

# High Chrome Alloy Grinding Balls

High chrome grinding balls are used in ball mills and SAG mills for milling and crushing materials like ore, coal, sand, and cement. The alloy casting provides a good microstructure, hardness, and low broken rate due to heat treatment, reducing wear and mill downtime.



## ADDITIONAL IMAGES



## Product Overview

### High Chrome Alloy Grinding Media

These high chrome alloy grinding balls are engineered for heavy-duty industrial applications, including mining, cement production, and ore crushing. Featuring a chrome content of 10-26%, these balls offer superior micro-structure integrity through advanced alloy casting and heat treatment processes. Designed to minimize wear rates and reduce ball mill downtime, they provide consistent performance in demanding milling environments.

## Mechanical Properties

### Surface Hardness

**63 HRC**  
Max Hardness

**58 HRC**  
Min Hardness

### Performance Metrics

- Micro Structure: Martensite + Carbide + residual Austenite
- Max Hardness Variation: HRC 2 (Surface to Core)
- Min. Falling Ball Cycles: 28,000
- Max Breakage/Deshaping Rate: 0.5%

Impact Value

3.5 J/cm<sup>2</sup>

## Chemical Composition

### Composition Limits

Element	Range (%)
Chromium (Cr)	10.0 - 28.0
Carbon (C)	2.0 - 3.2
Silicon (Si)	0.3 - 1.2
Manganese (Mn)	0.2 - 1.5
Molybdenum (Mo)	Max 1.50
Nickel (Ni)	Max 1.20
Copper (Cu)	Max 1.50
Phosphorus (P)	Max 0.10
Sulfur (S)	Max 0.12

## Logistics & Standards

### Compliance Standards

GB/T 17445-2009 • ASTM 531/A 532M-93A • EN 12513:2000E

Available Sizes (mm)	5, 6, 8, 10, 12.5, 15, 17, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130
Packaging	Metal drum with wood pallet, 800-1000 kgs per drum, 2 drums per pallet