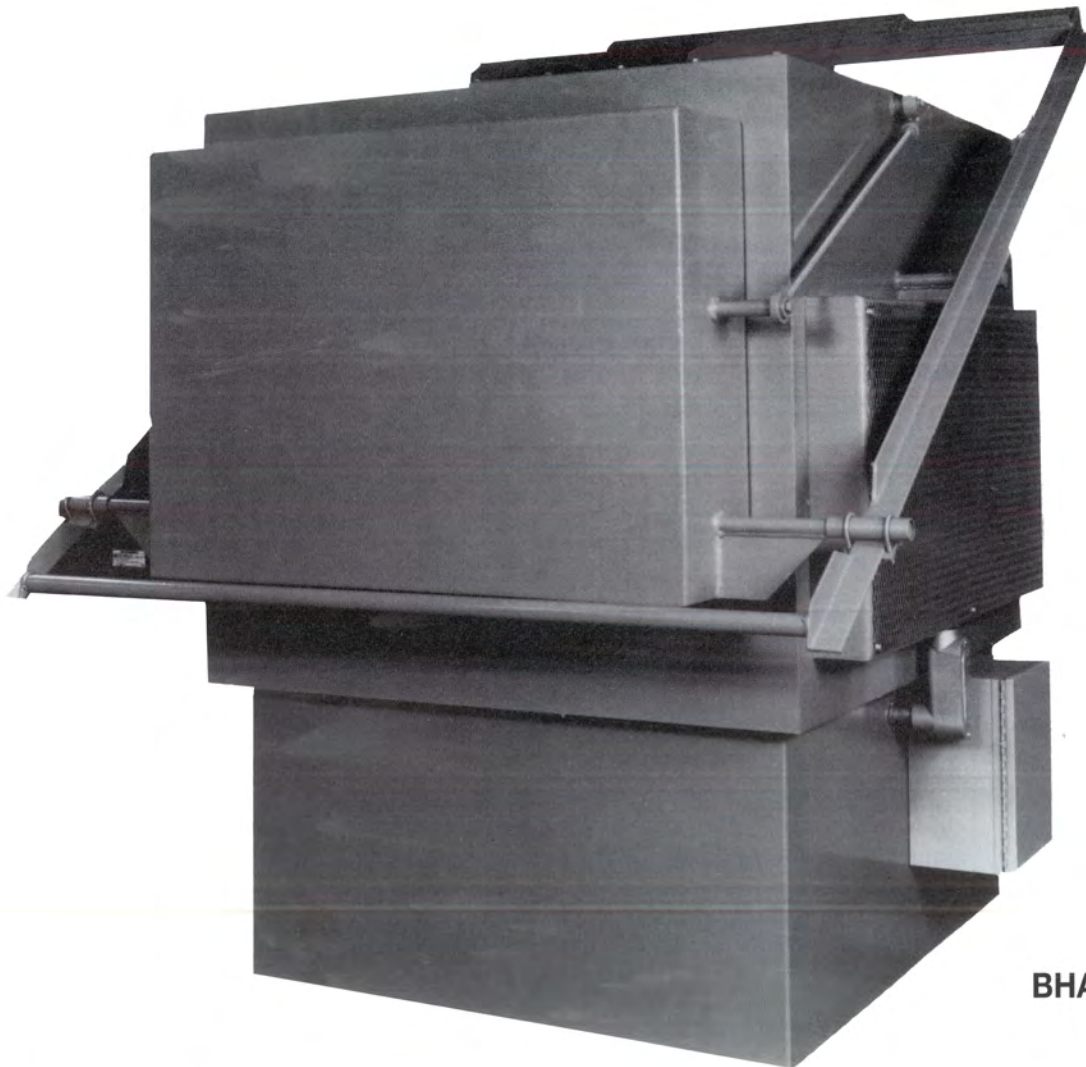




**Thermcraft**  
Incorporated

## SERIES BHAF GENERAL PURPOSE BOX FURNACES

MEETS MILITARY SPECIFICATION  
MIL-F-80258A



2000°F or 2200°F

Heats to operating  
temperature in less  
than one hour.

Temperature  
uniformity  $\pm 10^\circ\text{F}$

**MODEL**  
**BHAF-181836-1093**

Rugged simplicity and conservative design make this a very versatile and trouble-free heat treating furnace for operations above 1200°F with an air atmosphere.

•For heat treatment of aluminum - use one of Thermcraft's forced convection furnaces.

# SPECIFICATIONS

**SHELL:** Continuously welded 3/16" plate steel and heavy structural steel members assure furnace's structural integrity under all operating conditions. Front frame is 1/2" thick to preclude thermal warpage.

**INSULATION:** Wall and roof insulation of layered ceramic fiber blanket with low thermal mass. Door uses edge-stacked fiber insulation to prevent lamination failure caused by frequent door operations. Floor and entrance vestibule sides are insulating firebrick for mechanical strength. Blanket insulation is 9" thick. Resultant shell temperature is less than 120°F above ambient.

**HEARTH:** Silicon carbide flat plates, 1" thick for smaller furnaces, 1-1/2" thick for most. Hearth plates are placed on elevating piers to allow heating element placement below.

**DOOR:** Manually operated, counterweighted and self-aligning. Door can be lifted with one hand on even the largest furnace. A safety switch shuts element power off when the door is opened.

**HEATING ELEMENTS:** Nickel/chrome\* alloy resistance wire supported in hard refractory plate. Elements are suspended on the side walls and placed under the hearth. Power density is less than 15 watts per square inch assuring a long lifetime and even heat distribution. Ceramic holders keep the elements away from side wall insulation to aid heat flow and thermal uniformity.

\*2220°F version uses iron/chrome/aluminum alloy

**POWER CONTROLS:** Magnetic contactor with voltage reducing power transformer on most models, mounted below the furnace. A second magnetic contactor is operated by a high limit controller as a safety back-up.

**INSTRUMENTATION:** Many types and brands available. These are quoted separately to meet specific user requirements. Instruments can be mounted and prewired on the furnace itself, or in a separate wall or floor mount enclosure for user's connection to the furnace.

**OPTIONS:** a) quench tanks  
b) forced cooling, manual or automatic  
c) SCR power controls, zero or phase fired  
d) power operated door, pneumatic or electric

MODEL	CHAMBER			OVERALL			KW	VOLTAGE	PHASE	WEIGHT (LBS.)
	H"	W"	L"	H"	W"	L"				
BHAF-121530-1093	12"	15"	30"	66"	62"	62"	18	230 or 460	3	3,500
BHAF-122430-1093	12"	24"	30"	74"	70"	66"	30	230 or 460	3	4,000
BHAF-181836-1093	18"	18"	36"	74"	64"	70"	36	230 or 460	3	4,000
BHAF-182436-1093	18"	24"	36"	74"	70"	70"	36	230 or 460	3	5,000
BHAF-182442-1093	18"	24"	42"	74"	70"	78"	40	230 or 460	3	5,500
BHAF-182448-1093	18"	24"	48"	74"	70"	84"	45	230 or 460	3	6,000
BHAF-182460-1093	18"	24"	60"	74"	70"	96"	55	230 or 460	3	6,500
BHAF-202036-1093	20"	20"	36"	74"	66"	70"	40	230 or 460	3	4,500
BHAF-203660-1093	20"	36"	60"	74"	82"	96"	75	230 or 460	3	7,000
BHAF-203672-1093	20"	36"	72"	74"	82"	110"	90	230 or 460	3	7,500
BHAF-242448-1093	24"	24"	48"	76"	70"	84"	54	230 or 460	3	6,500
BHAF-243642-1093	24"	36"	42"	76"	82"	78"	65	230 or 460	3	7,000
BHAF-243660-1093	24"	36"	60"	76"	82"	96"	85	230 or 460	3	7,500
BHAF-243672-1093	24"	36"	72"	76"	82"	110"	105	230 or 460	3	8,500
BHAF-363648-1093	36"	36"	48"	86"	82"	84"	70	230 or 460	3	7,000
BHAF-363660-1093	36"	36"	60"	86"	82"	96"	90	230 or 460	3	9,500
BHAF-363672-1093	36"	36"	72"	86"	84"	106"	105	230 or 460	3	11,000
BHAF-484872-1093	48"	48"	72"	96"	96"	106"	135	230 or 460	3	12,500

\*2200°F version uses suffix 1204

## SERIES BHAF-1093 HEAT TREAT FURNACES



**Thermcraft**  
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Effective 12/1/93 area code will be (910)