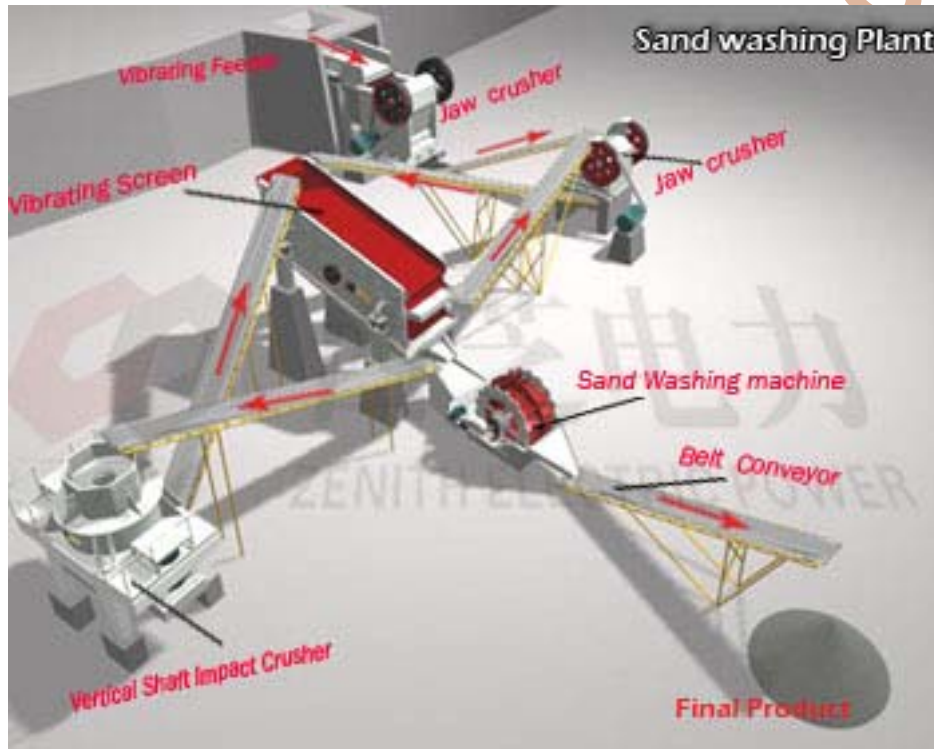


The sand washing plant consists of vibrating feeder, jaw crusher, vertical shaft impact crusher (sand making machine), vibrating screen, sand washing machine, belt conveyor and centrally electric controlling system, etc. The designed capacity is from 50t/h to 500t/h. After many years' research, our company has developed an internationally advanced vertical shaft impact crusher, which can be used together with other machinery as a complete sand making flow. This design racks a leading role in the same industry.



The following is a brief introduction of the each machine's operation principle in sand washing plant:

Jaw crusher

Our jaw crusher is a high efficient and energy saving machinery which introduces successful experience of the same machines home and abroad. These series of jaw crushers are widely used in mine, metallurgy, construction, road building, railway, water conservancy and chemical industry. They feature high crushing ratio, good shape in product, simple structure, reliable performance and low operation cost. They are ideal choice for primary crushing.



Operation principle of jaw crusher:

The motor drives the belt and the grooved wheel, which connect the eccentric shaft. Through the movement of eccentric shaft, the movable jaw plate moves up and down. When movable jaw plate moves up, the angle between it and toggle plate will be enlarged, so the movable jaw plate will be close to fixed jaw plate. Then, the materials will be pressed and crushed; when movable jaw plate moves down, the angle between it and toggle plate will be reduced, movable jaw plate will moves away from fixed jaw plate due to the tension rod and springs. At this moment, the crushed materials will be discharged at discharge opening. With moving of motor and periodical movement of movable jaw plate, material will be crushed and discharged gradually, so that batch production will be reached.

Vertical shaft impact crusher

VSI crusher is a product based on many professionals' wisdom and right decision in mining industry. It is internationally advanced equipment with low energy consumption. It plays a unique role in crushing equipment. VSI crusher is widely used in various materials crushing, cement, fireproof materials, bauxite, diamond, glass, construction sand, stone material and other clinker and slag in metallurgical industry. It bears the merits of simple structure, self-impact crush, low operation cost, stable operation, little noise, high efficiency, energy saving, high reduction ratio and little erasion in spare parts. In addition, the quick-wear parts of this machine are made of choiced wear-resistance materials, which ensured its long using time.



Operation principle of VSI crusher:

Simply speaking, the operation principle of VSI crusher is “stone strikes stone”, that is, materials enter the impeller cavity, which is turning at high speed, at the top. With centrifugal force, the materials will impact other materials that fall around the impeller. Then, after interact striking, materials will impact on material layer between the impeller and scaleboard for many times and will be rubbed and crushed. Then they will be discharged at the bottom.

Process of sand washing plant:

The stone material is sent regularly by the vibrating feeder to the primary jaw crusher, the crushed material is sent to the secondary jaw crusher to be crushed again. The crushed material is sent by belt conveyor to vibrating screen to be separated. The material, whose size is suitable for the feed size of the sand making machine, can be sent to the sand making machine. The unsuitable material should be sent back to the secondary jaw crusher to be crushed again. The crushed material from the sand making machine is sent back to the vibrating screen to be separated. The suitable separated sand, which is the final product, should be sent to the sand washing machine to be cleaned, and then sent by the belt conveyor. The unsuitable separated sand should be sent back to the sand making machine to be crushed again. The producing line forms two closed cycles. The producing line can be changed according to the customers' requests.