

Chamber Furnaces for Annealing, Hardening and Brazing



Chamber furnace N 7/H as table-top model



Chamber furnace N 61/H

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.



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

- 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
- Low energy consumption due to multi-layer insulation
- Exhaust opening in the side of the furnace, or on back wall of chamber furnace N 31/H and higher
- 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)
- Gas spring dampers provide for easy door opening and closing
- 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

Model	Tmax °C	Inner dimensions in mm			Volume in l	Outer dimensions ³ in mm			Connected load kW	Electrical connection*	Weight in kg	Minutes to Tmax ²
		w	d	h		W	D	H				
N 7/H	1280	250	250	140	9	800	650	600	3.0	1-phase	60	180
N 11/H	1280	250	350	140	11	800	750	600	3.5	1-phase	70	180
N 11/HR	1280	250	350	140	11	800	750	600	5.5	3-phase ¹	70	120
N 17/HR	1280	250	500	140	17	800	900	600	6.4	3-phase ¹	90	120
N 31/H	1280	350	350	250	31	1040	1100	1340	15.0	3-phase	210	105
N 41/H	1280	350	500	250	41	1040	1250	1340	15.0	3-phase	260	120
N 61/H	1280	350	750	250	61	1040	1500	1340	20.0	3-phase	400	120
N 87/H	1280	350	1000	250	87	1040	1750	1340	25.0	3-phase	480	120

¹Heating only between two phases

²If connected at 230 V 1/N/PE resp. 400 V 3/N/PE

³External dimensions vary when furnace is equipped with additional equipment. Dimensions on request.

*Please see page 73 for more information about supply voltage

Accessories for Annealing Hardening and Brazing

Our wide selection of chamber furnaces for annealing, hardening and brazing can be extended with a variety of accessories to suit your application. The accessories shown below represent only a small fraction of the products available. For further details, please see our separate catalogues for heat-treatment furnaces and hardening accessories.

Annealing Boxes

- Annealing boxes with or without protective gas connectors, up to 1100 °C, also in a tailor-made variant for cold evacuation, for instance for the annealing of small parts and bulk goods

Annealing Tray with Holder

- Annealing tram with alloy bag and holder with protective gas connection for models N 7/H to N 87/H for annealing and hardening under protective gas and quenching in air

Hearth Plates

- Hearth plates for up to 1100 °C for protection of the furnace floor for models N 7/H to N 87/H, edged on three sides

Hardening Tongs

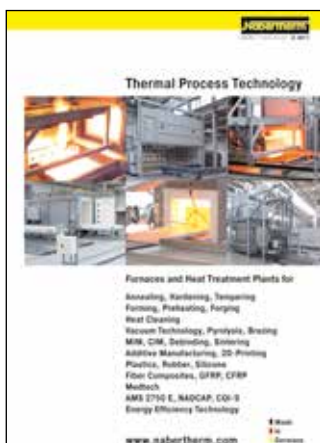
- Hardening tongs in various sizes and forms for use in annealing and hardening

Heat Treating Foil

- Heat treating foil for wrapping of samples for oxidation-free annealing and hardening of steels up to 1200 °C

Gloves

- Heat-resistant gloves to 650 °C or 700 °C for protection of operator during loading see page 14



Please ask for our separate catalogues for hardening furnaces and hardening accessories!