

Iron Ore

Mineral Reference Profile • Industrial & Strategic Materials

Chemical / compositional reference

hematite/magnetite-rich material

Mohs hardness

5–6.5 typical

Physical properties

Properties are assessed in relation to processing behavior, purity, grain size, mineral assemblage and end-use specifications.

Geological occurrence

Deposits are mined where geological concentration, volume, processing characteristics and infrastructure make extraction economically viable.

Economic, technological and cultural relevance

Construction, energy, manufacturing, agriculture, electronics, transport, infrastructure and strategic supply chains.

Museum learning value

In the museum context, Iron Ore is used to connect observation with mineral identification, geological formation, material science, responsible resource use and the relationship between natural resources and society. Specimen-specific analytical data should always be read from the verified museum catalogue or laboratory record.