

SERIES 1300

DIFFUSION TUBE FURNACES 1300°C (2372°F)

The CM 1300 Series Diffusion Tube Furnaces offer controlled heating and cooling rates, uniform temperature control, compactness, and sturdy construction for long term use. Both horizontal and vertical models are available for virtually any requirement in single or multi-zone configurations. Atmosphere and vacuum packages, and specialized control systems are offered in addition to the standard furnaces.

The 1300 Series furnaces incorporate a graded insulation package using high purity alumina fiber. These furnaces will not hot spot at high temperatures and are resistant to degradation. The rugged exterior consists of a perforated aluminum shell and solid end caps. An internal winding consisting of heavy gauge

Kanthal A1 wire is wound around the circumference of the inner furnace cavity and offset from the work tube by an array of ceramic spacers. The Kanthal A1 alloy in these elements is very durable at high temperatures, due to the formation of a protective oxide layer formed by reaction with the oxygen in air. The 1300 Series Control and Power Supply console includes all components required for immediate installation and operation. Proper control of the element winding requires a step-down transformer, phase angle-fire SCR, ammeter and voltmeter, circuit breaker and a multiple segment programmable control such as Honeywell or Eurotherm used in conjunction with a Type "S" thermocouple.

FURNACE INCLUDES:

- Rugged Aluminum Shell and End Caps
- High Purity Alumina Fiber Insulation
- Heavy Gauge Kanthal A1 Winding
- Universal Mounting Pads

OPTIONAL CONTROL/ POWER SUPPLY INCLUDES:

- Type "S" Thermocouple
- Programmable Ramp and Soak control
- Phase Angle-Fire SCR and Step-Down Transformer
- Ammeter and Voltmeter
- Separate Console
- 10' Interconnecting Wire and T/C Extension Leads

USED FOR THESE AND OTHER APPLICATIONS:

- Ceramics
- Glass
- Crystal Growth
- Powders
- Laboratory Research
- Materials Testing
- Heat Treating
- Melting
- Annealing
- Firing
- Sintering



STANDARD SIZES (ADDITIONAL SIZES AVAILABLE)

MODEL NUMBER	USABLE DIAMETER (in)	USABLE DIAMETER (mm)	HEATED LENGTH (in)	HEATED LENGTH (mm)	OUTSIDE DIAMETER (in)	OUTSIDE DIAMETER (mm)	OVERALL LENGTH (in)	OVERALL LENGTH (mm)	NUMBER OF ZONES	APPROX. WATTAGE
1320-24	2	51	24	610	10	254	30	76	1-3	4070
1330-36	3	76	36	914	12	305	42	1067	1-3	8140
1340-36	4	102	36	914	14	356	42	1067	1-3	10180
1340-48	4	102	48	1219	14	356	54	1372	1-3	13570
1350-36	5	127	36	914	14	356	42	1067	1-3	12215
1350-48	5	127	48	1219	14	356	54	1372	1-3	16285
1360-48	6	152	48	1219	14	356	56	1422	1-3	19000
1370-60	7	178	60	1524	16	406	68	1727	1-3	27140