Iron Ore

Iron ore crushing plant, iron ore beneficiation and mining equipment video, pic, pdf used in India, China, Malaysia...

Iron Ore Material Introduction

Iron ores are rocks and minerals from which metallic iron can be economically extracted. The ores are usually rich in iron oxides and vary in color from dark grey, bright yellow, deep purple, to rusty red.

Iron ore mining equipment

According to the various sources of iron as well as certain economic and safety aspects in regards to its extraction is included, we provide you with a suitable iron ore mining equipment. The course we provide information of Iron ore processing includes comprehensive information on the beneficiation of iron ore including comminution, sintering, upgrading, and pelletizing aspects.

Classification

Iron ore can be divided into seven categories according to their causes: Magnetite, hematite, magnetite, limonite, the siderite, pyrite, ilmenite.

Distributed

The iron ore is distributed in Algeria, Egypt, Ghana, Kenya, Nigeria, South Africa, Sudan, Zambia, Zimbabwe, China, Russia, Australia, New Zealand, France, Germany, Iceland, Italy, Luxembourg, Netherlands, Norway, Spain, Sweden, Switzerland, Ukraine, United Kingdom, Canada, Cuba, Mexico, United States, Brazil, Chile, Peru, Venezuela.

Application

Iron ores are typically used for the production of iron. Then the iron produced is to make steel. Steel is used to make automobiles, locomotives, ships, beams used in buildings, furniture, paper clips, tools, reinforcing rods for concrete, bicycles, and thousands of other items. It is the most-used metal by both tonnage and purpose.

Iron Ore Processing

Iron ore crushing and screening machine

Mining and processing of iron ore involves coarse crushing and screening. Iron ore is beneficiated by crushing and then separating the iron from the gangue minerals through screening. This is usually so efficient that lower grade ore can be treated especially when the magnetite is quite coarse. Common iron ore crushers are jaw crusher, cone crusher and fine jaw crusher.

Dry magnetic separation and wet magnetic separation

You will obtain three kind of iron ore particles after screening, respectively of 75~12mm, 12~2mm, 2~0mm in size. The largest ore particles pass to dry magnetic separation with shaking chute, the middle ones are moved to dry magnetic separator with coarse jigging, and the smallest to wet magnetic separator with fine jigging. The middlings produced by three processes are moved to screening process. The tailings of wet magnetic separation will be discharged directly.

Grinding and fine crushing machine

After the second crushing machine, iron ore particles are moved to secondary crushing and the first ball mill grinding. With fine ore particles, it is more efficient to upgrade iron ore. Wet ball mill and fine ore crushers are used during this process.

Spiral classification machine

Two stage spiral classification of close-circuit is conducted, with second ball mill grinding after the second classification.

Flotation desulfurization machine

The obtained iron ore mines materials are moved to flotation desulfurization process, then to weak magnetic separation. The obtained product is iron ore concentrate. And low iron content material is discharged as tailings. You will also obtain sulphide concentrate as by-product through flotation desulfurization.

Iron Ore Plant Line

Iron Ore Processing Project Video

Video of BM iron ore processing plants used in India include iron ore crusher, grinding mill, beneficiation plants and other assistant equipments.

Iron Ore Crusher Manufacturer

Chinese Shanghai SBM design the iron ore mining process flow chart including crushing, screening, washing and grinding process for the iron ore mine in India, Mauritania, Mexico, Ethiopia, Brazil, Malaysia, Mongolia, Philippines, Egypt, Australia, Sri Lanka, UAE, Liberia, Nigeria, Guinea, Angola, Indonesia, Iran, Zimbabwe, Sweden, Pakistan, South Africa, Saudi Arabia, USA, Uganda, Colombia, Peru and Canada.

If you want to buy best iron ore crusher machine, second hand equipments, portable iron ore crushers Understanding iron ore crusher price, parts, cost, you can contact our customer service.

Information

In the United States, almost all of the iron ore that is mined is used for making steel. The same is true throughout the world. Raw iron by itself is not as strong and hard as needed for construction and other purposes. So, the raw iron is alloyed with a variety of elements (such as tungsten, manganese, nickel, vanadium, chromium) to strengthen and harden it; making useful steel for construction, automobiles, and other forms of transportation such as trucks, trains and train tracks.

While the other uses for iron ore and iron are only a very small amount of the consumption, they provide excellent examples of the ingenuity and the multitude of uses that man can create from our natural resources.


Technology Standard

Iron ore refers to the the minimum industrial grade rock (or mineral) content of TFe requirements.

Iron ore classification

In accordance with the characteristics of mineral composition, structure, construction and mining, sorting, Metallurgical and process iron ore is divided into two major categories of the type of natural and industrial type.

1 natural type

1) According to the iron-bearing mineral species can be divided into: magnetite ore, hematite iron ore, the illusion, or semi martite iron ore, vanadium-titanium magnetite ore, limonite, siderite iron ore as well as by one of two or iron mineral composition of two or more kinds of mixed ore.

2) Press the harmful impurities (S, P, Cu, Pb, Zn, V, Ti, Co, Ni, Sn, F, As) content of the high and low, can be divided into high-sulfur iron ore, iron ore of low sulfur, high phosphorus iron ore, low phosphorus iron ore.

3) According to the structure, the structure can be divided into disseminated ore stockwork disseminated ores, striped ore, banded ore, the dense massive ore, brecciated ore and oolitic, bean-shaped, kidney-shaped honeycomb, powder, earthy ore.

4) feeling the pulse minerals can be divided into quartz type, amphibole, pyroxene, plagioclase type, sericite, chlorite type, actinolite-type, serpentine type, ankerite and jasper iron ore.

2 Industrial Type

1) Industrial utilization of iron ore, iron ore in the table, including steelmaking iron ore, iron ore, iron ore need to choose.

2) temporarily can not use industrial iron ore, iron ore, ore iron content in the balance sheet between the lowest industrial grade cut-off grade.

Related Reading And Information Of Sand Download

- Iron ore crusher plant pdf
- Iron ore mining processing production line docx

Related Topics:
- iron: http://www.unisbm.com/jh/iron.php