

**Bogie Hearth Furnaces with Wire Heating up to 1400 °C  
also as Combi Furnaces for Debinding and Sintering  
in one Process or with Gas-Supply Box for Inert  
Debinding**



W 1500/H



Bogie hearth furnace W 2060/S without bogie heating for preheating fusion molds



Meander shaped heating elements for short process times

**W 1000 - W 10000/14, W 1000/DB - W 10000/14DB**

Bogie hearth furnaces offer a whole series of advantages in firing, sintering and tempering in production. The bogie can be loaded outside the furnace. If multiple bogies are used, one bogie can be loaded while the other is in use in the furnace. Useful accessories like multi-zone control to optimize the temperature uniformity, controlled cooling systems to shorten process times to the fully automatic system with motorized bogies and bogie exchange provide for the perfect adaptation of these furnaces to production process. A combi furnace version with debinding package for debinding and sintering in a single process is also possible.

- Tmax 1280 °C, 1340 °C or 1400 °C
- Dual shell housing with rear ventilation, provides for low shell temperatures
- Swing door hinged on the right side
- Heating from five sides (four sides and bogie) provides for an optimum temperature uniformity
- Bogie heating receives power via blade contacts when driven in
- Heating elements mounted on support tubes provide for free radiation and long service life
- Bottom heating protected by SiC tiles on the bogie providing level stacking surface
- Multi-layer insulation consisting of lightweight refractory bricks backed by microporous silica insulation
- Self-supporting and long-life ceiling construction with bricks laid in arched construction, for models up to 1340 °C or as fiber insulation
- Roof made of high-quality fiber material for models with Tmax 1400 °C
- Freely moveable bogie with rubber wheels up to model W 3300
- Adjustable air inlet damper
- Manual exhaust air flap on the furnace roof
- Over-temperature limiter with manual reset for thermal protection class 2 in accordance with EN 60519-2 as temperature limiter to protect the furnace and load



Bogie hearth furnace W 3300 for glazing melting crucibles for the solar industry

**Additional equipment**

- Fiber insulation also in combination with meander shaped heating for short heating times
- Bogies with flanged wheels running on rails for easy and precise movement of high loads or complex kiln furniture
- Electric chain-driven bogie in combination with rail operation for smooth movement of heavy loads
- Bogie running on steel wheels with gear rack drive, no rails in front of the furnace necessary



W 2200/14 DB with debinding package and catalytical afterburning system



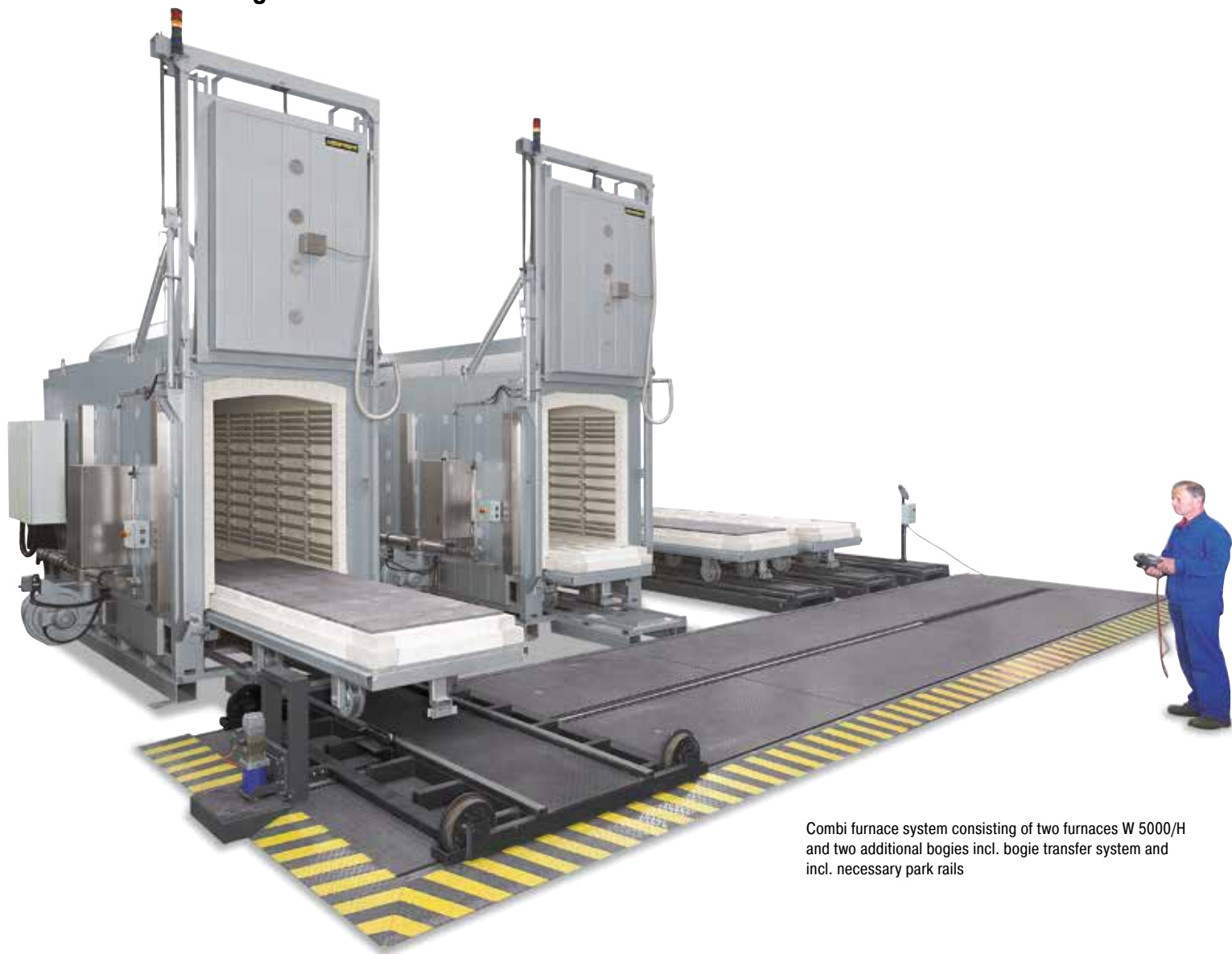
W 8250/S for tempering quartz glass

- Different possibilities for an extension to a bogie hearth furnace system:
  - Additional bogies
  - Bogie transfer system with parking rails to exchange bogies running on rails or to connect multiples furnaces
  - Motor-driven bogies and cross-traversal system
  - Fully automatic control of the bogie exchange
- Electro-hydraulic lift door
- Kiln furniture
- Motor-driven exhaust air flap, switchable via the program
- Uncontrolled or controlled cooling system with frequency-controlled cooling fan and motor-driven exhaust air flap
- Multi-zone control adapted to the particular furnace provides model for optimal the temperature uniformity
- IDB design with gas supply system and safety technology for debinding in non-flammable protective gases
- Commissioning of the furnace with test firing and temperature uniformity measurement (also with load) for the purpose of process optimization
- Debinding packages with passive safety concept see page 6
- Thermal or catalytic exhaust cleaning systems see page 41
- Process documentation and control with Controltherm MV software package, NTLog and NTGraph for the basic furnace or Nabertherm Control Center (NCC) for monitoring, documentation and control see page 83



W 7500 with bogie, separated in three parts

## Bogie Hearth Furnaces with Wire Heating up to 1400 °C also as Combi Furnaces for Debinding and Sintering in one Process or with Gas-Supply Box for Inert Debinding



Combi furnace system consisting of two furnaces W 5000/H and two additional bogies incl. bogie transfer system and incl. necessary park rails



Bogie hearth furnace in IDB-version with gas box for debinding and sintering under non-flammable protective or reaction gases

Model	Tmax °C	Inner dimensions in mm			Volume in l	Outer dimensions in mm			Heating power in kW <sup>1</sup>	Electrical connection*	Weight in kg
		w	d	h		W	D	H			
W 1000	1280	800	1600	800	1000	1470	2410	1915	57	3-phase	3000
W 1500	1280	900	1900	900	1500	1570	2710	2030	75	3-phase	3500
W 2200	1280	1000	2200	1000	2200	1670	3010	2140	110	3-phase	4500
W 3300	1280	1000	2800	1200	3300	1670	3610	2355	140	3-phase	5300
W 5000	1280	1000	3600	1400	5000	1670	4410	2555	185	3-phase	7300
W 7500	1280	1000	5400	1400	7500	1670	6210	2555	235	3-phase	10300
W 10000	1280	1000	7100	1400	10000	1670	7910	2555	300	3-phase	12500
W 1000/H	1340	800	1600	800	1000	1470	2410	1915	75	3-phase	3500
W 1500/H	1340	900	1900	900	1500	1570	2710	2030	110	3-phase	4000
W 2200/H	1340	1000	2200	1000	2200	1670	3010	2140	140	3-phase	5000
W 3300/H	1340	1000	2800	1200	3300	1670	3610	2355	185	3-phase	6000
W 5000/H	1340	1000	3600	1400	5000	1670	4410	2555	235	3-phase	8000
W 7500/H	1340	1000	5400	1400	7500	1670	6210	2555	370	3-phase	11300
W 10000/H	1340	1000	7100	1400	10000	1670	7910	2555	440	3-phase	13800
W 1000/14	1400	800	1600	800	1000	1470	2410	1915	75	3-phase	3300
W 1500/14	1400	900	1900	900	1500	1570	2710	2030	110	3-phase	3800
W 2200/14	1400	1000	2200	1000	2200	1670	3010	2140	140	3-phase	4800
W 3300/14	1400	1000	2800	1200	3300	1670	3610	2355	185	3-phase	5700
W 5000/14	1400	1000	3600	1400	5000	1670	4410	2555	235	3-phase	7700
W 7500/14	1400	1000	5400	1400	7500	1670	6210	2555	370	3-phase	10900
W 10000/14	1400	1000	7100	1400	10000	1670	7910	2555	440	3-phase	13300

<sup>1</sup>Depending on furnace design connected load might be higher

\*Please see page 80 for more information about supply voltage