Gas furnaces for heat treating & melting.

Buzzer

Venturi gas burners. Since 1911.

Fire-Box™

Charles A. Hones, Inc. 607 Albany Ave. North Amityville, NY 11701 Ph: 631.842.8886 Fax: 631.842.9300

The *Buzzer* Fire-Box™ furnaces are competitively priced and designed to last. They offer large, brick-lined work chambers. The all brick construction of our Fire-Box furnaces makes them appropriate for industrial applications which require high strength, durability, and abrasion resistance to stand up against tongs, shanks, and hooks commonly used in heat treating and investment casting. On average, model 2020L can attain 1,800°F in 60 minutes, while model 2436L takes 90 minutes.

- Constructed of welded steel plate reinforced by a sturdy angle iron frame.
- Floor-type units.
- Rated to 1,800°F.
- Can be set up to operate on either low pressure natural or propane (LP) gas. Conversion from one fuel to the other requires only a simple orifice change.

Model	Overall dimensions				Door opening		Working area			Height from floor	Approx. shipping weight	Gas connect	BTU's per hour in 1,000's
	Width	Length	Furnace height	Total height	Width	Height	Width	Length	Stacking Height				
2020S	37	34.5	55	82	20	14	20	20	12	34	1,475	1	135
2020L	37	34.5	61	93	20	20	20	20	18	34	1,540	1	150
2424S	41	38.5	55	82	24	14	24	24	12	34	1,400	1	150
2424L	41	38.5	65	101	24	24	24	24	20	34	1,840	1	185
2436S	41	50.5	55	82	24	14	24	36	12	34	1,955	1 1/4	210
2436L	41	50.5	65	101	24	24	24	36	20	34	2,000	1 1/4	280
2448S	41	68.5	55	82	24	14	24	48	12	34	2,700	1 1/2	280
2448L	41	68.5	65	101	24	24	24	48	20	34	3,500	1 1/2	300

Please note: all work shelves are 6" deep by width of door opening. Counterweight adds 5 1/2" to width. Overall dimensions do not include controls.

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No blower. No compressed air. **Buzzer** No complicated piping. Simple.

Insulation

Our Fire-Box furnace comes efficiently lined with 4½ inches of 2,300°F insulating firebrick backed up by 2 inches of 1,200° block insulation. The ***Buzzer*** engineered flat style arch is constructed of 4½ inches of 2,300°F firebrick backed up with 2½ inches of 1,600°F castable block insulation. Extra-insulation, combined with heat resistant stainless steel support rods, provides an arch design which can withstand the industrial casting room / tool room environment. Additionally, most threshold and vestibule bricks which surround the door opening are made of heavy duty hardbrick to provide the maximum abrasion resistance available.

Hearth plates

Fire-Box furnaces come standard with ceramic ribbed hearth plates which provide excellent heat transfer, stand up well to thermal shock, and are rated for 2,400°F. Our unique ***Buzzer*** ribbed hearth design allows heat to flow under parts for more efficient heat distribution. Fire-Box furnaces also employ our classic semi-muffle gas heated design in which combustion takes place under the ceramic hearth plates so that only the hot gases and products of combustion come in contact with the work. With this ***Buzzer*** engineered design, there is no direct flame impingement upon the work.

The burner

All Fire-Box furnaces are heated with our simple 57A cast iron burner. The 57A burner is equipped with the ***Buzzer*** Venturi air mixer, made in the USA of class 30 grey cast iron. Engineered for efficiency, our Venturi mixes combustion air at atmospheric pressure for the quickest and hottest flame without a blower.

Applications

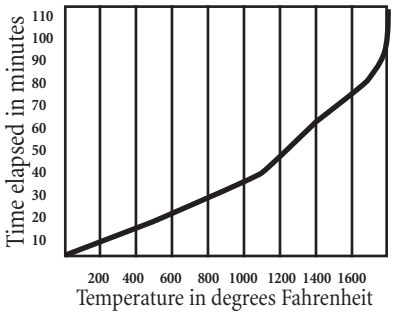
Can be used for applications up to 1,800°F.

- Often used for heat treating: hardening, annealing, pack carburizing, stress relieving, forging, or pack hardening.
- Special applications include investment casting, enameling, pre-heating, and ceramic/glass work.

2424L Fire-Box oven furnace with digital temperature control and flame safeguard package. Rated for use up to 1,800°F.

Temperature curve

Model 2424L takes 90 minutes to obtain 1,800°F when operating on natural gas at 5" w/c.



Work rate

In a separate trial, operating on natural gas at 5" w/c pressure, the 2424L took 4 hours to reach 1,725°F while loaded with 350 lbs. of cast iron. Weight included casting, charcoal, and container box for annealing application.