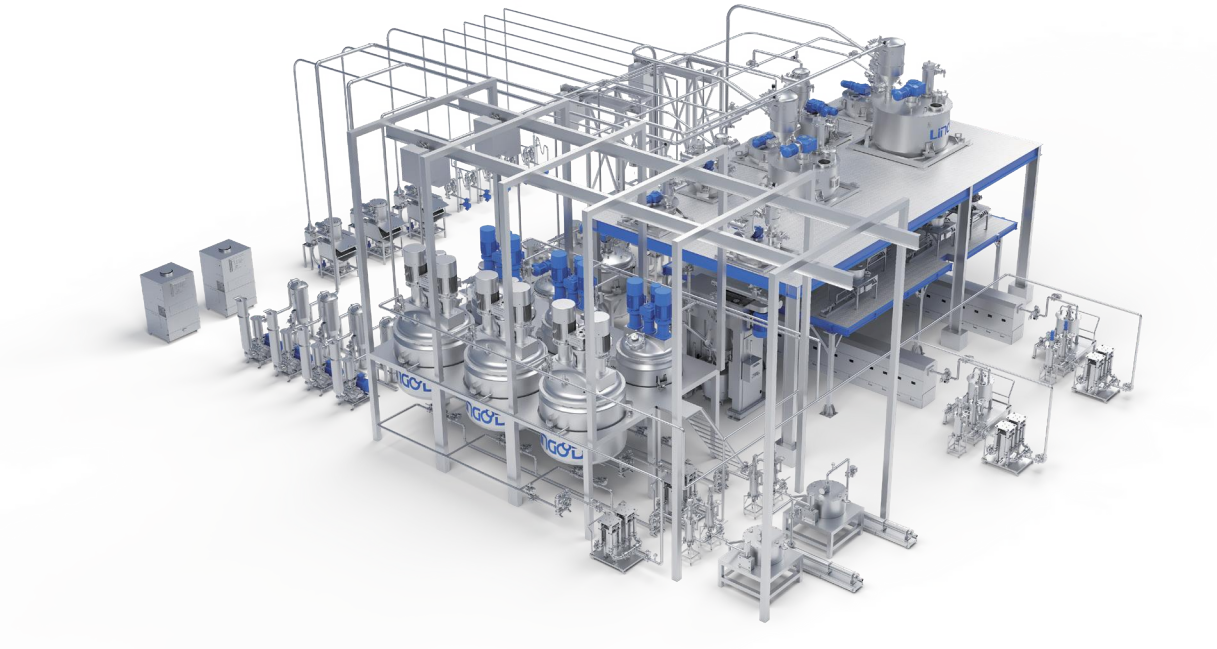




新能源固液处理解决方案
NEW ENERGY SOLID AND LIQUID PROCESSING SOLUTIONS



物料精准处理系统专家
EXPERT IN PRECISE MATERIAL HANDLING SYSTEMS

电话：+86 0510-68228600
地址：江苏省无锡市新吴区珠江路95-2号
网址：<https://www.lingood.com.cn/>
邮箱：info@lingood.cn

TEL. +86 0510-68228600
ADD. No.95-2, Zhujiang Rd, Xinwu, Wuxi, Jiangsu
WEB. <https://www.lingoodtech.com/>
EMAIL. info@lingood.cn



2012年 灵鸽公司成立
2023年 上市
股票代码 833284

2012年 Established In
2023年 Listed In
Stock Code 833284



无锡灵鸽机械科技股份有限公司是我国较早研发和生产失重给料技术及配套装备的企业，集研发、制造、销售、技术服务为一体，是粉体、粉液等物料自动化处理的领先企业，广泛应用于橡塑，食品，医药，锂电，光伏，氢能，化工，精细化工等行业。

Wuxi Lingood Machinery Technology Co.,Ltd. is one of the earliest companies in China to develop and produce los-in-weight feeding technology and supporting equipment. Integrating R&D, manufacturing, sales and technical services. It is a leading company in the automative processing of granular, powder and liquid materials. Widely used in rubber plastic, food, pharmaceutical, lithium, photovoltaic, hydrogen energy, chemicals, fine chemicals and other industries.

简单正直 踏实守信
忠诚重义 坚韧不拔

LINGOOD

新能源固液处理 解决方案

NEW ENERGY SOLID AND LIQUID
PROCESSING SOLUTIONS

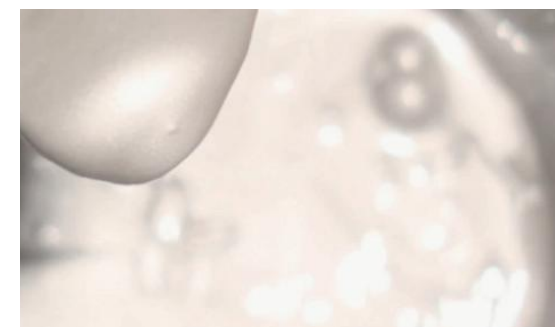
前驱体
电池浆料
钙钛矿
液体 / 固体电解质

Precursors
Battery Slurry
Perovskite (calcium titanate)
Liquid/Solid electrolytes

Conductive Slurry
导电浆料



Conductive silver paste
导电银浆



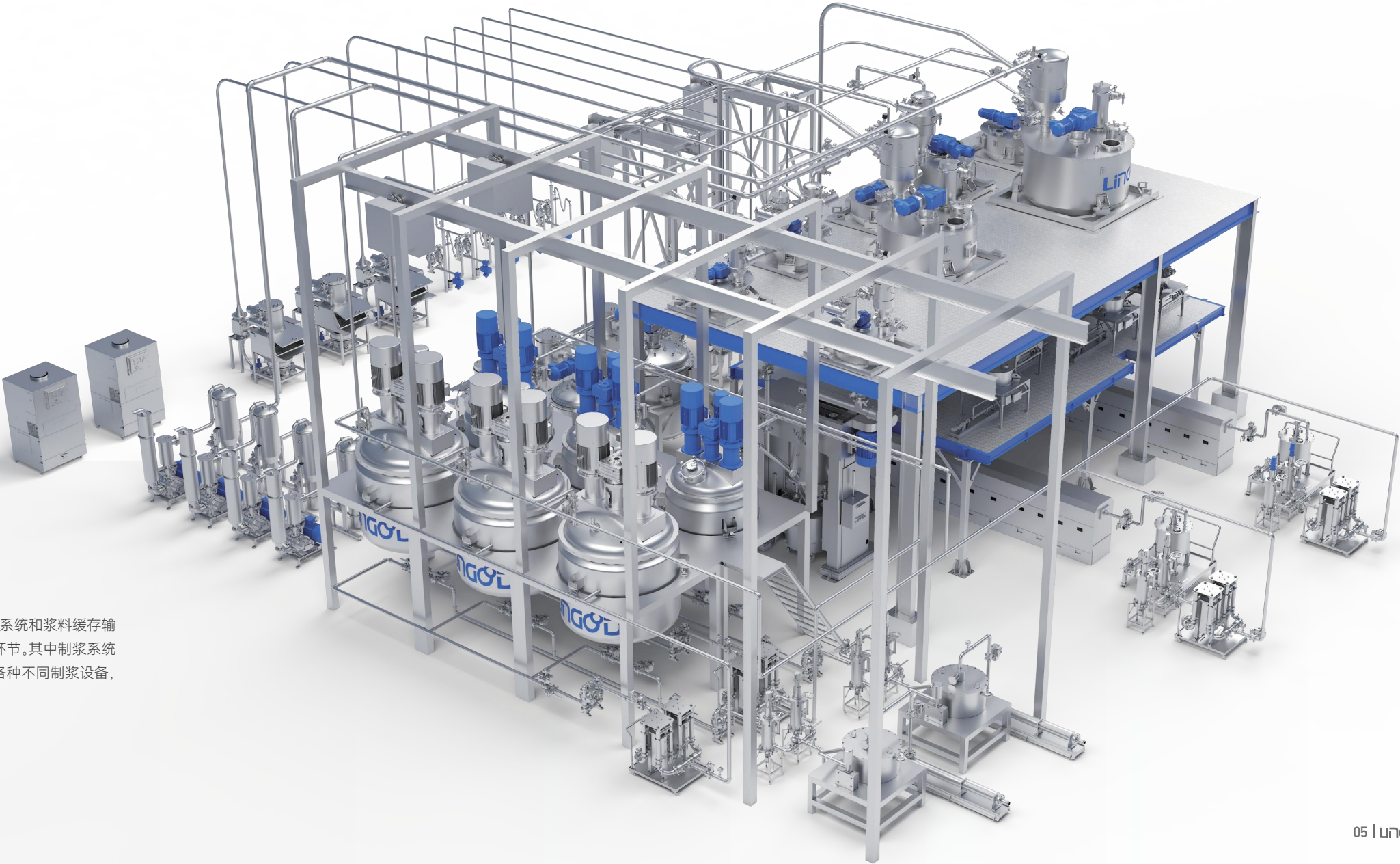
SYSTEM FEATURES

系统特点

- ◉ 产线智能化、无人化、无尘化
- ◉ 生产过程金属异物有效管控
- ◉ 计量精准可靠
- ◉ 在线粘度,固含检测
- ◉ MES管理生产数据可追溯
- ◉ 系统可视化
- ◉ The production line is intelligent, unmanned and dust-free
- ◉ Effective control of metal foreign objects in the production process
- ◉ Accurate and reliable measurement
- ◉ Online viscosity and solid content detection
- ◉ MES management makes production data traceable
- ◉ System visualization management

Lingood New Energy Solid And Liquid Processing Solutions

Lingood New Energy solid-liquid processing solution consists of raw material batching, solid-liquid mixing slurry system and slurry buffer conveying system, including raw material storage, metering, conveying, dispersion, mixing and other links. The slurry system can provide different processing types of equipment: double planetary mixer, high-speed slurry machine and twin-screw slurry machine to meet different production process requirements.



灵鸽新能源固液处理解决方案

灵鸽新能源固液处理解决方案由原料配料、固液混合制浆系统和浆料缓存输送系统组成，包括原料的储存、计量、输送、分散、混合等环节。其中制浆系统可以提供双行星搅拌机，高速制浆机和双螺杆制浆机等各种不同制浆设备，以满足不同生产工艺需求。

UNPACKING& FEEDING SYSTEM

解包投料系统

针对不同类型的原料包装, 不同状态的物料, 实现高效、无尘、准确投料。

To achieve efficient, stable, and dust-free feeding of different types of raw material packaging.

◎ **工艺配置灵活:**

适用于多种来料方式和多种吨袋规格, 投料方式可采用罐车、吨袋、小包多种投料方式结合。

◎ **低运营成本:**

通过智能管理系统优化运输和库存管理, 避免人为错误发生, 通过及时的原材料供应, 支持生产和销售。

◎ **数据无忧管理:**

智能化控制系统, 数据实时采集、储存、上传、便于管理。

◎ **Flexible Process Configuration:**

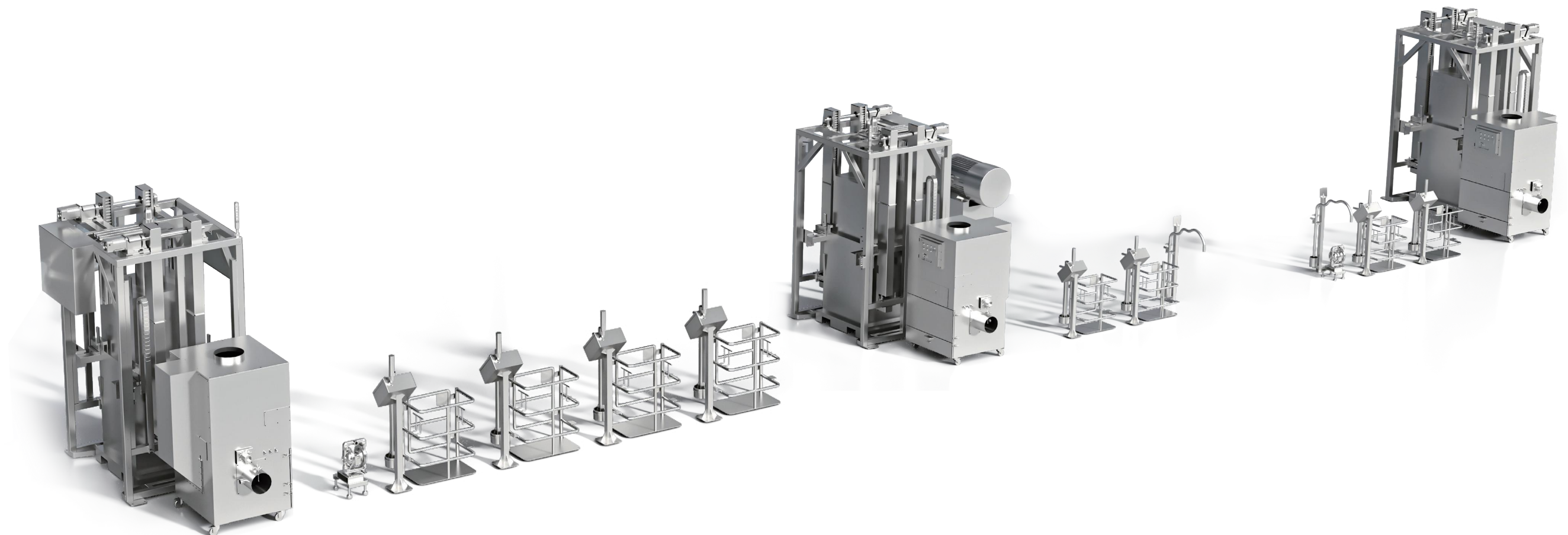
applicable to a variety of incoming material methods and multiple big bag specifications, and the feeding method can be combined with various feeding methods such as tank trucks, big bags, and small bags.

◎ **Low Operating Cost:**

optimize transportation and inventory management to reduce unnecessary cost expenditures; reduce human made errors to ensure the accuracy of orders and goods; support production and sales through timely supply of raw materials.

◎ **Worry-Free Data Management:**

intelligent control system, real-time data collection, storage, upload, and easy to manage.



METERING&BATCHING SYSTEM

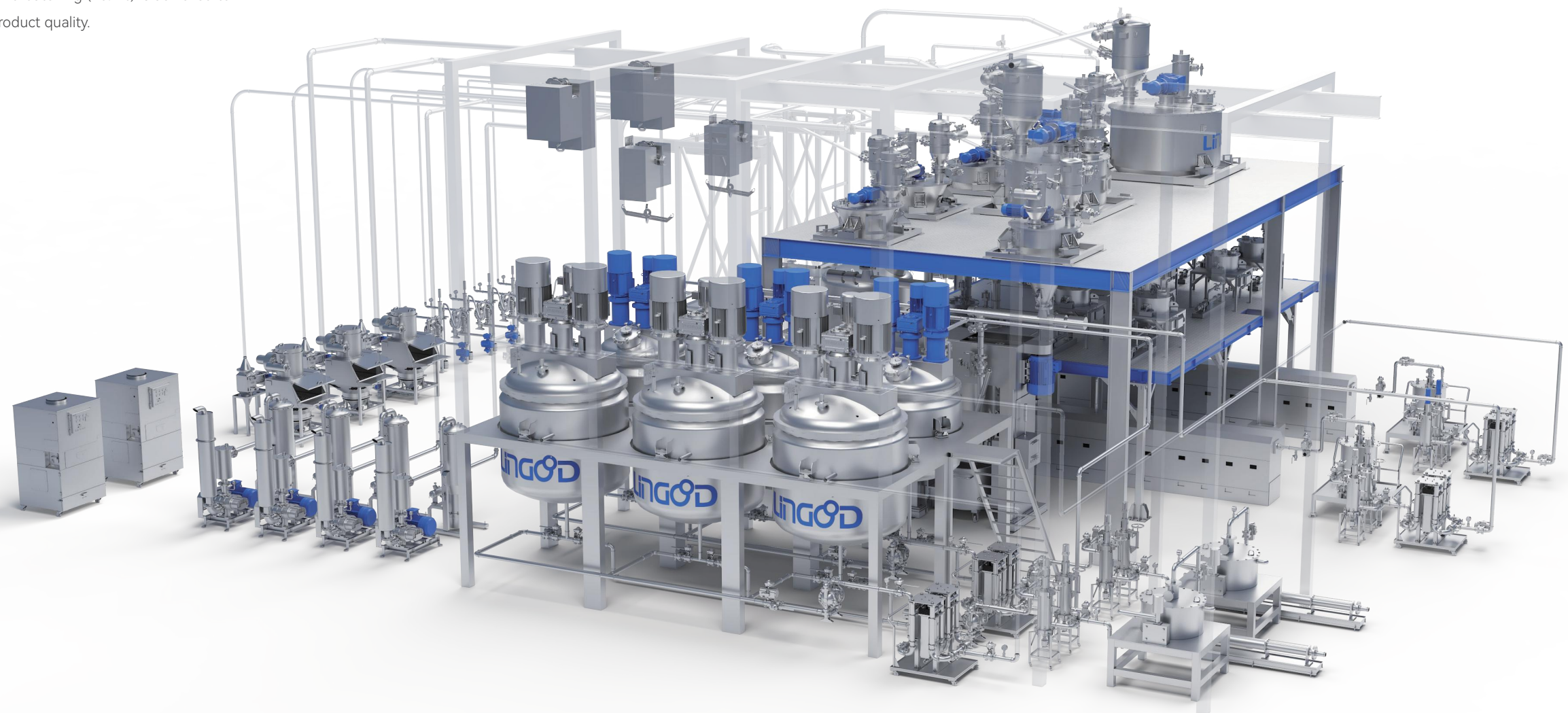
计量配料系统

针对不同物料，实现稳定可靠、精准高效的计量配料($\pm 0.2\%$)，保证产品品质的稳定

For different materials, stable, reliable, accurate and efficient metering and batching ($\pm 0.2\%$) is achieved to ensure the stable product quality.

喂料螺杆专用化，高度定制化，设备模块化设计及快拆结构，满足多配方快速切换的不同工艺要求
可实现问题的自诊断和系统的自恢复功能

The feeding screw is specialized, the equipment is modularly designed and has a quick-release structure to meet the different process requirements of rapid switching of multiple recipes.
Through relevant instruments, self-diagnosis of problems and self-recovery functions of the system can be realized during the operation of the system.



PNEUMATIC CONVEYING SYSTEM

气力输送系统

针对不同物料可采取不同的输送方式（正压，负压，管链，泵送等），确保全密闭、无尘化生产。

Different conveying methods (pressure, vacuum, pipe chain, pumping, etc.) can be adopted for different materials to ensure fully enclosed and dust-free production.

多种不同粉料在所有关键行业的输送设计经验。

全密闭式管道输送，无尘、不泄露。

自主设计开发的正压密相压力发送罐、旋转阀及自动化，可集成一体化控制。

Professional design experience in conveying various powder materials in all key industries.

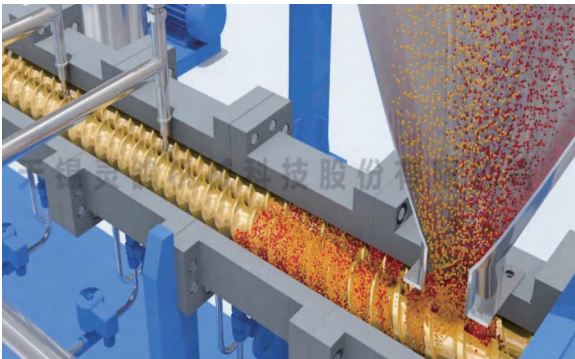
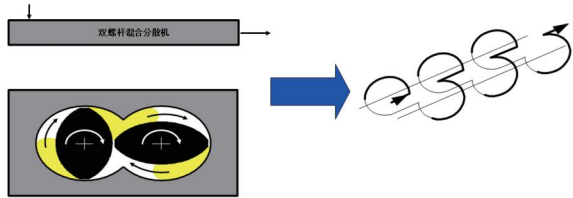
Fully enclosed pipeline transportation system is dust-free and less prone to leakage.

Own full range of pressure dense phase pressure sending tanks, rotary valves, and automation, which can be integrated and controlled in an integrated manner.



MATERIAL HANDLING SYSTEM

物料处理系统



双螺杆制浆

采用模块化双螺杆结构, 集成输送、混合、分散、排气于一体, 实现物料连续加工连续出料, 满足不同工况需求, 解决其它混合设备因功能单一导致成本、能源的损耗问题。

全过程金属异物有效管控、无尘化生产
智能化生产, 一键制浆
温度闭环控制系统, 节能高效

Twin-Screw slurry system

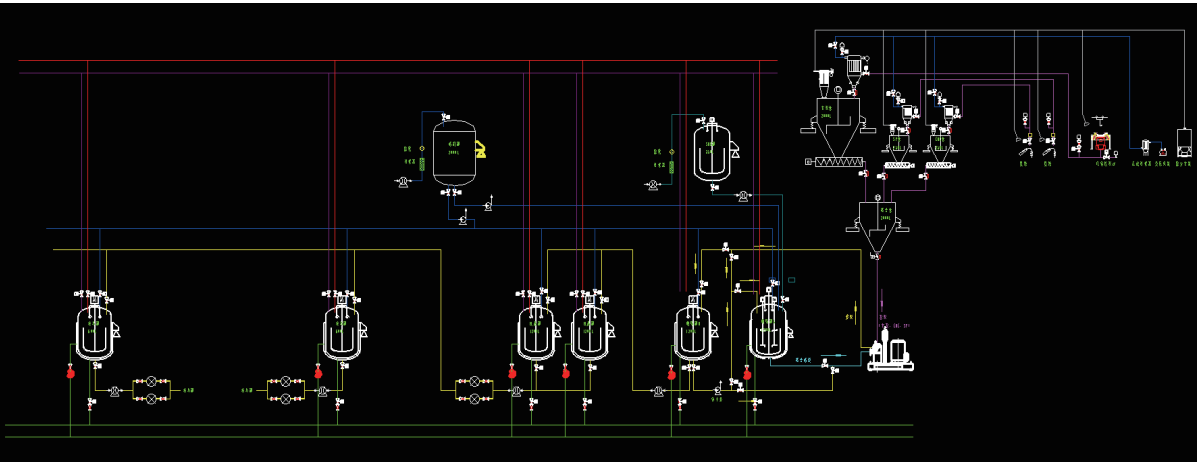
Adopts a modular twin-screw structure, integrating conveying, mixing, dispersion, and exhaust into one, achieving continuous processing and continuous discharge of materials. Functionally, it can be freely combined to meet different working conditions and solve the problem of cost and energy loss caused by single functions.

Low-metal exposure and dust-free production throughout the process
Intelligent production, one-click slurry production
Temperature closed-loop control system, energy-saving and efficient

双行星搅拌匀浆

配备有精确的控制系统, 精准配料, 可靠输送
采用高效节能的驱动系统, 特别适用于高粘物料、小批量多品种浆料的生产

Double planetary mixer and homogenization
Equipped with a precise control system for accurate batching and reliable transportation.
Intelligent production for efficient pulping.
Adopting efficient and energy-saving drive system to reduce energy consumption and is environmentally friendly. It is particularly suitable for the production of high-viscosity materials and small batches of multi-variety slurries



双行星搅拌机

浆料生产灵活
采用独特密封结构, 无积灰区
节能环保, 投料无粉尘

Double planetary mixer

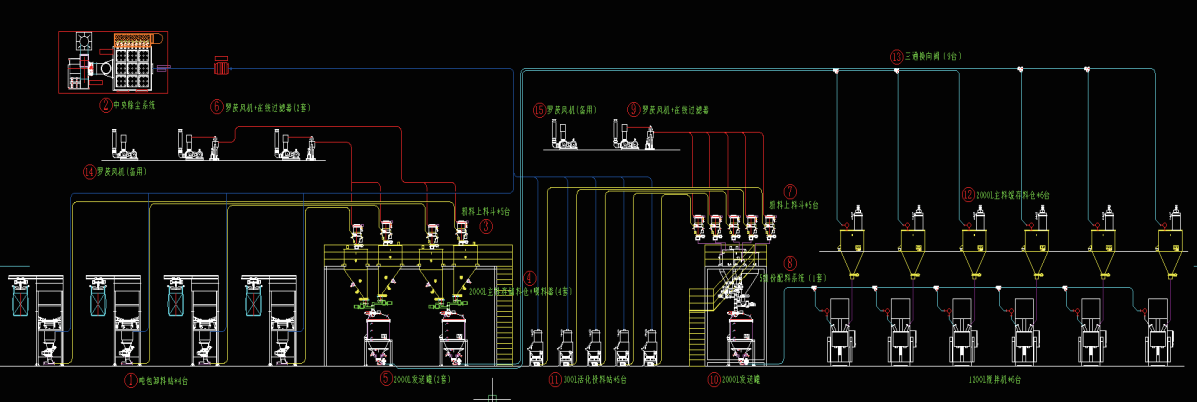
Flexible slurry production
Adopts a unique sealing structure without dust accumulating areas
Energy-saving and environmentally friendly, no dust during feeding.



高效制浆

高效率实现粉液快速高效混合；
突破产能瓶颈,单线产能可实现 4000L/H,甚至更大；
质量高度一致,满足高品质电池浆料生产需求
占地高度小,提升兼容性和灵活性；
能耗低,节能环保；

Efficient slurry systems:
High efficiency to achieve fast and efficient mixing of powder and liquid;
Break through the bottleneck of production capacity, a single-line production capacity can reach 4000L/H, or even higher;
Highly consistent quality, meeting the production needs of high-quality battery slurry
Small footprint, improved compatibility and flexibility;
Low energy consumption, energy saving and environmental protection;



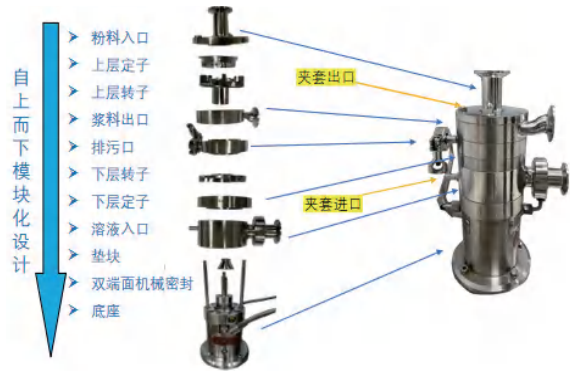
高效制浆机 High-Efficiency Slurry Maker

浆料高一致度:

采用连续式投料,狭小空间内高速混合分散,可保证浆料固含量粘度偏差范围很小,进而实现大批量连续式制浆,且经多次循环式制浆过滤后杂质更少。

Smooth Mix Every Time:

Keeps solid content and viscosity locked in tight with non-stop feeding and crazy-fast mixing, perfect for big batches. No clumps, just smooth batches that get cleaner with each filter cycle.



高固含、高粘度分散效果好:

以 20m-40m/s 的线速度高速分散, 加超声、真空条件, 解决高粘度、高固含问题, 快速对浆料进行分散制浆。

Powerful Dispersion for Thick Slurries:

High-speed mixing at 20-40m/s (racecar-level linear speed) combined with ultrasonic waves and vacuum technology. Effectively handles high-viscosity and high-solid-content materials for rapid, uniform slurry preparation.



LITHIUM BATTERY INTELLIGENT SLURRY MIXING SYSTEM LABORATORY
锂电智能合浆系统实验室

2024 年度无锡市重点实验室

适用于各种液体的黏度测试、锂电池浆料的制备、浆料成品的检测
Suitable for the viscosity testing of various liquids, preparation of lithium battery slurry, and testing of slurry finished products.



INTELLIGENT CONTROL SYSTEM

智能控制系统

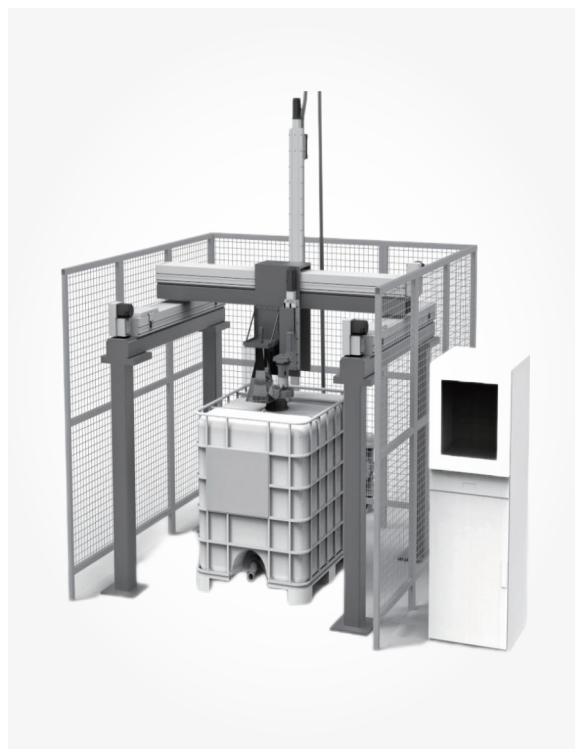
- ◉ 生产可视化
- ◉ 数据实时采集、跟踪
- ◉ 生产全周期管理

- ◉ Production Visualization
- ◉ Real-time Data Collection and tracking
- ◉ Full Production cycle Management



CORE SELF-DEVELOPED EQUIPMENT

核心自研设备



全自动液体供料站：

可与 AGV 自动对接，实现全自动上料，提高效率，降低人工操作劳动强度、避免危化品对人员健康造成危害

Fully automatic liquid feeding station:

It can automatically dock with AGV to achieve fully automatic loading, improve efficiency, reduce the labor intensity of manual operation, and avoid harm to personnel health caused by hazardous chemicals



自动吨袋卸料站：

- ◎ 无人化，无粉尘外溢
- ◎ 占地面积小
- ◎ 智能化控制

Automatic bulk bag unloading station:

- ◎ Unmanned, no dust spillage
- ◎ Small footprint
- ◎ Intelligent control



智能小袋拆包投料系统：

- ◎ 安全环保：密闭式拆包模式，粉尘集中收集处理
- ◎ 易于维护：模块化组合，机械结构简单，设计无死角
- ◎ 占地面积小，无人化连续化生产
- ◎ 拆包效率高：拆包速度可达 50-120 包 /h
- ◎ 适用范围广：可处理多种基础物料，适合各类规格和材质包装袋，可满足有毒、易燃、强腐蚀、高粉尘等人员不易接触工况

Automatic Small Bag Unpacking and feeding System:

- ◎ Safety and environmental protection: closed unpacking mode, centralized dust collection and treatment
- ◎ Easy to maintain: modular combination, simple mechanical structure, no blind spots in design
- ◎ Smaller footprint, unmanned continuous production
- ◎ High unpacking efficiency: 50-120 bags per hour
- ◎ Wide range of applications: It can handle a variety of basic materials, suitable for packaging bags of various specifications and materials, and can meet the working conditions where people are not easy to contact, such as toxic, flammable, highly corrosive, high dust, etc

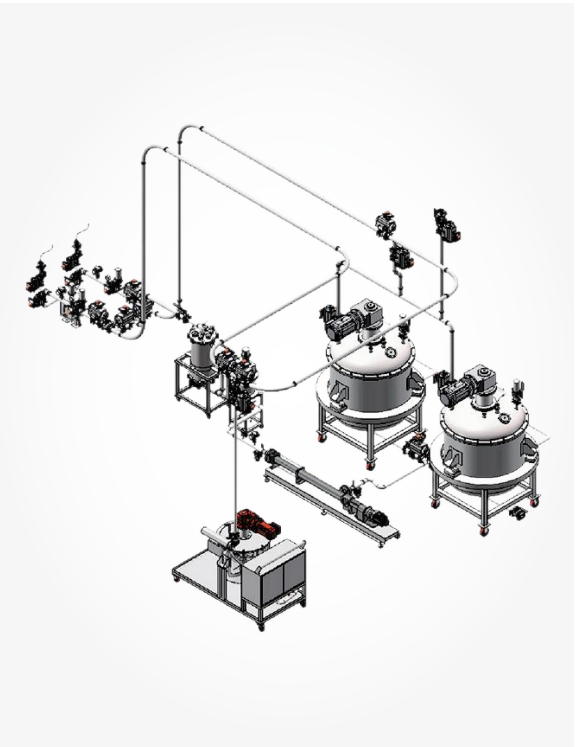


吨袋拆包机:

- ◎ 组合式投料口, 密封拆包, 带除尘系统以及振动下料装置
- ◎ 具备除磁过滤功能
- ◎ 本体 304 材质, 可选防爆配置

Big Bag Unpacking Machine:

- ◎ Combined feeding port, sealed unpacking, equipped with dust removal system and vibratory feeding device
- ◎ With magnetic filtering function
- ◎ Main body is made of 304 material, with optional explosion-proof configuration



管道推球系统:

- ◎ 清除管道内浆料沉积, 预防管道堵塞
- ◎ 可用客户指定气体推球, 匀速控制, 在线追踪

Dust removal and cleaning push ball equipment:

- ◎ Removes slurry deposit in the pipeline to prevent pipeline blockage
- ◎ Can use customer-specified gas to push the ball, uniform speed control, and online tracking



粉体失重式喂料机:

- ◎ **可靠稳定性:** 先进的重量处理技术及短控制技术, 消除了抗干扰性能差等问题
- ◎ **易清理维护:** 喂料部分快拆结构
- ◎ **防架桥:** 水平搅拌可选配垂直搅拌设计
- ◎ **喂料范围广:** 通用型螺杆接口, 方便更换不同型号螺杆

Powder loss-in-weight feeder:

- ◎ **Reliable and stable:** Advanced weight processing technology and short control technology eliminate problems such as poor anti-interference performance
- ◎ **Easy to clean and maintain:** Quick-release structure for the feeding parts
- ◎ **Anti-bridging:** Horizontal agitator can be equipped with optional vertical agitation design
- ◎ **Wide feeding range:** Universal screw interface, easy to replace different models of screws



全自动吨袋包装机:

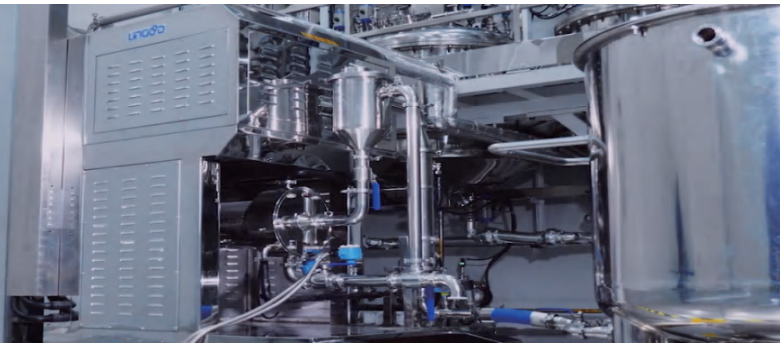
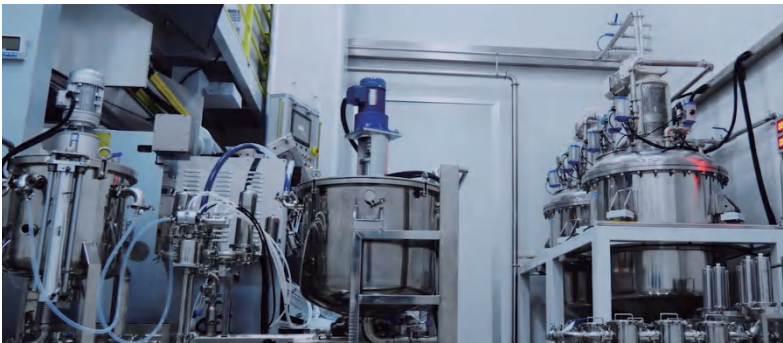
- ◎ **高度无尘:** 负压式给料进袋结构使物料包装密实无空气, 抽真空热合封装保证封袋过程无粉尘溢出
- ◎ **计量精准:** 双路快慢式给料结构及高精度静态复称系统, 提高包装效率同时保证计量准确性
- ◎ **适用范围广:** 各种粉料或粒料吨袋形式的自动计重包装

Fully automatic big bag packaging machine:

- ◎ **Highly dust-free:** The negative pressure feeding and bagging structure makes the material packaging dense without air, and the vacuum heat sealing packaging ensures that there is no dust leakage during the bag sealing process
- ◎ **Accurate measurement:** The dual-channel fast and slow feeding structure and high-precision static re-weighing system improves the packaging efficiency while ensuring the measurement accuracy
- ◎ **Wide range of applications:** Automatic weighing and packaging of various powder or granular materials in big bags

CUSTOMER CASE

客户案例



—— 为行业创造价值 ——

CREATING VALUE FOR THE INDUSTRY

