



Graphite Carbon Sleeve

For Annealing Furnace for Silicon Steel



The Graphite Carbon sleeve is using high quality coke as raw materials, and high coking modified asphalt as binder, supplement with a small amount of additive. The Graphite Carbon Sleeve has an isophobic internal structure, antioxidant treatment resistant up to 1100°C



Graphite Carbon Sleeve Technical Standards

1. Appearance standard

Diameter of Carbon graphite sleeve surface hole is no more than 1.5mm and the number of holes with diameter between 1.0-1.5mm is less than 3. Graphite sleeve has no surface cracks. Surface cracks is detected by visual inspection, surface roughness and product tag location are manufactured according to the contract drawing specification.

2. Dimensions

Convexity, flatness, diameter (both inside and outside), length, card slot and other specifications of graphite carbon sleeve are manufactured according to the contract

3. Graphite Carbon Sleeve Physical-Chemical Indexes.

Performance Index	Product Category					
	DWTT	ZWTT	GWTT			
Bending Strength (Mpa)	≥ 15	≥ 18	≥ 25			
Compressive Strength (Mpa)	≥ 30	≥ 35	≱ 45			
Porosity (%)	≤ 12	≤ 10	≤ 10			
Bulk Density (g/cm³)	≥ 1.73	≥ 1.75	≥ 1.85			
Graphitization Degree (%)	70-90	70-90	75-90			
Shore Hardness (Hs)	35-50	35-50	35-50			
Maximum Apreture (mm)	≤ 0.2	≤ 0.1	≤ 0.05			
Using Conditions Wet and Dry Atmosphere Room temperature – 900°C		Wet and Dry Atmosphere 850°C – 950°C	Dry Atmosphere above 950 °C			



References

Customer	Country	Size	Quantity supplied/year	Working Time	Working Temperature	Forming Type
Wuhan Steel	China	150x1900mm 180x1900mm	200pcs 145pcs	3 month	960-1050°C	Isostatic molded
Baosteel	China	150x1900mm 180x1900mm	100pcs 80pcs	3 month	960-1050°C	Isostatic molded
Tisco	China	140x2000mm	60pcs	6 month	900-1050°C	Isostatic molded
Posco Pohang	South Korea	150x2100mm	500pcs	6 month to 1 year	<950°C	Isostatic molded

Graphite Carbon Sleeve Operation Precautions

- 1. Carbon Graphite Sleeve is a brittle material. Vibration-impact during trasportation and installation is prone to breakage.
- 2. Iron core deformation (bending) will lead to breakage of the carbon graphite sleeve. Regularly checking and accordingly replacement is necessary.
- 3. Graphite oxidation reaction starts at 400 °C. Be aware of cooling for preventive maintenance in the dry atmosphere.
- 4. Keep furnace clean. Furnace dust and metal oxides are the primary cause of nodulation.





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