Combi High-Temperature Furnace LHT 08/17 BO up to 1750 °C with Integrated Catalytic Post Combustion

The combi furnace LHT 08/17 BO complements the muffle furnaces L ../11 BO (see page 14) and provides a solution for debinding/ashing processes up to 600 °C with subsequent sintering processes at high temperatures. Specified with a maximum temperature of 1750 °C, the LHT 08/17 BO can be used for process temperatures up to 1700 °C. The compact size of the furnace makes it ideal for research and development applications but also for debinding and sintering of small additively manufactured components. The furnace can also be used to determine loss on ignition where, after the ashing process, the samples must be treated at temperatures above 1050 °C.

The combi furnace LHT 08/17 BO has a passive safety system with integrated exhaust gas post combustion. Fresh air is fed through the back of the furnace via an exhaust gas fan so that there is always sufficient oxygen available for the process. The incoming air is guided past the furnace heating and preheated which ensures good temperature uniformity. At the same time, exhaust gases are extracted from the furnace to the integrated post combustion system, where they are incinerated and catalytically cleaned.

Combi furnace LHT 08/17 BO

Standard Design

- Tmax 1750 °C
- Tmax 600 °C for the debinding/ashing process
- Recommended maximum working temperature approx. 50 °C below Tmax of the furnace. Higher working temperatures will increase wear and tear.
- Heating from two sides
- Spring-supported door closing (lift door) with mechanical lock to prevent unintended opening
- Thermal/catalytic post combustion in the exhaust air duct, to max. 600 °C furnace temperature in operation
- Temperature control of post combustion adjustable to 850 °C
- Fresh air preheated by additional heating element on the back wall of the furnace chamber
- Controller with touch operation P580 (50 programs each with 40 segments), for a description of the controls see page 84

Model	Tmax	Inner dimensions in mm			Volume	Outer dimensions[2] in mm			Max. loading weight of organic substances	Max. evaporation rate of organic substances	Connected load[4]	Electrical	Weight
	in °C[1]	w	d	h	in l	W	D	H[3]	in g	g/min	in kW	connection*	in kg
LHT 08/17 BO	1750	150	250	150	6	530	705	695	75	1	14.3	3-phase	90

[1]Tmax 600 °C for the debinding/ashing process
[2]External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.
[3]Including exhaust tube (Ø 80 mm)
[4]The connected load refers to the standard furnace and may increase for a furnace with additional equipment. For furnaces with connection options for multi-range voltages, the connected load applies to the highest permissible connected voltage.

*Please see page 84 for more information about supply voltage

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High-temperature heating in furnace chamber

Schematic representation of the air flow in combi furnace LHT 08/17 BO