

## Bench Top Hardening Oven -Furnace Model K-659-B



*K-659-B shown with over temp controller, embedded ceramic heating elements, viewing port - mounted on furnace stand*

Keith Bench Top Hardening Furnaces are designed for general use in the shop, laboratory, factory or school and are ideal in the manufacture and testing of metals, ceramics, glass and electronics. By bringing heat treating in-house, you can save time and money while controlling quality and avoiding minimum lot charges.

All Keith Bench Top Furnaces are made in the USA and are shipped fully assembled and ready for easy installation. Simply connect to your power source to experience the safe, dependable operation of a Keith Bench Top Hardening furnace. Available in standard and custom sizes.

### Standard features included in base package:

- Rated for 2250°F temperature
- 240 Volts, single phase, 60 Hz
- PID temperature controller Watlow [PM3E](#) with one temperature set point
- (1) type K thermocouple
- Fire brick with easy to change resistance wire heating elements
- Vertical rising counter balanced door keeps hot face away from operator (safety)
- Door safety switches disconnect power to heating elements when door is opened
- Door with ceramic fiber rope seal for better temperature uniformity
- Variety of options available to better meet your specific heat processing requirements

**Options, Accessories & Spare Parts:**

- Upgrade to 2400°F maximum temperature package
  - PID temperature controller Watlow [PM4E](#) (4 programs, 10 steps, timer)
  - PID temperature controller Watlow [F4](#) (40 programs, 256 steps, timer)
  - Other PID controllers upon request; please specify (Eurotherm, West, etc.)
- 
- High limit/over temperature protection (includes controller and thermocouple)
  - Honeywell eZtrend Recorder for data collection and transfer
  - Electrical other than standard 240 Volt, single phase, 60 Hz
  - Steel Bench Top furnace stand
  - Viewing port
  - Roll away quench tank
  - Stainless Steel Exhaust Hood with mounting brackets
  - 2-inch stainless steel inert gas inlet port
  - Ceramic cement embedded element plate assemblies for heating element protection
  - Spare parts package for installation of new furnaces
  - AMS 2750 / NADCAP package



*Watlow PID Controller*



*Eurotherm 2404 Controller*



*West 4400 Controller*



*Honeywell Recorder*



*Exhaust hood*



*Wire Element Plate*



*Roll away quench tank*



*Furnace Stand*

**Spare and replacement parts:**

- Resistance coil wire elements and coil wire element plate assemblies
- Thermocouples
- Furnace and Kiln furniture
- Crucibles for metal and glass melting
- Stainless steel heat treat tool wrap to minimize oxidation of ferrous metals during heating



*Thermocouples*



*Stainless steel tool wrap*



*Furnace & Kiln Furniture*



*Alumina crucibles*

**List of our standard models**

Custom sizes are also available to fit your application. Please request a quote by phone or email and we will provide additional information.

Keith Model #	Chamber Size W	Chamber Size L	Chamber Size H	Overall Size W	Overall Size L	Overall Size H	Max intermittent Temperature	Max continuous Temperature	KW INPUT	Weight Lbs.
K-659-B	6.5"	9"	5.5"	15.5"	17.5"	22"	2250° F	2000° F	1.6	100
K-8610-B	8.5"	10"	6.5"	15.5"	17"	22"	2000° F	1800° F	1.4	100
K-120813-B	11.5"	13"	8"	23.5"	26.5"	27"	2250° F	2000° F	3.2	200
K-110813-B	11"	13"	8"	23.5"	26.5"	27"	2250° F	2000° F	3.8	200
K-120820-B	12"	20"	8"	25"	34"	28"	2250° F	2000° F	6.2	300
K-120832-B	12"	32"	8"	25"	45"	28"	2250° F	2000° F	6.2	425
K-120840-B	12"	40"	8"	25"	54"	28"	2250° F	2000° F	12.5	600
K-121220-B	12"	20"	12"	25"	34"	32"	2250° F	2000° F	6.2	450
K-161020-B	16"	20"	10"	29"	34"	31"	2250° F	2000° F	9.4	400
K-161220-B	16"	20"	12"	29"	34"	33"	2250° F	2000° F	9.4	450
K-161032-B	16"	32"	10"	29"	46"	31"	2250° F	2000° F	12.5	500
K-161232-B	16"	32"	12"	29"	46"	33"	2250° F	2000° F	12.5	550
K-181822-B	18"	22"	18"	35"	49"	49"	2250° F	2000° F	14.5	700
K-181824-B	18"	24"	18"	35"	51"	49"	2250° F	2000° F	14.5	750

8323 Loch Lomond Drive  
 Pico Rivera, California  
 90660-2588, USA  
 Phone (562) 948-3636  
 Fax (562) 949-3696  
**www.KeithCompany.com**  
 info@KeithCompany.com