

AMIBCA CRUSHTECH PVT. LTD.

DIRECTOR MR. URMIT HIRUBHAI PATEL

Introduction

We are Ambica CrushTech, spreading wings from Vadodara (Gujarat) towards all around the globe. We are glad to introduce ourselves as the leaders in crushing, screening & material handling industry since last couple of decades. We understand, design, manufacture, supply & export various sizes of feeders, crushers, screens and material handling systems along with pre & post sales services. We have dedicated technical team for all the products and services we extend; along with individual experts & skilled personnel carefully handpicked based on their experience & specialization for specific tasks. Our immense knowledge of latest metallurgical techniques ensures optimal utilization all equipment and resources, which enables us in providing reliability & long service life for products with excellent functionality.

Products

MATERIAL HANDLING EQUIPMENT

We provide different types of material handling equipment likes

- *****HOPPER
- **❖**FEEDER
- CONVEYORS

Let discuss about HOPPER

We provide different types of hoppers with wear abrasive plates, according to the need of customers.

Our expert engineers takes a very close eye on the climatic conditions of area & the type of material which is to be used in the machines, after analysing everything our engineers decides which type of metallurgy is to be used.

We have a wide range of hoppers:

- > Feed hoppers
- ➤ Intermediate hoppers
- ➤ Distribution hoppers









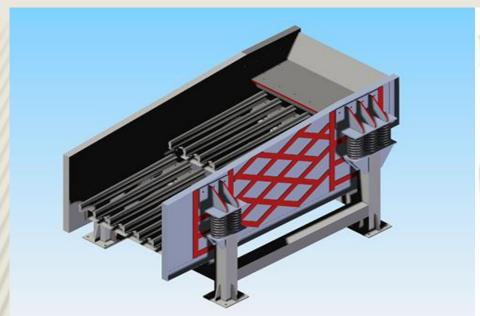
FEEDERS

Feeder is feeding equipment.

It can feed materials to crusher evenly and continuously and at the same time, some of it can screen materials roughly. It can be used in these areas such as metallurgical industry, coal mining industry, steel industry, building industry, chemical and grinding industry, mineral processing industry etc.

We mfg. different type of feeders with same specialization & dedication as per customers' requirements.

- **❖APRON FEEDERS**
- ***VIBRATING GRIZZLY FEEDERS**
- **❖RECIPROCATING FEEDER**
- **❖WOBBLER FEEDERS**
- **❖** FEEDER-BREAKERS









CONVEYORS

We have highly skilled projects division specializing in the design, manufacture & installation of complete conveyor system for use in various applications including mining, power generation & processing plants.

We provide platforms for easy inspection and maintenance of machine.

We provide special arrangements on conveyors to prevent any outside material mixing in the conveyors.

Our expertise & experience & experience have produced significant advancements in conveyor design.

We have a wide range of conveyors and elevators:

- ➤ Belt conveyors
- ➤ Bucket elevators
- >Stackers
- > Feed conveyors
- >Chain conveyors

We provide dust roofing along with conveyors as various choices available like semi hooded, fully hooded









CRUSHING EQUIPMENT

TYPES OF CRUSHING EQUIPMENT WE MFG. AS FOLLOW

- **❖JAW CRUSHERS**
- **❖**ROLL CRUSHERS
- **❖IMPACT CRUSHERS**
- *****HAMMER MILL
- **CONE CRUSHERS**

JAW CRUSHERS

A jaw crusher is generally used as a primary crusher in a crushing circuit. Product is fed into the top of the jaw crusher. The eccentric rotating drive shaft causes the movable jaw to oscillate crushing the aggregate against a fixed jaw. Jaw crushers are run on belt drives driven by an electric motor or diesel engine. Jaw crushers are used extensively throughout the aggregate and mineral processing industry. Types of Jaw Crushers

- SINGLE TOGGLE JAW CRUSHER
- > DOUBLE TOGGLE JAW CRUSHER









ROLL CRUSHERS

>SINGLE TOOTHED ROLL CRUSHER

The single toothed roll crusher is actually a rotary roller which consists of a large tooth and also a crushing plate which is adjustable according to the need and requirement.

> DOUBLE ROLL CRUSHERS

SMOOTH DOUBLE ROLL CRUSHER

It is used for primary and secondary crushing of soft and medium hard as well as sticky and wet material.

TOOTHED DOUBLE ROLL CRUSHER

Double roll crusher has big reduction ratio, without any requirement on the material moisture, no adhesion or blocking, less over crushed materials, low noise, small vibration, low dust, low energy consumption, small footprint, simple and convenient maintenance, etc

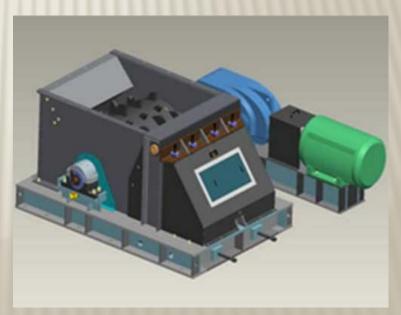
FOUR ROLL CRUSHER

Four roll crusher is fixed with four high-strength resistant alloy grinding rolls.









IMPACT CRUSHERS

> HORIZONTAL SHAFT IMPACTOR

- •Horizontal Shaft Impact crusher is widely used for sand and rock producing in the industry of roads, railways, reservoir, electricity power and building materials and so on with cubical shape.
- •Impact crushers can produce cubic products with very good grain shape, adopting the latest manufacturing technology and unique structure design.
- •Horizontal Shaft Impact crusher use impact energy to crush materials.

>VERTICAL SHAFT IMPACTOR

- •In VSI crusher the material fed in from the central opening. And in VSI they converted into small size as cubic shape.
- •VSI works on high rpm with high reduction ratio. VSI has reduces dusting and improves cubicness
- •We can us optimized rotor structure that reduces the wear and tear of rotor









HAMMER MILL

A hammer mill is a crusher that can grind, pulverize, and crush a wide range of materials. This rock crusher machine employs a rain of hammer blows to shatter and disintegrate the material. Hammer mills produce a finish product size that is dependent upon...

- Openings in perforated screens or grate bars
- Number, size and type of hammers
- Grinding plate setting
- Rotor speed

Hammer mill is mainly used for hard coal and lignite in coal processing plant, coking coal for the iron and steel industry and for soft to medium hard material





CONE CRUSHERS

A cone crusher is generally used as a secondary crusher in a crushing circuit. Precrushed product (usually 3in minus depending on the cone crusher model) is fed through the top of the cone crusher and flows over the mantle. The vertical cone crusher drive shaft rotates the mantle eccentrically below the concave, or bowl liner, squeezing the product and crushing it between the mantle and concave. Cone crushers are usually run on belt drives driven by an electric motor. Cone crushers are used extensively throughout the aggregate and mineral processing industry. The optimized structure and cavity adapting inter-particle crushing principle ensure high performance of crusher.

It improves the efficiency and decreases wear of wear resistance parts and improves quality of final product.



SCREENING EQUIPMENT

TYPES OF SCREEN EQUIPMENT ARE AS FOLLOW

- LINEAR MOTION VIBRATING SCREEN
- **❖** HOT SINTER SCREEN
- **❖** HOT PALLET SCREEN
- ❖ BANANA SCREEN
- CIRCULAR MOTION VIBRATING SCREENS
- > RESONANCE MOTION SCREENS
- > ELLIPTICAL MOTION VIBRATING SCREEN
- ❖ FLIP FLOW SCREEN
- >TROMMEL SCREENS
- >SHALE SHAKER













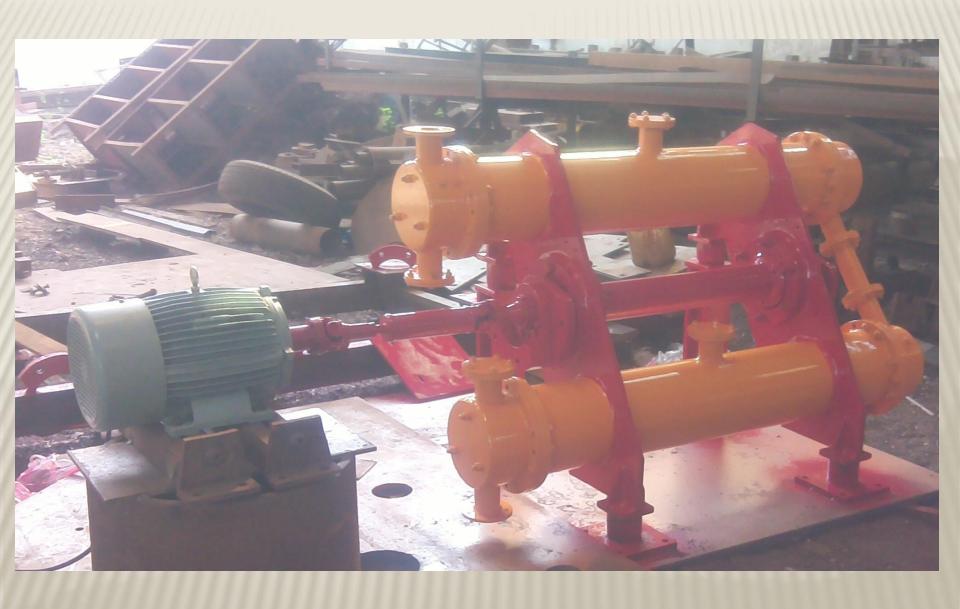
GRINDING EQUIPMENT

WE MFG. GINDING EQUIPMENTS ARE AS FOLLOW

- >TWIN TUBE VIBRATING MILL
- ➤ BALL MILL / ROD MILL
- **≻**SCRUBBER

TWIN TUBE VIBRATING MILL

Twin-and Three-Tube Vibrating Mills are driven by an unbalanced drive. The entire filling of the grinding cylinders, which comprises the grinding media and the feed material, constantly receives impulses from the circular vibrations in the body of the mill. The grinding action itself is produced by the rotation of the grinding media in opposite direction towards the driving rotation and by continuous head-on collisions of the grinding media. The residence time of the material contained in the grinding cylinders is determined by the quantity of the flowing feed material. The residence time can also be influenced by using damming cylinders in a helical curve and slides down from the inflow to the outflow. The high degree of fineness achieved is the result of this long grinding procedure.

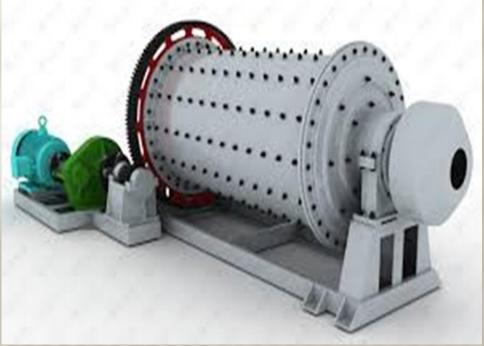


BALL MILL / ROD MILL

A Ball Mill grinds material by rotating a cylinder with steel grinding balls, causing the balls to fall back into the cylinder and onto the material to be ground. The rotation is usually between 4 to 20 revolutions per minute, depending upon the diameter of the mill. The larger the diameter, the slower the rotation. If the peripheral speed of the mill is too great, it begins to act like a centrifuge and the balls do not fall back, but stay on the perimeter of the mill.

Both dry and wet types are available.

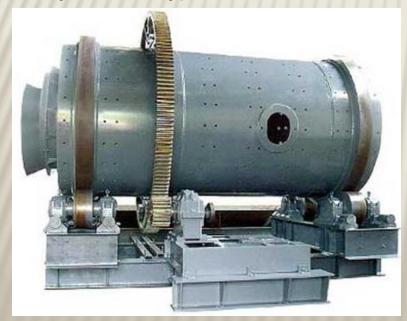




SCRUBBER

The continuous lifting and dropping action in rotary scrubber helps abrade, scrub and breakdown soluble contaminates in the feed material. Rotary Scrubbers can handle large feed sizes and high tonnages in comparison to other types of washing equipment. As an added benefit, they are lower in operating and maintenance costs. Minus 1/4" (6mm) material should be removed prior to Scrubbers in order to achieve an aggressive washing action on the coarse rock. This can be done with conventional screens ahead of the Scrubber or through a built-in desander section. If Sand Equivalency (SE) needs to be improved, then the fines can be left in the feed and coarse rock will wash the finer material.

Both dry and wet types are available.





BENIFICATION

> MUD CLEANER

Our Mud Cleaner completes consist of everything you need to plumb up to and operate the equipment as its own standalone unit. Just select the Mud Cleaner and Shaker combination you need based off of the flow rate you need to process and what micron level you need to cut to.

> DESANDERS

Demanders are what larger diameter hydro-cyclones are typically referred as, and will be the next step in solids removal after an initial scalping shaker passes. Demanders are capable of handling large flow rates, but do not offer as fine of a cut. The underflow will be recirculating over a shaker and processed again while the overflow will be free to move on to the next stage, typically a desalted.

>SHALE SHAKER

The primary and probably most important device on the rig for removing drilled from the mud. This vibrating sieve is simple in concept, but a bit more complicated to use efficiently. A wire-cloth screen vibrates while the drilling fluid flows on top of it

> JIGGING MACHINE

Jigging machine is deep groove separator, use water as separation medium, using the vertical flow pulsation of selected mineral loose and sorting according to different density. Jigging machine is diaphragm type, strokes and strokes frequency is according to mineral gravity, can be adjusted flexibly. It widely used in beneficiation tungsten, tin, gold, hematite, manganese, titanium, antimony, lead, tantalum and niobium.





LAB EQUIPMENT

>JAW CRUSHER

In jaw crushers crushing is carried out in the wedge-shaped space between a fixed jaw and another jaw that is fixed to an eccentric-moving rocker. The crushing rocker is powered via an eccentric shaft in the top section and supported via an adjustable linkage system at the bottom.



offered comes backed by latest technology support and allows optimum processing support as demanded by the customers. Further, these pulverizing systems also allows for superior production capacity with advantage of low energy consumption. Some of its features include allows production of superfine powder to coarse powder; design modifications can also be done according to customers' suggestion; feeding of raw material controlled through frequency converter;





>HAMMER MILL

Hammer mills the material is pulled in to the crushing space by the hammers suspended from the rapid-running rotor. Comminution occurs mainly through impact in the area of the grid basket. The material being crushed remains in the crushing space until the degree of fineness required has been achieved, so that it can then pass through the discharge grid.

>BALL MILL

Our ball mill machines easily meet laboratory and industrial grinding requirements. Loads with heavy duty construction, high quality steel grinding media balls, these ball mills efficiently take care of any pulverizing, milling or grinding job that you can give it. Their multipurpose design allows machines to handle wet or dry, brittle or fibrous materials effectively with intensive mixing performance.

>VIBRATION MILL

This vibration mill is suitable for grinding even the very hardest materials to high degrees of fineness and simultaneously mixing them intensively.







> SOLID TESTING DRUMS

These solidity testing drums are used to determine the tumbler strength for iron ore and coke. They can be used for any other bulk materials where the tumbler strength is of interest.

>SPLITTERS

This splitter is suitable for simple, rapid separation of freely flowing powders and pellets into 8 sample collectors. The outlets from the feed container can be sealed with a lever to allow the material to be filled, mixed and subsequently separated.

> HAMMER SAMPLER

The hammer sampler is implemented for sampling materials from belt conveyors. The sampler's removal principle resembles that of the sampling frame, serving as a reference sample from the stopped belt. The hammer sampler guides this sampling frame that is closed on one side in a circular movement through the material stream moving on the belt. It thus automatically removes a representative cross-section sample from the belt, corresponding to that of the sampling frame.







>SIEVE SHAKER

It is a gravity-screening machine, the three dimensional screening action has a vertical dominance. Due to this motion, the feed material is distributed evenly over the screen area and the vertical dominance ensures quick separation.

> DISC MILL

The disc mill is suitable for finely grinding soft to very hard materials with a Mohs hardness of up to 8, such as lignite, chalk, graphite, gypsum, bauxite, hard coal, ore, artificial fertilizers, blast furnace slag, quartz.

>LABORATORY DISC MILL

The Laboratory Disc Mill is used for the quick, dust free grinding of minerals, organic and ceramic materials, numerous brittle metals to analytical fineness, without loss of fines.

>PLANETARY BALL MILL

Planetary Ball Mills are used wherever the highest degree of fineness is required. In addition to well-proven mixing and size reduction processes, these mills also meet all technical requirements for colloidal grinding and provide the energy input necessary for mechanical alloying









PLANTS & PROJECTS

We provides

- ➤ Portable crushing and screening plants
- ➤ Stationary crushing and crushing plants

Portable crushing & screening plants

We provide advanced, automated & highly integral crushing plant production unit combination of feeder, jaw crusher, cone crusher, vibrating screen & belt conveyor which comes standard with a feed bin hopper, discharge bin hopper, distributor hopper & a very user friendly conventional electrical control cabinet.





➤ Stationary crushing & screening plants

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Stationary crushing & Screening Plant at TATA STEEL PLANT

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