



Mining and Processing **IRON ORE**

COMPOSITION • USES • DRYING • SOLUTIONS

1015 W. Highway 24, Moberly, MO, USA • +1 (660) 263-7474 • www.vulcandryingystems.com • sales@vulcandryingystems.com



IRON ORE'S COMPOSITION

Iron ores consist mostly of iron oxides and include magnetite, hematite, limonite, and many other rocks. The iron content in these ores varies from as high as 70% to less than 20%. The best grades of ore contain more than 60% iron. Lower grade ores are reined in order to remove contaminants, often through a process of crushing, washing, and magnetic separation.

IRON ORE'S USES

- 98% of mined iron ore is used in the manufacturing of steel used in structural engineering and automobiles
- Approximately 60% of iron ore and steel products are used in the construction and transportation industries
- 20% of iron ore is used in the manufacturing of machinery
- 20% of iron ore is used in the oil and gas industry
- Small amounts of iron ore are used in coal wash plants and for cement production
- Iron can be alloyed with other elements to produce stronger products for the construction industry, as well as for use in the production of ships, trucks, pipelines, trains and railroad tracks

DRYING IRON ORE

Iron ore needs to be dried prior to processing. Drying reduces shipping and storage costs, making the material easier to manage. Pre-drying iron ore helps improve processing times, reducing energy consumption at steel mills. Drying also helps eliminate steam that is generated, making the ore safer to transport.

VULCAN DRYING SYSTEMS SOLUTION

Vulcan Drying Systems supplies equipment to dry, sort, and convey iron ore. Our team can build a dryer to best fit your specific project needs. Vulcan Drying Systems has designed and built plants for clients processing up to 450 tons per hour.

Drying is an important step in the iron ore process, reducing shipping and storage costs, while making the material easier to handle. As an essential ingredient in steel production, iron ore is the most commonly used metal in the world.

For more information on Vulcan Drying Systems email us at sales@vulcandryingystems.com or call us at +1 (660) 263-7474.

