



| **Mulini a mascelle JC5 & JC6**

POWTEQ PRODUCTS

Please keep contact with POWTEQ if you have any further questions.



Cryo Grinder LM200



Micro Ball Mill GT300



Planetary Ball Mill BM40



Planetary Ball Mill BM6Pro



Mortar Grinder MG200



Twister TW100



Multi-functional Mill CM100M



Portable Cutting Mill CM50



Cutting Mill CM200



Ultra Centrifugal Mill FM200



Knife Mill HM100



Knife Mill HM300



Jaw Crusher JC5



Jaw Crusher JC6



Disc Mill DP100



Vibratory Disc Mill VM3



Sample Divider SD200



Vibratory Sieve Shaker SS2000

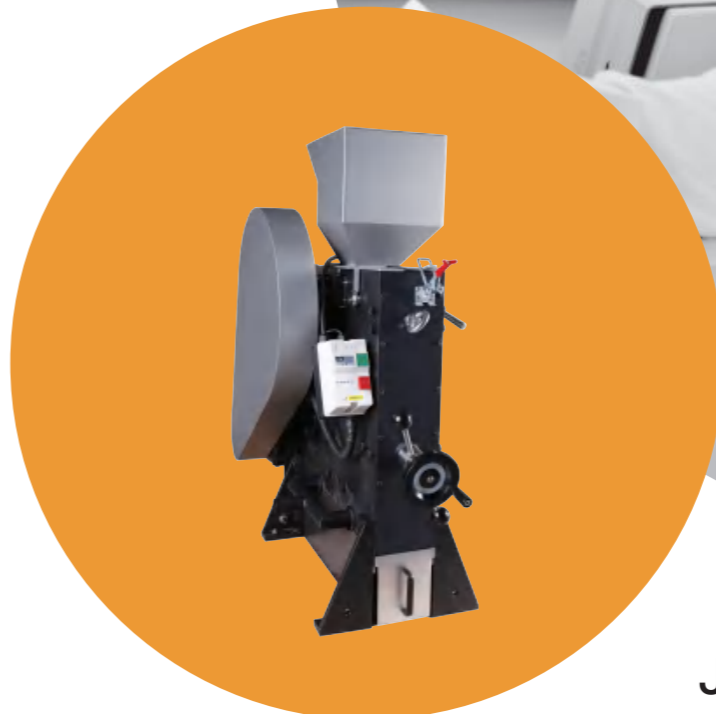


3D Mixer M10



Smart Graphite Digester

\* Technical improvements will be made without prior notice  
\* The warranty period of the hosts is two years



Jaw Crusher **JC5&JC6**

## ◇ Jaw Crusher JC5

POWTEQ Jaw Crushers are used to process medium-hard, hard, brittle and tough sample fast and gently. There are 6 kinds of materials for the jaw plate. This series of products with superior technical and safety performance, so it is your ideal choice for the sample preparation in the laboratory and enterprise production.

### ○ Applications

- **Mining and metallurgical industries:** niobium and titanium alloy, vanadium iron, chrome vanadium, tungsten carbide, ore, coal, slag, coke
- **Chemical products:** wide variety of chemical industry raw materials
- **Geological and mineralogical:** rock, granite, basalt, barite, silicate
- **Ceramic industry:** talc, sintered clay, sintering ceramic, electric ceramic
- **Building materials:** bauxite, slag brick, quartz, cement



JC5

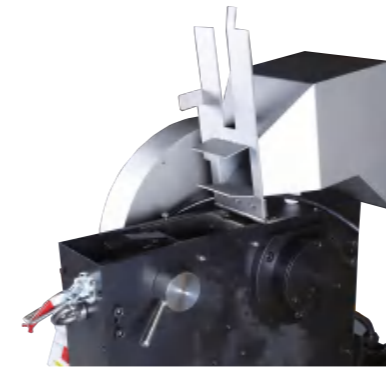
### Application Examples

| Before grinding | After grinding | Parameter             |  |
|-----------------|----------------|-----------------------|--|
|                 |                | Sample                | limestone  |
|                 |                | Instrument            | JC5 host with jaw plate of manganese steel                   |
|                 |                | Gap setting           | 2mm  |
|                 |                | Sample characteristic | hard   |
|                 |                | Feed size             | less than 90mm   |
|                 |                | Time                  | the sample can be collected immediately after feeding        |
|                 |                | Sample                | ferrocchrome   |
|                 |                | Instrument            | JC5 host with jaw plate of tungsten carbide                  |
|                 |                | Gap setting           | 2mm  |
|                 |                | Sample characteristic | hard   |
|                 |                | Feed size             | less than 90mm   |
|                 |                | Time                  | the sample can be collected immediately after feeding        |
|                 |                | Sample                | marble   |
|                 |                | Instrument            | JC6 host with jaw plate of manganese steel/ tungsten carbide |
|                 |                | Gap setting           | 0.5mm  |
|                 |                | Sample characteristic | hard   |
|                 |                | Feed size             | less than 40mm   |
|                 |                | Time                  | the sample can be collected immediately after feeding        |

### ○ Working principle

The sample enters the grinding chamber via the anti-splashing hopper. The crushing is proceeded inside the wedge-shaped shaft space between two jaw plates. one jaw plate is fixed, while the other jaw plate is driven by a bent axle to perform oval movement with the continuous rotation of the motor. The sample is crushed due to extrusion caused by constant movements of the jaw plate and moves downward under the effect of gravity. In case the grain size of the sample is less than the lower opening gap of jaw plates, it will fall to the drawer receiver at the lower part of the machine.

### ○ JC5 Technical advantages

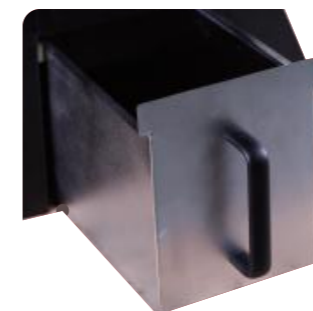


#### Comfortable operation and easy cleaning

The feed hopper of JC5 can roll over to one side or be removed easily. In this way, operators can clean the grinding chamber rapidly. The samples are collected in a drawer receiver and easy for the operator to proceed subsequent analysis.

#### High-safety design

The jaw crusher JC5 has high-level safety performance. The feed hopper can avoid scratching of operators touching the grinding chamber. The hopper baffle can prevent the rebound of samples from injuring persons. Furthermore, a safety switch is equipped at the upper of the feed hopper. The device cannot be started when the hopper is opened so as to guarantee the safety of operators. The motor and the controller also have overload protection devices; motor overload will occur when the load is too large (excessive sample loading or sample oversized). At this moment, such overload protection devices will automatically shut off the power supply to protect the motor and the crusher.



#### Eco-friendly design

We have equipped thoughtful dust - protection design for JC5 jaw crushers. In addition, in order to avoid environmental pollution caused by tiny dust particles, we equipped dust discharge connectors for the crushers. Operators can easily remove the dust particles inside the crusher by connecting industrial dust collectors with such dust discharge connectors.

## ◇ Jaw Crusher JC6

JC6 and JC5 are basically the same in application field and work principle. And both has the advantage of zero point correction to compensate for wear. Unlike JC5, JC6 is designed for desktop. JC6 features in the compact design, easy operation and the high final fineness of sample ( $d_{90} < 0.5 \text{ mm}$ ).



JC6

- High throughput, high degree of size reduction.
- Zero point adjustment to compensate the wear.
- Breaking jaws made of 6 different materials.
- Anti-splash design hopper.
- Easy-to-clean crushing chamber.
- Excellent performance and high final fineness ( $d_{90} < 0.5 \text{ mm}$ ).

### ○ JC6 Technical Advantages



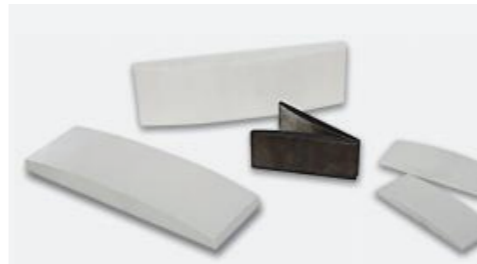
The feed hopper and the jaw plate can be easily removed



The sample collecting tank is easy to clean

Set jaw plate gap by rotating handle

### ● Jaw plates in different materials



For different applications, we can provide jaw plates in different materials. Please select the correct jaw plate material according to the requirement of sample crushing.

#### ● Manganese steel

Manganese steel is suitable for processing hard and medium-hard samples. The structure of this kind material will become denser after being squeezed, so it will gradually harden in use (cold hardening).

#### ● Stainless steel

Stainless steel can avoid rust. This material is recommended when dealing with low hardness samples.

#### ● Tungsten carbide

The tungsten carbide material is abrasion resistant. Even for samples with mohs hardness of 7-8, the tungsten carbide jaw plate can be used for a long time.

#### ● Zirconium oxide

Zirconium oxide jaw plate are specially used to deal with ceramic materials that contain no heavy metals, such as the crushing of dental, optical glass and other medical ceramics. In addition, the material will not bring color pollution to the crushed samples.

#### ● Steel of heavy-metal-free

Steel of heavy-metal-free can avoid scraping against the samples to cause heavy metal contamination. This material jaw plate is the ideal choice for the heavy-metal-free grinding pretreatment of the non-corrosive samples.

#### ● Industrial plastic

Industrial plastic has the characteristics of high toughness and drug resistance. It is suitable for hard and brittle samples. It will not cause metal pollution to the processed samples, which can guarantee the high purity of the sample.

### ○ Technical data

|                        | JC5                 | JC6               |
|------------------------|---------------------|-------------------|
| Feed size              | <90mm               | <40mm             |
| Final fineness         | <2mm                | <0.5mm            |
| Speed                  | 690rpm              | 500-1000rpm       |
| Collector capacity     | 5L                  | 3L                |
| <b>Jaw plate width</b> | 99mm                | 59.5mm            |
| Gap setting            | 0~30mm              | 0~11mm            |
| Zero point adjustment  | Yes                 | Yes               |
| <b>Rated power</b>     | 2.2KW               | 1.1KW             |
| Power supply           | 380V,50Hz           | 220V,50/60 Hz     |
| Instrument size(W*D*H) | 440 × 930 × 1090mm  | 450 × 630 × 490mm |
| Package size(W*D*H)    | 800 × 1165 × 1330mm | 785 × 900 × 780mm |
| Weight                 | 320kg               | 93kg              |

