

# Graphite Electrode

A focused product page for RP, HP, SHP, UHP graphite electrodes and nipples.

[Product specification sheet](#)

## Overview

Graphite electrode content is organized by grade, diameter, length, nipple, application and inquiry requirements.

## Key specifications

Grades	RP, HP, SHP, UHP
Accessories	Electrode nipples
Inquiry data	Diameter, length, grade, quantity, destination

## Applications

- Electric arc furnace steelmaking
- Metallurgical furnace use
- Graphite electrode nipple and accessory inquiries

## RFQ checklist

Product name  
Grade  
Diameter  
Length  
Nipple  
Furnace condition  
Quantity  
Packing  
Expected delivery  
Required documents

## Specification notes and batch confirmation

### Graphite Electrode Product System

This page explains RP, HP, SHP and UHP graphite electrodes plus graphite electrode nipple purchasing information. Buyers should provide grade, diameter, length, nipple, quantity, furnace condition, packing and destination.

### Graphite Electrode Grades

- RP Graphite Electrode: Inquiry data should include diameter, length, quantity, nipple and destination.
- HP Graphite Electrode: Discuss by power grade, furnace type and operating condition.
- SHP Graphite Electrode: Suitable for higher operating requirements and furnace conditions.

- UHP Graphite Electrode: Buyers should confirm specification, grade, furnace condition, quantity and application.
- Graphite Electrode Nipple: Nipple specification, thread, packing protection and installation notes should be confirmed with electrode size.

## Inquiry Data

- Specification: Diameter, length, grade and nipple type
- Application: Electric arc furnace, metallurgical furnace or other use
- Quantity: Pieces, tonnage or batch requirement
- Delivery: Packing, destination and expected delivery time

## Technical Data Buyers Usually Compare

- Grade: RP, HP, SHP or UHP according to furnace demand
- Bulk density: Compared by grade and diameter as a quality reference
- Electrical resistivity: Lower resistivity is normally required for higher power grades
- Flexural strength: Used to evaluate mechanical strength and handling risk
- CTE and ash: Used for thermal stability and impurity control
- Current load: Must match diameter, furnace condition and operating practice

## Grade and Furnace Matching

- RP graphite electrode: For regular power furnace demand, confirm diameter, length, nipple, pieces and destination.
- HP graphite electrode: For higher power operation, confirm furnace type, operating rhythm, target consumption and electrode size.
- SHP / UHP graphite electrode: For higher load conditions, confirm grade, furnace condition, nipple matching, packing and COA.

## Nipple and Handling Notes

Nipple type, thread, pre-installation, dust slot, packing protection and installation cleaning should be confirmed together with electrode diameter and grade. The old nipple installation content should be retained as a technical guide connected to this page.

## Graphite Electrode Technical and Use Notes

These notes help buyers compare terminology, specification fields, applications and inquiry requirements before requesting a quotation.

- Graphite Electrode Technical and Use Notes: This topic is included to help international buyers compare material names, key specifications, application fit and quotation requirements before sending an inquiry.
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## Legacy Product Manual Extract

Graphite electrodes are made from petroleum coke, needle coke and coal pitch through calcining, batching, kneading, forming, baking, impregnation, graphitization and machining. They are used as conductive materials in arc furnaces for steelmaking, silicon smelting and yellow phosphorus smelting.

- Grades / 等级: RP / HP / UHP, with grade, diameter, length and nipple confirmed by order.
- Size range / 尺寸范围: Common diameter 75-700 mm; confirm grade, size and batch route by order.
- Key indexes / 关键指标: Electrical resistivity, bulk density, flexural strength, elastic modulus, ash, CTE and current load.
- Nipple / 接头: Nipple size, thread, socket, pitch and torque should be matched with electrode diameter and grade.