

# HIGH TEMP. TUBE FURNACES

## ST SERIES · UP TO 1600°C - 1650°C - 1800°C-1900°C

High Temperature tube furnaces

STURDY DESIGN · CERAMIC FIBER INSULATION M160 - M180 - M190 (500)

**High Quality 24/7 Continuous-T° Tube Furnaces**

### STANDARD FEATURES

- CE manufactured
- Maximum operating temperature: up to 1600°C -1650°C - 1800°C and 1900°C
- Compact and lightweight
- 24/7 continuous work capability
- Heating elements by Kanthal SiC (Silicon Carbide) and Kanthal Super 1800 and 1900 (MoSi<sub>2</sub>)
- Low thermal mass insulation
- Built with low density ceramic bricks and ceramic fiber
- Double insulation includes air chamber
- Thermocouple type S or B
- Spare parts easily replaceable by end user

### FURNACE CONTROLS

- Furnace control under the furnace
- Eurotherm Thyristor Equipment Efit and Epack
- General safety switch
- General safety contactor
- **PAD Digital control**
  - PID parameters
  - Non-volatile memory
  - Microprocessor-based temperature controls
  - Alarm

### CONTROL

- Fuji Ramp programmer up to 64 steps
- (Optional)Eurotherm EPC series (Ramp Programmer + software Itools) 10 Progs / 25 steps - via Ethernet (Curves downloadable in CSV-Excel)

### SAFETY SHUT-OFF

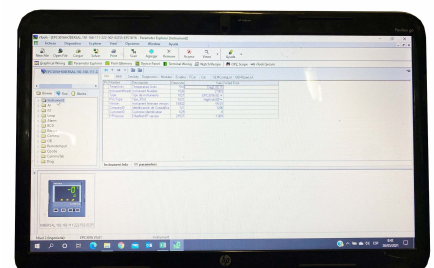
- Thermocouple break shut-off

### ACCESSORIES

- Safety alarm Class II. Over-temperature protection
- Controlled atmosphere system
- Vacuum system (1Mbar, x10<sup>-2</sup> and x10<sup>-5</sup>)
- Flow meter box (Gas supply systems)
- and more, ask for our full assortment!



High Temp. Tube furnace Hobersal ST166030SC



# HIGH TEMP. TUBE FURNACES

## ST SERIES · UP TO 1600°C - 1650°C - 1800°C-1900°C

### High Temperature tube furnaces

STURDY DESIGN · CERAMIC FIBER INSULATION M160 - M180 - M190 (500)

### High Quality 24/7 Continuous-T° Tube Furnaces

#### CHARACTERISTICS

- Reinforced construction, double insulation, included air chamber with fan
- Refractory parts engineered to resist extreme temperature changes, and specific ceramic paste types applied according to temperature and work fatigue of each part.
- Heat resistance in refractory insulation of very low thermal conductivity coefficient.
- Horizontal Operation

#### BASIC ACCESSORIES

- Gas supply system: Inert atmosphere control equipment (non-reactive gases), supporting nitrogen, argon and forming gas 10%.
- Vacuum flanges: Stainless Steel high vacuum end seals (water refrigerated, high density Silicon joint), gas inlet & outlet (KF16), thermocouple slot
- Vacuum kits: Vacuum equipment 1Mbar, x10<sup>-2</sup> and x10<sup>-6</sup> (Leybold pump Trivac series + vacuum meter + Complete set of accessories)

#### SPECIFICATIONS

Model	Heating length (mm)	Tube diameter (mm)	Outer dimensions (mm)			Power Kw	Voltage V	maximum Temperature °C	Maximum temperature limited work °C	Maximum temperature in continuous	Thermo couple	Control type	Heating Elements (Silicon Carbide)	Homogenous zone (mm)
			H	W	D									
<b>High Temperature tube furnaces up to 1600°C (1500°C in continuous)</b>														
ST166030 SC	300	40 to 100	700	760	460	4	220	1600°C	1550°C	1500°C	S	Ramp P.	Kanthal SiC	120
ST166045 SC	450	40 to 200	700	910	460	6	220	1600°C	1550°C	1500°C	S	Ramp P.	Kanthal SiC	200
ST166060 SC	600	40 to 200	700	1060	460	8	220	1600°C	1550°C	1500°C	S	Ramp P.	Kanthal SiC	300
ST166080SC	800	60 to 200	700	1260	460	10	380	1600°C	1550°C	1500°C	S	Ramp P.	Kanthal SiC	300
ST1680100SC	1000	80 to 200	700	1460	460	12	380	1600°C	1550°C	1500°C	S	Ramp P.	Kanthal SiC	700
<b>High temperature tube furnaces up to 1650°C (Kanthal Super 1800 MoSi2)</b>														
ST166030	300	40 to 100	750	625	540	5	220	1650°C	1600°C	1550°C	S	Ramp P.	MoSi2	120
ST166040	400	40 to 120	750	730	540	5	220	1650°C	1600°C	1550°C	S	Ramp P.	MoSi2	150
ST166060	600	60 to 200	750	1060	540	6	220	1650°C	1600°C	1550°C	S	Ramp P.	MoSi2	300
ST168080	800	80 to 200	750	1260	540	8	380	1650°C	1600°C	1550°C	S	Ramp P.	MoSi2	480
ST16100100	1000	100 to 200	750	1460	540	10	380	1650°C	1600°C	1550°C	S	Ramp P.	MoSi2	700
<b>High temperature tube furnaces up to 1800°C (Kanthal Super 1800 MoSi2)</b>														
ST186030	300	40 to 100	750	625	540	5	220	1800°C	1750°C	1700°C	B	Ramp P.	MoSi2	120
ST186040	400	40 to 120	750	730	540	5	220	1800°C	1750°C	1700°C	B	Ramp P.	MoSi2	150
ST186060	600	60 to 200	750	1060	540	6	220	1800°C	1750°C	1700°C	B	Ramp P.	MoSi2	300
ST188080	800	80 to 200	750	1260	540	8	380	1800°C	1750°C	1700°C	B	Ramp P.	MoSi2	480
ST18100100	1000	100 to 200	750	1460	540	10	380	1800°C	1750°C	1700°C	B	Ramp P.	MoSi2	700
<b>High temperature tube furnaces up to 1900°C (Kanthal Super 1900 MoSi2)</b>														
ST196030	300	40 to 100	750	625	540	5	220	1900°C	1850°C	1800°C	B	Ramp P.	MoSi2	120
ST196040	400	40 to 120	750	730	540	5	220	1900°C	1850°C	1800°C	B	Ramp P.	MoSi2	150
ST196060	600	60 to 200	750	1060	540	6	220	1900°C	1850°C	1800°C	B	Ramp P.	MoSi2	300
ST198080	800	80 to 200	750	1260	540	8	380	1900°C	1850°C	1800°C	B	Ramp P.	MoSi2	480
ST19100100	1000	100 to 200	750	1460	540	10	380	1900°C	1850°C	1800°C	B	Ramp P.	MoSi2	700
Homogeneity decreases with larger tube diameters														
Heating elements from Kanthal ( Kanthal SiC - Kanthal Super1800 and 1900)														
2, 3 and 4 Independent zones available (Under request)														
Other sizes under request (Custom furnaces available)														
External dimensions vary when furnace is equipped with additional equipment. Dimensions on request														

# HIGH TEMP. TUBE FURNACES

**ST SERIES** · UP TO 1600°C - 1650°C - 1800°C-1900°C

High Temperature tube furnaces

STURDY DESIGN · CERAMIC FIBER INSULATION M160 - M180 - M190 (500)

High Quality 24/7 Continuous-T° Tube Furnaces

## Accessories



Stainless Steel high vacuum end seals (water refrigerated, high density Silicon joint), gas inlet & outlet (KF) and



Ceramic Plugs



Gas Supply systems.  
Flow meter system 1 (Automatic)



Gas Supply systems.  
Flow meter system 2 (Manual)



Leybold vacuum equipment up to x10-2



Leybold vacuum equipment (Pump + Turbo station) up to x10-6



Ceramic, Alumina tubes, Inconel tubes...



Quartz tubes