

Product Data Sheet

Iron Ore Pellets - 62% Fe Grade

Description

Description	Iron Ore Pellets (62% Fe) are agglomerated iron ore fines, bound with a small proportion of binder (typically bentonite) and indurated (fired) into hard, uniform round pellets. This value-added product offers superior physical handling properties and metallurgical efficiency compared to raw fines, and is suitable for both blast furnace and direct reduced iron (DRI/sponge iron) production routes.
Applications	Blast furnace burden material – improves furnace permeability versus sinter/lump ore Feedstock for Direct Reduced Iron (DRI)/sponge iron production (rotary kiln and shaft furnace processes) Consistent, high-Fe agglomerated charge material for integrated steel plants
Grade	62% Fe Pellet Grade (Blast Furnace / DRI Grade)
CAS No.	Natural/processed iron oxide (Fe ₂ O ₃ /Fe ₃ O ₄), primarily hematite, CAS 1309-37-1

Key Benefits

1. High, consistent Fe content improving blast furnace/DRI metallurgical efficiency
2. Excellent physical properties (high tumble index, low abrasion) for durable handling and transport with minimal fines generation
3. Uniform size distribution improving furnace permeability and reducing gas-flow resistance
4. Higher value-added product than raw fines, suited to both blast furnace and DRI/sponge iron routes
5. Widely accepted standard grade in the global iron ore pellet trade

Chemical Analysis & Physical Data

Typical Specification

Parameter	Test Method	Unit	Specification
Fe (Total Iron)	XRF / Wet Chemical Method	wt%	Min. 62.0 (typical 62–64)
SiO ₂	XRF Method	wt%	Max. 5.0
Al ₂ O ₃	XRF Method	wt%	Max. 2.5
Phosphorus (P)	Spectrophotometric Method	wt%	Max. 0.05
Sulphur (S)	Combustion / Titration Method	wt%	Max. 0.02
Basicity (CaO/SiO ₂)	Calculated from XRF	–	0.3 – 1.1 (grade dependent)
Tumble Index (+6.3mm)	ISO 3271	%	Min. 93
Abrasion Index (– 0.5mm)	ISO 3271	%	Max. 5
Compression Strength (Dry)	ISO 4700	kg/pellet	Min. 200
Size	Sieve Analysis	mm	8 – 16

Packaging

Packaging Bulk (bulk carrier vessel shipment) – standard for the iron ore pellet export trade
Custom packaging available on request for smaller/specialised orders.

Storage & Handling

1. Store in a covered or designated open stockyard away from contamination
2. Minimise degradation from repeated handling/rehandling to preserve pellet integrity
3. Segregate by grade to avoid mix-up during storage and loading
4. Follow standard bulk mineral handling and stockpile management practices

Quality Assurance

1. Every shipment is tested against the specification above before dispatch
2. A shipment-specific Certificate of Analysis (COA) accompanies each consignment, reporting Fe, SiO₂, Al₂O₃, tumble index and compression strength against this TDS
3. COA available on request prior to shipment for buyer pre-approval
4. Third-party load-port inspection (SGS/Intertek/CIQ) can be arranged on request for regulated-market shipments

Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.