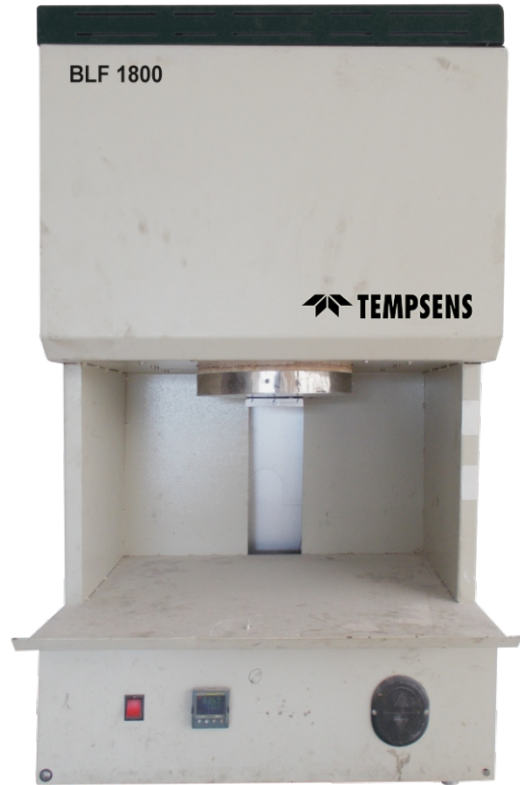


Bottom loading furnaces are designed for uniform thermal distribution inside the chamber, easy loading and unloading of sample with help of lifting arrangement. Bottom loading furnaces are ideal to achieve a variety of heating-cooling cycles without sacrificing temperature uniformity or product quality. These furnaces are well suited for calcining, firing and sintering oxide ceramic parts (i.e., alumina, zirconia), technical ceramics, co-fired substrate materials, capacitors, filters, thermistors, ferrites.

The high-temperature bottom loading furnaces are perfectly suited for sintering translucent zirconia. The motor-driven lifting table significantly simplifies the charging of the high-temperature furnace. The all-around heating of the cylindrical furnace chamber ensures a very even temperature uniformity.

The high-temperature bottom loading furnaces are additionally equipped with a drying as well as a forced cooling function. For residual drying, the oven remains open gapwise during heating up to a defined temperature and thus ensures reliable removal of moisture. For accelerated cooling, the furnace is automatically opened step by step under program control.



Tempsens is ISO and CE certified Laboratory & Industrial furnace manufacturers and suppliers. Tempsens provide range general purpose High Temperature Bottom Loading Furnace in three temperature ranges i.e. 1200°C, 1500°C & 1800°C

## Technical Specification

S.No.	Description	Value
1	Max temp (°C)	1200/1400/1600/1800 deg c
2	Max operating temp (°C)	1200/1400/1600/1800 deg c
3	Heating Element	Kanthal A1/Silicon Carbide/MoSi2
4	Temperature Controller	Microprocessor based PID controller
5	External Chamber Construction	MS Powder Coated / 304 Grade Stainless Steel (Optional)
6	Internal Chamber Construction	Vacuum formed ultra high purity alumina low thermal mass insulation with pre sintered fiber insulation board for maximum energy saving design
7	Bottom lifting arrangement	Bottom lifting plate fitted with DC motor ensure smooth lifting & lowering.
8	Temperature Accuracy	+/- 1 Deg C

## Standard features

- 1800°C maximum operating temperature.
- Bottom lifting arrangement: Bottom lifting plate fitted with DC Motor ensure smooth lifting & lowering
- Advance refractory interior, used in combination with energy efficient low thermal mass insulation.
- Door Lifting limit switch for making heating system off while in open condition.
- Over-temperature limiter with adjustable cutout temperature for thermal protection class 2 in accordance with EN 60519-2 as temperature limiter to protect the furnace and load.
- Equipped with thermocouple break protection that help preventing thermocouple failure run away.
- Exhaust air outlet at rear wall of the furnace.
- Power control through Solid state relay or Thyristor unit provides low noise operation.
- Thermocouple with NABL Certificate.

## Other Features

- ✓ Simple Installation
- ✓ Hassle free operation
- ✓ Automatic Temperature Control
- ✓ Easy Maintenance
- ✓ Spare part available at stock
- ✓ Rugged construction for long run
- ✓ Heating element from KANTHAL/I Squared R brand
- ✓ Dual Shell housing for low skin temperature.

## Optional Accessories

- ✓ Gloves
- ✓ Heating Element
- ✓ Tongs

## Optional Features

- ✓ Provision for gas/vacuum purging application (Ar, N<sub>2</sub>, O<sub>2</sub>, CO<sub>2</sub> etc.)
- ✓ Available in standard or as per customer size requirement
- ✓ Programmable PID Controller with RS-232/RS-485/Ethernet & Data Logging Software.

Model	Maximum Temperature(°C)	Internal Dimension* (HXWXD) (mm)	External Dimension (HXWXD) (mm)	Controlling Thermocouple	Heating Element
BLF - 1200	1200	120X120X 120	1010X 600X595	N	Kanthal A1
BLF - 1500	1500	*Customized chamber size available on request	1010X 600X595	R	MoSi2
BLF - 1800	1800		1010X 600X595	B	MoSi2

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