

FINE GRANULATOR MIXER

细微造粒机



研发
R&D



生产
Production



销售
Sales



售后
After sales



设备原理 Equipment principle

中国市场没有的卧式搅拌机！

The horizontal mixer is not available in the Chinese market!

设备名：细微造粒混合机

用 途：原材料精密混合·整粒·扩散·滚动·包覆

型 号：XRX-4 XRX-6 XRX-12 XRX-30

投料量：20 30 60 150

Equipment name: Fine granulator mixer

Use: Precision mixing of materials, Whole granules,

Diffusion, Rolling and Coating

Model: XRX-4 XRX-6 XRX-12 XRX-30

Feed volume: 20 30 60 150

【应用领域】

电池材料 精细陶瓷 电子材料 精细化学品

树脂 化妆品 医药品 食品等

【Application】

Battery materials Fine ceramics Electronic materials

Fine chemicals Resins Cosmetics Pharmaceuticals Food etc.

❖造粒混合原理

❖搅拌容器内壁由刮刀和多个高速搅拌叶片构成

❖从顶部提供的粉末原料由刮刀循环混合

❖并连续地提供给刮刀部分

❖在桨叶表面的引脚处，粉末原料受到桨叶的剪切·冲击作用

❖反复发生分散·压密

❖ Principle of granulation and mixing

❖ The inner wall of the mixing container consists of a scraper and a number of high-speed mixing blade.

❖ Powder raw materials supplied from the top are mixed circularly by scraper.

❖ And continuously supplied to mixing blade section.

❖ At the pin on the blade surface, the powder raw material is subjected to the shearing and impact of the blade.

❖ Repeated dispersion and compaction.

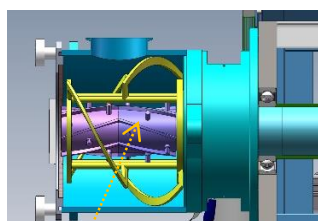


XRX-4



XRX-6

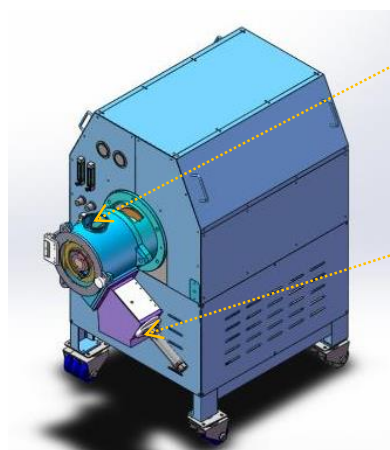
设备结构 Equipment structure



搅拌部
Mixing section

搅拌分散叶片

Mixing dispersion blade



原料投入部兼用布袋过滤器

Bag filter for raw material input department.

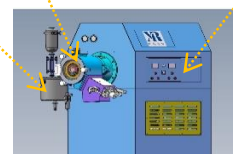
产品出口

Product export

加液容器
Filling vessel

二流体喷嘴
Two-fluid nozzle

控制柜
Control cabinet



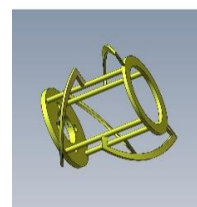
精细重质颗粒造粒！
Granulation of fine heavy particles!

多次进行原料的精密混合、整粒、扩散和滚动

一道工序可以生产出非常高的成品微粒！

Precise mixing of raw materials for many times Granulation, Diffusion and Rolling.

One process can produce very high finished particles!



刮刀

Scraper

型 号 Model		XRX-4	XRX-6	XRX-12	XRX-30
投料量 Feeding volume		20	30	60	150
桨叶转速 Paddle speed		3000~6000 r/min	2300~4600 r/min	2000~4000 r/min	1700~3400 r/min
桨叶驱动马达 Paddle motor		1.5 kW	2.2 kW	2.2 kW	3.7 kW
刮刀转速 Scraper speed		27 r/min	25 r/min	25 r/min	25 r/min
刮刀驱动马达 Scraper motor		0.4 kW	0.75 kW	0.75 kW	0.75 kW



◆即便是高流动性高密度重质颗粒也可以得到高回收率的成品

◆实际案例 细粒0.1~0.7mm 时间10分钟以内

- ◆ Even heavy particles with high fluidity and density can get finished products with high recovery rate.
- ◆ Actual case fine particles 0.1~0.7mm within 10 minutes.

◆可以控制粒径D50的粒度分布

◆因为是水平轴，所以对桨叶负荷少，热产生也最少

◆用刮刀卷起原料，用多个刮刀进行分散粉碎，混合均匀

- ◆ The particle size distribution of particle size D50 can be controlled.
- ◆ Since it is a horizontal axis, it has less load on the blade and least heat generation.
- ◆ Roll up the raw materials with a scraper, and use multiple scrapers to disperse and crush them, Mix well.

◆通过二流体喷嘴，可以获得清晰粒度的颗粒物

◆可以对微量液体成分的粒子进行包覆

◆加湿后的原料在3分钟内仍然比较均匀，精密扩散混合！

- ◆ Clear particle size can be obtained through the two fluid nozzle.
- ◆ It can coat particles with trace liquid components.
- ◆ The raw materials after humidification are still relatively uniform within 3 minutes, and they are mixed by precision diffusion!

◆即使是比重差较大的原料之间，也可在1分钟的短时间内快速混合！

- ◆ Even among materials with large specific gravity difference, they can be mixed quickly in a short time of 1 minute!

供多台设备于锂电行业大型企业！

Our company supplied several units to a large lithium battery enterprises !

◆电池原料的微粒制造及添加剂的包覆

◆挤压式颗粒机的前工序、成型冲压机的前工序

◆微量添加剂的精密混合 液剂·油脂和粉体的精密混合

◆凝集物、滤压机滤饼的细分散 2流体喷嘴的着色等

- ◆ Particulate manufacturing of battery raw materials and coating of additives.
- ◆ Pre process of extrusion granulator, pre process of forming press.
- ◆ Precision mixing of micro additives. Precision mixing of oil and powder.
- ◆ Agglomerate, fine dispersion of filter cake of filter press 2 Coloring of fluid nozzle, etc.

电气控制选项

Electrical control options

其他公司不具备的优点和特长
Advantages that other companies do not have

通过在线监控造粒时的搅拌分散叶片

功率变化，可以确定造粒完成点。

Through online monitoring of mixing and dispersing blades during granulation.

Power change can determine the completion point of granulation.



造粒完成点自动控制

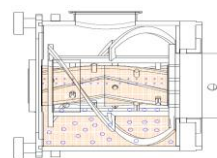
Automatic control of granulation completion point.

① 干粉开始混合

原料通过搅拌叶片流动，
粉末体积达到最大。
由于对搅拌叶片整体施加力
功率值也很大。

① Dry powder starts to mix

The raw materials flow through the mixing blades, The powder volume reaches the maximum.
Due to the overall force exerted on the mixing blade, The power value is also large.



② 液体湿润

液体均匀包覆在每个颗粒上，
整体体积降低，功率值最小。

② Liquid wetting

The liquid is uniformly coated on each particle,
The overall volume is reduced and the power value is minimum.

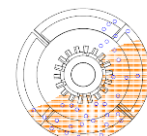


③ 造粒生产

粒子开始聚集 功率值逐渐增加。

③ Granulation production

Particles start gathering, The power value increases gradually.

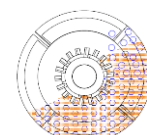


④ 造粒生长

造粒产品通过液体相互结合。
功率振幅随颗粒尺寸的增加而变化到最大值。

④ Granulation growth

Granulation products are combined with each other through liquid.
Power amplitude increases with particle size. And change to the maximum value.





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



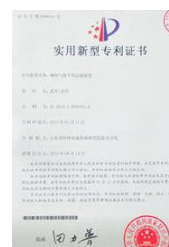
欧洲CE认证
CE certification in Europe



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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锂电设备 粉体机器

