

## Chamber Furnaces with Brick Insulation or Fiber Insulation



Chamber furnace LH 30/14



Chamber furnace LH 216/12SW with scale to measure weight reduction during annealing



LF furnace design provides for shorter heating and cooling times

The chamber furnaces LH 15/12 - LF 120/14 have been trusted for many years as professional chamber furnaces for the laboratory. These furnaces are available with either a robust insulation of light refractory bricks (LH models) or with a combination insulation of refractory bricks in the corners and low heat storage, quickly cooling fiber material (LF models). With a wide variety of optional equipment, these chamber furnaces can be optimally adapted to your processes.

- Tmax 1200 °C, 1300 °C, or 1400 °C
- Dual shell housing with rear ventilation, provides for low shell temperatures
- High furnace chamber with five-sided heating for very good temperature uniformity
- Heating elements on support tubes ensure free heat radiation and a long service life
- Controller mounted on furnace door and removable for comfortable operation
- Protection of bottom heating and flat stacking surface provided by embedded SiC plate in the floor
- LH models: multi-layered insulation of light refractory bricks and special backup insulation
- LF models: high-quality fiber insulation with corner bricks for shorter heating and cooling times. Only fiber materials are used which are not classified as carcinogenic according to TRGS 905, class 1 or 2.
- Door with brick-on-brick seal, hand fitted
- Short heating times due to high installed power
- Self-supporting arch for high stability and greatest possible protection against dust
- Quick lock on door
- Motor driven exhaust air flap
- Freely adjustable air inlet integrated in furnace floor
- Base included
- Defined application within the constraints of the operating instructions
- NTLog Basic for Nabertherm controller: recording of process data with USB-flash drive
- Controls description see page 72



Gas supply system for non-flammable protective or reactive gas with shutoff valve and flow meter with regulator valve, optionally with magnetic valve



Chamber furnace LF 60/14 with fresh air fan to accelerate the cooling times

#### Additional equipment

- Parallel swinging door, pivots away from operator, for opening when hot
- Lift door with electro-mechanic linear drive
- Separate wall-mounting or floor standing cabinet for switchgear
- Cooling fan for shorter cycle times
- Protective gas connection to purge with non-flammable protective or reaction gases
- Manual or automatic gas supply system
- Scale to measure weight reduction during annealing
- Process control and documentation via VCD software package or Nabertherm Control Center (NCC) for monitoring, documentation and control see page 75



Chamber furnace LH 30/12 with manual lift door

Model	Tmax °C	Inner dimensions in mm			Volume in l	Outer dimensions <sup>2</sup> in mm			Connected load kW	Electrical connection*	Weight in kg
		w	d	h		W	D	H			
LH 15/12	1200	250	250	250	15	680	860	1230	5.0	3-phase <sup>1</sup>	170
LH 30/12	1200	320	320	320	30	710	930	1290	7.0	3-phase <sup>1</sup>	200
LH 60/12	1200	400	400	400	60	790	1080	1370	8.0	3-phase	300
LH 120/12	1200	500	500	500	120	890	1180	1470	12.0	3-phase	410
LH 216/12	1200	600	600	600	216	990	1280	1590	20.0	3-phase	450
LH 15/13	1300	250	250	250	15	680	860	1230	7.0	3-phase <sup>1</sup>	170
LH 30/13	1300	320	320	320	30	710	930	1290	8.0	3-phase <sup>1</sup>	200
LH 60/13	1300	400	400	400	60	790	1080	1370	11.0	3-phase	300
LH 120/13	1300	500	500	500	120	890	1180	1470	15.0	3-phase	410
LH 216/13	1300	600	600	600	216	990	1280	1590	22.0	3-phase	460
LH 15/14	1400	250	250	250	15	680	860	1230	8.0	3-phase <sup>1</sup>	170
LH 30/14	1400	320	320	320	30	710	930	1290	10.0	3-phase <sup>1</sup>	200
LH 60/14	1400	400	400	400	60	790	1080	1370	12.0	3-phase	300
LH 120/14	1400	500	500	500	120	890	1180	1470	18.0	3-phase	410
LH 216/14	1400	600	600	600	216	990	1280	1590	26.0	3-phase	470
LF 15/13	1300	250	250	250	15	680	860	1230	7.0	3-phase <sup>1</sup>	150
LF 30/13	1300	320	320	320	30	710	930	1290	8.0	3-phase <sup>1</sup>	180
LF 60/13	1300	400	400	400	60	790	1080	1370	11.0	3-phase	270
LF 120/13	1300	500	500	500	120	890	1180	1470	15.0	3-phase	370
LF 15/14	1400	250	250	250	15	680	860	1230	8.0	3-phase <sup>1</sup>	150
LF 30/14	1400	320	320	320	30	710	930	1290	10.0	3-phase <sup>1</sup>	180
LF 60/14	1400	400	400	400	60	790	1080	1370	12.0	3-phase	270
LF 120/14	1400	500	500	500	120	890	1180	1470	18.0	3-phase	370

<sup>1</sup>Heating only between two phases

\*Please see page 73 for more information about supply voltage

<sup>2</sup>External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.



Parallel swinging door for opening when hot