

Dual Chamber Heat Treat Furnace Models

These standard dual chamber furnaces feature an upper chamber for hardening and a lower chamber for tempering. The two chambers allow for immediate tempering or drawing after quench without waiting for the hardening chamber to cool down to the lower temperature required.



*K-121220-D shown with
quench tank*

*K-121220-D shown with inert gas
flow control instrumentation*

This type of furnace construction requires a minimum of floor space. The upper door rises vertically so the hot face is away from the operator, while the lower chamber door is a hinge type construction. The lower furnace chamber is equipped with a high temperature fan for improved temperature uniformity. A quench tank can be stored under the lower furnace chamber and can be rolled out when needed.

Each furnace chamber has its own temperature control, thermocouple and solid state relay for power switching. The resistance coil wire wound heating elements are placed into a grooved ceramic plate which makes them easy to replace. Ports for inert protective gas atmosphere can be installed. For further oxidation protection, parts can be wrapped into heat treat foil.



Model K-181836-D

Our experts are very familiar many types of specifications, among them AMS 2750E and NADCAP requirements.

Standard features included in base package:

- Upper chamber rated for maximum 2250°F temperature
- Lower chamber rated for maximum 1250°F temperature
- 240 Volts, single phase, 60 Hz
- Each chamber equipped with an PID temperature controller Watlow [PM3E](#) with one temperature set point
- (1) type K thermocouple per chamber
- Fire brick with easy to change resistance coil wire heating elements
- Vertical rising counter balanced door on upper chamber keeps hot face away from operator (safety)
- Door safety switches disconnect power to heating elements when doors are opened
- Both doors have 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 for upper chamber
 - Upgrade to 2000°F maximum temperature package for lower chamber
 - 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 for each chamber (includes controller and thermocouple)
 - Honeywell eZtrend Recorder for data collection and transfer
 - Electrical other than standard 240 Volt, single phase, 60 Hz
 - 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



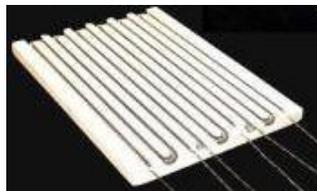
West 4400 Controller



Honeywell Recorder



Exhaust hood



Wire Element Plate



Roll away quench tank

Spare and replacement parts:

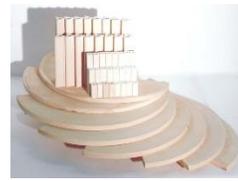
- Resistance coil wire elements and coil wire element plate assemblies
- Thermocouples
- Furnace and Kiln furniture
- Crucibles for metal and glass melting
- Stainless steel heat treat tool wrap to minimize oxidation of ferrous metals during heating



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	Lower Chamber Size W	Lower Chamber Size L	Lower Chamber Size H	Overall Size W	Overall Size L	Overall Size H	Max intermittent Temperature	Max continuous Temperature	KW Input	Weight Lbs.
K-110813-D	10.5"	13"	8"	10.5"	10"	8"	25"	35"	45"	2250° F	1250° F	8.3	400
K-120820-D	12"	20"	8"	12"	17"	8"	38"	48"	57"	2250° F	1250° F	10.6	800
K-121220-D	12"	20"	12"	12"	17"	12"	38"	48"	65"	2250° F	1250° F	10.6	950
K-120832-D	12"	32"	8"	12"	29"	12"	36"	50"	56"	2250° F	1250° F	10.6	900
K-120840-D	12"	40"	8"	12"	37"	8"	36"	58"	56"	2250° F	1250° F	20.5	1400
K-161032-D	16"	32"	10"	16"	29"	10"	43"	60"	62"	2250° F	1250° F	20.5	1400
K-161232-D	16"	32"	12"	16"	29"	12"	43"	60"	66"	2250° F	1250° F	20.5	1400
K-151520-D	15"	20"	15"	15"	15"	15"	33"	46"	67"	2250° F	1250° F	20	2000
K-181824-D	18"	24"	18"	18"	19"	18"	36"	50"	70"	2250° F	1250° F	28	2500
K-181836-D	18"	36"	18"	18"	31"	18"	53"	72"	89"	2250° F	1250° F	40	3200
K-181848-D	18"	48"	18"	18"	43"	18"	53"	84"	89"	2250° F	1250° F	44	4000

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