

# Ferrosilicon Ferroalloy

Ferrosilicon is an alloy of iron and silicon with a silicon content from 15% to 90%. It is used as a deoxidizer in steelmaking, a nodulizer in ductile iron production, and an alloying agent.



## Product Overview

### Ferrosilicon Ferroalloy

Ferrosilicon is a crucial ferroalloy composed of iron and silicon, typically containing between 15% and 90% silicon by weight. Produced through submerged arc furnace smelting of quartz, coke, and iron materials, it serves as a vital component in metallurgical processes. This versatile material acts as a deoxidizer in steelmaking and a nodulizer in ductile iron production, while also being essential for manufacturing corrosion-resistant alloys and silicon steel.

## Technical Composition

### Silicon Content

**15 %**

Minimum

**90 %**

Maximum

## Applications

### Primary Industrial Applications

- Steelmaking (Deoxidizer)
- Ductile Iron Production (Nodulizer)
- Alloying Agent
- Silicon Production
- Corrosion-resistant Alloy Manufacturing
- High-temperature Resistant Alloy Manufacturing
- Silicon Steel (Electromotors and Transformer Cores)

## Material Properties

### Physical Appearance

Dark, Metallic, Rough Surface, Irregular Texture

## Manufacturing Process

### Production Method

Submerged arc furnace smelting of quartz, coke, and iron materials