High Temperature Furnaces with SiC-rod heating

T max 1400 °C, 1500 °C and 1600 °C

- Excellent uniformity inside the furnace chamber
- Double-walled housing with rear-ventilation to ensure extremely low outer-casing temperatures
- Parallel-guided door moving up-wards with hot insulation surface to the rear, away from operator
- Insulation made of high grade ceramic fibre with low thermal mass
- Door collar made of strong fire bricks to protect insulation against mechanical damages
- Wear-resistant fire brick insulation in the furnace bottom
- Delivery includes ceramic bottom plate
- Powerful SiC-rod heating elements mounted in two sides of the furnace providing very fast heating times
- Heating elements controlled by solid state relays for very precise temperature control, wear-free and noiseless
- Exhaust pipe in the furnace ceiling

Accessories:

- Adjustable temperature limiter to protect furnace and charge acc. EN 60519-2
- Further accessories see page 13

Technical Data

Model	T max [°C]	Inner dimensions [mm] Width x Depth x Height	Volume [l]	Outer dimensions [mm] Width x Depth x Height	Power [kW]	Voltage [V]
KLC 05/14	1400	150 x 250 x 140	6	550 x 580 x 650	3,5	230 V 1/N
KLC 10/14	1400	200 x 250 x 180	9	560 x 670 x 720	4,5	400 V 3/N
KLC 15/14	1400	220 x 310 x 220	15	590 x 690 x 790	6,0	400 V 3/N
KLC 30/14	1400	250 x 480 x 270	33	600 x 730 x 800	12,0	400 V 3/N
KLC 05/15	1500	150 x 250 x 140	6	550 x 580 x 650	5,0	400 V 3/N
KLC 10/15	1500	200 x 250 x 180	9	560 x 640 x 720	6,5	400 V 3/N
KLC 15/15	1500	220 x 310 x 220	15	590 x 690 x 790	9,0	400 V 3/N
KLC 30/15	1500	250 x 420 x 270	30	600 x 730 x 800	12,0	400 V 3/N
KLC 05/16	1600	150 x 240 x 150	6	550 x 580 x 650	5,3	400 V 3/N
KLC 10/16	1600	210 x 240 x 180	9	560 x 640 x 720	6,0	400 V 3/N
KLC 15/16	1600	220 x 310 x 220	15	590 x 690 x 790	7,0	400 V 3/N
KLC 30/16	1600	250 x 420 x 270	28	600 x 730 x 800	11,5	400 V 3/N

High Temperature Furnaces with $MoSi_2$ heating elements

T max 1500 °C, 1600 °C, 1750 °C and 1800 °C

- Compact bench top furnaces with user-friendly parallel-guided door moving up-wards
- Double-walled housing with rear-ventilation to ensure low outercasing temperatures
- Insulation made of high grade aluminium oxide fibre with low thermal mass for very fast heating and cooling
- High grade heating elements made of Molybdenum-Disilicide ($MoSi_2$) mounted in two sides
- Low power rating
- Heating elements controlled by thyristors for very precise temperature control, wear-free and noiseless
- High temperature uniformity inside the furnace chamber
- Exhaust pipe in the furnace ceiling

Accessories:

- Automatically driven exhaust flap in the ceiling
- Controlled cooling system to accelerate cooling times
- Protective gas connection, manual or automatic gassing system
- Semi-gastight housing with silicone sealing
- Control and documentation software
- Softstart switch

Technical Data

Model	T max [°C]	Inner dimensions [mm] Width x Depth x Height	Volume [l]	Outer dimensions [mm] Width x Depth x Height	Power [kW]	Voltage [V]	Weight [kg]
HTL 01/15	1500	120 x 90 x 120	1	520 x 470 x 680	1,6	230 V 1/N	75
HTL 01/16	1600	120 x 90 x 120	1	520 x 470 x 680	1,6	230 V 1/N	75
HTL 02/16	1600	110 x 120 x 150	2	740 x 440 x 630	1,5	230 V 1/N	76
HTL 04/16	1600	150 x 150 x 150	4	740 x 440 x 630	3	230 V 1/N	83
HTL 10/16	1600	200 x 250 x 200	10	790 x 540 x 680	4	400 V 3/N	97
HTL 16/16	1600	200 x 300 x 260	16	830 x 550 x 735	8	400 V 3/N	175
HTL 20/16	1600	250 x 320 x 260	21	880 x 570 x 735	8	400 V 3/N	210
HTL 02/17	1750	110 x 120 x 150	2	740 x 440 x 630	1,5	230 V 1/N	76
HTL 04/17	1750	150 x 150 x 150	4	740 x 440 x 630	3	230 V 1/N	83
HTL 10/17	1750	200 x 250 x 200	10	790 x 540 x 680	4	400 V 3/N	97
HTL 16/17	1750	200 x 300 x 260	16	830 x 550 x 735	8	400 V 3/N	175
HTL 20/17	1750	200 x 320 x 260	21	880 x 570 x 735	8	400 V 3/N	210
HTL 02/18	1800	110 x 120 x 150	2	740 x 440 x 630	1,5	230 V 1/N	76
HTL 04/18	1800	150 x 150 x 150	4	740 x 440 x 630	3	230 V 1/N	83
HTL 10/18	1800	200 x 250 x 200	10	790 x 540 x 680	4	400 V 3/N	97
HTL 16/18	1800	200 x 300 x 260	16	830 x 550 x 735	8	400 V 3/N	175
HTL 20/18	1800	200 x 320 x 260	21	880 x 570 x 735	8	400 V 3/N	210

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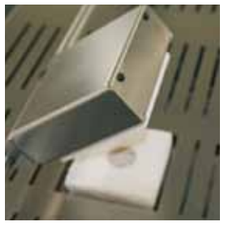

High Temperature Furnaces

with $MoSi_2$ heating elements

T max 1600 °C, 1750 °C and 1800 °C

- High temperature chamber furnaces with chamber volume of 16 - 70 litres*
- Furnaces with highest operation standard on precision and comfort. Very fast heating and cooling cycles, low power rating
- Double-walled housing with rear-ventilation to ensure very low outer-casing temperatures
- Door, door housing and furnace front made of stainless steel
- Parallel-guided door moving side-wards with hot insulation surface to the rear, away from operator
- Insulation made of high grade aluminium oxide fibre with low thermal mass for very fast heating and cooling
- High grade heating elements made of Molybdenum Disilicide ($MoSi_2$) mounted in two sides, additional heating from the rear wall available
- Heating elements controlled by thyristors for very precise temperature control, wear-free and noiseless
- Sophisticated process control systems
- Exhaust hole in the furnace ceiling with manual vapor vent flap

Accessories:

- Autom. driven exhaust flaps for extended ventilation of furnace chamber
- Controlled cooling system to accelerate cooling times
- Protective gas connection
- Manual or automatic gassing system
- From HTK 40/... with re-inforced bottom for higher work load

Technical Data

Model	T max [°C]	Inner dimensions [mm] Width x Depth x Height	Volume [l]	Outer dimensions [mm] Width x Depth x Height	Power [kW]	Voltage [V]	Weight [kg]
HTK 16/16	1600	200 x 300 x 260	16	820 x 655 x 1570	8,0	400 V 3/N	285
HTK 20/16	1600	250 x 320 x 260	21	870 x 675 x 1570	8,0	400 V 3/N	295
HTK 40/16	1600	300 x 350 x 350	37	920 x 705 x 1660	11	400 V 3/N	375
HTK 50/16	1600	250 x 550 x 350	48	870 x 905 x 1660	18	400 V 3/N	655
HTK 70/16	1600	400 x 400 x 400	64	1020 x 755 x 1710	12	400 V 3/N	545
HTK 16/17	1750	200 x 300 x 260	16	820 x 655 x 1570	8,0	400 V 3/N	285
HTK 20/17	1750	250 x 320 x 260	21	870 x 675 x 1570	8,0	400 V 3/N	295
HTK 40/17	1750	300 x 350 x 350	37	920 x 705 x 1660	11	400 V 3/N	375
HTK 50/17	1750	250 x 550 x 350	48	870 x 905 x 1660	18	400 V 3/N	655
HTK 70/17	1750	400 x 400 x 400	64	1020 x 755 x 1710	12	400 V 3/N	545
HTK 16/18	1800	200 x 300 x 260	16	820 x 655 x 1570	8,0	400 V 3/N	285
HTK 20/18	1800	250 x 320 x 260	21	870 x 675 x 1570	8,0	400 V 3/N	295
HTK 40/18	1800	300 x 350 x 350	37	920 x 705 x 1660	11	400 V 3/N	375
HTK 50/18	1800	250 x 550 x 350	48	870 x 905 x 1660	18	400 V 3/N	655
HTK 70/18	1800	400 x 400 x 400	64	1020 x 755 x 1710	12	400 V 3/N	545

Other sizes on request

For further information about our High temperature furnaces please ask for our catalogue „Furnaces for Ceramics, Glass, Solar Cells"

Elevator Furnaces

T max 1100 - 1800 °C

- Elevator furnaces with chamber volume of 1, 2 and 8 litres and temperatures from 1100 °C to 1800 °C
- Double-walled housings with rear-ventilation to ensure very low outer-casing temperatures
- Casing made of strong and sleek framework construction
- Reliable vibration-free bottom lifting with electro-mechanical movement
- Insulation made of high grade aluminium oxide fibre with low thermal mass for very fast heating and cycles
- Low power rating
- Switch gear and control unit integrated in furnace housing for comfortable operation of controller
- For large scale production furnaces with an usable volume of up to 2000 litre are available

Technical Data

Model	T max [°C]	Inner dimensions Width x Depth x Height [mm] or ø x Height [mm]	Volume [l]	Outer dimensions [mm] Width x Depth x Height	Power [kW]	Voltage [V]
ELS 08/11	1100	180 x 200 x 210	7,5	630 x 810 x 1220	2,0	230 V 1/N
ELS 08/14	1400	180 x 180 x 230	7,4	630 x 810 x 1220	4,5	400 V 3/N
ELHT 01/16	1600	Ø 105 x 55	0,5	520 x 470 x 680	1,9	230 V 1/N
ELHT 02/16	1600	Ø 105 x 100	1,0	520 x 470 x 680	3,6	230 V 1/N
ELHT 08/16	1600	200 x 200 x 200	8,0	620 x 770 x 1900	8,0	400 V 3/N
ELHT 08/17	1700	200 x 200 x 200	8,0	620 x 770 x 1900	8,0	400 V 3/N
ELHT 08/18	1800	200 x 200 x 200	8,0	620 x 770 x 1900	8,0	400 V 3/N