

## 550mm To 750mm Large-Diameter RP, HP, And UHP Grades Graphite Electrodes For EAF

Our Product Introduction

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### Basic Information

- Place of Origin: Zhengzhou ,China
- Brand Name: Rongsheng Xinwei
- Certification: ISO9001
- Model Number: UP HP UHP
- Minimum Order Quantity: 1 Ton
- Price: 200-800USD
- Packaging Details: Packed on wooden pallets, with water-proof cover, and tightened with plastic/steel bandages
- Delivery Time: 10-20 Days
- Payment Terms: TT; L/C
- Supply Ability: 2000tons /month



### Product Specification

- Highlight: EAF Graphite Electrodes ,  
UHP Graphite Electrodes ,  
750mm Graphite Electrodes

### Product Description

#### Product Overview of 550mm to 750mm Large-Diameter RP, HP, And UHP Grades Graphite Electrodes For EAF

Introducing our large-diameter Carbon Graphite Electrodes, available in sizes of 550mm, 650mm, 700mm, and 750mm. Designed for high-performance in electric arc furnaces, these electrodes are crafted from superior-quality carbon graphite, ensuring exceptional conductivity and durability.

Our Product Introduction



#### Key Features of RP, HP, And UHP Grades Graphite Electrodes For EAF

**High Electrical Conductivity:** Our electrodes are engineered to facilitate efficient energy transfer, maximizing the melting process in electric arc furnaces.

**Thermal Resistance:** Designed to withstand extreme temperatures, these electrodes maintain their performance even under the most demanding conditions.

**Robust Durability:** Constructed from high-grade materials, they exhibit excellent resistance to oxidation and wear, providing a longer lifespan.

**Custom Sizes Available:** With a range of diameters, we can meet your specific application needs.

#### Applications of RP, HP, And UHP Grades Graphite Electrodes For EAF

These oversized electrodes are ideal for various applications, including:

**Electric Arc Furnaces:** Essential for the production of steel and recycling metals.

**Foundries:** Suitable for non-ferrous metal processing.

**Silicon Production:** Critical for chemical manufacturing processes.

#### Technical Parameter of Graphite Electrodes and Nipple:

##### Regular Graphite Electrode

| Item                                                                |           | Nominal diameter mm |      |         |      |         |      |         |      |
|---------------------------------------------------------------------|-----------|---------------------|------|---------|------|---------|------|---------|------|
|                                                                     |           | 75~130              |      | 150~225 |      | 250~300 |      | 350~450 |      |
| Grade                                                               |           | Excellent           | —    | Ex      | —    | Ex      | —    | Ex      | —    |
| Resistivity<br>$\mu\Omega\cdot m \leq$                              | Electrode | 8.5                 | 10.0 | 9.0     | 10.5 | 9.0     | 10.5 | 9.0     | 10.5 |
|                                                                     | Connector | 8.0                 |      | 8.0     |      | 8.0     |      | 8.0     |      |
| Flexural strength MPa $\geq$                                        | Electrode | 10.0                |      | 10.0    |      | 8.0     |      | 7.0     |      |
|                                                                     | Connector | 15.0                |      | 15.0    |      | 15.0    |      | 15.0    |      |
| Elastic Modulus GPa $\leq$                                          | Electrode | 9.3                 |      | 9.3     |      | 9.3     |      | 9.3     |      |
|                                                                     | Connector | 14.0                |      | 14.0    |      | 14.0    |      | 14.0    |      |
| Bulk density g/cm <sup>3</sup> $\geq$                               | Electrode | 1.58                |      | 1.53    |      | 1.53    |      | 1.53    |      |
|                                                                     | Connector | 1.70                |      | 1.70    |      | 1.70    |      | 1.70    |      |
| Thermal expansion coefficient 10-6/<br>room temperature ~600 $\geq$ | Electrode | 2.9                 |      | 2.9     |      | 2.9     |      | 2.9     |      |
|                                                                     | Connector | 2.7                 |      | 2.7     |      | 2.8     |      | 2.8     |      |
| Ash % $\leq$                                                        |           | 0.5                 |      | 0.5     |      | 0.5     |      | 0.5     |      |

##### High Power Graphite Electrodes

| Item                                                               |           | Nominal diameter mm |         |
|--------------------------------------------------------------------|-----------|---------------------|---------|
|                                                                    |           | 200~400             | 450~500 |
| Resistivity<br>$\mu\Omega\cdot m \leq$                             | Electrode | 7.0                 | 7.5     |
|                                                                    | Connector | 6.3                 | 6.3     |
| Flexural strength MPa $\geq$                                       | Electrode | 10.5                | 10.0    |
|                                                                    | Connector | 17.0                | 17.0    |
| Elastic Modulus GPa $\leq$                                         | Electrode | 14.0                | 14.0    |
|                                                                    | Connector | 16.0                | 16.0    |
| Bulk density g/cm <sup>3</sup> $\geq$                              | Electrode | 1.60                | 1.60    |
|                                                                    | Connector | 1.72                | 1.72    |
| Thermal expansion coefficient 10-6/<br>Room temperature~600 $\geq$ | Electrode | 2.4                 | 2.4     |
|                                                                    | Connector | 2.2                 | 2.2     |
| Ash % $\leq$                                                       |           | 0.5                 | 0.5     |

##### Ultra High Power Graphite Electrode

| Item                                   |           | Nominal diameter mm |         |         |
|----------------------------------------|-----------|---------------------|---------|---------|
|                                        |           | 300~400             | 450~500 | 550~650 |
| Resistivity<br>$\mu\Omega\cdot m \leq$ | Electrode | 6.2                 | 6.3     | 6.0     |
|                                        | Connector | 5.3                 | 5.3     | 4.5     |
| Flexural strength MPa $\geq$           | Electrode | 10.5                | 10.5    | 10.0    |
|                                        | Connector | 20.0                | 20.0    | 22.0    |

|                                                               |           |      |      |      |
|---------------------------------------------------------------|-----------|------|------|------|
| Elastic Modulus GPa ≤                                         | Electrode | 14.0 | 14.0 | 1.66 |
|                                                               | Connector | 20.0 | 20.0 | 1.78 |
| Bulk density g/cm3 ≥                                          | Electrode | 1.67 | 1.66 | 1.66 |
|                                                               | Connector | 1.74 | 1.75 | 1.78 |
| Thermal expansion coefficient 10-6/<br>Room temperature~600 ≥ | Electrode | 1.5  | 1.5  | 1.5  |
|                                                               | Connector | 1.4  | 1.4  | 1.3  |
| Ash % ≤                                                       |           | 0.5  | 0.5  | 0.5  |

**Quality Assurance**  
We maintain strict quality control throughout the manufacturing process to ensure that every batch meets international standards. With over 20 years of industry experience, we are committed to delivering reliable and high-performance products.

**Why Choose Rongsheng RP, HP, And UHP Grades Graphite Electrodes For EAF?**  
**Industry Leadership:** With decades of experience, we have established ourselves as a top supplier of refractory materials.  
**Global Presence:** Our products are exported to over 100 countries, reinforcing our reputation as a trusted provider.  
**Customer-Centric Approach:** We offer tailored solutions and responsive support to meet your specific requirements.

**Contact Us**  
For more information or to place an order, please reach out to us:  
**Tel/Whatsapp:** +86-18538509097  
**Email:** Jackyhan2023@outlook.com  
Experience the quality and performance of our oversized Carbon Graphite Electrodes and elevate your production processes today!

 **Henan Rongsheng Xinwei New Materials Research Institute Co., Ltd**

 +86-18538509097     Jackyhan2023@outlook.com     bricksrefractory.com

11th Floors, Building 6, China Central Electronic Commerce Port, Daxue Road, Zhengzhou, Henan, China