

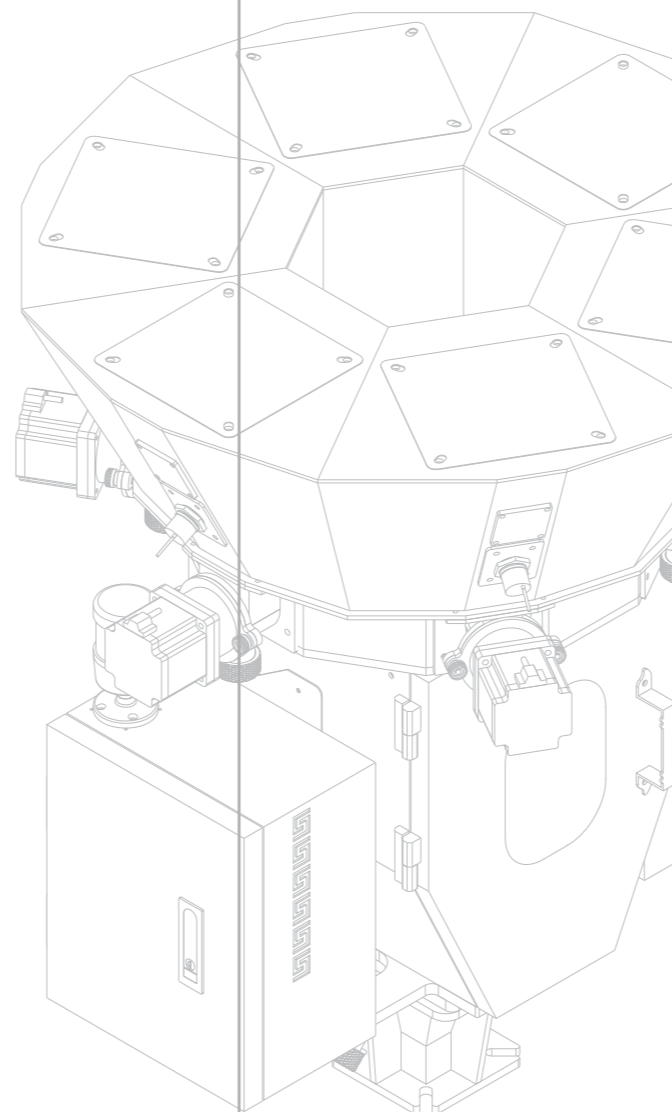
Dosing 计量

Mixing 混合



LIANSU has dedicated in plastic pipe extrusion equipment manufacturing for 30 years, and be committed to providing plastic pipe manufacturers with the whole industry chain of extrusion processing solutions, including Automatic Plastic Material Compound & Conveying System, and the downstream of on-line socket and packaging device, also integrates the digital management of equipment IoT to improve production management efficiency and reduce the production cost for customers.

联塑机器深耕管道挤出设备的研发与制造30年，一直致力于为客户提供塑料管道全产业链的挤出加工解决方案，覆盖挤出加工上游的材料自动混配输送系统，下游配套在线扩口、在线包装机构，并融合设备物联的数字化管理系统，打造塑料管道“质造”全流程生态链，为客户降本增效，助力企业精细化管理。



As a brand of Liansu, Mconvey is a material handling solution provider integrating R&D, production, sales, installation and service. The company focuses on the R&D and manufacturing of automatic dosing, mixing and conveying equipment in the plastic molding industry with more than 10 years of experience. At present, the products cover a full range of automated debagging, silo storage, dosing, mixing, drying and conveying equipment, which are widely used in the processing and conveying of powder, granular and liquid materials in the extrusion and injection molding industries.

联塑机器旗下品牌——麦康维，是一家集研发、生产、销售、安装和服务于一体的物料输送解决方案提供商。公司专注于塑料成型行业的自动计量、混配与输送设备的研发和制造已有超过10年的经验。目前，麦康维的产品涵盖了全系列的自动拆包、料仓储存、计量、混配、干燥及输送设备，广泛应用于挤出、注塑成型行业中的粉料、粒料及液体材料的处理和输送。



# MACHINING WORKSHOP



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## Multi-Component Dosing

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# Dosing

计量秤

## Gravimetric Doser (For Granules) 色母机

### Single/Multiple Component Dosing 单/多头带搅拌

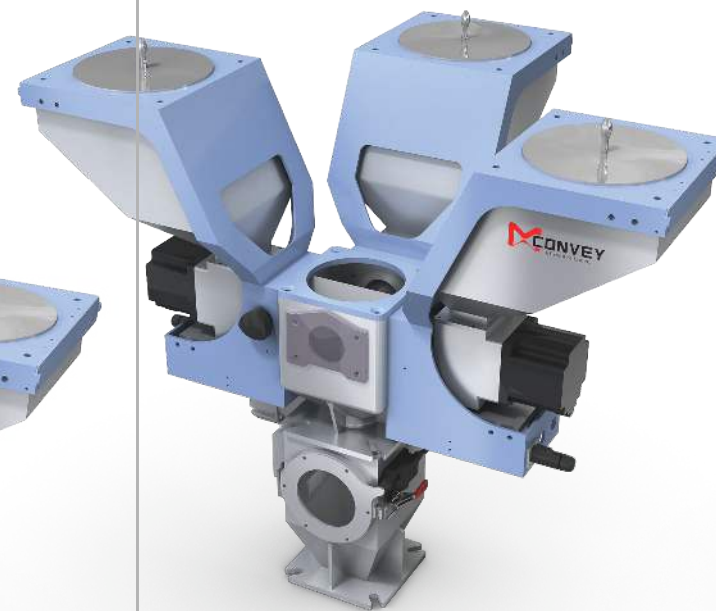
- PLC control and touch screen display.
- Modular assembly with multi-combinations.
- Simple and fast material change .
- Maintenance-free.
- The measurement accuracy can reach  $\pm 0.1\%$ .
- Sturdy and durable Stainless steel casting parts.
- Self-learning control without debugging when change formula.

- PLC控制，触摸屏显示,简单，易懂；
- 模块化组装结构，可自由组合成多种模式；
- 换料简单快速；
- 免维护；
- 计量精度可达 $\pm 0.1\%$ ；
- 不锈钢铸造主件，坚固耐用；
- 自学习控制，换配方免调试。



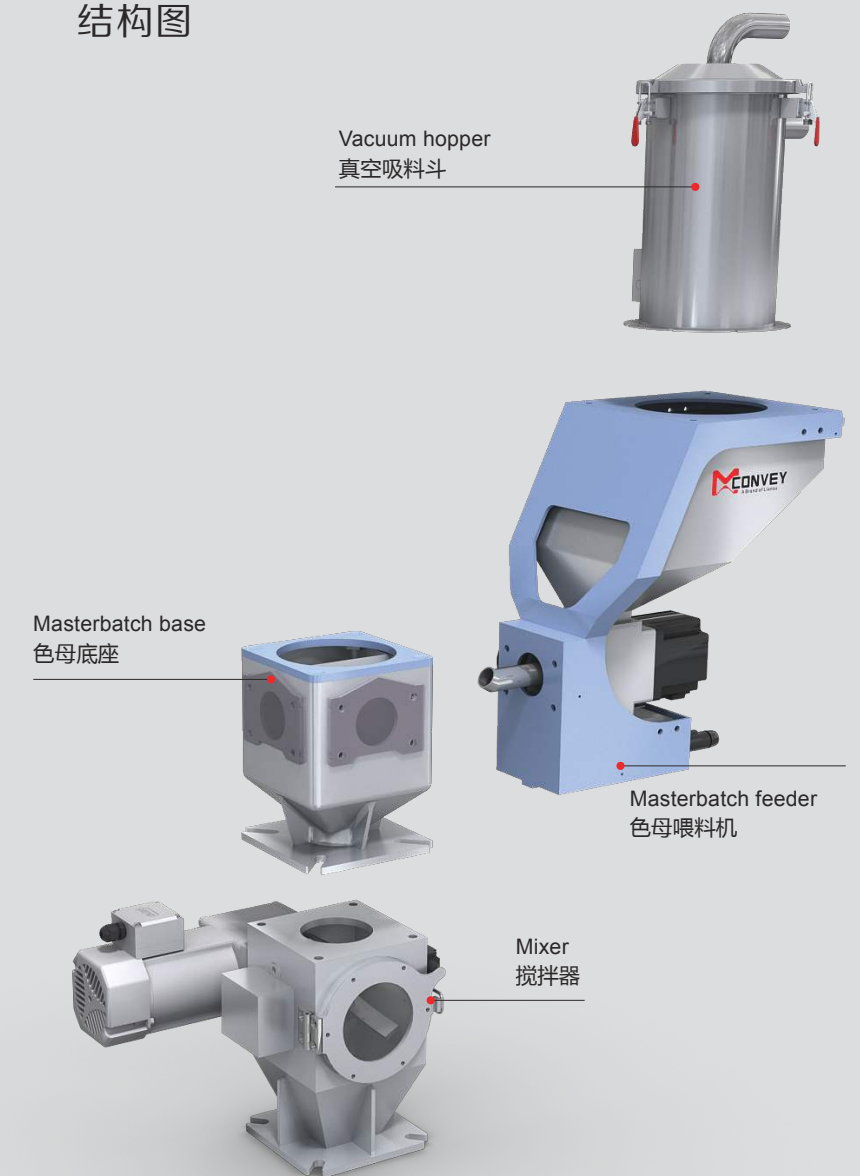
Single component with mixing base  
单头带搅拌

Double-components with mixing base  
双头带搅拌



Three-components with mixing base  
三头带搅拌

## Composition 结构图



# Dosing

计量秤

## Gravimetric Doser (For Powder)

色粉机

6L、12L

- Gravimetric type: Equipped with load cell to work in loss-in-weight mode.
- PLC control and touch screen display.
- Self-cleaning twin screws, material change fast and quick.
- The measurement accuracy can reach  $\pm 0.1\%$ .
- Self-learning control without debugging when change formula.
- Simple structure and small size.

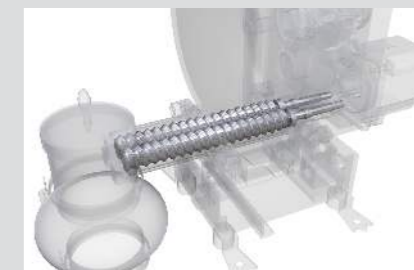
- 装有重量传感器，失重模式；
- PLC控制，触摸屏显示，简单，易懂；
- 采用自洁双螺杆，换料快速；
- 计量精度可达 $\pm 0.1\%$ ；
- 自学习控制，换配方免调试；
- 结构简单，体积小巧。



6L



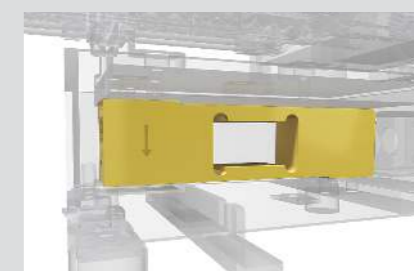
12L



Twin screws stirring 双螺杆



Anti-bridge 破架桥



Load cell 重量传感器



Control 控制器



Communication 通讯

# Dosing

计量秤

## Loss In Weight Feeder(Powder)

粉体失重秤

50、75、100、175L

- Twin screw structure with self-cleaning function.
- 360-degree bridge breaking without dead angle, also applicable to powder materials with poor fluidity.
- Patented design, no disturbance to material metering during mixing.
- Dosing accuracy can reach  $\pm 0.5\%$ .
- Two different control system as options:
  1. Continuous dosing synchronized with extruder.
  2. Dosing batch by batch.
- Configurable mobile APP service.
- High versatility for the full range of accessories.

- 双螺杆结构，有自清洁功能；
- 无死角360度破架桥，对流动性极差的粉体材料也适用；
- 专利设计，搅拌时对物料计量没有扰动；
- 计量精度可达 $\pm 0.5\%$ ；
- 产量跨度范围达到100倍以上；
- 适用范围广，通用型强，同一机型配置，能够适用于流动性差的粉体材料；
- 可配置移动APP服务。
- 全系列配件通用性强。



50L



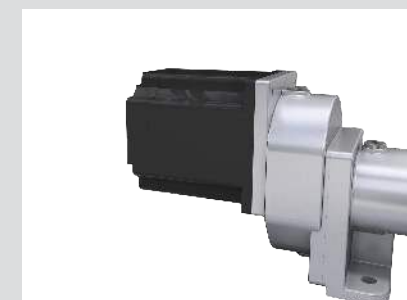
75L



100L



175L



Twin screw driving, compact speed reduction, low noise.

双螺杆驱动，减速机构小巧，低噪音



360° stirring : Vertical + horizontal stirring.

垂直搅拌+水平搅拌共动力360°无死角搅拌



Portable electronic control system with open data port and can be customized.

便携式的电控系统，可开放数据端口，高度定制化专机



Twin screw driven permanent magnet motor, low power, high torque.

双螺杆驱动永磁电机，小功率，大扭矩

# Dosing

计量秤

## Loss In Weight Feeder (Granules)

米重秤

60、350、500、750、1000、1400kg/h

- Unique design of material shut-off valve without material jams.
- Visual observation window
- Suitable for recycled materials.
- Modular design and good versatility.
- Multiple redundant designs can effectively handle situations such as abnormal air and power supply.

- 独特的关料阀门设计，永不卡料；
- 可视化观察窗
- 可适用于回收料；
- 模块化设计，通用性强；
- 多种冗余设计，能够有效处理诸如供气供电异常等情况。



Load cell 传感器



Material discharging port 下料口



Visual window 可视窗口

# Dosing

计量秤

## Liquid Doser

液体秤

### Diaphragm Pump 隔膜泵

- Adjust peristaltic metering pump made of fine ceramic material with excellent performance.
  - Unique valveless structure without blocking.
  - High precision processing parts, and ultra-high spitting accuracy can be achieved up to  $\pm 0.5\%$ .
  - It is used for micro-precision addition of liquids and transportation of various medium and low viscosity liquids.
- 采用性能优异的精细陶瓷材质的蠕动计量泵；
  - 独特的无阀构造，不会堵塞；
  - 主要零件的加工精度高，可获得超高吐出精度可达 $\pm 0.5\%$ ；
  - 应用于液体的微量精密添加和各种中低粘性液体输送。



## Composition

结构图



# Multi-Component Dosing

多组份配料

## Multi-Component Gravimetric Doser

多头失重秤

- Flexible combination: Optional to dose multi-types of powder materials, or Simultaneous dose powder and granules. Double-screw feeding for powder dosing; single-screw feeding for pellet dosing.
  - PLC control and touch screen display.
  - Self-cleaning twin screws, material change fast and quick.
  - The measurement accuracy can reach  $\pm 0.1\%$ .
  - Self-learning control without debugging when change formula.
- 
- 灵活组合:可选多头粉体失重称, 或者粉粒料一体机, 同时配粉料和颗粒料; 粉体的计量采用双螺杆喂料。颗粒的计量采用单螺杆喂料;
  - PLC控制, 触摸屏显示, 简单, 易懂;
  - 采用自洁双螺杆, 换料快速;
  - 计量精度可达 $\pm 0.1\%$ ;
  - 自学习控制, 换配方免调试。



Double-component Doser (for powders)  
双色粉机



Double-component Doser (for powder + granule)  
色母粉体一体机



Triple-component Doser (flexible combination)  
多头色母粉体一体机

Multi-  
Component  
Dosing  
多组份配料

Gravimetric Blender  
称重混料机

60kg/h Series 60kg/h 系列

- Modular assembly, 6 groups can be assembled.
  - Small size, especially suitable for installation in small spaces.
  - Full screw measurement with  $\pm 0.1\%$  accuracy.
  - Combination of gain-in-weight and loss-in-weight, high output and high precision.
  - With Ethernet communication function, realizing centralized monitoring with other devices.
  - Configurable mobile APP service.
- 
- 模块化组装，6组任意拼装；
  - 体积小，特别适用于小空间的安装；
  - 全螺杆计量方式，计量精度 $\pm 0.1\%$ ；
  - 增重和失重相结合，高产的同时，高精度；
  - 具有以太网通讯功能，实现与其它设备联网集中监控功能；
  - 可配置移动APP服务。

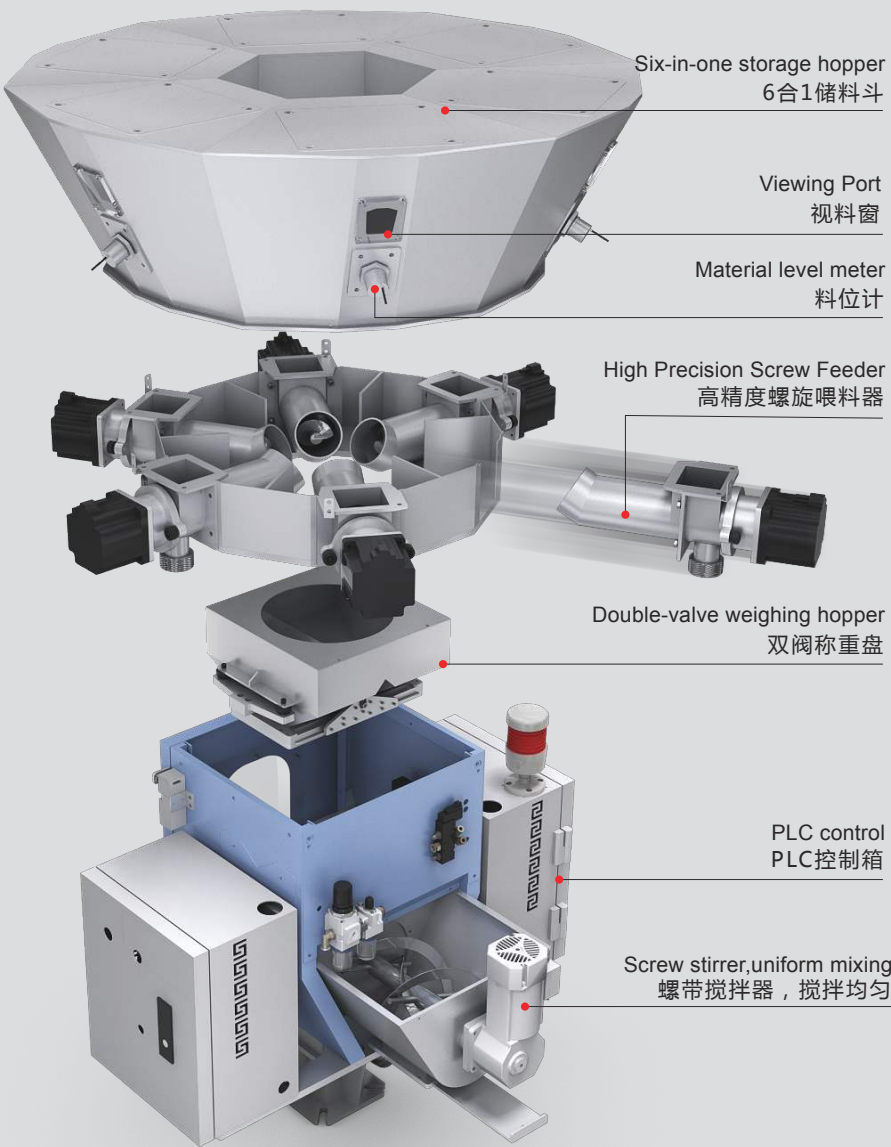


60kg/h  
60kg 称重混料机



60kg/h with gravimetric doser  
60kg 加色母机

Composition  
结构图



Multi-Component Dosing

多组份配料

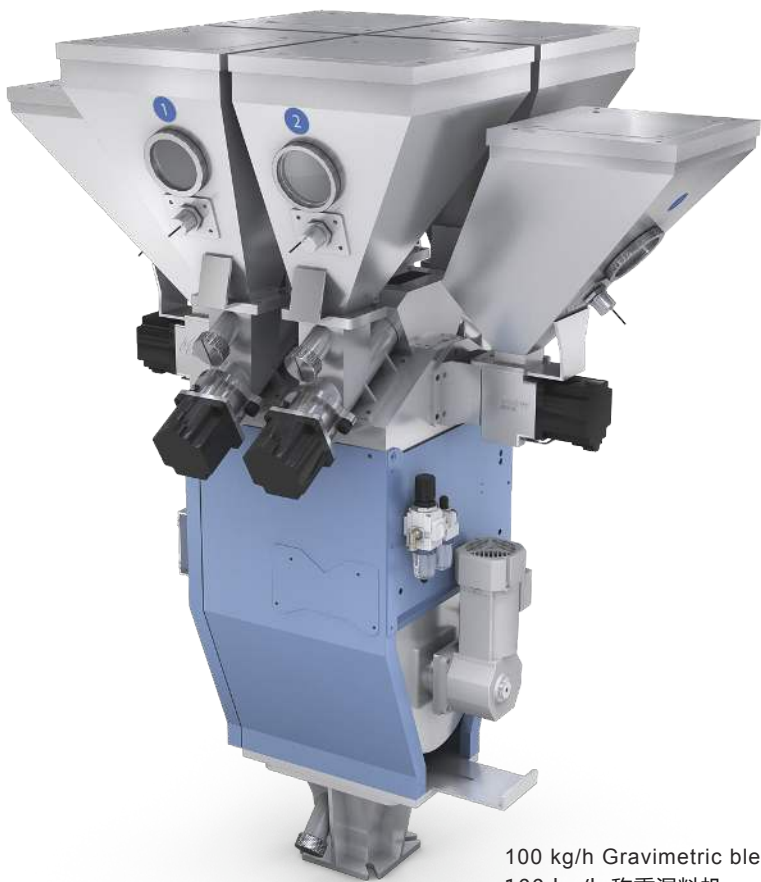
Gravimetric Blender

称重混料机

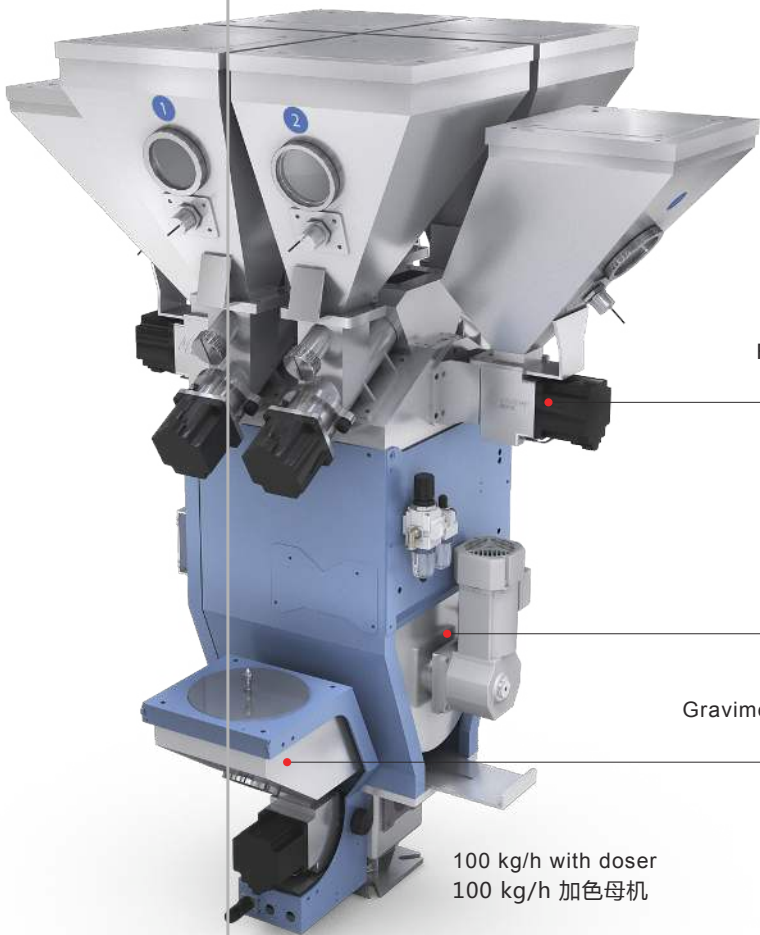
100 kg/h Series 100 kg/h 系列

- Modular assembly, 2 to 7 groups can be assembled.
- Compact structure, especially suitable for installation in small spaces.
- All screw measurement with  $\pm 0.1\%$  accuracy.
- Combination of gain-in-weight and loss-in-weight, high output and high precision.
- With Ethernet communication function, realizing centralized monitoring with other devices.
- Configurable mobile APP service.

- 模块化组装，2~7组任意拼装；
- 体积小，特别适用于小空间的安装；
- 全螺杆计量方式，计量精度 $\pm 0.1\%$ ；
- 增重和失重相结合，高产的同时，高精度
- 具有以太网通讯功能，实现与其它设备联网集中监控功能。
- 可配置移动APP服务。



100 kg/h Gravimetric blender  
100 kg/h 称重混料机

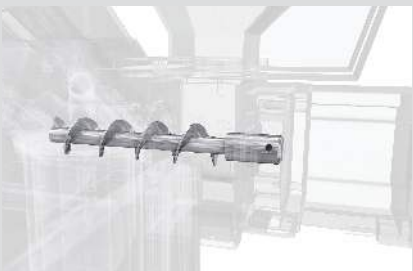


100 kg/h with doser  
100 kg/h 加色母机

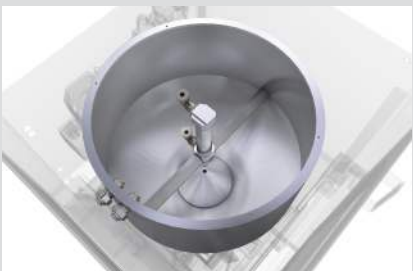
Feeding screw motor  
喂料螺旋电机

Stirring motor  
搅拌电机

Gravimetric doser(granules)  
失重色母机



Screw 螺杆



Weighing bucket 称重斗



Mixing barrel 搅拌料桶



HMI 控制器



Mobile APP monitoring 移动APP

Multi-Component Dosing  
多组份配料

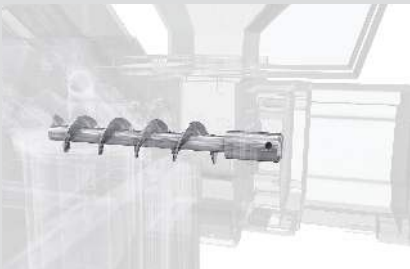
Gravimetric Blender  
称重混料机

200kg/h Integration 200kg/h一体机

- Modular assembly, 2 to 6 groups can be assembled.
  - Precision casting valves with high feeding accuracy and good stability.
  - Self-learning control without debugging when change formula.
  - Stir uniform no matter material density change.
  - Compact structure, integrating three functions of suction, feeding and mixing.
  - With Ethernet communication function, realizing centralized monitoring with other devices
  - Configurable mobile APP service.
- 
- 模块化组装，2~6组任意拼装；
  - 精密铸造阀门，配料精度高稳定性好；
  - 自学习控制，换配方不用调试；
  - 搅拌均匀无惧物料密度变化；
  - 结构紧凑，集成吸料、配料和混料三种功能；
  - 具有以太网通讯功能，实现与其它设备联网集中监控功能；
  - 可配置移动APP服务。



200kg/h with hoppers  
200kg/h 带料斗



Screw 螺杆



Weighing bucket 称重斗



Mixing barrel 搅拌料桶



HMI 控制器



Mobile APP monitoring 移动APP

Multi-Component Dosing  
多组份配料

Gravimetric Blender  
称重混料机

200-5000kg/h

- Modular assembly, 2 to 8 groups can be assembled.
  - High versatility for the full range of accessories.
  - Precision casting valves with high feeding accuracy and good stability.
  - Self-learning control without debugging when change formula.
  - Stir uniform no matter material density change.
  - Multi-level automatic segmentation control ensures high output and high precision at the same time.
  - With Ethernet communication function, realizing centralized monitoring with other devices.
  - Configurable mobile APP service.
- 模块化组装，2~8组任意拼装；
  - 全系列配件通用性强；
  - 精密铸造阀门，配料精度高稳定性好；
  - 自学习控制，换配方不用调试；
  - 搅拌均匀无惧物料密度变化；
  - 多级自动分段控制，保证高产量的同时，也保证高精度；
  - 具有以太网通讯功能，实现与其它设备联网集中监控功能；
  - 可配置移动APP服务。



200-600kg/h



200/600/1200/2000/3000/5000kg/h



Offline 离线式

Composition  
结构图



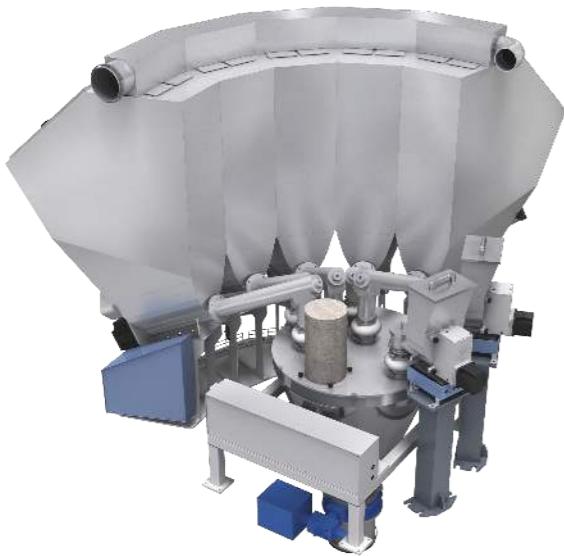
3000/5000kg/h

Multi-  
Component  
Dosing  
多组份配料

Powder Formula Weigher  
粉体配方秤

Online 在线

- Modular assembly, 2 to 12 groups can be assembled.
  - Precision casting valves with high feeding accuracy and good stability.
  - Combining gain-in-weight and loss-in-weight to ensure high output and high precision.
  - Unique patented mixing design to break bridges effectively .
  - All components fed by screws, direct drive, high speed and low noise.
  - Maintenance-free design without reducer.
- 
- 模块化组装，2~12组任意拼装；
  - 精密铸造阀门，配料精度高稳定性好；
  - 增重和失重相结合，保证高产量的同时，高精度；
  - 独特的专利搅拌设计，有效破架桥；
  - 全组分螺杆设计，DD驱动，高速静音。
  - 免维护设计（无减速机）。



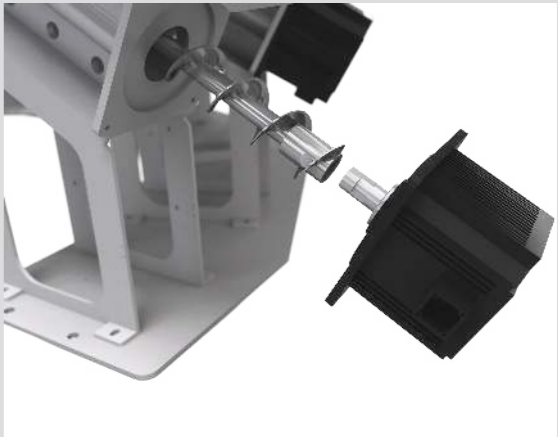
5+2 Groups  
5+2组份



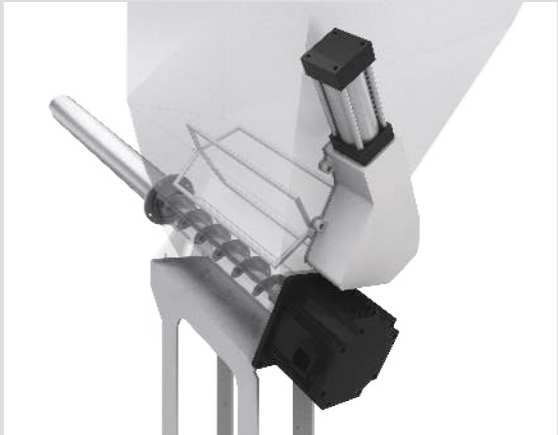
9 Groups  
9 组份



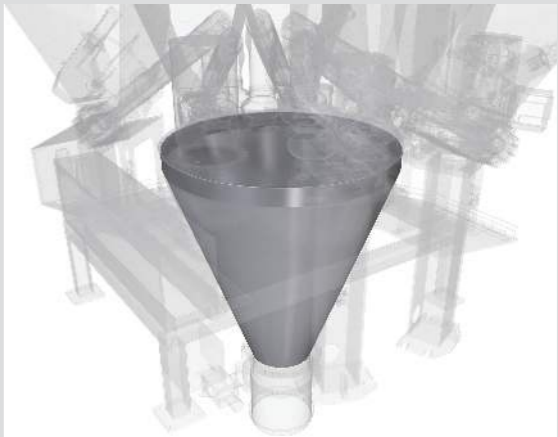
12 Groups  
12 组份



Screw 螺杆



Anti-bridge 破架桥



Weighing pan 秤盘

Multi-Component Dosing

多组份配料

Powder Formula Weigher

粉体配方秤（批次计量）

Offline 离线

- Modular assembly, 2 to 12 groups can be assembled.
- Precision casting valves with high feeding accuracy and good stability.
- Combination of gain-in-weight and loss-in-weight, high output and high precision.
- Unique patented mixing design to break bridges effectively .
- Full-component screw design, DD drive, high speed with silent.
- Multi-station automatic rotation measurement.
- Unique design to prevent dust.
- Maintenance-free design without reducer.

- 模块化组装，2~12组任意拼装；
- 精密铸造阀门，配料精度高稳定性好；
- 增重和失重相结合，保证高产量的同时，高精度；
- 独特的专利搅拌设计，有效破架桥；
- 全组份螺杆设计，DD电机驱动，高速静音；
- 多工位自动旋转计量，自动化程度高；
- 独特的防止粉尘外扬设计；
- 免维护设计（无减速机）。



Composition

结构图



Multi-  
Component  
Dosing

多组份配料

Customized Weighing System

粉&粒配方秤（连续计量）

Gravimetric Combo for powder & granulate  
粉粒组合

- Loss-in-weight feeders, and various materials feed online according preset proportion.
- The combination of powder and granules are suitable for accurate measurement of different materials.
- Modular component design with flexible combination.
- Easily handle various materials, including powder materials with poor fluidity.
- Application in plastic compound pelletizing.

- 多台失重秤组合，各种材料按比例在线添加；
- 粉料和粒料结合，适用于不同材料的精确计量；
- 模块化的组件设计，灵活搭配；
- 能够轻松应对各种材料，包括流动性很差的粉体材料；
- 可灵活应用于改性造粒行业。



Composition

结构图



Multi-  
Component  
Dosing

多组份配料

Customized Weighing System

失重配方秤

For Film 用于薄膜

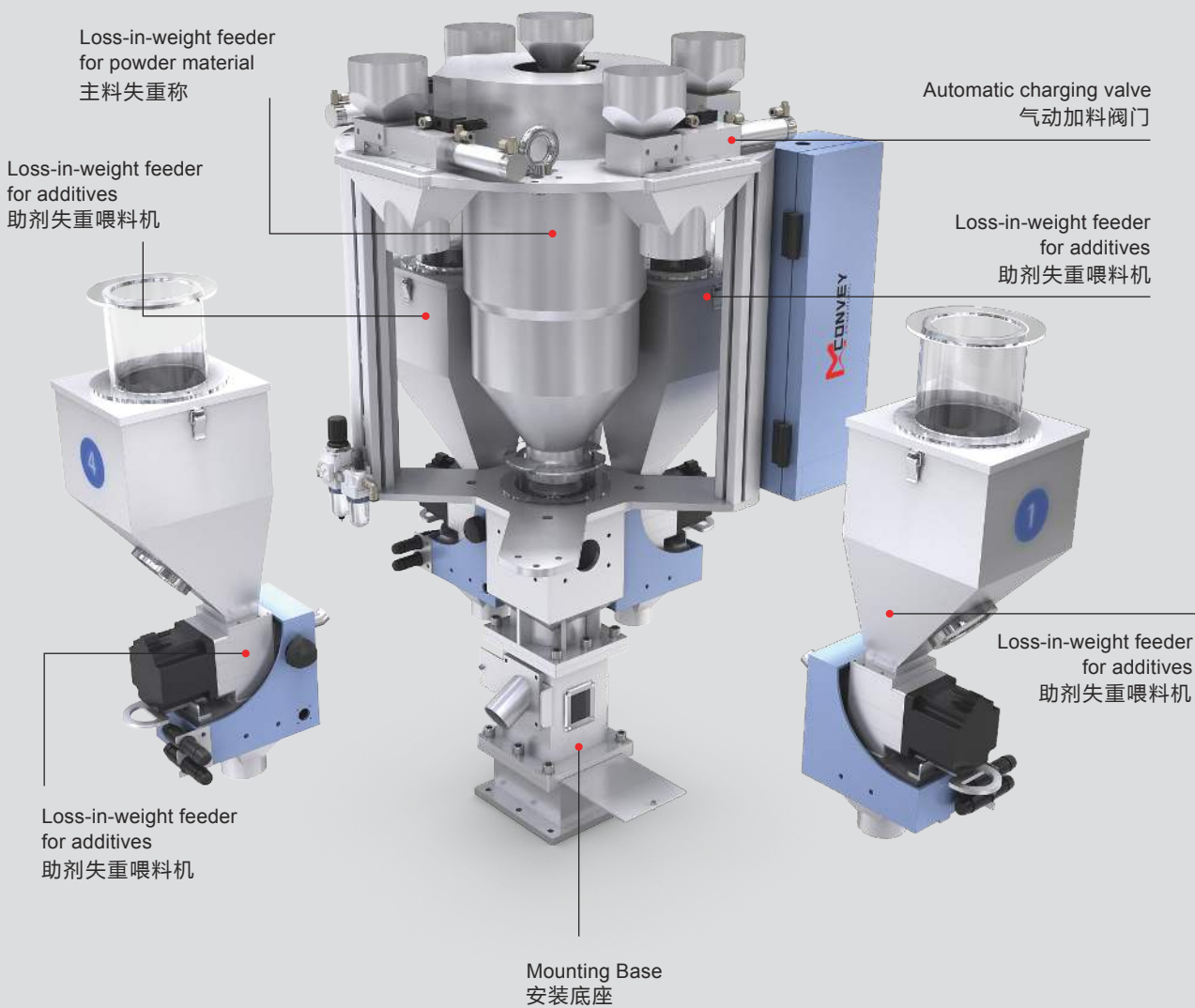
- Various granular materials are continuously measured with loss in weight feeder to feed different materials.
- The weigher adopts windproof design with accurate measurement.
- Modular component design with flexible combination.
- Simple and easy cleaning.
- Compact structure and less space occupation.

- 多种颗粒料均采用失重秤进行连续计量，实现不同材料的按比例添加；
- 秤体均采用“防风”设计，受车间的环境影响小，计量准确；
- 模块化的组件设计，灵活搭配；
- 清理简单快捷；
- 结构紧凑，空间占用小。



Composition

结构图



Multi-Component Dosing  
多组份配料

Customized Weighing System  
失重配方秤

For Extrusion 用于挤出

- Combined with multiple loss in weight feeders , and various materials feed online in proportion.
  - Also applied to measurement of poor flow material such as high-calcium carbonate compound materials and crushed materials
  - Online color change with flexible production.
  - Accurate online dosing measurement and fully mixing to ensure the product quality .
- 
- 多台失重秤组合，各种材料按比例在线添加；
  - 实用性强，不仅适用于流动差的高钙的粉体材料，也可适用于形状不规则的粒料甚至是破碎料材料的计量；
  - 在线换色，生产灵活多变；
  - 各种材料精确在线计量后，经过充分搅拌后，进入挤出机，确保挤出产品的质量。



Composition  
结构图



# Mixing

混料

## Compound Mixer

高低速混料

300/500、500/1500、500/2000、1000/3000 L

- The unique bearing group structure can withstand large axial and radial forces.
- The double protection design of the bearing effectively prevents dust entering.
- The specially customized S6 high-torque and ultra-efficient permanent magnet motor has comprehensive energy saving rate of 10-20%.
- The blades adopt special wear-resistant technology and their service life is increased by 3 times.
- Efficient mixing, overall output increased by 50%.

- 独特的轴承组结构，可以承受大的轴向和径向作用力；
- 轴承双重防护设计，有效防止粉尘进入轴承；
- 特殊定制的S6专用高扭超高效永磁电机，综合节能率为10-20%；
- 桨叶采用特殊耐磨工艺，寿命提高3倍。
- 高效混料，综合产量提升50%。



GRH300G-LH500G



GRH500G-LH1500G



GRH500G-LH2000G



GRH1000G-LH3000G

# Mixing

混料

## Ribbon Mixer

螺带搅拌

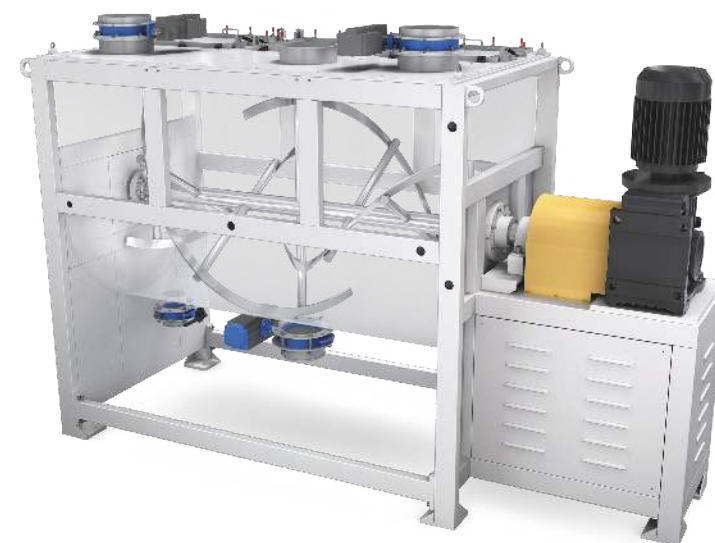
1000、3000、5000 L

- Minimum residue.
- Mixing evenly.
- Conveying the same material and unloading at the same time.
- No pollution to the materials.
- Easy to clean.

- 最小残留量
- 搅拌均匀
- 同物质料输送同时卸料
- 对物料无污染
- 易于清理



5000 L



5000 L



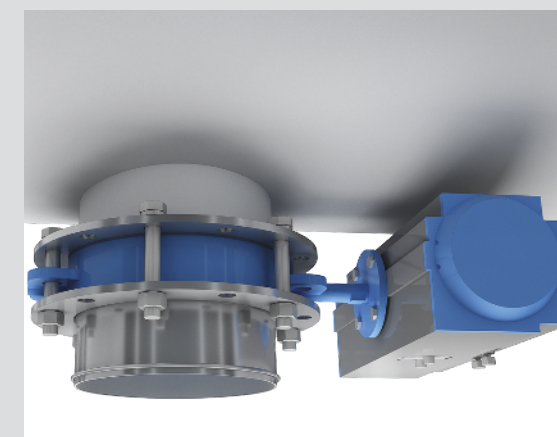
5000 L



Special patented spindle sealing  
特殊专利主轴密封



Special wear-resistant and corrosion-resistant  
coating on spindle and screw belt  
主轴和螺带上特殊的耐磨耐腐蚀涂层



Material discharging port  
排料口

# Mixing

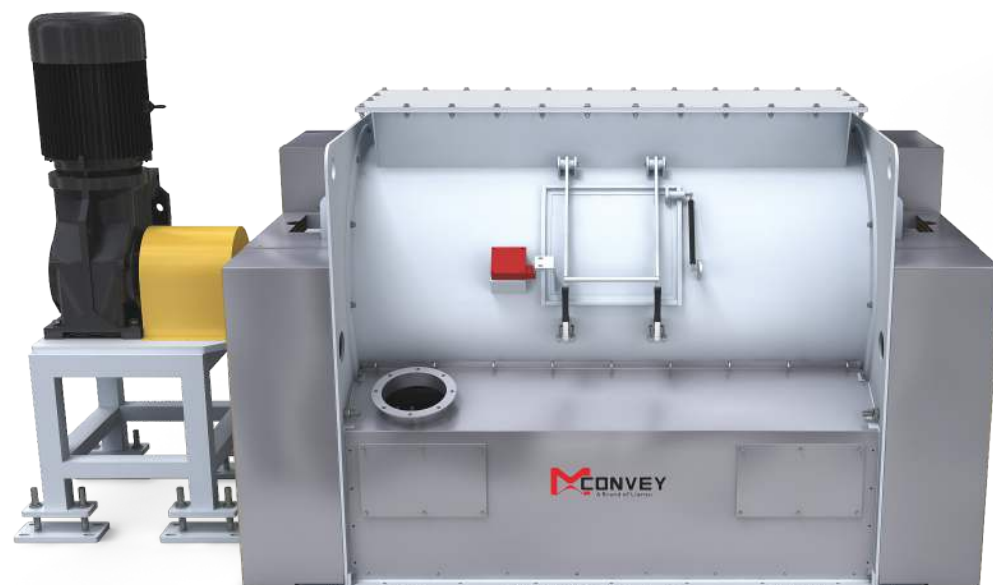
混料

## Horizontal Coulter Mixer 犁刀搅拌

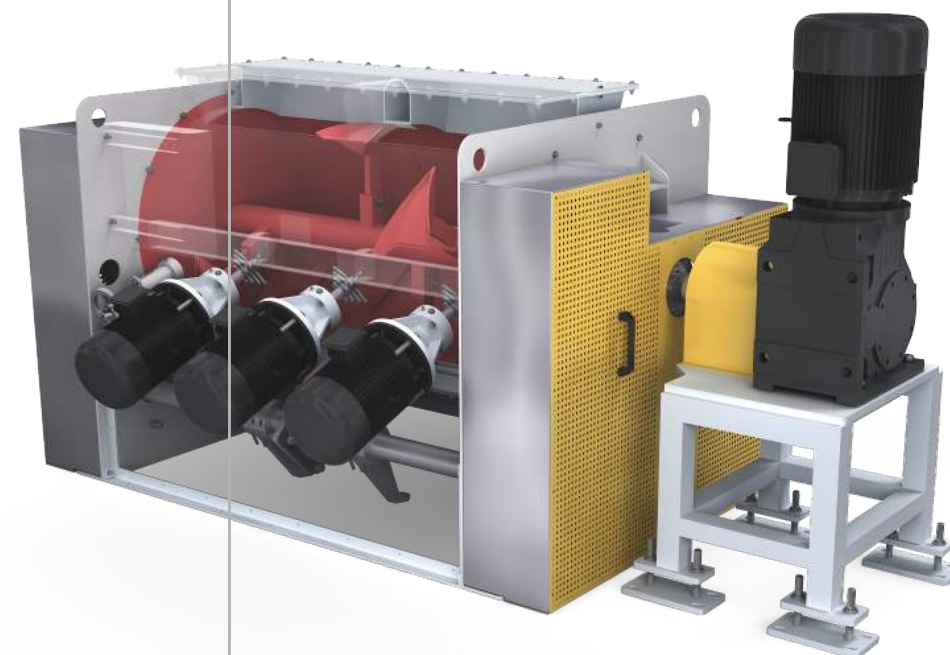
1000、3000 L

- Minimum residue.
- Mixing evenly with short time.
- No pollution to the materials.
- Easy to clean.
- Tough design and matching drivers.
- The special application tools and fittings for the lithium industry.

- 最小残留量
- 搅拌均匀，时间短
- 对物料无污染
- 易于清理
- 坚固的设计及配套的驱动
- 用于锂电行业特殊的应用工具及配件



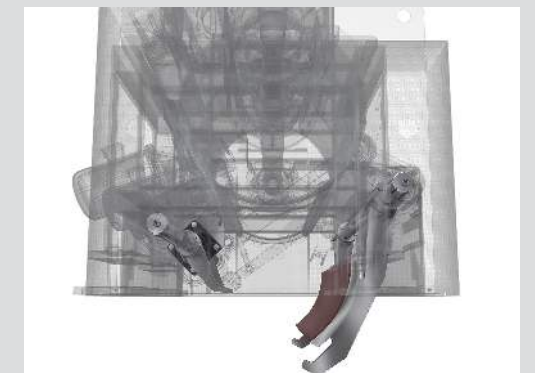
1000 L



1000 L



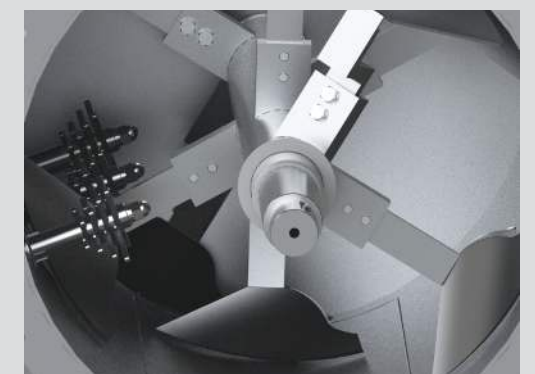
Lining 内衬



Large port for material discharging  
大开盖排料



Spindle sealing 主轴密封



Stirring blade 搅拌刀