High-Temperature Lift-Bottom Furnaces



LHT 02/17 LB with a set of saggars





Electrically driven lift-bottom



Saggar

LHT/LB

The electrically driven lift-bottom considerably allows for proper charging of the LHT/LB furnaces. The heating all around the cylindrical furnace chamber provides for an opitimal temperature uniformity. For model LHT 02/17 LB the charge can be placed in charge saggars made of technical ceramics. Up to three charge saggars can be stacked on top of each other resulting in a high productivity. Due to its volume model LHT 16/17 LB can also be used for applications in production.

- Tmax 1700 °C
- High-quality molybdenum disilicide heating elements
- Furnace chamber lined with first-class, durable fiber materials
- Outstanding temperature uniformity due to all-round furnace chamber heating
- Furnace chamber with a volume of 2 or 16 liters, table with large floor space
- Spacers to lift-up the saggars already installed in the table
- Precise, electric spindle drive with push button operation
- Housing made of sheets of textured stainless steel
- Exhaust air vent in the roof
- Type S thermocouple
- Switchgear with thyristor
- Controls description see page 60



Additional equipment

- Over-temperature limiter with manual reset for thermal protection class 2 in accordance with EN 60519-2 as temperature limiter to protect the furnace and load
- Saggar for charging of up to three layers see page 12
- Protective gas connection to purge with non-flammable protective or reaction gases
- Manual or automatic gas supply system
- Adjustable air inlet through the floor
- Process control and documentation with Controltherm MV software package see page 63

Model	Tmax	Inner dimensions in mm		Volume	Outer dimensions in mm			Connected Electrical		Weight
	°C	Ø	h	in I	W	D	Н	load kW	connection*	in kg
LHT 02/17 LB	1700	Ø 120	130	2	540	610	740	3.3	1-phase	85
LHT 16/17 LB	1700	Ø 260	260	16	650	1250	1980	12.0	3-phase	410

*Please see page 60 for more information about supply voltage

High-Temperature Furnaces with Scale for Determination of Combustion Loss and Thermogravimetric Analysis (TGA)



LHT 04/16 SW with scale for measuring weight reduction during annealing and with gas supply system

*Please see page 60 for more information about supply voltage

LHT 04/16 SW and LHT 04/17 SW

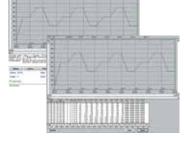
These furnaces were specially developed to determine combustion loss during annealing and for thermogravimetric analysis (TGA) in the lab. The complete system consists of the high-temperature furnace for 1600 °C or 1750 °C, a table frame, precision scale with feedthroughs into the furnace and powerful software for recording both the temperature curve and the weight loss over time.

- Technical description of the furnaces: see models LHT 04/16 and LHT 04/17 page 19
- Description of the weighing system: see models L 9/... SW page 11

Model	Tmax	Inner dimensions in mm			Volume	Volume Outer dimensions in mm				onnected Electrical Weig		
	°C	w	d	h	in I	W	D	Н	load kW	connection*	in kg	to Tmax ²
LHT 04/16 SW	1600	150	150	150	4	655	370	890	5.0	3-phase ¹	85	25
LHT 04/17 SW	1750	150	150	150	4	655	370	890	5.0	3-phase ¹	85	40

¹Heating only between two phases

² If connected	at 230	V 1	1/N/PI	E rsp.	400	V 3	/N/PE



Software for documentation of the temperature curve and combustion loss using a PC