

hammer knife crusher with anti-clogging design for wet coal

Hammer Knife Crusher is an efficient crushing equipment specially designed for processing high moisture, easy to stick coal and ore samples, which plays an important role in laboratory sample pre-processing, industrial online sampling and sample preparation.

Hammer Knife Crusher

Hammer Knife Crusher is widely used in many industries such as coal, electric power, iron and steel metallurgy, geological survey, building materials, environmental protection testing and so on. The product manufacturing standards strictly refer to the relevant national industry norms, such as GB/T 19494 "Coal Mechanized Sampling", GB 474 "Coal Sample Preparation Methods", GB/T 2007 "Bulk Mineral Sampling Sample Preparation Rules", etc., to ensure that the sampling effect is stable, the particle size is uniform, and there is no sample loss.

Features

1. The whole machine adopts fully sealed structure, preventing dust leakage, guaranteeing a clean operating environment and meeting the current environmental protection requirements.
2. The crushing part adopts the compound structure of hammer knife assembly, integrating impact, shear and crushing in one, with high crushing efficiency.



3. The screen plate adopts pluggable design, which is convenient for quick replacement and meets the demand of discharging materials with different granularity.
4. The hammer head is treated with tungsten carbide cladding technology, which has high hardness, strong wear resistance and prolonged service life.
5. The screen plate is made of high-strength alloy material, with good anti-impact and anti-wear performance.
6. Equipped with automatic cleaning structure, especially suitable for wet coal crushing with high water content and easy to be blocked, without frequent manual cleaning.
7. Simple and convenient operation and maintenance, parts replacement and cleaning without professional tools, saving maintenance time.
8. All transmission parts are equipped with protective cover, high safety and low noise during operation, to ensure production safety.
9. The internal impact plate and scraping device are equipped, which can effectively remove the wet materials attached to the inside of the equipment and prevent clogging.

Advantages

The strong adaptability of the hammer knife crusher to high humidity materials, even in the processing of coal samples or mineral samples with high moisture content, it can still maintain continuous, stable and non-clogging crushing operation. At the same time, the equipment can effectively control the sample size and moisture loss to ensure the accuracy of the experimental analysis. In addition, the optimized structure of the whole machine is easy for daily maintenance, which is suitable for long-term use in frequently used laboratories and industrial sites.

Working Principle

Hammer Knife Crusher is driven by the motor to rotate the spindle at high speed, and the hammer knives mounted on the spindle make continuous striking, shearing and projecting to the incoming materials. The materials in the crushing chamber repeatedly impact, friction, shear, and gradually be crushed to the set size and discharged through the screen plate.

For materials with high humidity, the equipment is equipped with scraper and sweeping device, which can remove the adhering materials at regular intervals, solving the problems of wet materials sticking to the wall and clogging effectively, and ensuring the equipment to run for a long time without any obstruction.

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| Model | TR400 | TR400A |
|-----------------|---|----------------|
| Feed size | ≤100mm | |
| Output size | less than 6mm or less than 13mm(choose one) | |
| Production rate | 2000kg each hour | |
| Motor power | 4kw | |
| Power supply | three phase 380Vac | |
| Weight | 245kg | |
| Dimensions | 1100x500x1260mm | |
| Sweeping method | manual mode | automatic mode |