

## 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.



## 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
- Temperature uniformity up to +/- 10 °C according to DIN 17052-1 see page 71
- 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
- Parallel guided downward swinging door (user protected from heat radiation)
- Door movement cushioned with gas dampers/struts
- Controller B400 (5 prgrams with each 4 segments), alternative controllers see page 75

Model	Tmax Inner dimensions in mm			Volume	Outer dimensions <sup>1</sup> in mm			Connected	Electrical	Weight	Heating time	
	in °C	w	d	h	in I	W	D	Н	load in kW	connection*	in kg	in min <sup>2</sup>
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-phase3	70	70
N 17/HR	1280	250	500	140	17	800	900	600	6.4	3-phase <sup>3</sup>	90	110
N 31/H	1280	350	350	250	31	1040	1100	1340	15.0	3-phase	210	90
N 41/H	1280	350	500	250	41	1040	1250	1340	15.0	3-phase	260	105
N 61/H	1280	350	750	250	61	1040	1500	1340	20.0	3-phase	400	105
N 87/H	1280	350	1000	250	87	1040	1750	1340	25.0	3-phase	480	105

<sup>&</sup>lt;sup>1</sup>External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.

 $^{\star}$ Please see page 75 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

<sup>&</sup>lt;sup>2</sup>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)

<sup>&</sup>lt;sup>3</sup>Heating only between two phases