

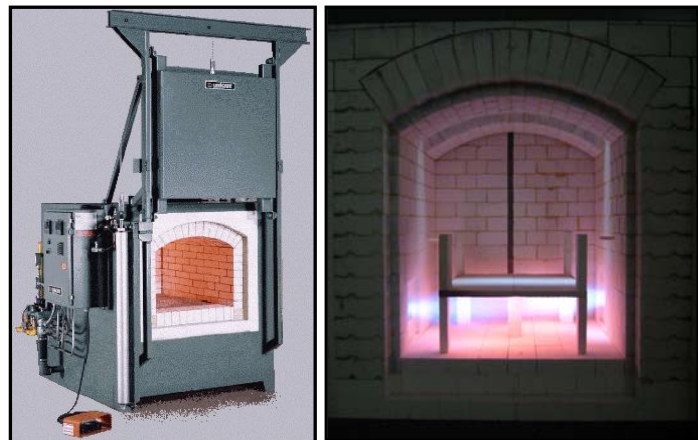


FUEL FIRED BOX KILNS AND FURNACES MODELS to 1500°C (2730°F)

Performance proven for safe, efficient oxidation and reduction firing. A choice of standard insulating brick, low mass ceramic fiber or corrosion resistant hard ceramic lining. Forced Draft or economical natural draft. Already hundreds in use by professional ceramists, metallurgists, schools, industry, and research.



Standard 1370°C (2500°F) models in this series are rugged, time tested front loading units suitable for use in the most demanding environments. High temperature models are available for both oxidation and reduction firing of ceramics up to 1500°C (2730°F). The Unique/Pereny series is also used for many other applications including processing of metals and research and development projects.



Using the same extra heavy gauge welded steel shells lined with high quality refractories, the two model series, USA and USF offer different fuel burner systems to meet different needs depending on requirements for economy, precision and fuel availability.

USA Forced Draft Gas, LPG, Oil

For precision and firing performance USA models are equipped with a proven forced draft burner system. This system consists of precision nozzle mix burners sealed into each side of the kiln and a primary air turbo blower fan. Air and fuel are precisely metered at each burner by adjustable needle valves. Ultra-violet flame sensing and a safety shut-off valve are included to automatically shut down the system in the event of flame failure, fuel or power interruption.



**USF Forced Draft
Gas, LPG**

The economical standard forced draft burner equipment supplied on the USF series consists of pre-mix burners with individual blower fans front mounted on the kiln. The controls furnished provided a means for easy manual regulation of the fuel/air mixture, heating rate, and kiln atmosphere. Failsafe devices are provided to shut off the kiln in the event of pilot or fuel interruption.

Standard Features:

- Heavy duty steel shell finished with heat resistant enamel paint and COOL SKIN® double wall sidewalls to reduce surface temperatures.
- Parallel swing heat seal door fabricated of steel plate, pivot counter balanced to open and close easily with four adjustable door clamps.
- Lining consists of high quality refractories and insulation in a multilayered graded configuration up to 13” thick, rated to a maximum temperature of 1650°C (3000°F).
- Temperature control is microprocessor programmable with SCR power regulation to precisely control heat-up rate and set point.
- A duplex thermocouple is provided for both operation control and over-temperature limit shut-down.
- Electrical components are UL/FM listed and include a main control panel safety circuit breaker. The entire system meets applicable NFPA, NEC and CE directives.

Specifications

	UNIQUE/PERENY		USA/USF Series Kilns		Models available to 1800°C / 3240°F	
Model* No.	Capacity Cu. Ft.	Chamber Size W x D x H	Overall Size** W x D x H	Max. Fuel*** Consumption, CFH	Weight lbs	
US-2	2	14"x14"x18"	38"x32"x56"	200	800	
US-4	4	17"x17"x24"	42"x35"x66"	200	1500	
US-6	6	21"x21"x24"	46"x44"x66"	200	2000	
US-8	8	24"x18"x32"	48"x41"x70"	200	2500	
US-10	10	24"x24"x32"	48"x47"x75"	250	3000	
US-12	12	24"x27"x32"	56"x50"x75"	275	3500	
US-16	16	32"x25"x36"	58"x48"x75"	400	4000	
US-20	20	32"x27"x40"	58"x50"x75"	500	4500	
US-24	24	34"x27"x46"	60"x50"x75"	600	5000	
US-30	30	36"x28"x52"	62"x51"x85"	700	6000	
US-40	40	36"x37"x52"	62"x60"x85"	900	7500	
US-50	50	36"x46"x52"	67"x72"x85"	1000	9000	
US-60	60	45"x40"x60"	74"x66"x93"	1200	10500	

*Specify burner type with model number, e.g., USA-16, USF-8

**Installation should allow for 24" all around kiln for piping and accessibility. Customer provisions include exhaust hood, stack, chimney and breeching connections.

***Fuel data based on natural gas at 1000 BTU/C.F. and 6"W.C. minimum. 1-1/2" ips service lines required. If LPG, oil or other fuel is to be used, please specify.

NOTE: Sizes shown are typical for 13700C rated models with firebrick lining. Please call for dimensions of higher temperature or fiber lined systems.

Specifications or design subject to change without notice.