

# Graphite Electrode & Nipples Low Cost | High Performance | Quick Delivery





## **Graphite Electrodes & Nipples**

Wedge Graphite Electrodes & Nipples are made of high-quality petroleum coke and needle coke raw materials with an objective to achieve high electric & thermal conductivity, mechanical strength, thermal shock resistance, machinability. Continuous development in Electric Arc Furnaces (EAF) & Ladle Technology has led to the need of Graphite Electrodes of very stringent quality.

At Wedge we offer wide range electrode grades and diameters to help maximize your furnace performance and provide measurable operational conditions without thermo-mechanical problems to ensure smooth trouble free operation.

#### Features & Advantages:

- Low electric resistance
- Excellent electric and thermal conductivity
- Very high oxidation resistance
- Improved thermal shock resistance
- Very high mechanical strength
- · Highest level of machining accuracy

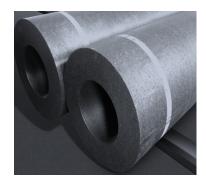
### **Application**

- Electric Arc Furnace (EAF) steelmaking Ladle Furnace
- Thermoelectric furnace for the production of ferroalloy, pure silicon, yellow phosphorus, copper ice, calcium carbide, etc.
- Graphite furnace, melting glass furnace and electric furnace for producing silicon carbide.



| Quality                     |                                  | НР          |             | UHP         |             |
|-----------------------------|----------------------------------|-------------|-------------|-------------|-------------|
|                             |                                  | Electrode   | Nipple      | Electrode   | Nipple      |
| Electrical Resistivity, max | μΩ.m                             | 5.4 - 7.0   | 4.5 - 6.0   | 5.5         | 4.5         |
| Bending Strength, min       | Мра                              | 10 - 15     | 16 - 24     | 10 - 15     | 16 - 24     |
| Young's Modulus, max        | Gpa                              | 12 - 15     | 14 - 18     | 14          | 18          |
| Ash Content(<), max         | %                                | 0.3         | 0.3         | 0.3         | 0.3         |
| Bulk Density, min           | g/cm³                            | 1.65 - 1.75 | 1.74 - 1.80 | 1.70 - 1.75 | 1.80 - 1.85 |
| CTE                         | 100-600 °C 10 <sup>-6</sup> / °C | 2.4         | 2.2         | 1.5         | 1.4         |
| Diameter                    | mm                               | 200 - 600   |             | 350 - 700   |             |
| Length                      | mm                               | 1600 - 2200 |             | 1800 - 2700 |             |
| EAF                         | MT                               | 10 - 30     |             | 10 - 30     |             |
| LF                          | MT                               | 20 - 50     |             | 20 - 50     |             |











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