High-Temperature Furnaces with Molybdenum Disilicide Heating Elements up to 1800 °C

Designed as tabletop models, these compact high-temperature furnaces have a variety of advantages. The first-class workmanship using high-quality materials, combined with ease of operation, make these furnaces all-rounders in research and the laboratory. These high-temperature furnaces are also perfectly suited for the sintering of technical ceramics, such as zirconium oxide dental bridges.



High-temperature furnace LHT 02/17

Standard Equipment

- Tmax 1600 °C, 1750 °C, or 1800 °C
- Recommended working temperature 1750 °C (for models LHT ../18), increased wear and tear must be expected in case of working at higher temperatures
- High-quality heating elements made of molybdenum disilicide offer very good protection against chemical interaction between charge and heating elements
- Adjustable air inlet opening
- Exhaust air opening in the roof
- Thermocouple type B or type S (LHT ../17 D)
- Controller with touch operation P580 (50 programs with each 40 segments), controls description see page 84



High-temperature furnace LHT 01/17 D

Additional Equipment

- Over-temperature limiter with adjustable cutout temperature as temperature limiter to protect the furnace and load
- Port for thermocouple in the furnace roof
- Protective gas connection to purge with non-flammable process, not gas tight
- Manual or automatic gas supply system
- Stackable saggars for loading in up to two or three levels, depending on model



High-temperature furnace LHT 03/17 D



High-temperature furnace LHT 08/18

Model	Tmax	Inner dimensions in mm			Volume	Outer dimensions[1] in mm			Connected	Electrical	Weight	Heating time
	in °C	w	d	h	in l	W	D	H[2]	load[5] in kW	connection*	in kg	in min[3]
LHT 02/16	1600	130	145	130	2	430	450	570+325	3.40	1-phase	33	28
LHT 04/16	1600	160	175	160	4	450	475	610+335	3.40	1-phase	39	50
LHT 08/16	1600	200	200	200	8	500	500	650+370	6.70	3-phase[4]	47	33
LHT 01/17 D	1650	110	120	120	1	385	425	525+195	1.95	1-phase	28	27
LHT 03/17 D	1650	135	135	200	4	412	450	595+300	2.70	1-phase	38	57
LHT 02/17	1750	130	145	130	2	430	450	570+325	3.40	1-phase	33	46
LHT 04/17	1750	160	175	160	4	450	475	610+335	3.40	1-phase	39	90
LHT 08/17	1750	200	200	200	8	500	500	650+370	6.70	3-phase[4]	47	50
LHT 02/18	1800	130	145	130	2	430	450	570+325	3.40	1-phase	33	56
LHT 04/18	1800	160	175	160	4	450	475	610+335	3.40	1-phase	39	106
LHT 08/18	1800	200	200	200	8	500	500	650+370	6.70	3-phase[4]	47	60

[1]External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.
[2]Including opened lift door
[3]Heating time of the empty and closed furnace up to Tmax –100 K (connected to 230 V 1/N/PE rsp. 400 V 3/N/PE)
[5]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
[4]Heating only between two phases



Saggars with top lid



Furnace chamber with high-quality fiber materials and heating elements made of molybdenum disilicide on both sides



Example of an over-temperature limiter