

SMK SERIES HIGH TEMPERATURE FURNACES MODELS FOR USE UP TO 1800°C

Molybdenum disilicide electric elements for extra high temperature operation. Rugged, heavy duty design for laboratory and production use when dependable precision is required. Proven applications include advanced ceramics and refractory materials.

SMK Furnaces are available in a selection of standard sizes from 4 to 450 liters. All are designed to provide long trouble free service. Various optional features include air preheating, controlled fan cooling and atmosphere to add processing capability such as precisely controlled 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.
- Parallel swing heat seal door fabricated of steel plate, pivot counter balanced to open and close easily with four adjustable door clamps.
- Energy efficient multilayered graded lining of 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 sidewalls 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 operation 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 that provide uniform convection heating to enable de-binding and sintering in one cycle.
- Custom sizes, temperature ratings, exhaust systems, and 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>
SMK-250	4	150x150x150mm	610x470x1500mm	240-1/8.5	150
SMK-400	6	200x200x150mm	940x815x1675mm	240-1/10	200
SMK-600	10	200x250x200mm	610x610x1400mm	240-1/12	225
SMK-800	13	200x250x250mm	940x815x1675mm	240-1/14	250
SMK-1000	16	200x300x260mm	710x650x1500mm	240-1/15	270
SMK-1200	20	250x300x260mm	965x890x1675mm	240-1/16	310
SMK-2000	33	300x300x370mm	1015x865x1675mm	240-1/18	350
SMK-2600	42	300x460x300mm	1015x1015x1675mm	n 240-3/20	390
SMK-4300	65	300x460x460mm	1015x965x1675mm	240-3/26	560
SMK-5400	90	380x460x510mm	1120x1040x1675mm	n 240-3/30	750
SMK-7800	130	460x610x460mm	1195x1195x1675mm	n 240-3/34	775
SMK-9600	160	500x550x550mm	1140x1020x1900mm	n 240-3/40	800
SMK-17K	276	500x1000x550mm	1140x1470x1900mm	n 240-3/50	1100
SMK-28K	450	500x1150x780mm	1140x1620x1900mm	240-3/60	1500

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



Standard - Ceramic Fiber Board Insulation



Optional - Insulating Fire Brick (IFB) Lining

