8"W x 5 3/4"H	7 3/4"	36	13 1/4"	14"	15 1/2"	120	12	1,440	14	15	5-15R
Precision Elite II	2000°		Fiber	.28	7 3/4"W x 7 3/4"H	8"	41	13 1/4"	14"	17"	120	15	1,800	14	15	5-15R
TnF-J-14-1	1700°		Fiber	.88	13"W x 9"H	13"	90	18"	21 1/2"	20 1/2"	120	20	2,400	12	20	5-20R
Medium Size Furnaces																
Dragon	2350°	4"	Firebrick		9 24"W x 27"H	24"	660	43 3/4"	39 1/4"	50"*	240	69	16,500	4	75	Direct
HT-22D	2000°	3"	Firebrick	3.38	21"W x 13 1/4"H	21"	290	37 1/2"	30"	23"	240	30	7,200	6	50	6-50R
Iguana	2350°	3"	Firebrick	4.2	18"W x 22 1/2"H	18"	483	36"	31 1/4"	60"	240	45	10,800	6	60	6-50R
PMTG-18	2350°	4"	Firebrick	1.8	13"W x 13"H	18"	350	36"	38"	38"	240	27	6,500	10	30	6-30R
PMT-21	2350°	4"	Firebrick	3.3	21"W x 13"H	21"	640	40"	35"	28"	240	40	9,600	6	60	6-50R
PMT-36	2350°	4"	Firebrick	3.5	13"W x 13"H	36"	470	34"	50"	28"	240	36	8,650	6	60	6-50R
Super Dragon	2350°	4 1/2"	Firebrick	15.18	27"W x 36"H	27"	1500	54"	46"	77"	240	90	21,600	2	100	Direct
Drying and Curing Ovens																
SO445	500°	4"	Steel	16	24"W x 48"H	24"		54"	41"	74"	240	70	16,700	4	75	Direct
SO447	350°	4"	Steel	47	50"W x 54"H	30"		82"	45"	80"	240	38	9,000	6	60	6-50R
SO448	350°	4"	Steel	58	56"W x 60"H	30"		86"	45"	86"	240	38	9,000	6	60	6-50R
SO769	550°	2"	Steel	3.3	12"W x 28"H	17"		36"	30"	65"	240	40	9,600	6	60	6-50R
Bottom Loaders																
BL-16223	2350°	3"	Firebrick	2.8	16 1/2"	22 1/2"		28"	24"	37"	240	50	12,000	6	60	Direct
BL-16273	2350°	3"	Firebrick	3.3	16 1/2"	27"		28"	24"	41"	240	50	12,000	6	60	Direct
BL-22293	2350°	3"	Firebrick	6.7	22 1/2"	29"		34"	30"	43"	240	83	20,000	0	100	Direct
BL-28293	2350°	3"	Firebrick	10.3	28"	29"		39"	35"	43"	240	60	14,400	4	70	Direct

Super Dragon

- Long-life mercury displacement relays
- NEC/UL-compliant high-amperage circuit breakers
- 4 1/2" insulating firebrick walls, top and floor; 4" thick door
- Inner door recess to prevent radiant heat loss
- Floating door system with four spring door latches
- Sentry 12-key controller with sheathed Type-K thermocouple
- Strategically placed elements for more even heating



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

Outside Kiln Dimensions

At least 12" of additional clearance are required on all sides of kiln during operation for safety. 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.

Power

Table top models are available in 120, 208, or 240 volts. Other models are available in 208, 220, 240, 380, or 480 volts, single or 3 phase.

Doorway Clearance

Clearance may vary from specifications for special order kilns.

*Dragon: Fully assembled, a Dragon requires 39 1/4" of doorway clearance. If you remove the element cover (on back of kiln) and the KilnVent, the Dragon will fit through a 34" doorway.