

Chamber Furnaces for Annealing, Hardening and Brazing up to 1280 °C

To withstand harsh use in the laboratory, e.g. when heat-treating metals, robust insulation with light refractory bricks is necessary. The chamber furnaces N 7/H - N 87/H are a perfect fit to solve this problem. The furnaces can be extended with a variety of accessories, like annealing boxes for operation under protective gas, roller guides, or a cooling station with a quench tank. Even high-performance applications like the annealing of titanium in medical applications can be implemented without the use of expensive and complicated annealing systems.



Chamber furnace N 61/H

Standard Equipment

- Tmax 1280 °C
- Deep furnace chamber with three-sides heating: from both side walls and bottom
- Heating elements on support tubes ensure free heat radiation and a long service life
- Bottom heating protected by heat-resistant SiC plate
- Stainless steel upper door jamb protects furnace structure when furnace is opened hot
- Temperature uniformity up to ± 10 °C according to DIN 17052-1 see page 77
- Low energy consumption due to multi-layer insulation
- Base frame included in the delivery, N 7/H - N 17/HR designed as table-top model
- Exhaust opening in the side of the furnace, or on rear wall of chamber furnace in the N 31/H models and higher
- Parallel guided downward swinging door (user protected from heat radiation)
- Door movement cushioned with gas dampers/struts
- Controller with touch operation B500 (5 programs with each 4 segments), alternative controllers see page 84

Model	Tmax in °C	Inner dimensions in mm			Volume in l	Outer dimensions ¹ in mm			Connected load ⁴ in kW	Electrical connection*	Weight in kg	Heating time in min ²
		w	d	h		W	D	H				
N 7/H	1280	250	250	140	9	800	650	600	3.0	1-phase	60	320
N 11/H	1280	250	350	140	11	800	750	600	3.5	1-phase	70	320
N 11/HR	1280	250	350	140	11	800	750	600	5.5	3-phase ³	70	70
N 17/HR	1280	250	500	140	17	800	900	600	6.4	3-phase ³	90	110
N 31/H	1280	350	350	250	31	1040	1030	1340	15.0	3-phase	210	90
N 41/H	1280	350	500	250	41	1040	1180	1340	15.0	3-phase	260	105
N 61/H	1280	350	750	250	61	1040	1430	1340	20.0	3-phase	400	105
N 87/H	1280	350	1000	250	87	1040	1680	1340	25.0	3-phase	480	105

¹External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.

²Heating time of the empty and closed furnace up to Tmax – 100 K (connected to 230 V 1/N/PE resp. 400 V 3/N/PE)

³Heating only between two phases

⁴The 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



Working with protective gas boxes for a protective gas atmosphere using a charging cart



Chamber furnace N 7/H as table-top model



Deep furnace chamber with three-sides heating