



## STATIC OR BOGIE CHAMBER FURNACE - SBCF

**The robust construction of the SBCF large chamber furnace makes it ideal for applications such as the heat treatment of steels and alloys, ceramics sintering and aerospace heat treatment.**

The SBCF chamber furnace is an industrial scale furnace based on a modular design principle which can be adapted to various applications. The furnace chamber is cubic in shape and is available in three sizes.

The furnace has a side hinged door and a fixed hearth. As an option the hearth can be fitted to a bogie so it can be pulled out of the furnace on a track system. This hearth design technique also allows the furnace to be easily adapted to a vertical lift arrangement to provide an elevator hearth, in which case the door would become a fixed side of the chamber.

Under hearth heating and free radiating coiled wire elements on four sides. This design provides the option of single and 3-zone temperature control and for applications demanding the best uniformity possible, such as AMS 2750F (this can be combined with an optional air circulation fan).

The construction uses low thermal mass insulation materials to maximise running efficiency whilst using robust refractory materials where physical strength is required such as the loading area of the hearth. Silicon carbide (SiC) tiles are fitted on the hearth to provide a hard wearing surface.

## STANDARD FEATURES

- | 1100 °C maximum operating temperature
- | 3-zone control fitted with 1 x programmable EPC3008P1 and 2 x EPC3016 slaves with retransmission of setpoint
- | Over-temperature protection
- | Furnace can meet the requirements of AMS2750F
- | Under hearth heating and free radiating coiled wire elements on four sides
- | Excellent temperature uniformity and control
- | Robust construction ensures safe outer case temperature
- | Double skin construction ensures safe outer case temperature
- | Hard wearing silicon carbide tiled hearth

## OPTIONS (*SPECIFY THESE AT TIME OF ORDER*)

- | Temperature interlocked door
- | Bogie hearth
- | Vertical air circulation fan
- | Available with various instrumentation and data acquisition options

## TECHNICAL DETAILS (MODELS)

	<b>SBCF-3/11/500</b>	<b>SBCF-3/11/1700</b>	<b>SBCF-3/11/3300</b>
<b>Max temp (°C)</b>	1100	1100	1100
<b>Number of heated zones</b>	Three zone	Three zone	Three zone
<b>Dimensions: External H x W x D (mm) with fan</b>	2353 x 1710 x 1354	2753 x 2110 x 1754	3053 x 2410 x 2054
<b>Dimensions: External H x W x D (mm) without fan</b>	2130 x 1710 x 1354	2530 x 2110 x 1754	2830 x 2410 x 2054
<b>Volume (litres)</b>	512	1728	3375
<b>Chamber size (mm)</b>	800 x 800 x 800	1200 x 1200 x 1200	1500 x 1500 x 1500
<b>Uniform volume (mm)</b>	600 x 600 x 600	1000 x 1000 x 1000	1300 x 1300 x 1300
<b>Temp uniformity (°C)</b>	±5	±5	±5
<b>Max power (W)</b>	54000	96000	144000

**Please note**

- Maximum continuous operating temperature is 100 °C below maximum temperature

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