

THK SERIES HIGH TEMPERATURE TOP HAT FURNACES MODELS FOR USE UP TO 1800°C

Molybdenum disilicide heating elements for extra high temperature operation. Heavy duty design with a motorized vertical-lift furnace for easy, open access to the product setting area. Ideal for production, pilot plant and laboratory applications when dependable precision is required. Proven uses include technical ceramics, aerospace parts, SOFC fuel cells, and refractory materials.

THK Furnaces are industrial quality systems available in a selection of standard sizes from 4 to 450 liters. Various optional features are available such as air preheating, controlled fan cooling and atmosphere for precise binder burn-out and sintering.



Standard Features: 1600°C, 1750°C and 1800°C Models

- Heavy duty steel shell finished with heat resistant enamel paint and COOL SKIN® double wall sidewalls to reduce surface temperatures.
- Furnace support frame of welded structural steel forms a strong integral unit with open access to load and unload the work placed on the furnace base.
- Precision screw jacks raise and lower the furnace in a smooth, vibration free motion aligned to the furnace base to form a tight heat seal on closure.
- Energy efficient multilayered graded ceramic fiber board amply rated for the hot face temperature, backed up with low thermal mass ceramic insulation.
- Molybdenum disilicide heating elements are low watt loaded designs arranged on the interior side walls to provide uniform heating and long service life.
- Temperature control is microprocessor programmable with SCR power regulation to precisely control heat-up rate and set point.
- A duplex type R (PtRh-Pt) thermocouple is provided for both operational control and over-temperature limit shut-down.
- Electrical components are UL/FM listed and include a main control panel safety circuit breaker. The entire system meets applicable NFPA, NEC and CE directives and is completely wired ready for operation after connection to the required electrical service. An instruction manual is supplied.





Optional Features

- Variable air flow rate fans to automatically program control pre-selected binder burnout and cooling rate gradients.
- Air pre-heaters provide uniform convection heating to enable de-binding and sintering in one cycle.
- Custom sizes, temperature ranges, exhaust systems, HMI PC process controls.

Specifications

	UNIC	UE/PERENY	SMK Series Kilns	(1600°C / 2912°F)_	
Model	Volume	Chamber Size	Overall Size	Electrical	Weight
No.	<u>Liters</u>	$W \times D \times H$	$W \times D \times H$	Volts-Ph/Kw	<u>Kg</u>
THK-250	4	150x150x150mm	610x470x1500mm	240-1/8.5	150
THK-400	6	200x200x150mm	940x815x1675mm	240-1/10	200
THK-600	10	200x250x200mm	610x610x1400mm	240-1/12	225
THK-800	13	200x250x250mm	940x815x1675mm	240-1/14	250
THK-1000	16	200x300x260mm	710x650x1500mm	240-1/15	270
THK-1200	20	250x300x260mm	965x890x1675mm	240-1/16	310
THK-2000	33	300x300x370mm	1015x865x1675mm	240-1/18	350
THK-2600	42	300x460x300mm	1015x1015x1675mm	240-3/20	390
THK-4300	65	300x460x460mm	1015x965x1675mm	240-3/26	560
THK-5400	90	380x460x510mm	1120x1040x1675mm	240-3/30	750
THK-7800	130	460x610x460mm	1195x1195x1675mm	240-3/34	775
THK-9600	160	500x550x550mm	1140x1020x1900mm	240-3/40	800
THK-17K	276	500x1000x550mm	1140x1470x1900mm	240-3/50	1100
THK-28K	450	500x1150x780mm	1140x1620x1900mm	240-3/60	1500

^{*}Specifications are approximate and subject to change without notice.



Excellent Temperature Uniformity



Operator Friendly Control Centers

