PT. ELECTRINDO TEHNIKAPRIMA

KANTHAL ELECTRIC HEATING SYSTEMS

PT. ELECTRINDO TEHNIKAPRIMA is a company which produces Furnaces with the complete elements. The product consist of

KANTHAL FURNACE PRODUCT
Kanthal Wire & Kanthal Strip, Fibrothal, Silicone Carbide, Metallic Element, and Ceramic Tube

ELECTRIC HEATING TECHNOLOGY
Tubular Heater, Catridge Heater, Finned Heater, Immersion Heater, Infrapara, Infrared, Instrument Controller, Quartz, and Chemical Heater

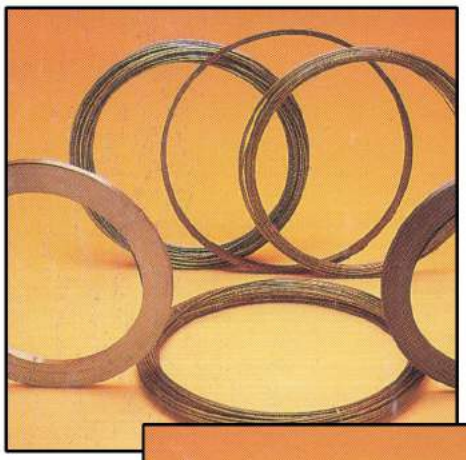
INSTRUMENT AND CONTROL
Digital and Analog Cable and also Thermocouple type: J, K, S, R, B, pt 100 Ω, N, etc

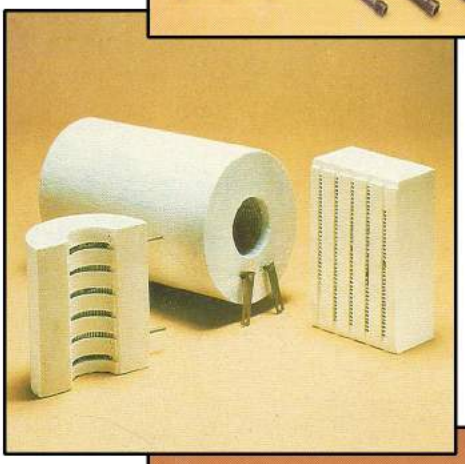
MELTING AND HOLDING
Melting and Holding Aluminium with gas, diesel, and Kerosene

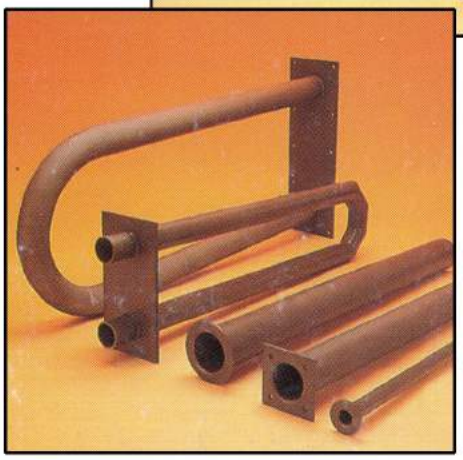
Furnace is for necessity of Heat Treatment, Tempering, Hardening, Melting Aluminium, Holding Aluminium, Annealing, Tempered Glass, Bending Glass, Kilns, Ceramic, Research, and Laboratory. We also give manual book of the product made. Our Furnace's Elements are import from Sweden-Germany, Australia, Japan, and Spain. Our Furnaces are standard of Germany

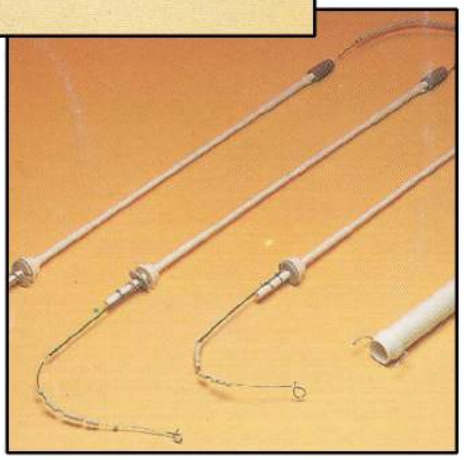
KANTHAL WIRE

Kanthal Wire & Strip









Thermocouple

Description : Probe with Terminal Enclosure

Type available : K, J, E, T and RTD
Process connection available : 1/4", 1/2", 3/4" & 1" NPT or BSP
Probe size available : inch or mm : 1.0mm to 12.75mm
Enclosure available : Cast Aluminium or Ex-Proof
Temperature Range available from : -50°C to 1050°C

Description : Probe with process connection and Terminal Enclosure

Type available : K, J, E, T and RTD
Process connection available : 1/4", 1/2", 3/4" & 1" NPT or BSP
Probe size available : inch or mm : 1.0mm to 12.75mm
Enclosure available : Cast Aluminium or Ex-Proof
Temperature Range available from : -50°C to 1050°C

Description : Probe with End Cap process connection and Terminal Enclosure

Type available : K, J, E, T and RTD
End Cap size available : 1/2", 1", 2
Probe size available : inch or mm : 1.0mm to 12.75mm
Enclosure available : Cast Aluminium or Ex-Proof
Temperature Range available from : -50°C to 1050°C

Description : Spring Loading Sensor with Union and Terminal Enclosure

Type available : K, J, E, T and RTD
Process Connection : Union Nipple
Probe size available : inch or mm : 1.0mm to 12.75mm
Enclosure available : Cast Aluminium or Ex-Proof
Temperature Range available from : -50°C to 1050°Cv

Thermocouple

Description : Probe and spring with extension wire

Type availabe : K, J, E, T and RTD
.Wire Material : Fiberglass, Steelbraided, Teflon, PVC, Silicon etc
Probe size available : inch or mm : 1.0mm to 8mm
Temperature Range available from : 0° to 400°C

Description : Lug with extension wire

Type available : K, J, E, T and RTD
.Wire Material : Fiberglass, Steelbraided, Telfon, PVC, Silicon etc
Temperature Range available from : 0° to 400°C

Description : Screw Thermocouple

Type available : K, J, T
Screw size available : 1/4", M6, M8 BSW
.Wire Material : Fiberglass, Steelbraided, Telfon, PVC, Silicon etc
Temperature Range available from : 0° to 400°C

Thermocouple

Description : Adjustable Spring Loaded Bayonet Cap with Wire Extension

Type available : K, J, E, T and RTD
Lock Cap Size : 12mm or 15mm
Wire Material : Fiberglass, Steelbraided, Telfon, PVC, Silicon etc
Temperature Range available from : 0° to 400°C

Description : Bayonet Cap Holder
Use to couple with PA Model for Locking

Material available : Stainless Steel or Copper tinned

Description : Probe with square lug and extension wire

Type available : K, J, E, T and RTD
Wire Material : Fiberglass, Steelbraided, Telfon, PVC, Silicon etc
Temperature Range available from : 0° to 400°C

Description : Probe with 5/8" screw and nut with extension wire

Type available : K, J, E, T and RTD
Probe size available : inch or mm : 1.0mm to 5mm
Wire Material : Fiberglass, Steelbraided, Telfon, PVC, Silicon etc

Thermocouple Accessories

Description : Probe with connector

Type available : K, J, E, T and RTD
Connector : Male or Female or Male & Female
Probe size available : inch or mm : 1.0mm to 8mm
Temperature Range available from : 0°C to 400°C

Description : Stainless Steel Probe with Wire Extension

Type available : K, J, E, T and RTD
Probe size available : inch or mm : 1.0mm to 12.75mm
Wire Material : Fiberglass, Steelbraided, Teflon, PVC, Silicon etc
Temperature Range available from : 0°C to 510°C

Description : Compression Fitting

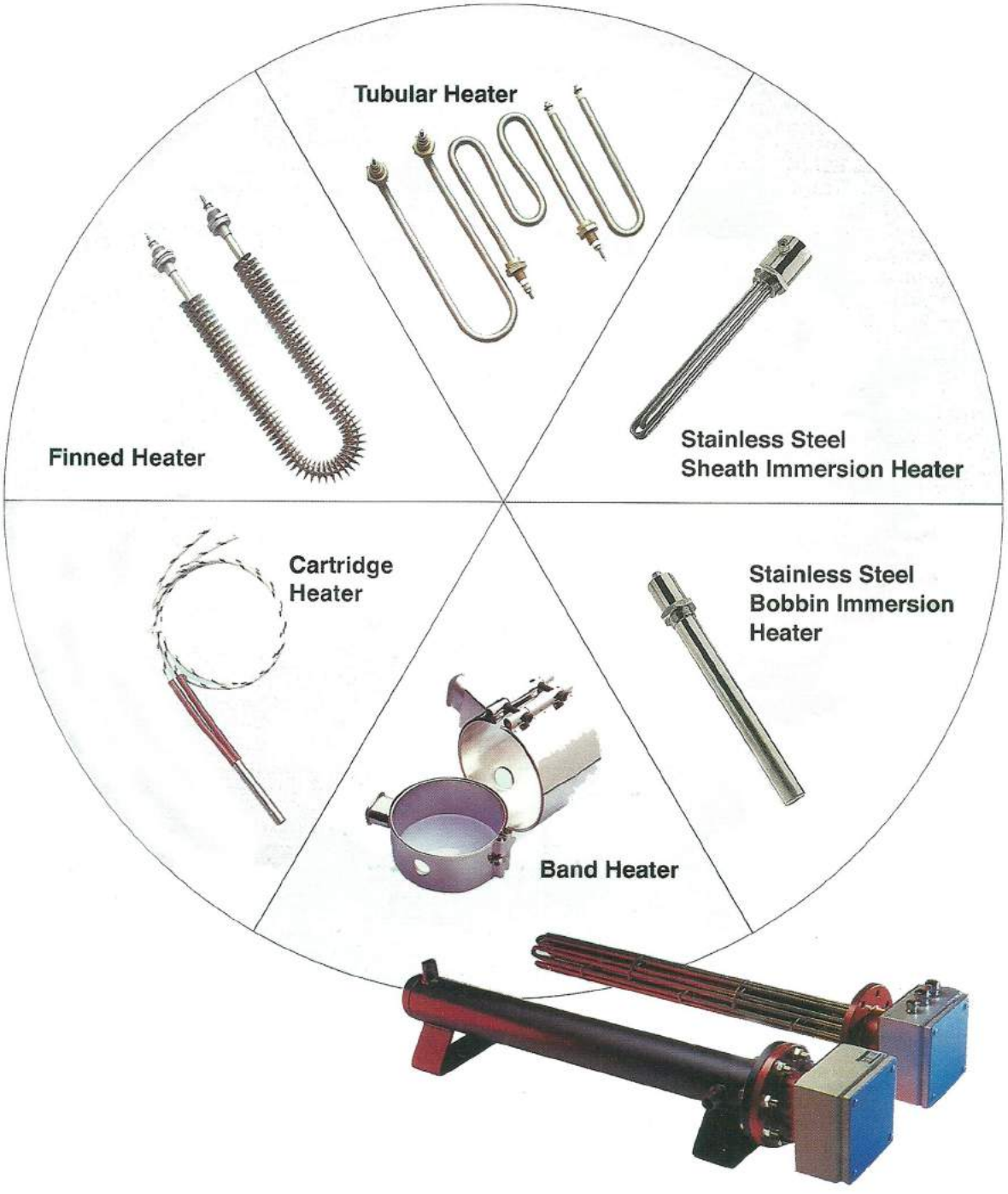
Type available : Brass Nickel plated or Stainless Steel
Size : For Probe from diameter 1mm to 8mm

Thermocouple Wire

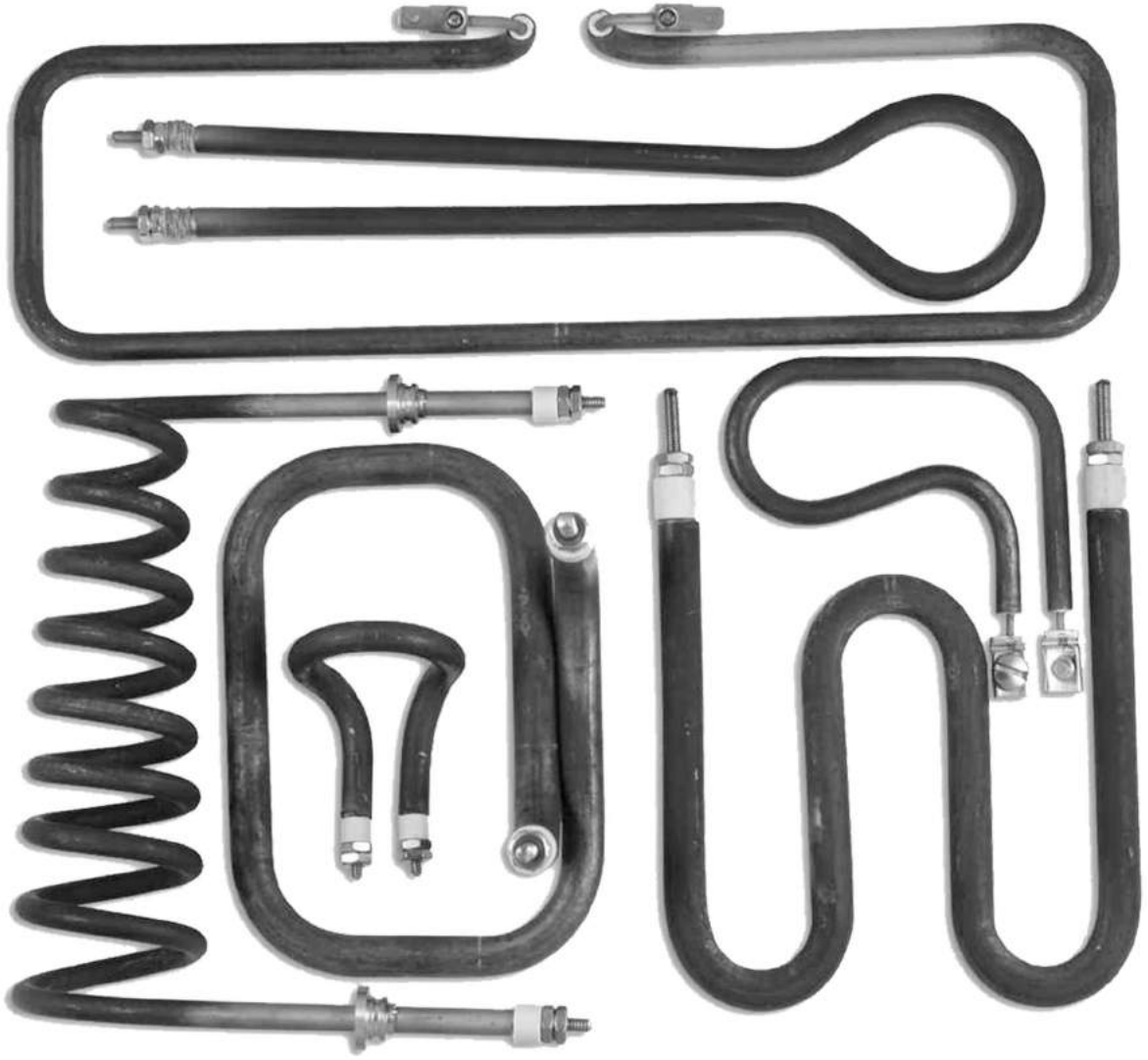
Appearance	Dimensions (mm)	Covering
	Core 0.3/7 Nom.finish 4.1×2.4	Heat-resistant PVC insulating sheath.
	Core 0.3/7 Nom.finish ϕ 5	
	Core 0.3/7 Nom.finish 5×3.6	Outer: Heat resistant insulating sheath. Inner: Copper shield.
	Core 0.3/7 Nom.finish ϕ 5.5	
	Core single0.3 Nom.finish 3.3×2.2	Heat-Resistant PVC insulating sheath.
	Core single0.65 Nom.finish 4.2×2.6	
	Core single0.3 Nom.finish 2.3×1.6	Glass braided insulating sheath.
	Core single0.65 Nom.finish 3.4×2.1	
	Core single0.8 Nom.finish 3×1.7	

Thermocouple Wire

Appearance	Dimensions (mm)	Covering
	Core 0.65/7 Nom. finish 8×5.2	Heat-resistant PVC insulating sheath.
	Core 0.65/7 Nom. finish 8.6×5.8	Outer: heat-resistant PVC sheath. Inner: Copper shield.
	Core 0.65/7 Nom. finish 8.5×5.35	Inner: Heat-resistant PVC sheath. Outer: Copper shield.
	Core 0.65/7 Nom. finish 6.5×3.4	Glass braided insulating sheath.
	Core 0.65/7 Nom. finish 7.1×4.0	Outer: Glass braided insulating sheath. Inner: Copper shield.
	Core 0.65/7 Nom. finish 6.8×4.3	Inner: Glass braided insulating sheath. Outer: Copper shield.
	Core 0.2/40 Nom. finish ϕ 9.8	Heat-resistant rubber insulating sheath.
	Core 0.2/40 Nom. finish ϕ 11.4	Outer: Heat-resistant rubber insulating sheath.


Tubular Heater
Finned Heater
Stainless Steel
Sheath Immersion Heater
Cartridge
Heater
Stainless Steel
Bobbin Immersion
Heater
Band Heater
Flange & Circulation
Heater

Tubular Heater

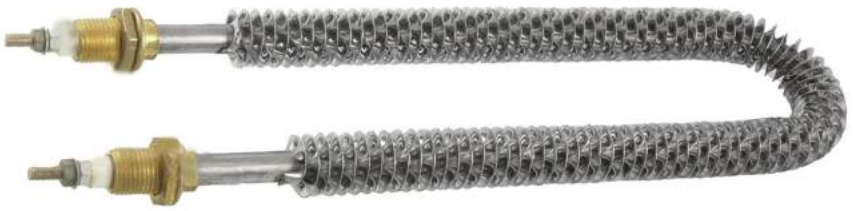


- The Hotwatt Tubular Heater has built-in resistance to shock, vibration, corrosion, and temperature extremes.
- The heater is swaged, reducing the diameter of the metal sheath and compacting the insulation. This insures rapid heat transfer and holds the coil in position for forming.
- Many formations are available.

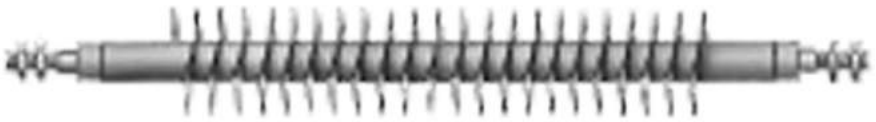
Finned Tubular Heater

Finned "W" Model

- Mechanically-bonded continuous fin assures excellent heat transfer and helps prevent fin vibration at high air velocities
- Several standard formations and mounting bushing available
- Standard fin is high temperature painted steel with steel sheath
- Optional stainless steel fin with stainless steel or incoloy sheath for corrosion resistance 220v, 380v, 480v, avaialble
- Maximum Sheath temperature 400°C - Steel 480°C INCOLY



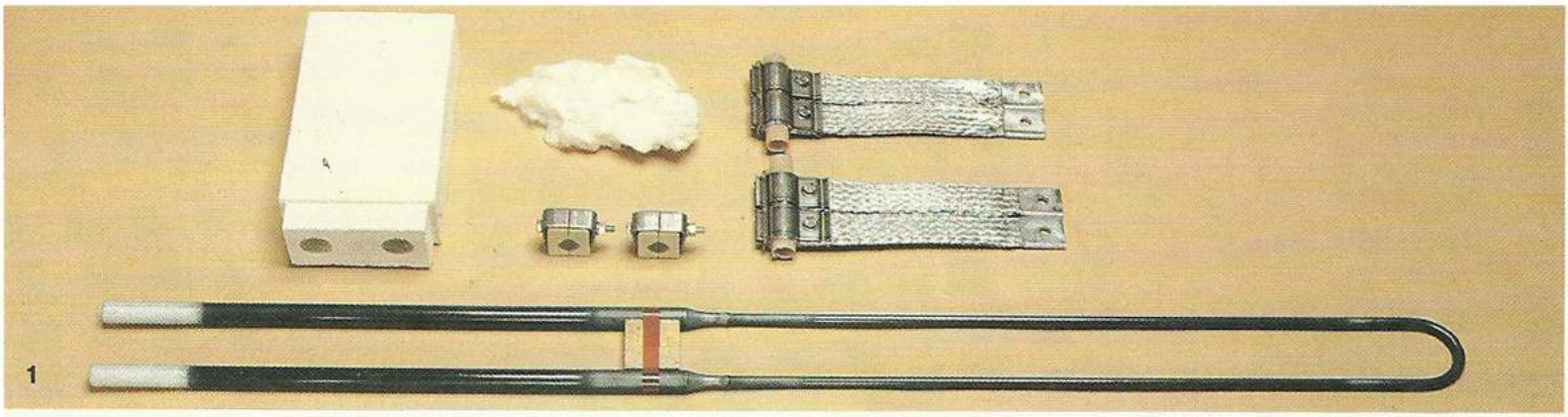
Finned "U" Model



Finned "I" Model

***shape and voltage can be adjusted on demand**

Assembling and Installation
KANTHAL SUPER Elements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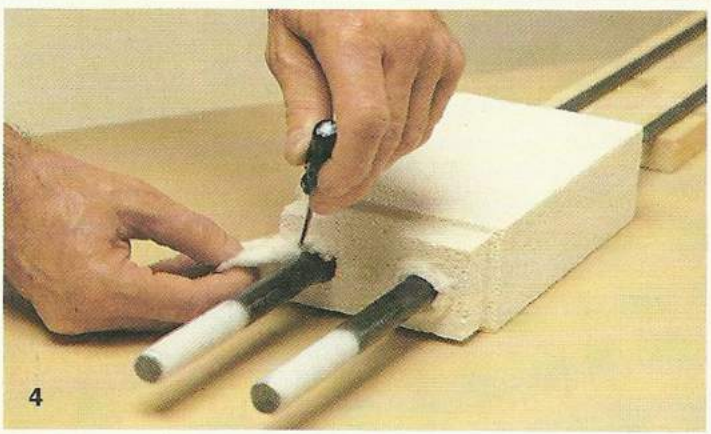
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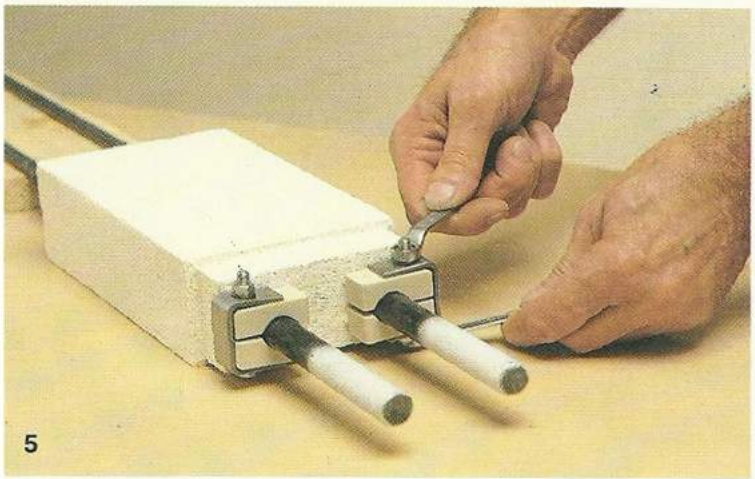
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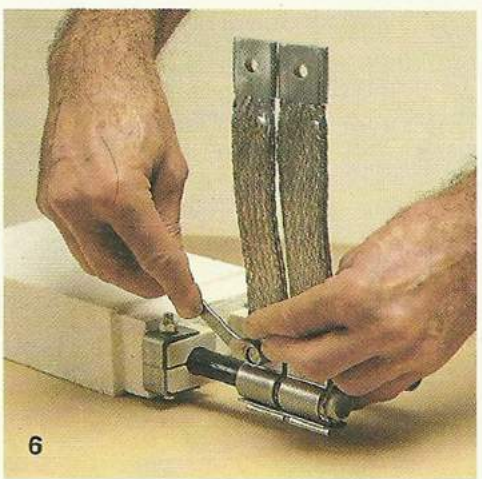
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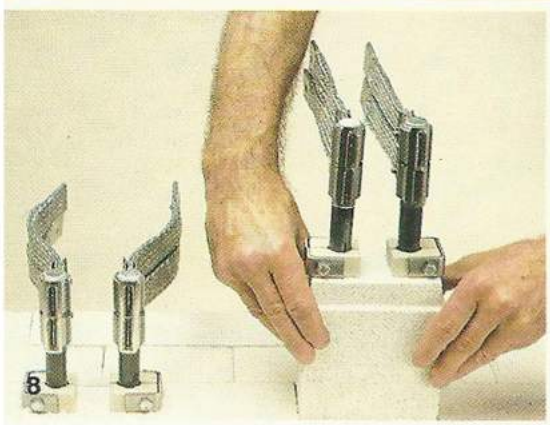
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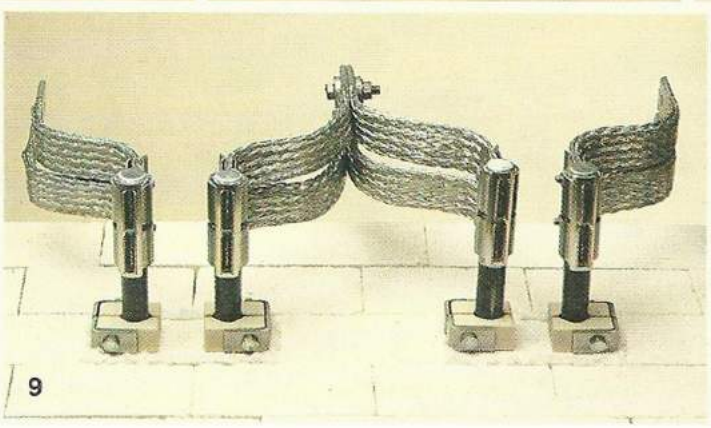
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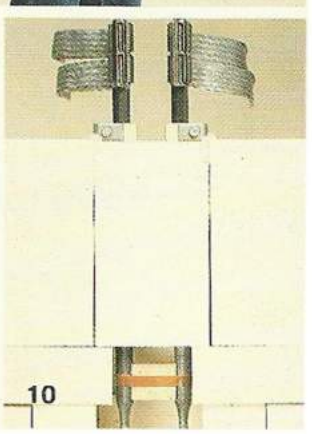
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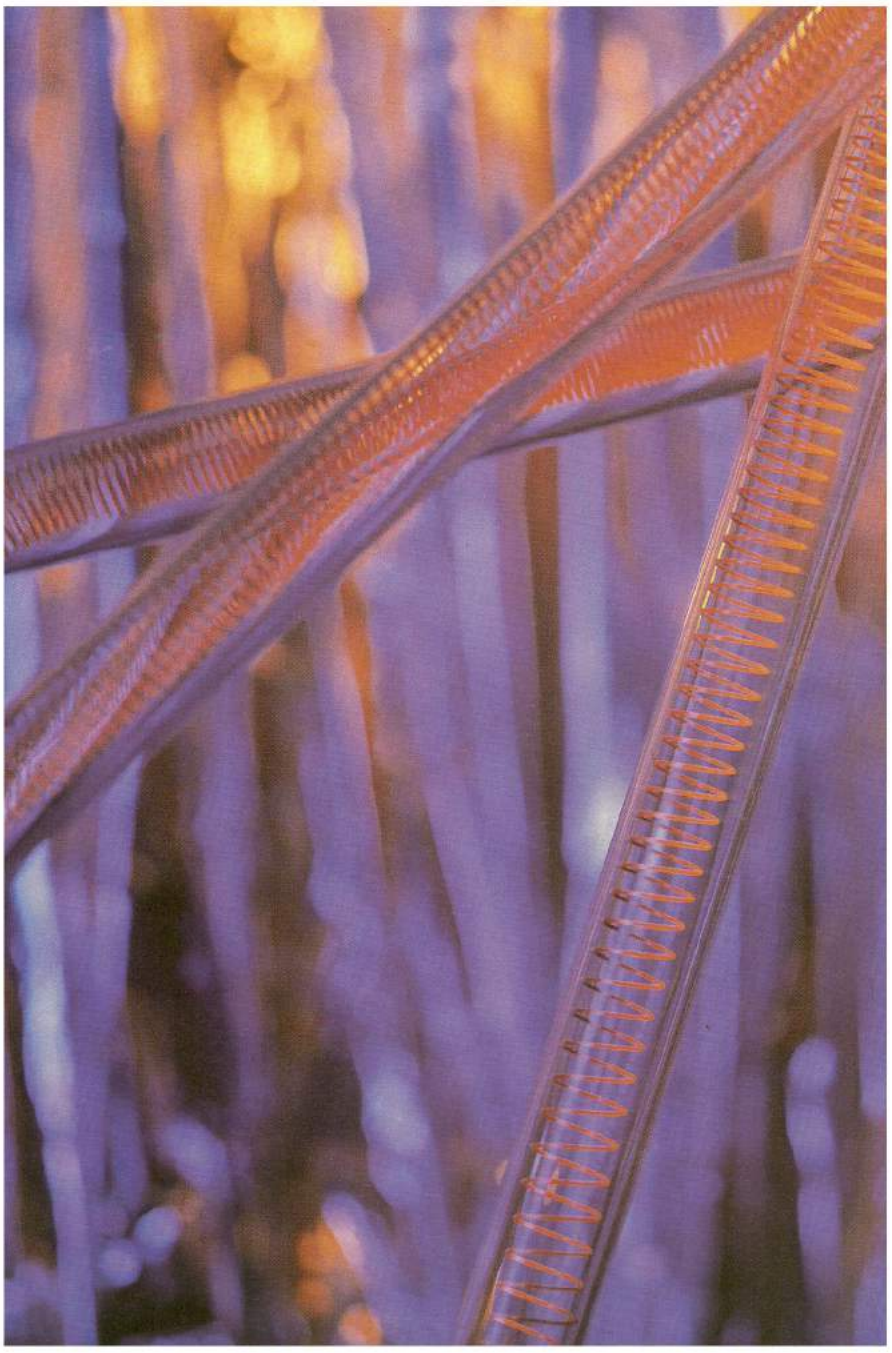
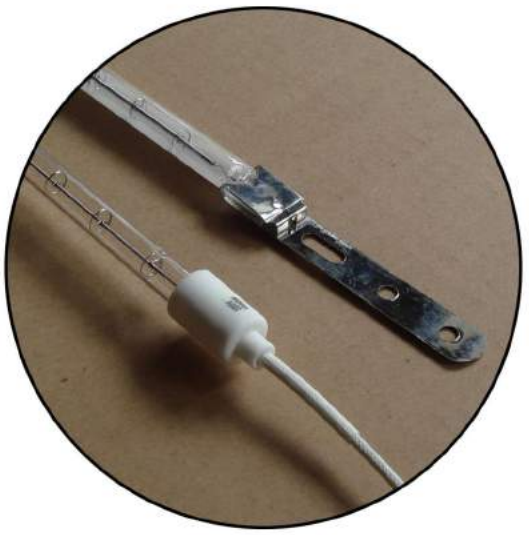
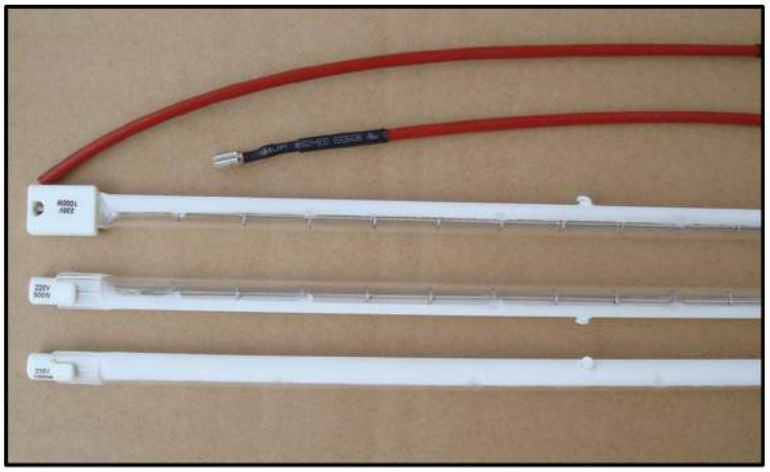
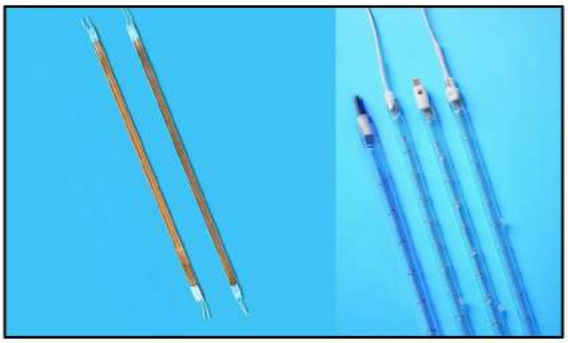
LAMP INFRARED HEATER



Infrared Lamp







Features

Small

Power Heating Up Rapidly

Thermal Inertia are Very Small and Long-Lived

Right Plane infiltration Good thing

Applications

The shoe machine - Plastic blowing machine

Wet curtain manufacturing - Dyeing printing

Acrylic production - Food processing

Preshrinking machines stereotypes on the pipeline drying and heating

Its specific radiation properties of the work piece 0.5-120m/min

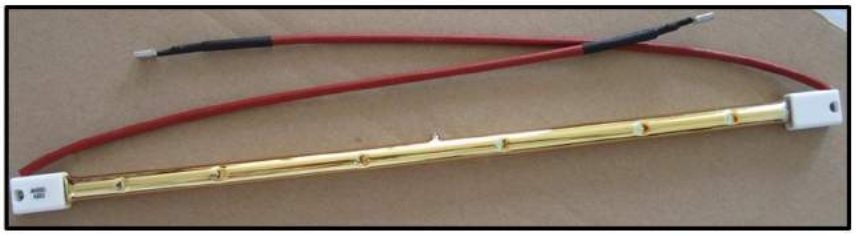
meet the rapid rate of drying molding

Pro Musicis halogen heaters

ovens and other local fast heated to high temperatures baking

IR Infrared Light

Gold coated infrared heating lamp



Features

Rapid Warming

Long Life

Small Thermal inertia

Applications

Patio Heaters

Shoe Machine

Leather Machine

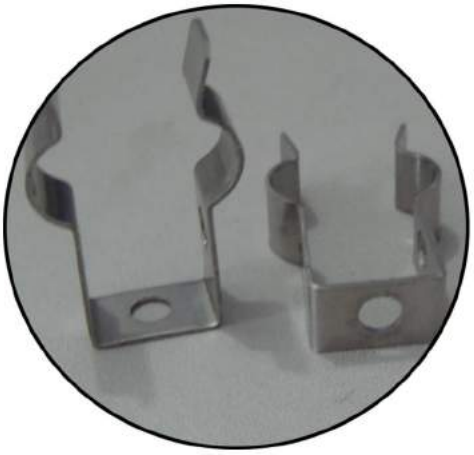
Heating Device

Sterilization Cabinets

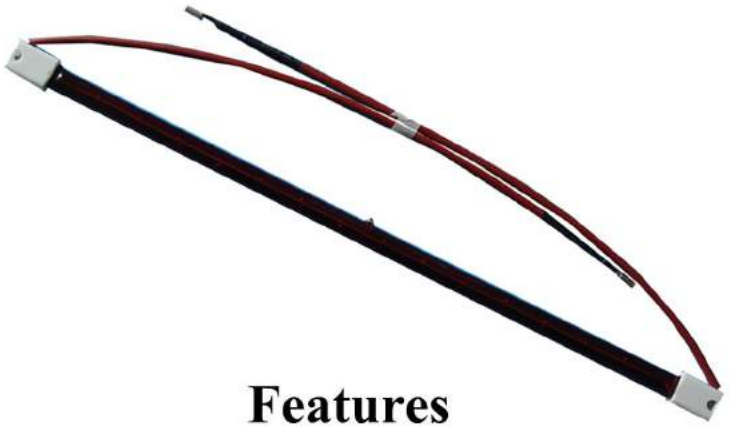
Paint Machines

Optical Air Conditioning

CLAMP SUPPORT STAINLESS STEEL



IR-Quartz Halogen Lamp



Features

Rapid Warming

Long Life

Small Thermal inertia

Applications

Shoe Machine

Leather Machine

Heating Devices

Sterilization Cabinets

Paint Machines

Model	Power (W)	Voltage (V)	Color Temp(K)	Peak Wave LG (um)	Life (H)	Size (MM)
IR-I	300	120	980-1380	2.5-4.5	5000	200-450
IR-I	350	120	980-1380	2.5-4.5	5000	200-450
IR-I	400	120-240	980-1380	2.5-4.5	5000	200-550
IR-I	500	120-240	980-1380	2.5-4.5	5000	200-550
IR-I	600	120-240	980-1380	2.5-4.5	5000	250-600
IR-I	800	120-240	980-1380	2.5-4.5	5000	250-800
IR-I	1000	120-240	980-1380	2.5-4.5	5000	250-1000
IR-I	1200	120-240	980-1380	2.5-4.5	5000	300-1000
IR-I	1500	120-380	980-1380	2.5-4.5	5000	300-1000
IR-I	1800	120-380	980-1380	2.5-4.5	5000	350-1000
IR-I	2000	120-380	980-1380	2.5-4.5	5000	350-1000

Medium Wave Infrared Lamp


Halogen IR Color Tube


U-shaped Infrared halogen lamp


Special IR halogen lamp


Halogen Straight IR lamp

Features

Rapid Warming

Long Life

Small Thermal inertia

Applications

Heating Device

Sterilization Cabinets

Paint Machines

Optical Air Conditioning

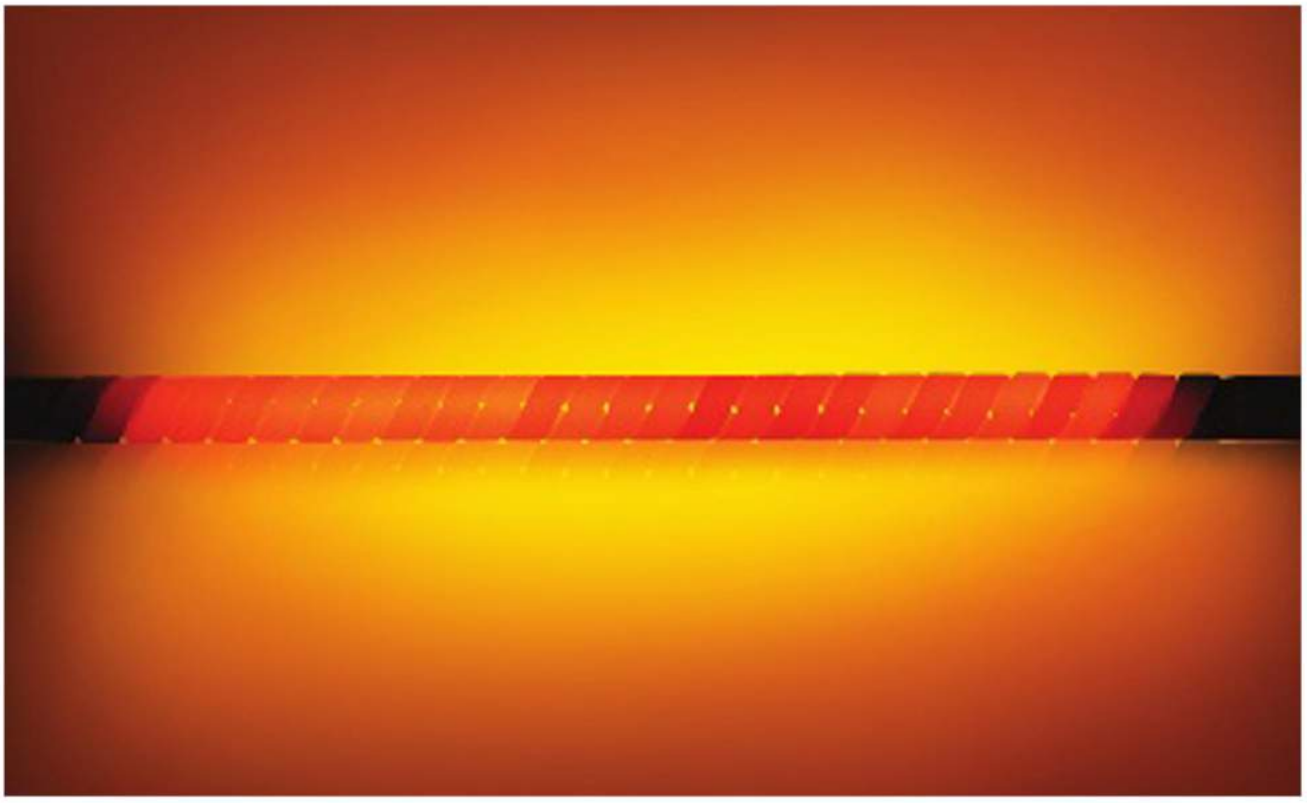
Dry Curing

Food Processing

Model	Power (W)	Volt (V)	Color Temp(K)	Peak Wave LG (um)	Life (H)	Size (MM)
IR-W	300	120	1580	2.5-4.5	5000	200-450
IR-W	325	120	1580	2.5-4.5	5000	200-450
IR-W	400	120-240	1680	2.5-4.5	5000	200-550
IR-W	500	120-240	1680	2.5-4.5	5000	200-550
IR-W	600	120-240	1680	2.5-4.5	5000	250-600
IR-W	800	120-240	1680	2.5-4.5	5000	250-700
IR-W	1000	120-240	1680	2.5-4.5	5000	300-700
IR-W	1200	120-380	1680	2.5-4.5	5000	350-700
IR-W	1500	220-480	1680	2.5-4.5	5000	350-700

Ceramic Support

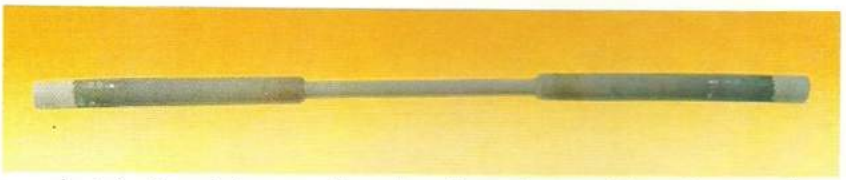
Ceramic Support



Silicon Carbide

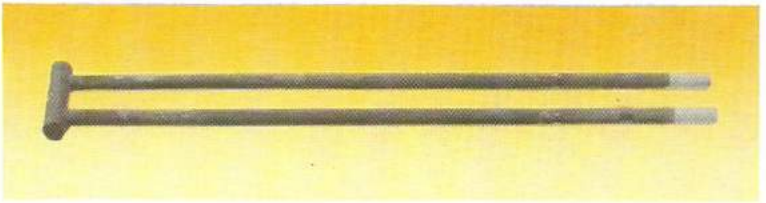
Silicon Carbide

Dumbbell Alpha Rod



One of the earliest heating element designs, the enlarged cold ends of the Dumbbell style element were originally made over sized to increase cold end cross section, lowering electrical resistance, thereby lowering cold end operating temperature. Modern Dumbbell Alpha Rod by contrast, employ an advance technology to keep the terminal ends cool by virtue of the decreased resistivity of the lower resistance cold end material used in the manufacturing process. Oversize cold ends are therefore no longer necessary, the old style resistance ratio was 1:3, whereas the new DB resistance ratio is 1:15. Maximum temperature is 1425°C.

Alpha Rod Type 'U'



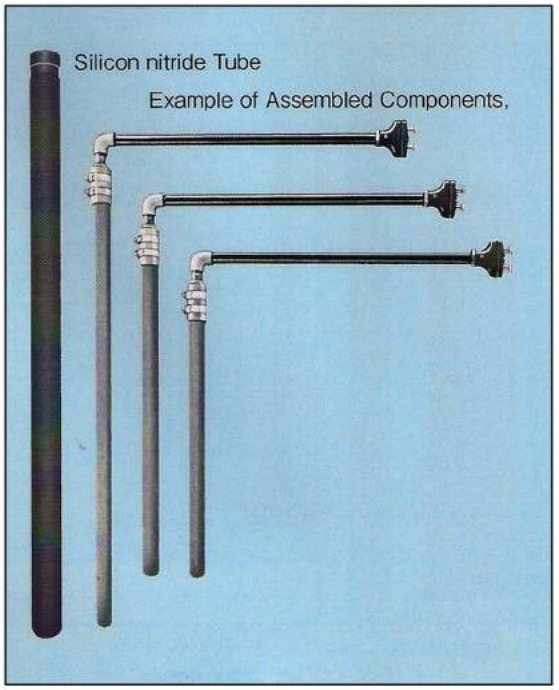
Comprising two carefully matched SiC rods united with a silicon Carbide bridge, Type U elements provide for wiring both terminals from one side of the furnace. Ideal for drop-through designs, radiant tube systems or where one element will not span heating Chamber. Pictured : Type U element with straight cold end. Dumbbell cold end also available

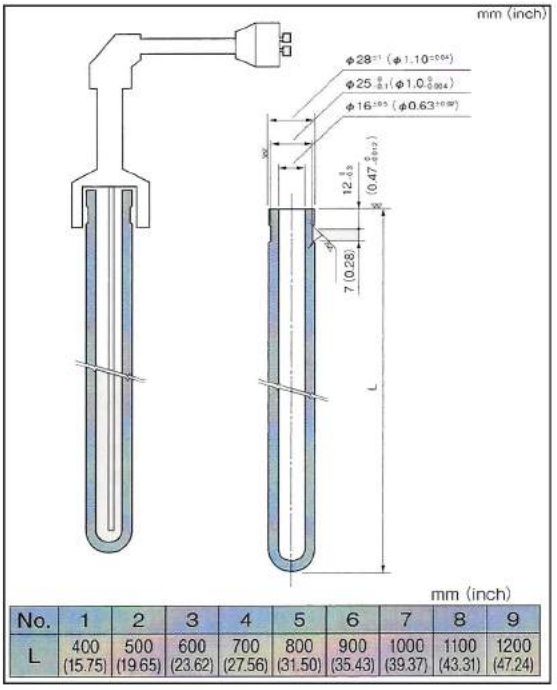
(For Dimensions, Resistance, Kindly contact us) :

Three Piece Alpha Rod

Three piece Alpha Rod features welded-on low resistance (LRE) cold ends which run cooler than any one - piece cold ends. Heat is concentrated in the furnace, not the ends, for energy efficiency. Maximum Temperature 1425°C.

Silicon Nitride





No.	1	2	3	4	5	6	7	8	9
L	400 (15.75)	500 (19.65)	600 (23.62)	700 (27.56)	800 (31.50)	900 (35.43)	1000 (39.37)	1100 (43.31)	1200 (47.24)

- **There is no eluted contamination into molten aluminum**
- **Therefore the purioty of metal is maintained**
- **Superb thermal shock resistance**
- **Light weight, high strenght, and easy to handle**

Even with flux, SN-240/201B are hardly eroded. This ensures long life

Radiant Tube Heater

Ceramic Blanket

Applications

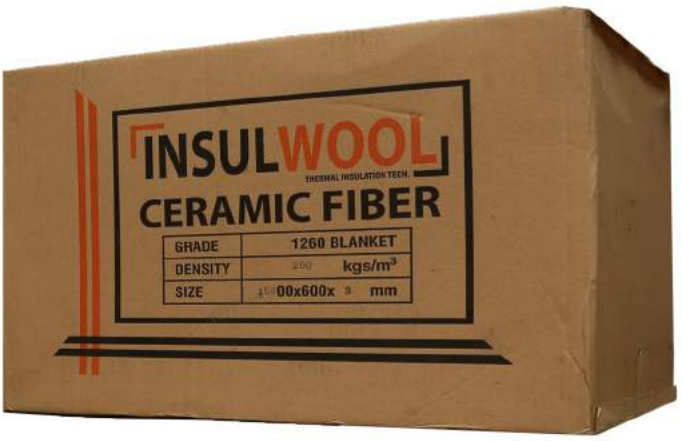
High Thermal insulation for general use
Electric Furnace, diffusing furnace, etc

Insulating lining material for furnace ceiling and walls
Annealing furnace, heat treatment furnace, etc

Back-up insulation for furnace ceiling and walls
Petroleum refining furnace, tunnel kilns, etc

Expansion joint fillings for furnaces
Sound absorbing material around burner

Thickness (mm)	Width (mm)	Length (mm)
12.5 , 25	600	7200
50	600	3600



Ceramic Blanket is a high thermal insulation which is produced by spun of blown process. It combines the advantage of low heat storage, lo thermal conductivity and excellent tensile strength. Offering a broad range of thermal capabilities and physical characteristics, the product provides proven and effective solution to a variety of high temperature heat processing applications

Available Density : 64, 96, 128 kgs/m^3
Grade : 1260 ^{0}C & 1400 ^{0}C(HT)

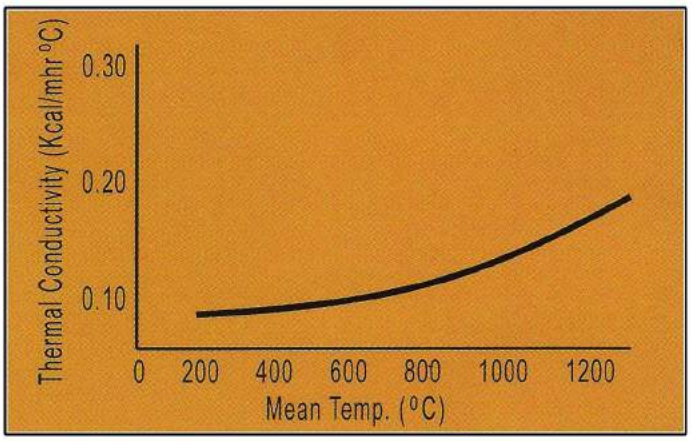
Ceramic Fiber Board

Ceramic Fiber Board is a rigid board type product made of Bulk Fiber processed with organic and inorganic binder.
Due to its hard surface, it can be used upto 30m/sec wind velocity in internal furnace.

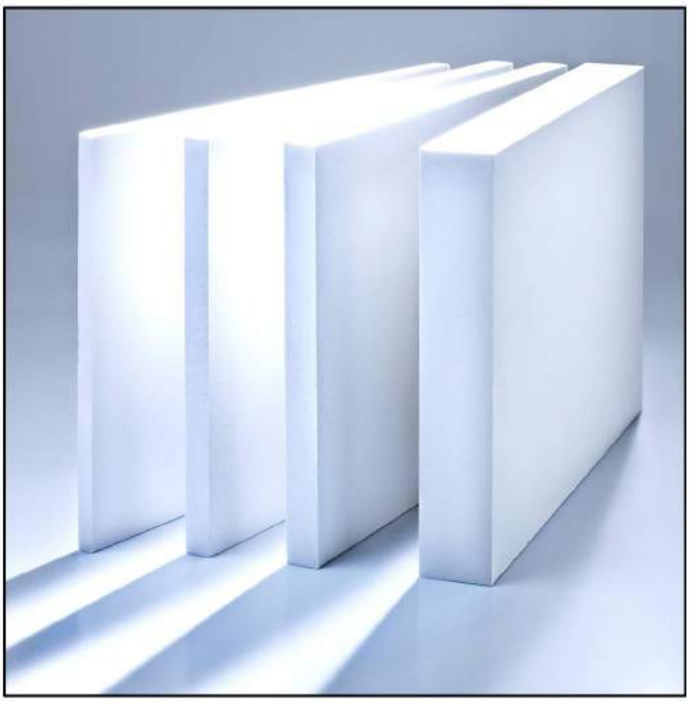
Applications

- General high thermal insulation.
- Insulating lining material for furnace ceiling and walls (annealing furnace, heat treatment furnace, etc.)
- Back-up insulation for furnace ceiling and walls. (petroleum refining furnace, tunnel kilns, etc.)
- Expansion joint fillings for furnaces.

Available Density : 300 kgs/m^3
Grade : 1260°C & 1400°C(HT)



Thickness (mm)	Width (mm)	Length (mm)
12.5	500	1000
25, 50	600	900
	1000	1200



Elstein


122mm
60mm


ELSTEIN FSR 1000
230V 1000W 750°C max
60mm
245mm


ELSTEIN FSF 400
230V 400W 750°C max.


ELSTEIN FSF 400
230V 400W 750°C max.
60mm
60mm

Thyristor Power Regulator

- Independent adjustment of Max and BIAS
- Down-opened Panel, easy for fuse replacement
- VR of Max and SFS are installed in the front panel, easy for adjustment
- Multi-LED display panel makes the operating condition clear
- The auxiliary powers are independently controlled for all models
- Build-in buffering output adjustment (SFS VR), adjusting range 1~22 seconds. Ony for the phase control product
- Top & Bottom shielding covers are designed for safety and fashion out looking, also easy for wiring installation
- In case of 0.5 Hz sudden power losses, system output can be switched off immediately. Once the power is restored the system will buffer the output to prevent the voltage surge for fuse burn-down

- Main power is one spec. Design for 200~480VAC
- Automatic power frequency detection for 50~60 Hz. No need for selection or switch
- Automatic detection and display for power out-of-phase, SCR overheating, and fuse burn-down with one set of alarm dry contact output
- In cases of SCR overheating or fuse burn-down, the system output is stopped immediately. Once the malfunction is eliminated and power is restored, the system will buffer the output to prevent the fuse burn-down
- 4-20mA, 1-5VDC, 2-10VDC, 0-5VDC, 0-10VDC, dry contact points, etc. and all control signals are ready to use
- Triggering circuit and the main board are designed separately to avoid the main board damage when main circuit malfunctions
- Using European detachable control signal connector for easy replacement without re-wiring installation

Microjet Recorder

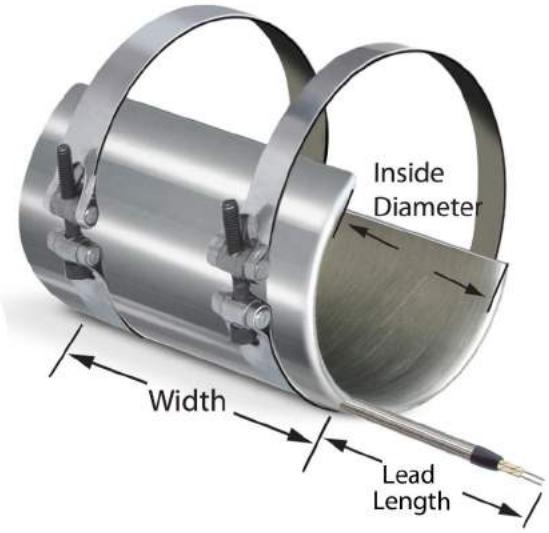
Inkjet technology, previously available only on expensive printers, is now available on a strip chart recorder at an affordable price, a price that falls below the cost of some dot matrix type printers. If you note the comparison between the dot matrix and inkjet typeface, there simply is no reason to use a dot matrix type recorder anymore

- This Recorder has basically 2 models, user programmable model and factory configuration model
- Factory can pre-configure recorder parameters with customer supplied information prior to shipment, reducing the users total installation cost and time
- In case of 1 or 2 continuous recording, 2-color type ink cartridge (PHZH2002) is also available
  Since its life-span became longer than before, you can cut the running-cost in 1/4-1/2
- Real time clock (calender) function is available with standard specification

Temperature Control

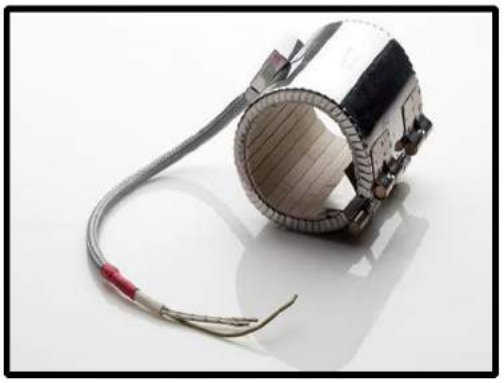
Type			PXR3	PXR4	PXR7	PXR5	PXR9	PXR4 Socket
								
External dimensions	Front size		24×48mm	48×48mm	72×72mm	48×96mm	96×96mm	48×48mm
	Panel depth (with watertight packing)		97mm	78.8mm	79.7mm	78mm	79.5mm	84.7mm
Control method	ON/OFF		●	●	●	●	●	●
	PID with auto tuning		●	●	●	●	●	●
	Fuzzy PID with auto tuning		●	●	●	●	●	●
	PID with self-tuning		●	●	●	●	●	●
	Heating and cooling (PID,fuzzy PID)		●	●	●	●	●	—
Input signal	Resistance bulb	Pt100	●	●	●	●	●	●
	Thermocouple	J,K,R,B,S,T,E,N,PLⅡ	●	●	●	●	●	●
	Voltage/current	DC1~5V, DC4~20mA	●	●	●	●	●	●
Output signal	Control output1 (heating)	Relay contact	●	●	●	●	●	●
		SSR/SSC drive	●	●	●	●	●	●
		DC4~20mA	●	●	●	●	●	●
	Control output 2 (cooling)	Relay contact	●	●	●	●	●	—
		SSR/SSC drive	●	●	●	●	●	—
		DC4~20mA	●	●	●	●	●	—
Manual operation (Note1)			—	●	●	●	●	●
Alarm output (option)			● (Max. 2 points)	● (Max. 3 points)	● (Max. 3 points)	● (Max. 3 points)	● (Max. 3 points)	● (Max. 2 points)
Heater burnout alarm (option)			—	●	●	●	●	—
8-step ramp soak (option)			●	●	●	●	●	●
RS-485 communication (option)			●	●	●	●	●	—
Digital input (option)			● (Max. 2 points)	● (Max. 2 points)	● (Max. 2 points)	● (Max. 2 points)	● (Max. 2 points)	—
Re-transmission (4 to 20mA DC)			●	●	●	●	●	—
Remote-Setpoint			—	●	●	●	●	—
Power supply voltage	AC100~240V 50/60Hz		●	●	●	●	●	●
	DC24V, AC24V 50/60Hz		●	●	●	●	●	●
Front waterproof structure			●	●	●	●	●	●
External terminal structure			Plug-in terminal	M3 screw terminal	M3 screw terminal	M3 screw terminal	M3 screw terminal	Socket
DIN rail mounting			●	—	—	—	—	●
Terminal cover			—	●	●	●	●	—
Applicable standards	UL, C-UL		●	●	●	●	●	●
	CSA		●	●	—	●	●	●
	CE mark		●	●	●	●	●	●

Band Heater


Inside
Diameter
Width
Lead
Length


Width
Lead
Length
Inside
Diameter

Nozzle Element Heater



Ceramic
Protection Tube

Ceramic Alsint

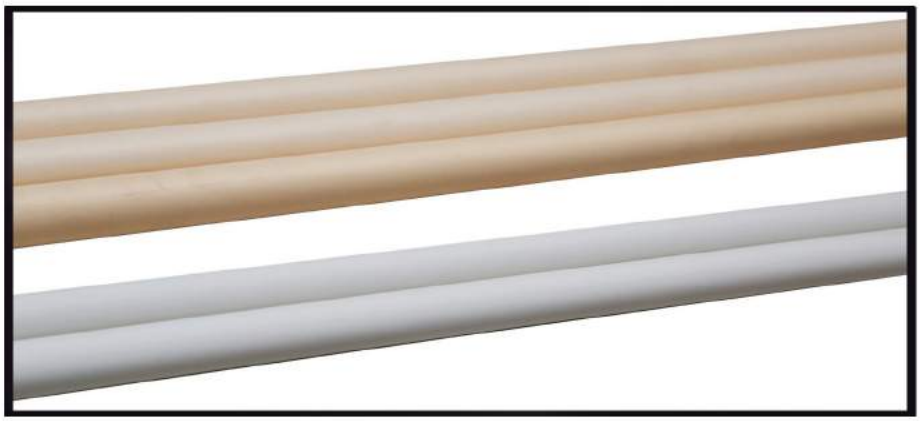
Ceramic Alsint Features

Operating Temp 1600°C
99.7% Alumina
Superior chemical stability
Recommendable for use in molten steel slag and molten glass, impervious

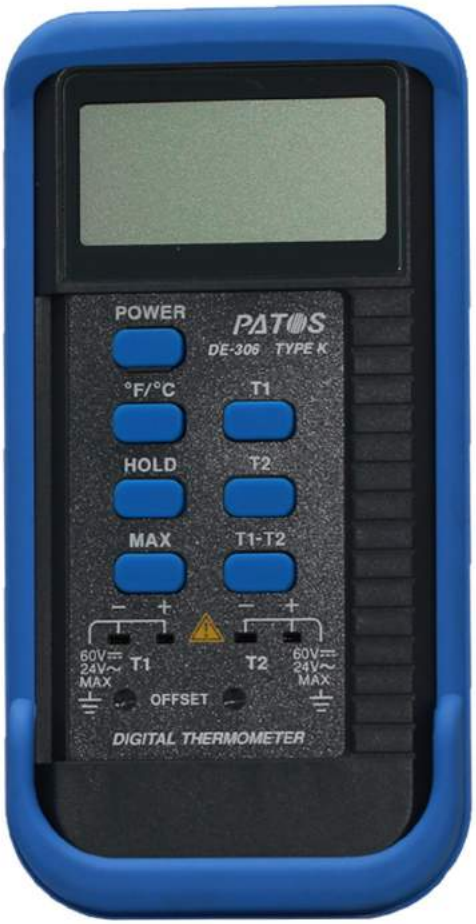
Ceramic Phytagoras

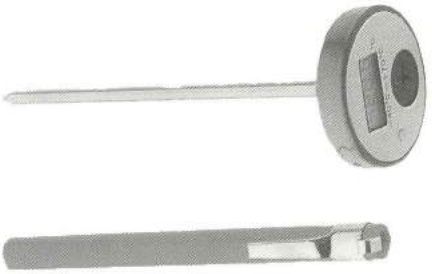
Ceramic Phytagoras Features

Operating Temp 1400°C
High Alumina ceramic. Good resistance to thermal shock
Recommendable for use in coal or oil burning and electric furnaces
60% Alumina-40% Silica
Sintered Alumina. Less thermal shock resistance



Digital Thermometer Accessories





Digital Thermohygrometer

Electrindo Manufacturing Products

1. Continuous Bright Carburizing & Hardening Furnace.(Oil Water Salt)
2. Batch Type Carburizing & Nitriding Furnace. Box, Pit, Rotary Type
3. Continous Bright Treatment Furnace. for Stainless, Brazing
4. Circulation Furnace. Box, Pit, Truck, Continuous Type
5. High Temp. Furnace. Box, Pit, Truck Type
6. RX, DX Gas Generator, AX Ammogas Generator
7. Powder Metallurgy & Steam Treatment Furnace
8. Salt Bath Treatment Furnace. Pit, Continuous Type
9. Aluminium & Low Alloy Melting Furnace
   Aluminium Brazing Furnace for Al. Condenser & Heat Exchanger
10. Teflon & Enamel Coating Firing Furnace. Aluminium, Plate Steel
11. Precision Ceramic Sintering & Lab Furnace. (Ferric, Condenser, Resistor)
12. Back-Mirror Forming Furnace for Auto Car. Concave, Raised, Clock
13. Flat Glass Tempering-Bending Furnace. Nature Chemical
    Architecture, Furniture, Automobile, Pot Cover

PT. ELECTRINDO TEHNIKAPRIMA

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