

Bench Top Heat Treating Furnaces



A wide range of models are offered in bench top convenience for laboratory, tool room and production applications where temperatures from 300°F to 2250°F are needed. These furnaces are used for heat treating, drawing, copper enameling, heat processing of various materials, was burn-out, mold heating, ashing, assaying, and all types of heat testing. They are heavy-duty, industrial quality furnaces.

The smaller furnaces are insulated with 2 ½ inches of insulating firebrick, backed up with 1 ½ inch of high temperature block insulation. The base is well ventilated to prevent bench damage. The instruments are mounted on the front panel for easy viewing. Full access to the controls for repair and adjustment is provided via removable side panels. The unique vertical rising door is counterbalanced and mounted on heavy steel swing arms.

The trade name Recco Furnaces is the property of W. P. Keith Co., Inc.

STANDARD FURNACE SPECIFICATIONS

MODEL:	RATING:	CHAMBER SIZE:			OUTSIDE DIMENSIONS:			STANDARD VOLTAGE:	CONNECTED POWER:	FURNACE WEIGHT:
		W	H	D	W	H	D			
R-120820-B	2250°F	12"	8"	20"	25"	28"	33"	230V / 1PH	5.0 KW	250 LB
R-121220-B	2250°F	12"	12"	20"	26"	32"	33"	230V / 1PH	5.0 KW	300 LB
R-120832-B	2250°F	12"	8"	32"	25"	28"	45"	230V / 1PH	5.0 KW	350 LB
R-120840-B	2250°F	12"	8"	40"	25"	28"	53"	230V / 1PH	8.0 KW	450 LB

All specifications are subject to change without notice.

SPECIAL FEATURES

- UL approved control system
- Safe and simple operation
- Unattended startup and shutdown
- Precise heating control
- Spare parts from stock
- Easy installation and maintenance

OPTIONS

- Independent over temperature protection
- Inert atmosphere package
- Temperature uniformity heat input control system
- Programmable controls (West setpoint controls are standard)
- Voltages: 3 Phase, 208V, 230V or 460V
- Quench Tanks
- Alloy hearth plates

HEATING ELEMENTS

In the smaller models, heavy coiled wire heating elements are installed in grooved refractory plates, which slip into grooves in the refractory lining. The plates protect the heating elements from damage while loading and unloading the furnace and provide exceptional support for the elements for long element life. In larger furnaces, the heating elements are installed in grooves within the ceramic fiber lining.



CONTROLS

All furnace controls are conveniently located in a base mounted control cabinet at a level where they are easy to view and operate. Solid-state digital indicating PID temperature controllers are used for the most precise control of temperature. All controllers are equipped with broken thermocouple protection.

PROTECTION FROM OXIDATION

Several approaches are available when parts need to be protected from oxygen. The easiest method is to wrap your parts in stainless steel heat-treating foil. A small amount of paper or charcoal can be included to consume the oxygen in the package. Likewise, you can place your parts into an alloy box containing paper or charcoal. Another approach is to insert an atmosphere of argon or nitrogen into the furnace with our optional inert atmosphere package. This eliminates most of the oxygen in the furnace, and is suitable for processing many grades of alloy.

SAFE AND SIMPLE OPERATION

Door limit switches turn off the heating elements when the door is opened. The controller safety features make these units ideal for unattended operation. With a timer or programmable controller, unattended startup and/or shutdown can be scheduled.

EASY INSTALLATION

Simply position the furnace where desired on a good level surface and ensure that the circuit breaker is suitable for the electrical load. A single electrical connection is made from your circuit breaker to the furnace.

EASY MAINTENANCE

The only maintenance your **Keith** furnace should require for many years is occasional replacement of heating elements, thermocouples and perhaps some small electrical parts. The furnaces have been designed to make all maintenance simple and fast.

The plates containing the heating elements are easily replaced from the front of the furnace. You can purchase the assembled plates or just the heating elements themselves.

All electrical parts are easily accessible in the control cabinet. A wiring diagram is provided to assist in troubleshooting.

Repair parts for your furnace are always available – even a complete refractory lining kit should you need one after many years of satisfactory operation. ***We suggest you include spare heating element plate assemblies and thermocouples with your furnace order.***

KEITH COMPANY

8323 Loch Lomond Drive
Pico Rivera, California 90660

Visit us on the web at www.KeithCompany.com

tel 562.948.3636 • fax 562.949.3696 • info@KeithCompany.com