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Product Brochure



BROKEN SERIES

Double Roll Crusher

SGP

Efficient double roll crusher for medium-hard ores, coal & limestone. Offers precise size control, low over-crushing & durable performance.

<https://www.planetaryballmills.com/products/broken-series/double-roll-crusher.html>



Product Overview

Efficient double roll crusher for medium-hard ores, coal & limestone. Offers precise size control, low over-crushing & durable performance.





Product Introduction



Double-Roll Crushing

Long service life and resistant to damage. Available in stainless steel, corundum, and nylon materials.

Bakelite Handwheel

The discharge particle size is adjustable. After setting the roller gap according to the required crushing size, the final particle size can be controlled.



Compact Size Easy Operation

The double-roll crusher has a simple structure, occupies little space, and is easy to operate and maintain.

Cooling Fan Vent

High-speed operation effectively enhances airflow and heat dissipation, ensuring stable machine operation.



The roller crusher mainly consists of the following parts:

1. **roller** : Two cylindrical rollers (one fixed roller, one adjustable roller) installed in parallel, usually with toothed, grooved or smooth designs on the surface, made of high manganese steel or other wear-resistant materials.
 2. **Transmission** : The motor drives the roller to rotate in reverse through a pulley or reducer.
 3. **Adjustment device** : Control the discharge granularity by adjusting the gap between the two rollers (wedge block or hydraulic device).
 4. **Spring safety device** : Automatically separate the rollers when overloaded to prevent equipment damage.
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1. **Mining industry** : Crushing coal, iron ore, gold ore, etc.
 2. **Building materials industry** : Crushing limestone, gypsum, slag, etc.
 3. **Chemical industry** : Processing of brittle materials such as fertilizer raw materials and coke.
 4. **other** : Breaking of glass and ceramic raw materials.

Technical parameters

Roll material	Stainless steel	Corundum (high alumina ceramic)	nylon
Roll size	Φ200×240(mm)	φ240×240(mm)	φ240×240(mm)
Roller speed	52r/min	52r/min	52r/min
Feeding particle size	≤20mm (multiple roller alignment for low hardness and brittle materials) ≤10mm (according to the characteristics of crispy materials) ≤5mm (high and low hardness crispy materials)	≤10mm (according to the characteristics of crispy materials)	≤10mm (according to the characteristics of crispy materials)
Discharge particle size	≥150um	≥150um	≥150um
Production volume	300Kg/H (related to material characteristics)	300Kg/H (related to material characteristics)	300Kg/H (related to material characteristics)
Motor power	1.5KW	1.5KW	1.5KW
Overall dimensions	About 950*620*970	About 950*620*970	About 950*620*970
Equipment weight	About 220kg	About 220kg	About 220kg

Application areas: Mining, chemical industry, cement, refractory materials, abrasives, construction materials

1. Key points for selection :

- Select the roller surface type (toothed/smooth) according to the material hardness, humidity, and particle size requirements.
- Match roller diameter and speed according to production capacity needs.
- Pay attention to the compatibility of the motor power and equipment load.

2. Maintenance recommendations :

- Regularly check the wear of the roller surface and repair or replace it in time.
- Keep bearings lubricated and avoid high temperature operation.
- Adjust spring pressure to ensure sensitive overload protection.

Working Principle

1. The material enters between the two rollers through the feeding port.
2. The two rollers rotate in opposite directions and use friction to bring the material into the crushing cavity.
3. The material is crushed under the squeezing, shearing and splitting action of the rollers.
4. The crushed material is discharged from the gap between the two rollers, and the discharge particle size is determined by the gap between the rollers.

Product Features

- Simple structure and low maintenance cost.
- The discharge particle size is uniform (usually the adjustable range is 2-10mm).
- Overload protection function to avoid equipment damage.
- Suitable for fine crushing of medium and low hardness materials.

Accessories & Customization

Accessories

Grinding jars, heating elements, sample holders, control modules and other matching accessories can be selected according to the product configuration.

Customization

For voltage, capacity, chamber size, process temperature or application requirements, please contact TENCAN for a suitable configuration.