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Product Brochure



BROKEN SERIES

Teeth Roll Crusher

DC

A new product designed and developed by ourselves based on the structural principles of the American Ganglac Crusher.

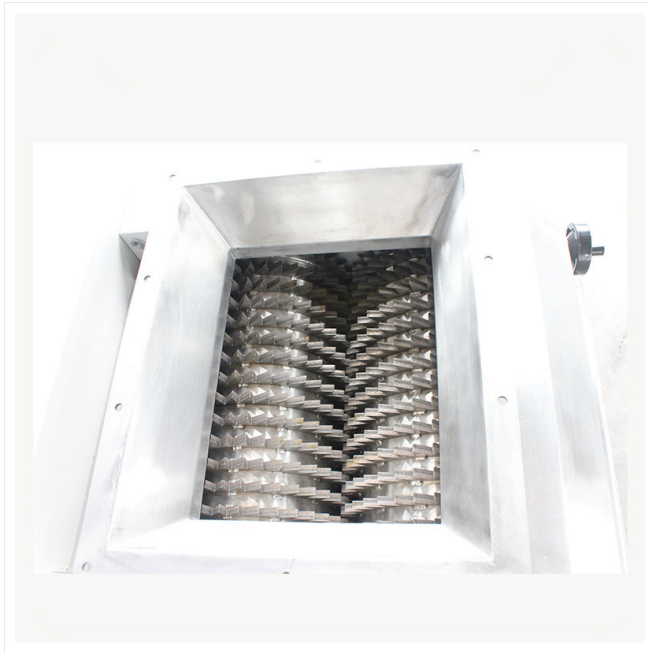
<https://www.planetaryballmills.com/products/broken-series/teeth-roll-crusher.html>



Product Overview

A new product designed and developed by ourselves based on the structural principles of the American Ganglac Crusher.





Product Introduction

The tooth roller crusher is a new product designed and developed by ourselves based on the structural principles of the American Ganglac crusher.

The tooth roller crusher is composed of transmission device, frame part, crushing roller, mechanical spring device, linkage mechanism, etc. Tooth roller crusher is divided into two series: double-tooth roller crusher and four-tooth roller crusher.



Special Wear-Resistant Toothed Rollers

Optimized tooth profile design enables selective crushing by tensile and shear forces, delivering high efficiency, low consumption, and uniform particle size.

Bakelite Handwheel

The spacing between the toothed rollers can be adjusted freely, and the roller bearings are centrally lubricated.



Compact Size Easy Operation

The toothed roll crusher features a compact size, large crushing ratio, low noise, a simple structure, and easy maintenance.

Cooling Fan Vent

High-speed operation effectively increases airflow through the machine body for efficient heat dissipation, ensuring stable machine operation.



Tooth roller crusher is mainly used in coal, metallurgy, mining, chemical industry, building materials and other industries, and is more suitable for crushing raw coal (including gangue) in large coal mines or coal preparation plants.

Technical parameters

Application fields: coal, metallurgy, mining, chemical industry, building materials

Feeding particle size: 10~50 (mm)

Discharge particle size: 0.5~5 (mm)

Production capacity: 70-80 (kg/h)

Power consumption: 1.5 (kw)

Motor power: 1.5

Grinding degree: fine grinder

Drive mode: motor drive

Target: Coal

Specifications: $\Phi 300 \times 500 \text{mm}$ (SUS304), $\Phi 300 \times 300 \text{mm}$ (SUS304)

Grinding series		
Tooth crusher/parameter introduction		
Gear roller size	$\Phi 300 \times 300 \text{mm}$ (SUS304)	$\Phi 300 \times 500 \text{mm}$ (SUS304)
Roller speed	52r/min	52r/min
Feeding particle size	10mm~50mm (according to material characteristics) Suitable for flaky, soft and crunchy materials	10mm~80mm (according to material characteristics) Suitable for flaky, soft and crunchy materials
Discharge particle size	0.5mm~5mm	0.5mm~5mm
Production volume	70-80Kg/H	600Kg/H
Motor power	1.5KW	3.0KW
Overall dimensions	(660*800*930) reference size	(880*1020*1140) reference size
Equipment weight	To be determined	To be determined

1. Key parameter matching

- Material properties** : Select toothed rollers for high hardness materials (such as granite); Smooth rollers can be selected for low hardness or fine crushing requirements.
- processing power** : Select the roller diameter and roller width according to the production capacity (for example, the processing capacity of 2PG800×600 is 12-45t/h, and the processing capacity of 2PG1500×800 is 50-120t/h).
- Power configuration** : Matching motor power (for example, 2PG1000×700 requires 2×30kW), fully automatic models are recommended for high-capacity scenarios.

2. Use and maintenance recommendations

- uniform feeding** : Equipped with a vibrating feeder to avoid uneven wear of the

roller surface caused by unbalanced load.

- **Regular maintenance** : Check the gear roller wear, bearing lubrication and hydraulic system pressure, and replace worn parts in time.

3. Typical model examples

- **Small and medium** : 2PG400×250 (processing capacity 2-10t/h, motor 2×5.5kW), suitable for small-scale production lines.
- **Large** : 2PG1500×800 (processing capacity 50-120t/h, motor 2×75kW), suitable for mining or large-scale building materials projects.

Working Principle

The tooth roller crusher mainly uses special wear-resistant tooth rollers to rotate at high speed to split and crush materials, forming a high productivity mechanism.

Product Features

1. The tooth roller crusher has large crushing capacity.
2. Prevent power overload, overload protection, safe and reliable.
3. The distance between gear rollers can be adjusted arbitrarily, and the gear roller bearings are lubricated centrally.
4. Optimized tooth shape design, selective crushing by tensile and shear force, high efficiency, low consumption, and uniform granulation.
5. The tooth roller crusher has the advantages of small size, large crushing ratio, low noise, simple structure and easy maintenance.

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.