ADCERAX
ADVANCED CERAMICS

Silicon Carbide Heating Tube

——Stable output. Fast ramping. Longer furnace uptime.

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About ADCERAX

Powered by **HUNAN ATCERA CO.,LTD** – A Trusted Innovator in Advanced Ceramics Since 2010 ,**HUNAN ATCERA CO. Ltd** has been deeply engaged in the field of advanced ceramics for 20 years, and has production experience of more than 2000 precision ceramic products. We focus on the material of alumina ceramics, zirconia ceramics, silicon carbide ceramics, silicon nitride ceramics, aluminum nitride ceramics and quartz, etc., and aim to provide you with advanced ceramics one-stop service.

Adcerax delivering bespoke advanced ceramic solutions for industries where precision and durability matter.And has become a leading global China supplier of silicon carbide tube, with products exported to the United States, Germany, Japan, South Korea, and many other countries.

Our Expertise

Engineering Support: Professional product engineers providing timely technical assistance from design to production.

Customization Capability: Accepting small-batch custom orders based on customer drawings or samples.

Rapid Delivery: Quick shipping for custom orders and 24-hour dispatch for in-stock standard products.

Supply Chain Integration: One-stop customization and procurement services leveraging China's supply chain advantages.

ADCERAX Promise

Your ROI Starts from Day One

- ↑ 37% Lifespan: Industry Standards Verified by SGS Third-Party Testing in Extreme Thermal Shock Environments
- ↓ 22% Downtime: Reduce unplanned downtime with ceramic component life enhancement
- ⚡15 days fast response: From drawing confirmation to functional prototype delivery
- 🛡️12 months warranty: Unconditional return of quality problems to factory for remanufacturing + process optimization report

Our Certifications

CNAS ISO 水圆认证 CQM CERTIFICATION RoHS COMPLIANT

What is Silicon Carbide Heating Tube?

Silicon Carbide Heating Tube is a ceramic heating component made mainly from silicon carbide material. It is designed to generate heat directly and work stably in high-temperature furnaces and thermal processing equipment.

It is commonly used for

- Industrial electric furnaces
- Heat treatment equipment
- Laboratory high-temperature furnaces
- Drying and sintering systems
- Kilns and thermal processing lines

Silicon Carbide Heating Tube Process

Raw Material Preparation

Alumina powder is selected and mixed with binders and plasticizers to form a uniform slurry or paste.

Forming

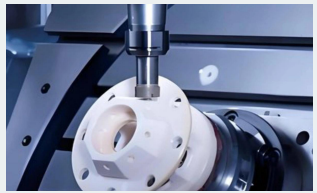
Extrusion: Alumina slurry is extruded through a die into continuous tubular shapes.
Isostatic Pressing: Powder is molded under high pressure to form high-density, uniform tubes.
Slip Casting: Liquid slurry is cast into a mold and solidified.

Drying

The formed tubes are dried slowly to remove moisture and prevent cracking or deformation.

Sintering

The dried tubes are fired in a high-temperature kiln (typically 1600–1700°C) to achieve full densification and develop the final ceramic properties.



Machining

After sintering, the tubes may be ground or machined to achieve precise dimensions, surface finish, or special features such as chamfered ends or holes.

Silicon Carbide Heating Tube Properties

Item	Unit	RBSiC (SiSiC)	SSiC	NBSiC
Full Name	—	Reaction Bonded Silicon Carbide	Sintered Silicon Carbide	Nitride Bonded Silicon Carbide
SiC Content	W%	80	99	80
Free Si	W%	20	0	0
Si_3N_4 Content	W%	0	0	20
Max. Service Temperature	°C	≤1380	≤1600	≤1550
Density	g/cm³	3.02	3.1	2.8
Apparent Porosity	%	<0.1	<0.1	12
Flexural Strength (20°C)	MPa	250	380	160
Flexural Strength (1200°C)	MPa	280	400	180
Elastic Modulus	GPa	330	420	220
Thermal Conductivity (1000°C)	W/m·K	45	74	15
Thermal Expansion Coefficient	$K^{-1} \times 10^{-6}$	4.5	4.1	5
Hardness	kg/mm²	2600	2800	2600

Why This Silicon Carbide Heating Tube Wins in Real Furnace Duty?

The value is not only higher temperature - it is more stable heat delivery, fewer shutdowns and more predictable ageing.

Continuous high-temperature capability:

RSiC supports continuous service up to 1600 C, with peak exposure up to 1700 C for demanding furnace operations.

Rapid thermal cycling tolerance:

The product page states 300-500 C/min thermal-shock resistance, helping aggressive ramps without structural failure.

Better atmosphere resistance:

A protective SiO2 layer reduces surface degradation by more than 30% versus metal-based heating elements in mixed-gas environments.

Less maintenance pressure:

Reported replacement intervals are reduced 20-35% in cyclic heat-treatment duty, with some applications showing 30-40% lower replacement frequency versus FeCrAl heaters.

Stable resistance aging:

Electrical drift is typically controlled within +/-5% after 1000 hours of elevated-temperature exposure, improving control accuracy.

Where buyers usually need it

Used in electric furnaces, heat treatment systems, ceramic kilns, and laboratory furnaces where stable high-temperature heating is required.

What it protects against

Helps reduce slow heat-up, uneven heating, oxidation-related failure, and frequent element replacement in high-temperature service.

Why buyers move away from conventional options

Conventional metal elements may oxidize faster and lose stability at high temperature. Silicon carbide heating tubes are chosen for higher temperature capability, faster response, and longer service life.

Silicon Carbide Heating Tube

Fast, stable heating for high-temperature electric furnace duty

SPECIFICATIONS

Material	**Silicon Carbide (SiC)**
Typical Use	**Electric heating element**
Max Temperature	**Up to 1500–1600°C**
Density	**Approx. 2.8–3.1 g/cm³**
Customization	**Custom diameter, heated length, cold end, and terminal design available**

APPLICATIONS

Electric Furnaces · Sintering Furnaces · Heat Treatment Equipment · Laboratory Furnaces · Thermal Processing Systems · Industrial Heating Lines · High-Temperature Heating Duty

KEY FEATURES

1. Provides rapid heat generation and stable thermal output in high-temperature electric furnace systems.
2. Good oxidation resistance supports reliable service in air and oxidizing atmospheres.
3. Maintains heating performance under repeated start-stop and thermal cycling conditions.
4. Suitable for furnaces requiring fast temperature rise, uniform heating, and long service stability.

🎯 Silicon Carbide Heating Tube Size:

Type1- Silicon Carbide Heating Element Single Helical

Type	OD / mm	Heating zone / mm	Cold zone/ mm	Overall length /mm	Hot zone surface area / cm²	voltage / V	Power / W	Range of resistance Ω (±20%)	Purity
AT-THG-BA001	14	200	200	600	87	59	1650	2.11	99%
AT-THG-BA002	14	200	250	700	87	60	1680	2.14	99%
AT-THG-BA003	14	250	200	650	109	71	1990	2.53	99%
AT-THG-BA004	14	250	250	750	109	73	2040	2.61	99%
AT-THG-BA005	14	300	250	800	131	85	2380	3.04	99%
AT-THG-BA006	16	200	250	700	100	58	1970	1.71	99%
AT-THG-BA007	16	250	200	650	125	69	2350	2.03	99%
AT-THG-BA008	16	250	250	750	125	70	2380	2.06	99%
AT-THG-BA009	16	250	300	850	125	71	2410	2.09	99%
AT-THG-BA010	16	300	200	700	150	81	2750	2.39	99%
AT-THG-BA011	16	300	250	800	150	82	2790	2.41	99%
AT-THG-BA012	16	300	300	900	150	83	2820	2.44	99%
AT-THG-BA013	16	350	250	850	175	94	3200	2.76	99%

Silicon Carbide Heating Tube Size:

Type	OD / mm	Heating zone / mm	Cold zone/ mm	Overall length /mm	Hot zone surface area / cm²	voltage / V	Power / W	Range of resistance Ω （±20%）	Purity
AT-THG-BA014	16	350	300	950	175	95	3230	2.79	99%
AT-THG-BA015	20	300	400	1100	188	84	3440	2.05	99%
AT-THG-BA016	20	350	400	1150	219	97	3980	2.36	99%
AT-THG-BA017	20	400	400	1200	251	109	4470	2.66	99%
AT-THG-BA018	20	450	400	1250	282	121	4960	2.95	99%
AT-THG-BA019	25	300	400	1100	235	84	4120	1.71	99%
AT-THG-BA020	25	300	500	1300	235	86	4210	1.76	99%
AT-THG-BA021	25	400	400	1200	314	110	5390	2.24	99%
AT-THG-BA022	25	500	400	1300	392	135	6620	2.75	99%
AT-THG-BA023	30	300	400	1100	282	79	4980	1.25	99%
AT-THG-BA024	30	300	500	1300	282	80	5040	1.27	99%
AT-THG-BA025	30	400	400	1200	376	103	6490	1.63	99%
AT-THG-BA026	30	400	500	1400	376	104	6550	1.65	99%
AT-THG-BA027	30	500	400	1300	471	127	8000	2.02	99%

🎯 Silicon Carbide Heating Tube Size:

Type	OD / mm	Heating zone / mm	Cold zone/ mm	Overall length /mm	Hot zone surface area / cm²	voltage / V	Power / W	Range of resistance Ω （±20%）	Purity
AT-THG-BA028	30	600	400	1400	565	151	9510	2.4	99%
AT-THG-BA029	35	400	400	1200	439	101	7680	1.33	99%
AT-THG-BA030	35	400	500	1400	439	102	7750	1.34	99%
AT-THG-BA031	35	500	400	1300	549	124	9420	1.63	99%
AT-THG-BA032	35	500	500	1500	549	125	9500	1.64	99%
AT-THG-BA033	35	600	400	1400	659	148	11200	1.96	99%
AT-THG-BA034	35	700	400	1500	769	171	13000	2.25	99%
AT-THG-BA035	40	500	400	1300	628	116	10700	1.26	99%
AT-THG-BA036	40	500	500	1500	628	117	10800	1.27	99%
AT-THG-BA037	40	600	400	1400	753	138	12700	1.5	99%
AT-THG-BA038	40	700	400	1500	879	161	14800	1.75	99%
AT-THG-BA039	45	700	450	1600	989	149	16800	1.32	99%
AT-THG-BA040	45	800	400	1600	1130	168	19000	1.49	99%

🎯 Silicon Carbide Heating Tube Size:

Type2- Silicon Carbide Heating Element Double Helical

Type	OD (mm)	Heat zone (mm)	Cold zone (mm)	Overall length (mm)	Heating zone (cm²)	voltage (V)	Power (W)	Range of resistance Ω (±20%)	Purity
AT-THG-BB001	16	100	150	250	50	61	940	3.96	99%
AT-THG-BB002	16	100	200	300	50	69	1060	4.49	99%
AT-THG-BB003	16	150	150	300	75	84	1290	5.47	99%
AT-THG-BB004	16	150	250	400	75	99	1520	6.45	99%
AT-THG-BB005	16	200	200	400	100	113	1740	7.34	99%
AT-THG-BB006	16	250	200	450	125	135	2080	8.76	99%
AT-THG-BB007	20	100	150	250	62	58	1110	3.03	99%
AT-THG-BB008	20	100	250	350	62	72	1380	3.76	99%
AT-THG-BB009	20	150	200	350	94	87	1670	4.53	99%
AT-THG-BB010	20	200	200	400	125	109	2090	5.68	99%
AT-THG-BB011	20	250	150	400	157	124	2380	6.46	99%
AT-THG-BB012	20	250	250	500	157	138	2650	7.19	99%
AT-THG-BB013	20	300	250	550	188	160	3070	8.34	99%
AT-THG-BB014	25	150	200	350	117	87	2000	3.78	99%

🎯 Silicon Carbide Heating Tube Size:

Type	OD / mm	Heating zone / mm	Cold zone/ mm	Overall length /mm	Hot zone surface area / cm²	voltage / V	Power / W	Range of resistance Ω (±20%)	Purity
AT-THG-BB015	25	200	200	400	157	110	2530	4.78	99%
AT-THG-BB016	25	200	300	500	157	121	2780	5.27	99%
AT-THG-BB017	25	300	300	600	235	167	3840	7.26	99%
AT-THG-BB018	25	300	400	700	235	179	4120	7.78	99%
AT-THG-BB019	25	350	300	650	274	191	4390	8.31	99%
AT-THG-BB020	25	400	300	700	314	214	4920	9.31	99%
AT-THG-BB021	30	200	200	400	188	190	2790	2.9	99%
AT-THG-BB022	30	250	200	450	235	111	3440	3.58	99%
AT-THG-BB023	30	300	300	600	282	132	4090	4.26	99%
AT-THG-BB024	30	350	350	700	329	153	4740	4.94	99%
AT-THG-BB025	30	400	400	800	376	174	5390	5.62	99%
AT-THG-BB026	30	450	350	800	424	194	6010	6.26	99%
AT-THG-BB027	30	500	300	800	471	214	6630	6.91	99%
AT-THG-BB028	35	200	200	400	219	89	3260	2.43	99%
AT-THG-BB029	35	250	200	450	274	109	3990	2.98	99%

🎯 Silicon Carbide Heating Tube Size:

Type	OD / mm	Heating zone / mm	Cold zone/ mm	Overall length /mm	Hot zone surface area / cm²	voltage / V	Power / W	Range of resistance Ω (±20%)	Purity
AT-THG-BB030	35	300	300	600	329	130	4760	3.55	99%
AT-THG-BB031	35	400	300	700	439	171	6260	4.67	99%
AT-THG-BB032	35	450	350	800	494	191	6990	5.22	99%
AT-THG-BB033	35	500	300	800	549	211	7720	5.77	99%
AT-THG-BB034	40	200	200	400	251	86	3660	2.02	99%
AT-THG-BB035	40	250	200	450	314	106	4510	2.49	99%
AT-THG-BB036	40	300	300	600	376	127	5400	2.99	99%
AT-THG-BB037	40	350	300	650	439	147	6250	3.46	99%
AT-THG-BB038	40	400	300	700	502	167	7100	3.93	99%
AT-THG-BB039	40	400	400	800	502	167	7100	3.93	99%
AT-THG-BB040	40	450	300	750	565	186	7910	4.37	99%
AT-THG-BB041	40	450	350	800	565	187	7950	4.4	99%
AT-THG-BB042	40	500	300	800	628	206	8760	4.84	99%

Silicon Carbide Heating Tube Size:

Type3- Silicon Carbide Heating Element Dumbbell

Type	Small side OD / mm	Heat zone length / mm	Cold zone length / mm	large side OD / mm	Range of resistance / Ω	Purity
AT-THG-BD001	8	180	60	14	2.6-5.2	99%
AT-THG-BD002	8	180	150	14	2.6-5.2	99%
AT-THG-BD003	8	150	150	14	2.2-4.5	99%
AT-THG-BD004	8	180	180	14	2.6-5.2	99%
AT-THG-BD005	8	200	150	14	2.9-5.8	99%
AT-THG-BD006	12	150	200	20	1.1-2.2	99%
AT-THG-BD007	12	200	200	20	1.4-2.9	99%
AT-THG-BD008	12	250	200	20	1.8-3.8	99%
AT-THG-BD009	14	180	150	22	1.3-2.3	99%
AT-THG-BD010	14	150	250	22	0.9-1.8	99%
AT-THG-BD011	14	200	250	22	1.2-2.3	99%
AT-THG-BD012	14	250	250	22	1.5-3.0	99%
AT-THG-BD013	14	300	250	22	1.8-3.5	99%
AT-THG-BD014	14	400	350	22	2.3-4.7	99%
AT-THG-BD015	18	300	250	28	1.1-2.2	99%

🎯 Silicon Carbide Heating Tube Size:

Type	Small side OD / mm	Heat zone length / mm	Cold zone length / mm	large side OD / mm	Range of resistance / Ω	Purity
AT-THG-BD016	18	300	350	28	1.1-2.2	99%
AT-THG-BD017	18	400	250	28	1.4-2.9	99%
AT-THG-BD018	18	500	350	28	1.8-3.6	99%
AT-THG-BD019	18	600	350	28	2.1-4.3	99%
AT-THG-BD020	18	400	400	28	1.4-2.9	99%
AT-THG-BD021	25	400	400	38	0.8-1.7	99%
AT-THG-BD022	25	600	500	38	1.3-2.6	99%
AT-THG-BD023	25	800	450	38	1.7-3.4	99%
AT-THG-BD024	25	500	400	45	0.6-1.2	99%
AT-THG-BD025	30	1000	500	45	1.1-2.2	99%
AT-THG-BD026	30	1200	500	45	1.3-2.6	99%
AT-THG-BD027	40	1000	500	56	0.8-1.7	99%
AT-THG-BD028	40	1500	500	56	1.3-2.6	99%
AT-THG-BD029	40	2400	700	56	2.0-4.0	99%
AT-THG-BD030	40	2600	850	56	2.2-4.4	99%

🎯 Silicon Carbide Heating Tube Size:

Type4- Silicon Carbide Heating Element Tubes

Type	OD / mm	Heating zone length / mm	Cold zone length / mm	Range of resistance / Ω	Purity
AT-THG-BC001	14	200	250	1.2-1.3	99%
AT-THG-BC002	14	250	250	1.5-3.0	99%
AT-THG-BC003	14	300	250	1.8-3.5	99%
AT-THG-BC004	14	400	350	2.3-4.7	99%
AT-THG-BC005	14	500	350	2.9-5.9	99%
AT-THG-BC006	16	200	200	0.9-1.9	99%
AT-THG-BC007	16	250	200	1.2-2.4	99%
AT-THG-BC008	16	300	300	1.4-2.8	99%
AT-THG-BC009	18	250	250	0.9-1.8	99%
AT-THG-BC010	18	300	350	1.1-2.2	99%
AT-THG-BC011	18	400	250	1.4-2.9	99%
AT-THG-BC012	18	500	350	1.8-3.6	99%
AT-THG-BC013	20	200	200	0.6-1.2	99%
AT-THG-BC014	20	250	250	0.7-1.4	99%
AT-THG-BC015	20	300	300	0.8-1.6	99%

🎯 Silicon Carbide Heating Tube Size:

Type	OD / mm	Heating zone length / mm	Cold zone length / mm	Range of resistance / Ω	Purity
AT-THG-BC016	20	400	350	1.1-2.2	99%
AT-THG-BC017	20	500	400	1.4-2.8	99%
AT-THG-BC018	20	600	350	1.5-3.0	99%
AT-THG-BC019	25	300	400	0.6-1.3	99%
AT-THG-BC020	25	400	400	0.8-1.7	99%
AT-THG-BC021	25	500	400	1.1-2.2	99%
AT-THG-BC022	25	600	500	1.3-2.6	99%
AT-THG-BC023	25	800	450	1.7-3.4	99%
AT-THG-BC024	25	900	400	1.9-3.8	99%
AT-THG-BC025	25	1000	500	2.2-4.5	99%
AT-THG-BC026	30	400	400	0.5-0.9	99%
AT-THG-BC027	30	500	400	0.6-1.2	99%
AT-THG-BC028	30	1000	500	1.1-2.2	99%
AT-THG-BC029	30	1200	500	1.3-2.6	99%
AT-THG-BC030	30	1300	500	1.4-2.9	99%
AT-THG-BC031	30	1500	250	1.6-3.4	99%

🎯 Silicon Carbide Heating Tube Size:

Type	OD / mm	Heating zone length / mm	Cold zone length / mm	Range of resistance / Ω	Purity
AT-THG-BC032	30	1500	300	1.6-3.4	99%
AT-THG-BC033	30	1500	600	1.6-3.4	99%
AT-THG-BC034	30	2000	650	2.2-4.4	99%
AT-THG-BC035	35	400	400	0.4-0.8	99%
AT-THG-BC036	35	500	400	0.5-1.0	99%
AT-THG-BC037	35	1000	500	1.0-2.0	99%
AT-THG-BC038	35	1200	500	1.1-2.2	99%
AT-THG-BC039	35	1500	500	1.4-2.8	99%
AT-THG-BC040	40	400	400	0.3-0.7	99%
AT-THG-BC041	40	1000	500	0.8-1.7	99%
AT-THG-BC042	40	1500	500	1.3-2.6	99%
AT-THG-BC043	40	2000	650	1.7-3.4	99%
AT-THG-BC044	40	2400	700	2.0-4.0	99%
AT-THG-BC045	40	2600	850	2.2-4.4	99%

Silicon Carbide Heating Tube Size:

Type5- Silicon Carbide Heating Element Type W

Type	Heat zone OD / mm	Heating zone length / mm	Cold zone Length / mm	center distance / mm	Bridge OD / mm	Overall length / mm	Purity
AT-THG-BF001	14	200	250	40	14	54	99%
AT-THG-BF002	14	250	300	50	14	64	99%
AT-THG-BF003	14	300	350	60	14	74	99%
AT-THG-BF004	16	200	250	40	16	56	99%
AT-THG-BF005	16	250	300	50	16	66	99%
AT-THG-BF006	16	300	350	60	16	76	99%
AT-THG-BF007	18	300	350	60	18	78	99%
AT-THG-BF008	18	400	400	70	18	88	99%
AT-THG-BF009	18	500	450	75	18	93	99%
AT-THG-BF010	20	250	300	50	20	70	99%
AT-THG-BF011	20	300	350	60	20	80	99%
AT-THG-BF012	20	400	400	70	20	90	99%
AT-THG-BF013	25	400	400	70	25	95	99%
AT-THG-BF014	25	500	450	75	25	100	99%
AT-THG-BF015	25	600	500	80	25	105	99%
AT-THG-BF016	30	600	400	70	30	100	99%
AT-THG-BF017	30	700	450	75	30	105	99%
AT-THG-BF018	30	800	500	80	30	110	99%

🎯 Silicon Carbide Heating Tube Size:

Type6- Silicon Carbide Heating Element Type U

Type	Heating zone OD / mm	Heating zone Length / mm	Cold zone Length / mm	center distance / mm	Bridge OD / mm	Overall length / mm	Range of resistance / Ω	Purity
AT-THG-BU001	14	200	250	40	14	54	2.4-4.6	99%
AT-THG-BU002	14	250	300	50	14	64	3.0-6.0	99%
AT-THG-BU003	14	300	350	60	14	74	3.6-7.0	99%
AT-THG-BU004	16	200	250	40	16	56	1.4-2.8	99%
AT-THG-BU005	16	250	300	50	16	66	1.8-3.6	99%
AT-THG-BU006	16	300	350	60	16	76	2.0-5.0	99%
AT-THG-BU007	18	300	350	60	18	78	2.0-5.0	99%
AT-THG-BU008	18	400	400	70	18	88	2.8-5.8	99%
AT-THG-BU009	18	500	450	75	18	93	3.6-7.2	99%

Customize Silicon Carbide Heating Tube

For industrial buyers, the real decision is not only size. It is whether geometry, resistance behavior and atmosphere adaptation are tuned to the process.

Sructural customization

- Tube geometry for furnace layout
- Heating-zone / cold-end distribution
- Terminal structure for reliable connection

Thermal-electrical matching

- Nominal resistance profile for controller compatibility
- Surface watt loading tuned to throughput demand
- Ramp-rate behavior aligned with thermal profile

Atmosphere adaptation

- Oxidation strategy for protective film growth
- Atmosphere compatibility for vapor and reactive gas exposure
- Operational cycling support for repeated thermal transitions

Customization Process

1. **Inquiry & Design** — Submit your **detailed** requirements
2. **Mold & Samples** — Proceed with mold/sample creation
3. **Confirmation** — Confirm specifications and contract
4. **Delivery** — Safe and efficient shipping

Fast Response Commitment

From drawing confirmation to functional prototype delivery

15 Days

Silicon Carbide Heating Tube Applications

Metal heat-treatment furnaces

Challenge

Heating elements operate under repeated high-temperature cycles, which can lead to slow heat-up, temperature fluctuation, and shorter service life.

Why SiC works

Silicon carbide heating tubes offer fast thermal response, high operating temperature capability, and stable radiant heating in continuous furnace service.

Observed result

Heat-up becomes faster, furnace temperature stays more uniform, and element replacement frequency is reduced.

Ceramic and refractory sintering

Challenge

Sintering processes require stable high-temperature heating. Poor temperature uniformity can cause uneven firing, defects, and inconsistent product quality.

Why SiC works

Silicon carbide heating tubes provide efficient heat transfer, reliable high-temperature operation, and more even heat distribution across the furnace chamber.

Observed result

Firing consistency improves, temperature control becomes steadier, and product quality is more repeatable.

Glass and fiber-glass conditioning

Challenge

Long operating cycles and elevated furnace temperatures can accelerate element aging, reduce heating efficiency, and increase maintenance frequency.

Why SiC works

Silicon carbide heating tubes combine oxidation resistance, high-temperature stability, and dependable performance under continuous thermal duty.

Observed result

Service life is extended, furnace operation becomes more stable, and downtime for heater replacement is reduced.

Silicon Carbide Heating Tube Usage Guide

Installation Preparation

- Careful Handling : Avoid impact and keep contact areas clean.
- Pre-Use Check: Check tube condition, alignment, and chamber fit before heating.
- Proper Support: Use stable supports and allow thermal expansion.

Start-Up Guidelines

- Gradual Heating: Use a moderate ramp-up at initial start-up.
- Even Temperature Rise : Avoid sudden heating and large temperature differences.
- Basic Monitoring : Watch resistance and current during early operation.

Operational Practices

- Suitable Atmosphere: Use in compatible furnace atmospheres.
- Stable Operation: Avoid overload and local overheating.
- Power Matching: Match the tube with the correct electrical system.

Maintenance and Inspection

- Routine Inspection: Check surface condition and end contacts regularly.
- Gentle Cleaning: Clean only after full cooling.
- Planned Replacement: Replace based on wear and resistance drift.

Technical Support

Technical Inquiry: info@adcerax.com

Service Hotline: +86-0731-84428843

Whatsapp: +86-19311583352

Silicon Carbide Heating Tube FAQ

Q: How does the Silicon Carbide Heating Tube keep stable high-temperature output?

A: Its recrystallized SiC structure helps maintain stable electrical resistance during long high-temperature cycles. A protective SiO_2 layer also slows oxidation and supports consistent radiant heat output.

Q: Why does the Silicon Carbide Heating Tube resist thermal shock better?

A: Its low thermal expansion and strong ceramic structure provide high thermal-shock resistance during rapid heating and cooling. This helps reduce cracking, deformation, and thermal fatigue.

Q: How does the Silicon Carbide Heating Tube reduce unplanned downtime?

A: The tube resists oxidation, corrosion, and resistance drift, helping prevent sudden heater failure. This supports longer service life and more predictable replacement planning.

Q: How does the Silicon Carbide Heating Tube improve temperature uniformity?

A: Its good thermal conductivity helps deliver more even heat distribution along the heating length. This reduces local hot spots and improves furnace temperature uniformity.

Q: Why is the Silicon Carbide Heating Tube suitable for harsh furnace atmospheres?

A: Its dense SiC matrix offers good resistance to oxidizing and chemically demanding atmospheres. This helps maintain structural stability and heating performance in continuous service.

Service Support

ADCERAX is committed to providing comprehensive service support to customers, from product selection to after-sales maintenance.

Pre-Sales Support

- Expert technical team provides custom design advice
- Sample testing and performance verification
- Technical parameter consultation

Sales Support

- Order tracking and production progress updates
- Professional packaging and logistics solutions

After-Sales Service

- Product quality assurance and problem resolution
- Technical consultation and application support
- 24-hour response commitment

Quality Assurance

- Strict quality control system
- Product performance testing and verification

Contact Our Specialist Team

Customer Service: info@adcerax.com

Service Hotline: +86-0731-84428843

Online Support: adcerax.com/support

Contact Us

ADCERAX looks forward to cooperating with you and providing high-quality silicon carbide tube solutions. Our team is dedicated to serving you with any questions or needs you may have.

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Inquiry Process

1. **Submit Inquiry**
   Submit your requirements via email, phone, or website form.
2. **Technical Evaluation**
   Our expert team evaluates your needs and provides solutions.
3. **Quotation Confirmation**
   Provide detailed quotation and delivery time based on your requirements.
4. **Order Confirmation**
   Confirm order and arrange production and delivery.

Get in touch with us

We promise to respond to your inquiry within 24 hours.

Ready to enhance your product performance with silicon carbide tube? Contact our team for personalized consultation, technical support, and competitive quotations.

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