

## Chamber High-Temperature Furnaces with Fiber Insulation up to 1800 °C



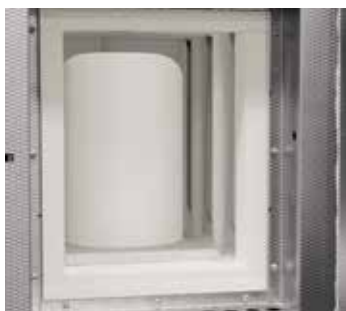
HT 16/17



HT 160/17 with gas supply system and inner process hood



Reinforced floor as protection for bottom insulation HT 16/16



Inner process hood with gas injection through the furnace bottom protects the furnace chamber against contamination and/or prevents chemical interaction between the charge and heating elements

### HT 04/16 - HT 450/18

Due to their solid construction and compact stand-alone design, these high-temperature furnaces are perfect for processes in the laboratory where the highest precision is needed. Outstanding temperature uniformity and practical details set unbeatable quality benchmarks. For configuration for your processes, these furnaces can be extended with extras from our extensive option list.

- Tmax 1600 °C, 1750 °C, or 1800 °C
- Furnace sizes from 4 to 450 liters
- High-quality molybdenum disilicide ( $\text{MoSi}_2$ ) heating elements
- Parallel swivel door, chain-guided, enabling safe opening and closing without damage to the fiber insulation in the collar area, protection of user from radiation from the furnace
- Door labyrinth sealing provides for optimum energy efficiency and temperature uniformity
- Door area armored with stainless steel to avoid burn damages
- Reinforced floor as protection for bottom insulation as standard from models HT 16/16 upwards
- Over-temperature limiter with manual reset for product and furnace protection
- Furnace chamber lined with first-class, durable fiber material
- Special ceiling construction with high durability
- Thermocouple, PtRh-Pt, Type B or Type S
- Vapor vent in the furnace roof
- Controls description see page 60

## Additional equipment

- Uncontrolled or controlled cooling system with frequency-controlled cooling fan and motor-driven exhaust air flap
- Furnace in HDB design featuring fresh air preheating, exhaust gas ventilation and an extensive safety package for debinding and sintering in one process, i. e. without transferring the material from the debinding furnace to the sintering furnace.
- Motor-driven exhaust air flap control
- Stainless steel exhaust gas hoods
- Catalytic or thermal afterburners
- Kiln furniture
- Lift door
- Special heating elements for zirconia sintering provide for longer service life with respect to chemical interaction between charge and heating elements
- Protective gas connection to purge with non-flammable protective or reaction gases
- Manual or automatic gas supply system
- Inner process box to improve the gas tightness and to protect the furnace chamber against contamination



HT 276/17 with pneumatically driven and parallel lift door

Model	Tmax °C	Inner dimensions in mm			Volume in l	Outer dimensions in mm			Connected load kW	Electrical connection*	Weight in kg
		w	d	h		W	D	H			
HT 04/16	1600	150	150	150	4	610	470	1400	5.2	3-phase <sup>1</sup>	150
HT 08/16	1600	150	300	150	8	730	640	1400	8.0	3-phase <sup>1</sup>	200
HT 16/16	1600	200	300	260	16	810	700	1500	12.0	3-phase <sup>1</sup>	270
HT 40/16	1600	300	350	350	40	1000	800	1620	12.0	3-phase	380
HT 64/16	1600	400	400	400	64	1130	900	1670	18.0	3-phase	550
HT 128/16	1600	400	800	400	128	1130	1290	1670	26.0	3-phase	750
HT 160/16	1600	500	550	550	160	1245	1040	1900	21.0	3-phase	800
HT 276/16	1600	500	1000	550	276	1140	1470	1900	36.0	3-phase	1100
HT 450/16	1600	500	1150	780	450	1200	1620	2060	64.0	3-phase	1500
HT 04/17	1750	150	150	150	4	610	470	1400	5.2	3-phase <sup>1</sup>	150
HT 08/17	1750	150	300	150	8	730	640	1400	8.0	3-phase <sup>1</sup>	200
HT 16/17	1750	200	300	260	16	810	700	1500	12.0	3-phase <sup>1</sup>	270
HT 40/17	1750	300	350	350	40	1000	800	1620	12.0	3-phase	380
HT 64/17	1750	400	400	400	64	1130	900	1670	18.0	3-phase	550
HT 128/17	1750	400	800	400	128	1300	1290	1670	26.0	3-phase	750
HT 160/17	1750	500	550	550	160	1245	1040	1900	21.0	3-phase	800
HT 276/17	1750	500	1000	550	276	1140	1470	1900	36.0	3-phase	1100
HT 450/17	1750	500	1150	780	450	1200	1620	2060	64.0	3-phase	1500
HT 04/18	1800	150	150	150	4	610	470	1400	5.2	3-phase <sup>1</sup>	150
HT 08/18	1800	150	300	150	8	730	640	1400	9.0	3-phase <sup>1</sup>	200
HT 16/18	1800	200	300	260	16	810	700	1500	12.0	3-phase <sup>1</sup>	270
HT 40/18	1800	300	350	350	40	1000	800	1620	12.0	3-phase	380
HT 64/18	1800	400	400	400	64	1130	900	1670	18.0	3-phase	550
HT 128/18	1800	400	800	400	128	1130	1290	1670	26.0	3-phase	750
HT 160/18	1800	500	550	550	160	1260	1070	1900	21.0	3-phase	800
HT 276/18	1800	500	1000	550	276	1140	1470	1900	36.0	3-phase	1100
HT 450/18	1800	500	1150	780	450	1200	1620	2060	64.0	3-phase	1500

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

\*Please see page 60 for more information about supply voltage



HT 16/17SW with scale to measure weight reduction during annealing