

# Cylindrical High-Performance Electrode

These high-performance electrodes are designed for specialized industrial applications. They are packaged in wooden crates to ensure safe transport and maintain integrity during international shipping.



## Product Overview

### High-Performance Cylindrical Electrodes

These cylindrical high-performance electrodes are engineered for demanding industrial applications requiring superior thermal and mechanical stability. Designed with a focus on durability and efficient conductivity, they offer consistent performance across a wide range of operating temperatures. The product is optimized for safe international transport and reliable integration into high-temperature processes.

## Physical Properties

### Bulk Density

Component	Density (g/cm <sup>3</sup> )
Electrode	1.62-1.73
Nippeie	1.74-1.80

Nominal Diameter Range: 1250-1700mm

## Mechanical Properties

### Bending Strength

Component	Strength (Mpa)
Electrode	9.0-15.0
Nippeie	16.0-24.0

### Young's Modulus

Component	Modulus (Gpa)
Electrode	9.0-14.0
Nippeie	12.0-20.0

## Electrical & Thermal Properties

### Electrical Resistivity

Component	Resistivity ( $\mu\Omega$ )
Electrode	5.8 <sup>7.0</sup>
Nippeie	4.0 <sup>5.5</sup>

### Coefficient of Thermal Expansion (100-600)

Component	Value ( $\times 10^{-6}$ )
Electrode	1.6 <sup>2.0</sup>
Nippeie	1.0 <sup>1.8</sup>

Ash Content 0.3 %

## Operational Guidelines

### Suggested Operation Current

Diameter (mm)	Current Range (A)
200	5500 <sup>9000</sup>
250	8000 <sup>13000</sup>
300	13000 <sup>17400</sup>
350	17400 <sup>24000</sup>
400	21000 <sup>31000</sup>
450	25000 <sup>40000</sup>
500	30000+