

# HORIZONTAL COLLOID MILL

## 卧式胶体磨



研发

R&D



生产

Production



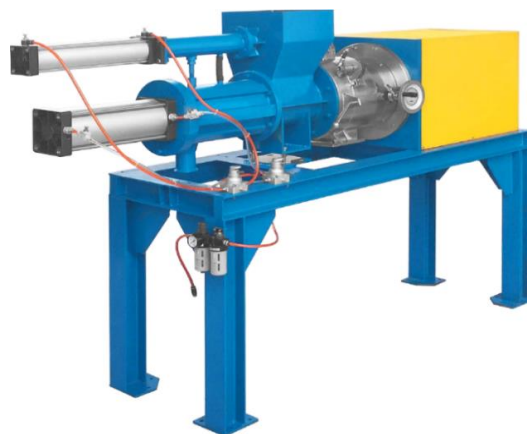
销售

Sales



售后

After sales



## 设备原理 Equipment principle

设备名：卧式胶体磨

用途：原材料破碎用

型号：XRW-250

磨盘径：φ250mm

Equipment Name : Horizontal colloid mill

Use : Raw material crushing

Model : XRW-250

Grinding disc diameter : φ250mm

利用左右1组的陶瓷磨盘、左盘固定、右盘高速旋转而产生的揉搓·剪切·解聚·打散达到粉碎效果  
通过磨盘间隙调节粒度

利用日本IMAO公司的刻度仪表盘控制间隙

The ceramic grinding disc of the left and right groups,

the left disc is fixed, and the right disc is rotated at high speed.

The resulting kneading, shearing, depolymerization, and breaking up achieve a crushing effect.

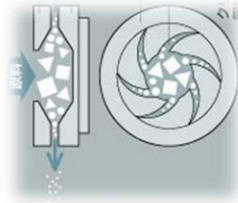
The particle size is adjusted by the disc gap.

Use the scale dashboard of IMAO Corporation of Japan to control the clearance.



XRW-250

型号 Model	XRW-250	
粉碎电机 Pulverization motor		11kW
磨盘转速 Rotation speed		1,460 r/min
磨盘尺寸 Size of grinding disc		φ250mm
处理能力 Processing capacity		100 ~ 500kg
机器尺寸 Machine size		W970×L2,480×H1,130mm
设备重量 Equipment weight		750kg



### 【应用领域】

锂电池正负极材料 陶瓷品回收利用 触媒等

### 【Application】

Lithium battery cathode and anode materials Ceramic recycling Catalysts etc.

## 设备优势 Advantage of equipment

### 设备优越性

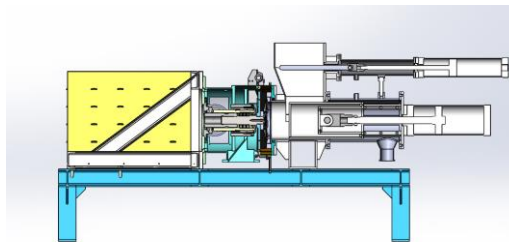
保证密封性·控制湿度·增加耐腐蚀性材料

可注入干燥空气或氮气控制露点

Equipment superiority

Materials that ensure tightness, control humidity, and increase corrosion resistance.

Dry air or nitrogen can be injected to control the dew point.



### 稳定高效

性能稳定·保养简单·节约能耗

粉碎物料100%通过

Stable and efficient

Stable performance, simple maintenance, energy saving.

100% pass of the crushed material.

### 有效保持物料特性

粉碎区域采用夹层水冷却技术

Prevents alteration of raw materials

Temperature control technology that cools the grinding section with a water-cooled jacket structure.

### 机械高度1,130mm

充分利用厂房空间,

不能放高设备的区域也可以灵活放置

Mechanical height 1,130mm

Make the most of the plant space.

Areas where the device cannot be

placed high can also be flexibly placed.

### 不产生磁性异物

在粉碎过程中杜绝任何异物产生

Eliminate any foreign matter in the crushing process.

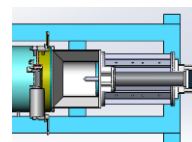


### 从日本进口的刻度仪表

原材料的颗粒大小可在10微米的范围内调节

Scale imported from Japan

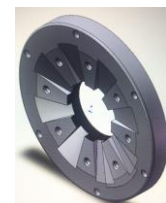
Adjustable raw material particle size in 10μm increments.



### 把物料送入粉碎区域

The double-channel putter device

Feed the material into the shredding area.



### 粉碎磨盘

氧化锆材质

碳化硅材质

WC新型磨盘

Grind disk

Zirconia

Silicon carbide

WC new grinding disc

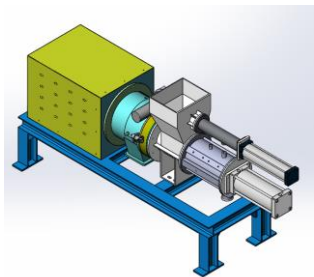
### 无死角清理

拆卸简单 维修方便 内部打扫方便

No dead end clean

Easy to disassemble and easy to maintain. Easy to clean internally.

# 电池材料的粉碎 Battery materials grinding



**电池材料的前期处理!**  
Pre-treatment of battery materials!



**二氧化硅**  
Silicon dioxide



粉碎实验前

Before crushing experiments



粉碎实验后

After crushing experiments

**单晶三元高镍**  
Monocrystalline ternary high nickel



粉碎实验前

Before crushing experiments



粉碎实验后

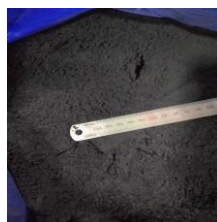
After crushing experiments

**钴酸锂**  
Lithium cobalt oxide



粉碎实验前

Before crushing experiments



粉碎实验后

After crushing experiments

## 粉碎实验数据

Crushing experimental data

原料 Raw material	10目以上 >2mm More than 10 mesh > 2mm	10目 0.6~0.2mm 10 mesh 0.6 ~ 0.2mm	30目 0.3~0.6mm 30 mesh 0.3 ~ 0.6mm	50目以下 <0.3mm Below 50 mesh < 0.3mm
二氧化硅 Silicon dioxide	1.0%	10.0%	24.0%	65.0%
单晶三元高镍 Ternary high nickel	0.4%	59.0%	21.0%	19.6%
钴酸锂 Lithium cobalt oxide	0.2%	27.0%	46.0%	26.8%
多晶三元 Polycrystal Ternary	0.1%	10.2%	2.7%	87.0%
NCA NCA	0.2%	13.0%	11.8%	75.0%

## 试验案例 Experimental cases

**硫酸钴**  
Cobalt sulfate



粉碎实验前

Before crushing experiments



粉碎实验后

After crushing experiments

**环保陶瓷触媒**  
Environmentally ceramic catalyst



粉碎实验前

Before crushing experiments



粉碎实验后

After crushing experiments

**红砖块**  
Red bricks



粉碎实验前

Before crushing experiments



粉碎实验后

After crushing experiments





高新技术企业  
High-tech enterprise



高新技术产品认定  
High-tech product identification



中国科学院苏州纳米研究所产学研基地  
Suzhou Institute of Nanotechnology, Chinese Academy  
of Sciences, Designation of Joint Research Centers



中南大学合作设立博士生工作站  
Collaboration with Central South University  
to establish a doctoral internship



ISO9001认证  
ISO9001 certification



欧洲CE认证  
CE certification in Europe



韩国KCs认证  
KCs certification in Korea



防爆设备安装认证  
Explosion-proof equipment  
installation certification



专利证书  
Patent certificate

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