CARBOLITE®
a VERDER company




## HIGH TEMPERATURE BOTTOM LOADING FURNACE

# BLF

www.carbolite.com/products/chamber-furnaces/laboratory-furnaces/blf-high-temperature-bottom-loading-furnaces/

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# HIGH TEMPERATURE BOTTOM LOADING FURNACE

**BLF bottom loading furnaces use an electrically operated elevator hearth, which as it rises into the furnace chamber, lifts the load into the heated zone.**

This furnace provides the following advantages: easy loading of samples and uniform heating achieved by locating elements in all six side walls of the chamber.

The 1600 °C is ideal for sintering of zirconia dental crowns and frameworks. The silicon carbide heating elements will not cause discolouration of the zirconia.



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# STANDARD FEATURES



- 1600°C, 1700°C & 1800°C maximum operating temperature
- 3 to 21 litre capacities
- Programmable EPC3016P1 controller
- Ideal for: sintering high performance ceramics, melting glass under high temperature or working with modified atmospheres
- Rapid heating & cooling cycles can be achieved through raising & lowering the hearth
- Electrically operated elevator hearth protects operator from the chamber's radiant heat
- Hearth cage with safety interlock
- Excellent temperature uniformity as a result of the hexagonal chamber
- Overtemperature protection to protect load or furnace during unattended operation
- 1600 °C model heated by silicon carbide elements
- 1700 °C & 1800 °C models heated by molybdenum disilicide elements
- Ethernet communications



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# OPTIONS (SPECIFY THESE AT TIME OF ORDER)

- A range of sophisticated digital controllers, multisegment programmers and data loggers with digital communication options is available – more information about controllers: www.carbolite.com/products/control-options/
- Compatible crucibles
- Modified hearth for the introduction of gases into an inverted crucible (not gas tight)
- Radiation shutter
- Customised options including: adaptation to introduce thermocouple or stirrer through the chamber roof and rotating hearth
- Plasma sprayed alumina protection tube to protect heating elements from sample contamination

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# EXAMPLES




BLF 17/3 with CC-T1 controller




BLF 18/8 with inverted crucible, gas flowmeter and radiation shutter options

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# TECHNICAL DATA



| Model | BLF 16/3 | BLF 17/3 | BLF 17/8 | BLF 17/21 | BLF 18/3 | BLF 18/8 |
|---|---|---|---|---|---|---|
| **Max temp (°C)** | 1600 | 1700 | 1700 | 1700 | 1800 | 1800 |
| **Heat-up time (mins)** | 80 | 80 | 80 | 180 | 112 | 110 |
| **Dimensions: Internal H x Diameter (mm)** | 190 x 150 | 190 x 150 | 250 x 200 | 300 x 300 | 190 x 150 | 250 x 200 |
| **Dimensions: External H x W x D (mm)** | 1025 x 750 x 530 | 975 x 750 x 530 | 1950 x 1360 x 800 | 1850 x 1250 x 900 | 975 x 750 x 530 | 1950 x 1360 x 800 |
| **Configuration** | Bench-top | Bench-top | Floor-standing | Floor-standing | Bench-top | Floor-standing |
| **Volume (litres)** | 3 | 3 | 8 | 21 | 3 | 8 |
| **Max power (W)** | 6000 | 4125 | 8130 | 12000 | 4775 | 7010 |
| **Thermocouple type** | R | B | B | Pt20%Rh/ Pt40%Rh | 2 | Pt20%Rh/ Pt40%Rh |
| **Weight (kg)** | 155 | 155 | 424 | 600 | 155 | 424 |

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www.carbolite.com/contact-services/contact-form/?prefilltext=contact_form.request&product=C-3-UCF-C

## REQUEST A QUOTE →

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