

sealed jaw crusher with adjustable sample discharge size

Sealed Jaw Crusher is an efficient crushing equipment for laboratory and industrial sample pre-processing, designed for pre-crushing of various hard materials, such as coal, ore, coke, limestone and so on.

Sealed Jaw Crusher

The remarkable feature of the Sealed Jaw Crusher is its fully sealed design, which effectively prevents dust leakage and guarantees a clean and safe operating environment. This equipment meets numerous national standards for sample preparation and is an essential tool before material assay.

Structural Characteristics

1. Fully enclosed dustproof structure: Metal shell with fully sealed design and dustproof sealing ring prevents dust from escaping during the crushing process.
2. Adjustable discharge opening: Precisely control discharge size via screw adjusting mechanism to meet various particle size requirements.
3. High-strength body structure: Made with high-quality steel plate welding or cast steel, offering high strength and impact resistance for long-term stable operation.



4. Low noise and vibration design: Compact transmission structure, smooth movable jaw operation, and shock absorbing pads/base reduce noise and vibration.
5. Safety protection device: Equipped with overload protection to prevent jamming or damage, enhancing safety and service life.

Performance Advantages

1. High reliability: Precision structure and excellent materials ensure stable continuous operation.
2. Sample pollution-free: Fully sealed design and wear-resistant materials prevent external dust interference or cross-contamination, meeting stringent pre-assay standards.
3. Easy maintenance: Quick replacement of wearing parts, rational lubrication system layout, minimal daily maintenance.
4. Low energy consumption: Well-matched motor and crushing mechanism for high energy efficiency and controlled operating costs.

Working Principle

The Sealed Jaw Crusher uses a crank linkage mechanism to drive the movable jaw back and forth periodically. The motor powers the eccentric shaft via belt pulley, causing the movable jaw to swing relative to the fixed jaw. Material enters the crushing chamber, is crushed by extrusion, splitting, and bending, then discharged from the lower port. Adjusting the discharge opening clearance controls finished product size. High-strength sealing gaskets prevent dust leakage, and the inner lining (often manganese steel or high-chromium alloy) ensures wear resistance for high-frequency operation.

Application Areas

1. Coal, electric power industry: Coal sample crushing for ash, volatile matter, moisture, and other pre-analytical components.
2. Metallurgy, iron and steel industry: Preliminary crushing of iron ore, manganese ore, quartz ore, and other minerals for grade detection or assay analysis.
3. Geological survey: Preparation of core and geological samples for composition testing and reserve evaluation.
4. Third-party testing organizations: Consistent particle size for laboratory sample preparation, ensuring accurate and repeatable results.
5. Building materials industry: Sample crushing of limestone, cement raw materials, etc., for ingredient comparison and quality control.

sealed jaw crusher with adjustable sample discharge size

Model	EP150x125	EP150x250	EP200x300	EP250x400
Feed opening size	150x125mm	150x250mm	200x300mm	250x400mm
Feed size	≤100mm	≤125mm	≤180mm	≤210mm
Output size	less than 10mm or 40mm(adjustable)	less than 20mm or 40mm(adjustable)	less than 20mm or 50mm(adjustable)	less than 20mm or 60mm(adjustable)
Production rate	0.5 to 2ton per hour	1 to 3ton per hour	2 to 6ton per hour	5 to 20ton per hour
Motor power	4kw	5.5kw	7.5kw	15kw
Power supply	three phase 380Vac			
Weight	380kg	500kg	550kg	3000kg
Dimensions	1160x580x990mm	1480x730x1160mm	1900x870x1230mm	2000x1150x1570mm