

# Graphite Electrode for Electric Arc Furnace

Graphite electrodes are essential for electric arc furnaces in steel manufacturing. These electrodes are engineered to withstand high temperatures and provide excellent electrical conductivity during the steelmaking process.



## Product Overview

### High-Performance Graphite Electrodes

These graphite electrodes are engineered specifically for use in Electric Arc Furnaces (EAF) for steelmaking applications. Designed to withstand demanding industrial environments, they offer excellent electrical conductivity and thermal resistance to ensure optimal furnace performance. The product range includes various grades—UHP, HP, and RP—to cater to specific operational requirements and ensure longevity during the smelting process.

## Technical Specifications

|                       |                 |
|-----------------------|-----------------|
| Diameter Supply Scope | ∅100mm - ∅700mm |
| Available Grades      | UHP, HP, RP     |

## Performance Metrics

### Physical and Electrical Properties

| Property  | Electrode (Range) | Nipple (Range) |
|---|-------------------|----------------|
| Electric Resistivity (10 <sup>-6</sup> Ω)               | d5.0 - d6.0       | d4.0 - d5.5    |
| Transverse Strength (MPa)                               | e8.0 - e15.0      | e16.0 - e24.0  |
| Young's Modulus (GPa)                                   | d9.3 - d14.0      | d14.0 - d18.0  |
| Bulk Density (g/cm <sup>3</sup> )                       | e1.54 - e1.68     | e1.70 - e1.76  |
| Coefficient of Thermal Expansion (10 <sup>-6</sup> /°C) | d1.5 - d2.5       | d1.2 - d2.0    |
| Ash Content   | 0.2 %             |                |

## Logistics and Handling



Securely packaged graphite electrodes ready for industrial transport.

### Handling Features

Labeled for tracking • Safety symbols included • Secure transport

### Packaging

Wooden crates with metal banding