

1000000 t/a GGBS Production Line

Equipment Type: GRMS46.41 Slag Vertical Roller Mill

Material: slag and cement clinker

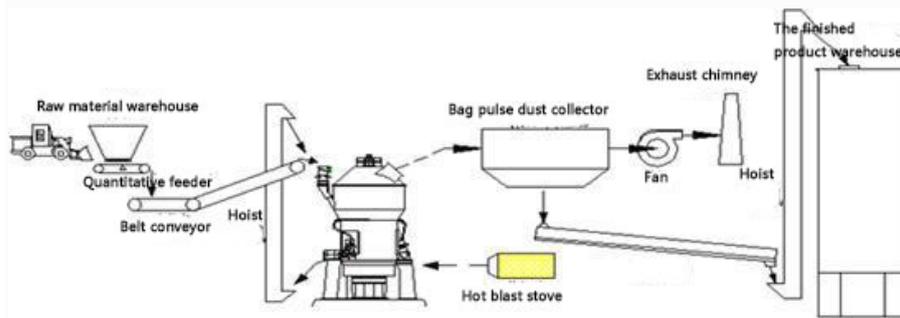
Annual Output: 1000,000 t/a GGBS

Introduction:

At present, with the same amount of GGBFS instead of concrete and cement product of cement dosage, which has become the main trend of building materials industry. Great Wall Machinery is a professional supplier of GGBFS production line.

The annual output of 1000,000 tons of [GGBFS production line](#), which signed with the Great Wall Machinery. This project is beneficial to ecological environment protection. It not only gains good economic benefit, but also gets good social benefit.

[Great-Wall Machinery](#) GGBS production line has been recognized by our key customers, the domestic production operation of the production line has been up to more than 30, customers all over the world.

Working principle:

The original slag by grab machine into the feeding bin, measurement by conveyor belt into the spiral feeding device for feeding [Slag Vertical Roller Mill](#), the material with grinding disc to rotate under the action of centrifugal force moving from the center to the edge in grinding process, after compaction, degassing, grinding process, the material is entered from the air ring hot air with, and instant drying, smaller particles were brought to the powder selecting machine for sorting, coarse powder return disc grinding. Qualified fine powder was brought into the bag type dust collector, was finished after the collection of gas powder separation. Finished product collection after delivery into the finished bulk library, exhaust fan exhaust silencing by post. Large granular material part difficult to grind spit slag mouth into the external circulation system through the wind ring, by removing iron, again by the hoist feed mill. Hot air drying and mill needs ventilation is provided by the hot blast furnace, the insufficient part supplemented by cold air valve from the atmosphere.

Configuration

1. Magnetic Separators

Magnetic separators create strong magnetic attractions with ferrous materials. It is commonly used to remove unwanted iron contaminants from cement mixtures. Separating iron from mixtures avoids the risk of long, big iron parts tearing open the conveyor belt, ensures the proper functioning of the crusher and grinder, and it improves the grade of raw



material. In addition, recovering ferrous metals from raw materials also comes with financial benefits.

Our permanent magnet separator for pipeline is an automatic high-performing magnetic separation device. It is often utilized in cement, electricity, ceramics, bricks and tiles, metallurgy, chemical engineering, food, glass, and steel industries, as a separator of choice when it comes to purifying materials and ensuring the operational safety of the downstream equipment on the GGBS production line.

2. Dust Collectors

Air-borne powder enters the rotary separator at bottom, where guide vanes force the air to change from an upward flow to a tangential flow. The separator rotor tends to rotate along with the air flow without causing any drag to the stream. Hence, a centrifugal zone is formed between the guide vanes and separator vanes, where powder is separated from air.

During separation, larger particles are thrown outward by rotary force of the separator rotor, falling to the bottom of separator due to the force of gravity. After exiting the centrifugal zone, these oversize particles are collected in a conical hopper and returned to the roller mill for further grinding. Finer particles are brought through the center of the separator chamber and out the top, where they are collected by a dust collector.

3. Central Control System

The central control system is a critical part of the GGBS production line. It is comprised of the Distributed Control System, and the Closed-Circuit Television which contains 6 monitor circuits.

In a distributed control system, or DCS for short, there are a number of computers, each controlling a separate circuit. Information can be collected together from each computer and obtained by the central controller, which facilitates centralized management and control. Compared with the computer controlled multilevel system, DCS has the advantages of optimized, flexible layout, low cost, high reliability, maximum accessibility, easy maintenance, great flexibility, good compatibility, and comprehensive functionalities.

Main Process Flow

GGBS production line runs smoothly with high efficiency.

1. Ships transport slag into wharf. Grab bucket picks up the slag and sends it to belt conveyer. The slag is then transported to the production site.
2. Forklift conveys the slag into the dryer. Dried slag is then transported into storage silo by elevator. One storage silo has a capacity of 20000 t. Slag is discharged from the bottom of the storage silo. It is sent into mill head bin by belt conveyer and elevator.
3. Slag is grinded in the slag mill of the slag powder production line (slag powder processing equipment). Bucket feeds the grinded slag into 0-SEPA3000 separator. Dusty gas enters into coarse powder separator. Coarse powder is sent back into the mill to grind via chute. Fine slag powder is sent into two high efficient dust collectors with air flow.
4. The end product is then transported into powder storage silos by elevator. The remaining gas is then purified and exhausted into the air. Normal gas concentration is no more than 50 mg/m³.
5. Slag powder is then stored in powder storage silos of this slag powder production line or slag powder processing equipment. A bulk system installed at each silo bottom. It has a delivery capacity of 100 t/h. slag powder would be delivered in bulk.

Our products mainly consist of cement production line, rotary kiln, ball mill, raw mill, slag powder production line, cement grinding line, preheating equipment, conditioning tower, electrical control equipment, liquid ammonia tank, etc.

Features:

- 1. A good return on investment, can recover the cost-effective**
- 2. High efficiency, energy saving, environmentally friendly.**

3. Mature general contrasting scheme.
4. The customers case witness all over the country.