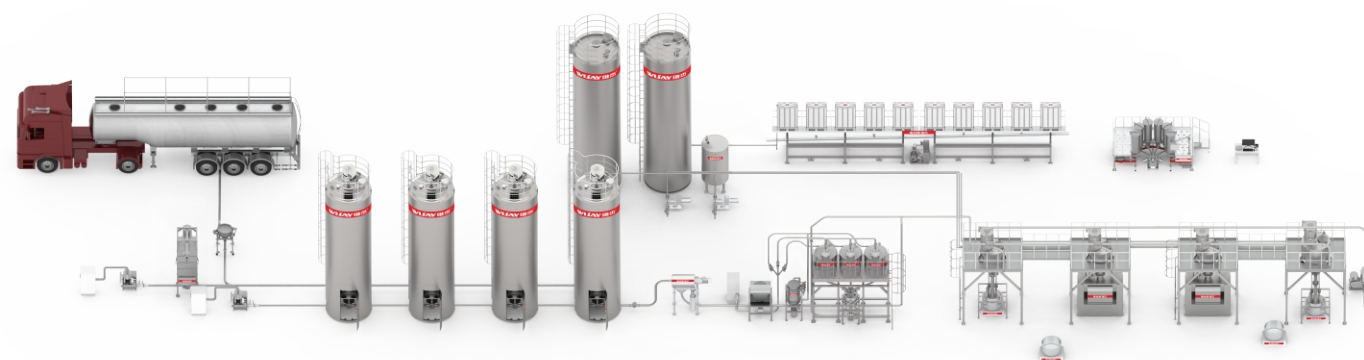




广东维杰物料自动化系统有限公司
Guangdong Wijay Material Automation System Co., Ltd

建材涂料行业
BUILDING MATERIALS AND COATINGS INDUSTRY

维杰官网
www.wijaysystem.com



维杰微信视频号
Wijay wechat video number



总部大楼地址: 广东省东莞市松山湖国际金融创新园41A栋
Headquarters building: Building 41, International Financial Innovation Park, Songshan Lake, Dongguan City, Guangdong Province
香港办公地址: 香港铜锣湾希慎道33号利园一期1911
Hong kong office address: Room 1911, Lee Garden One, 33 Hysan Avenue, Causeway Bay, Hong Kong
欧洲办公地址: 波兰弗罗茨瓦夫市普洛洛吉斯园区格林尼查那大道8c
European Office Address: 8C Greenichana Avenue, Ploologgis District, Wroclaw City, Poland
研发中心地址: 广东省东莞市松山湖国际金融创新园31栋6楼整层
R & D center address: Building 31, 6th Floor, International Financial Innovation Park, Songshan Lake, Dongguan City, Guangdong Province
东莞生产基地: 广东省东莞市大朗镇竹山竹园一路1号
Dongguan Production base: No. 1, Zhushan Zhuyuan Road, Dalang Town, Dongguan City, Guangdong Province
湖南生产基地: 湖南省衡阳市蒸湘区新华开发区芙蓉路46号
Hunan production base: No. 46 Furong Road, Xinhua Development Zone, Zhenxiang district, Hengyang City, Hunan Province
网站/HTTP: www.wijaygroup.com 邮箱/MAIL: wijay@wijaygroup.com 电话/TEL: 0769-22505696 83280060

广东维杰物料自动化系统有限公司

Guangdong Wijay Material Automation System Co., Ltd.

广东维杰物料自动化系统有限公司成立于2012年，是一家专注于物料自动化系统、中央供料系统的高新技术企业、专精特新企业、瞪羚企业。

企业位于广东省东莞市松山湖的国际金融创新园，有独栋总部大楼和2000平方米的技术研究发展中心及超4万平方米的生产基地。

维杰秉承“极简设计，极致可靠”的设计宗旨，10+年食品行业、塑料化工、新能源行业，数字化工厂产线规划建设经验。从产线规划设计、整厂物料自动化系统的规划设计、设备研发、部件制造（核心部件）、到整条生产线的安装调试。

维杰自主研发了100多项发明专利和软著，通过了ISO9001质量管理体系认证、ISO14001环境管理体系认证、知识产权管理体系认证等。与浙江工业大学产学研合作，持续创新。

2022-2028全球与中国自动中央供料系统市场现状及未来发展趋势QYR研究报告，2022年公布的全球中央供料系统的知名厂商名单中，维杰排名前列。广东省电子信息行业协会2022年公布的国内物料自动化系统市场占比中，维杰的市场占有率为15.2%。维杰在全球与中国均具有较高知名度和影响力。

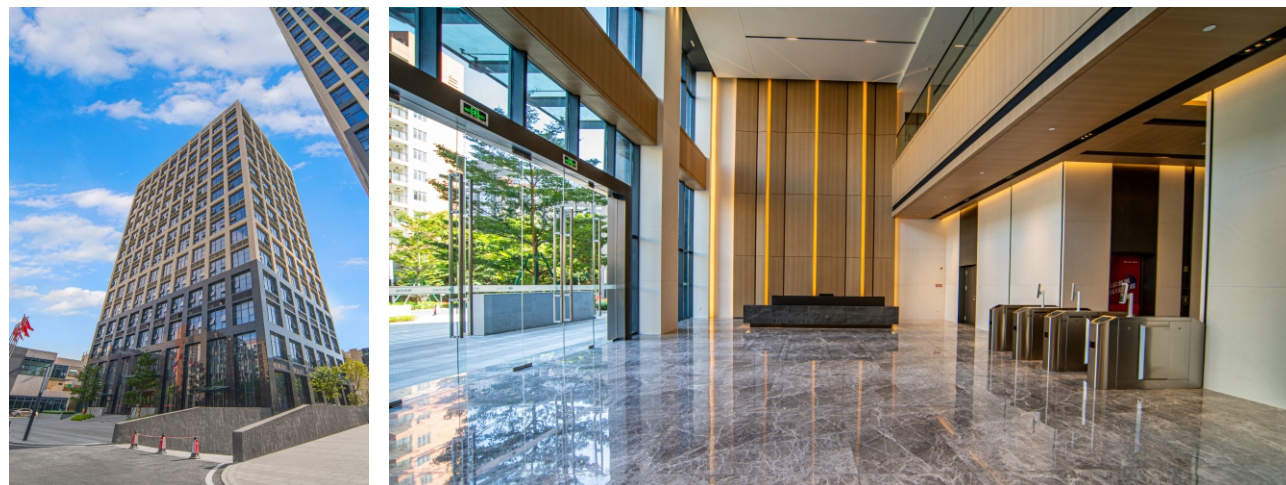
Welcome to Wijay Material Automation System Co., Ltd., a leading high-tech enterprise specializing in material automation and central feeding systems. With over ten years of experience, we have a proven track record in planning and constructing production lines for industries such as food, plastics, chemicals, and green energy. Our headquarters, located in the International Financial Innovation Park in Songshan Lake, Dongguan City, Guangdong Province, house a state-of-the-art 2000m² technology R&D center and a production base of over 40,000 square meters.

Adhering to the design philosophy of "Minimalist Design, Ultimate Reliability," Wijay has over 10 years of experience in digital factory production line planning and construction for industries such as food, plastics & chemicals, and new energy. The company provides comprehensive services, from production line planning and design, whole-plant material automation system design, equipment R&D, core component manufacturing, to full production line installation and commissioning.

Wijay has independently developed more than 100 patented inventions and software copyrights and has obtained certifications including ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and Intellectual Property Management System. In collaboration with Zhejiang University of Technology, the company continues to drive innovation.

According to the "2022-2028 Global and China Automatic Central Feeding System Market Status and Future Development Trends" report by QYR Research, Wijay ranks among the top global manufacturers of central feeding systems. In 2022, the Guangdong Electronic Information Industry Association reported that Wijay holds a 15.2% market share in China's material automation systems sector. The company enjoys high visibility and influence both globally and domestically.

Choose Wijay for cutting-edge material automation and central feeding systems that drive success in your industry.



常见物料

Common items

维杰专业团队将根据客户需求量身定制解决方案，满足不同行业的特殊要求。

Wijay's professional team will tailor solutions according to customer needs to meet the special requirements of different industries.



碳酸钙
Calcium Carbonate



碳酸钠
Sodium Carbonate



滑石粉
Talcum Powder



铝灰
Aluminum Dross



树脂
Resin



钛白粉
Titanium White



品牌战略 WIJAY CULTURE

维杰定位

WIJAY ORIENTATION

物料自动化系统第一名
FIRST PLACE IN MATERIAL AUTOMATION SYSTEMS

维杰理念

WIJAY PHILOSOPHY

极简设计极致可靠
MINIMALIST DESIGN EXTREME RELIABILITY

维杰宗旨

WIJAY TENET

创新成就客户工程铸就世界
INNOVATION CREATES CLIENTS ENGINEERING CREATES THE WORLD

维杰愿景

WIJAY VISION

世界一流企业的系统首选供应商
THE PREFERRED SYSTEM SUPPLIER FOR WORLD-CLASS ENTERPRISES



文化理念 WIJAY VALUES

专业品质

PURSUIT OF EXCELLENCE

精益求精

ATTENTION TO DETAIL

服务至上

SERVICE ORIENTED

合作共赢

ACTING IN GOOD FAITH

主营业务 CORE BUSINESS

维杰公司的业务主要涉及粉粒体与流体的自动化工艺。粉体处理系统通常包括解包、进料、仓储、卸料、研磨、筛分、干燥、金属检测、输送及计量设备。流体物料系统通常包括进罐、储存、出料、过滤、混合、均质、金属检测、温度调节、输送及计量设备。

维杰服务的客户大多为全球知名的顶尖企业。维杰提供的解决方案质量优异、可靠性高，确保了您产品的成本及质量的优势。

作为中国业内先行者，维杰已经发展成为集研发、设计、制造(核心部件)、销售和工程服务为一体的民营独资企业。维杰在全国各地利用面向未来的高科技，帮助广大客户实现具有创新性的项目，能够对每一个WIJAY解决方案均作出“设计合理”、“系统稳定”的承诺。

The business of Wijay is mainly involved in the automation process of powder particles, granules, and fluids. Powder and granule processing systems typically include equipment for unpacking, feeding, warehousing, unloading, grinding, screening, drying, metal detection, transportation, and metering. Fluid material systems typically include equipment for tank entry, storage, discharge, filtration, mixing, homogenization, metal detection, temperature regulation, transportation, and metering.

Most of the clients served by Wijay are globally renowned top enterprises. The solutions provided by Wijay are of excellent quality and highly reliable, ensuring both cost and quality advantages of your products.

As a pioneer in the Chinese automation industry, Wijay has developed into a privately owned enterprise that integrates research and development, design, manufacturing (core components), trade, and engineering services. Wijay utilizes advanced technology to help clients across the country achieve innovative projects and makes a commitment to “appropriate design” and ensuring a “stable system” for every WIJAY solution.



维杰发展历程 OUR HISTORY

2012



维杰获得技术先进型服务企业证书，与雀巢中国等名企达成合作。
Wijay has obtained the certificate of Advanced Technology Service Enterprise and starts to cooperate with famous companies such as Nestlé China.

2013



维杰获得自主创新先进企业荣誉称号，开始与伊利等乳制品名企合作，在食品行业的物料自动化系统占领先地位。
Wijay has been awarded the title of Independent Innovation Advanced Enterprise and has started collaborating with well-known dairy companies such as Yili, occupying a leading position in the food material automation system industry.

2014



维杰成立自己的研发中心。并与滨崎集团合作建设高标准示范工厂。
Wijay established its own research and development center. And cooperates with BinQi Foods to build a high standard demonstration factory.

2015



维杰设立维壹智能科技有限公司，致力于智能型流体输送、回收、清洁等设备系统的研究与发展。维壹智能与维杰物料自动化公司及维杰混合技术公司形成战略协同，三家公司的设立既可独立承担专业领域的工程项目，也可以协同提供完整的工程解决方案。
Wijay has set up WIYI, which is committed to the research and development of intelligent fluid conveying, recycling, cleaning, and other equipment systems. WIYI has formed strategic collaboration with Wijay and Wijay Hybrid. These three companies, can not only independently undertake engineering projects in their respective fields, but also collaborate to provide complete engineering solutions.

2016



维杰设立混合技术公司，致力于高效稳定的混合、均质、捏合技术的研究与发展，与维杰物料自动化形成战略协同，提供物料自动化系统与混合设备系统完全融合的全自动信息化混配解决方案。
Wijay has set up a mixing technology company, which is committed to the research and development of efficient and stable mixing, homogenization and kneading technologies, forming strategic coordination with Wijay's material automation, and providing a fully automated information mixing solution that fully integrates the material automation system and the mixing equipment system.

2017



维杰在松山湖购买总部大楼并入驻，并开始研发和制造专利机型、标准产品及系统。
Wijay opened its new headquarters in the Songshan Lake hi-tech district of Dongguan and began to develop and manufacture patented models, standard products, and systems.

2018



维杰设立香港公司开拓海外业务。并与富通集团达成合作，建造全球最大光纤光缆生产基地的工业4.0物料自动化系统。在塑料化工、锂电新材行业取得领先地位。
Wijay set up a Hong Kong company to expand overseas business and has successfully cooperated with the Futong Group to build the Industry 4.0 material automation system for the world's largest optical fiber and cable production base. It has achieved a leading position in the petrochemical industry, the lithium battery industry, and the new material industry.

2019

2020



维杰购买2000平方写字楼并建造成混合技术测试及研究部、工程安全及燃爆测试及研究部、粉碎及造粒测试及研究部、输送技术测试及研究部、流体技术及研究部、电气工程部、工厂软件及信息化部的研究发展中心，自主研发专利和发明超50件。
Wijay purchased a 2000 m² office building to expand its headquarters and has established a research and development center that includes a hybrid-technology, engineering safety and explosion testing, crush-testing, transportation-technology testing, fluid-technology, electrical-engineering, factory-software and information-technology research departments, producing more than 50 patents and inventions.

2021



维杰积极布局国际市场，位于香港湾仔的维杰集团公司，承担着维杰国际业务的发展及集团事务管理，维杰产品畅销海内外。
Wijay becomes active in the international market. The Wijay Group Company, located in Wanchai, Hong Kong, is responsible for the development of Wijay's international business and group affairs management. Wijay's products are popular domestically and abroad.

2022



维杰与上市公司贝特瑞、德方纳米、索通发展、邦普科技等新能源行业知名企业达成长期合作关系。
As a gazelle enterprise, Wijay has continued to innovate, starting a cooperation with Zhejiang University of Technology in production, education, and research, and successfully cooperating with the Country Garden Group and other global Top 500 companies. The market share in China in the material automation system industry has reached to 15.2%.

2023



维杰成为瞪羚企业，持续创新，与浙江工业大学产学研合作，与碧桂园集团等世界500强达成合作，物料自动化系统市场占有率15.2%。
Wijay is establishing long-term cooperative relationships with well-known listed companies in the green energy industry, such as BTR, Dynanonic, SUNSTONE, BRUNP, Shanshan, etc.

2024



维杰15年专注物料自动化系统研发制造，深耕行业痛点。2025年初，公司扩建大朗新工厂，依托自主研发实力，打造更高效、可靠的自动化设备，助力客户提质增效。
Wijay - 13 years specializing in R&D and manufacturing of material automation systems, with deep industry expertise. In early 2025, we expanded our Dalang production base, leveraging independent R&D to deliver more efficient and reliable automation equipment, helping customers enhance productivity and quality.

2025



维杰对生产设施进行了全面扩容与升级，工厂占地面积得以拓展，生产设备的种类更加丰富多样，生产规模亦实现了跨越式增长，全方位推动了公司生产力的进阶与蜕变，公司销量突飞猛进。
Wijay has conducted a comprehensive expansion and upgrade of production facilities, expanding its factory's area size, enriching the variety of production equipment, achieving a breakthrough in production scale, comprehensively driving the advancement and transformation of the company's productivity, leading to a significant surge in sales volume.

我们擅长处理的物料

We are good at dealing with the material.

粉状物料 Powder material

- 粉状物料是指由无数相对较小颗粒物质构成的集合体，有时具有固体的性质，在某些情况下又具有液体或气体的性质，维杰把小于1000μm以下的颗粒物定义为粉体。
- 维杰在粉体物料处理有着丰富的经验，所涉及的工艺及设备包括了：解包、进料、仓储、卸料、研磨、筛分、金属检测、输送及计量设备。
- Powdered materials refer to an aggregate composed of countless relatively small particulate matter. They sometimes exhibit the properties of solids, while under certain conditions, they may also display characteristics of liquids or gases. Wijay defines particles smaller than 1000 μm as powder.
- Wijay has extensive experience in handling powdered materials, covering processes and equipment such as: bag unpacking, feeding, storage, discharging, grinding, screening, metal detection, conveying, and metering equipment.



流体物料 Fluid Material

- 流体是与固体相对应的一种物体形态，是液体和气体的总称，它的基本特征是没有一定的形状并且具有流动性。流体都有一定的可压缩性，流体各层之间存在一定的运动阻力即粘滞性，维杰通常在流体黏度范围于1-5000mPa·s进行相关工艺的处理。
- 在维杰的产品配方中，通常会有多种的流体（膏状）物料。因此维杰在帮客户设计物料自动化系统时，通常会对流体物料同时处理，以便实现配方管理功能，所涉及的工艺及设备包括了：进罐、储存、出料、过滤、混合、均质、金属检测、温度调节、输送及计量设备。
- Fluids are a state of matter opposite to solids, encompassing both liquids and gases. Their fundamental characteristics include the absence of a fixed shape and the ability to flow. All fluids exhibit a certain degree of compressibility, and there is resistance to motion between fluid layers, known as viscosity. Wijay typically handles fluids with viscosities ranging from 1 to 5000 mPa·s in related processes.
- In Wijay's product formulations, various fluid (paste-like) materials are often involved. Therefore, when designing automated material systems for clients, Wijay typically handles fluid materials concurrently to enable formula management functions. The processes and equipment involved include: loading into tanks, storage, discharge, filtration, mixing, homogenization, metal detection, temperature regulation, conveying, and metering equipment.



在维杰全面的系统设计中，维杰能够确保您配方中的所有原料，均能在设定的时间点，以正确的剂量，加入到正确的生产流程中。

In Wijay's comprehensive system design, he can ensure that all raw materials in your formula are added to the correct production process at the specified time points with accurate dosages.



高硬度物料 High hardness material

- 高硬度物料通常指物料的硬度超过常规管道材质的硬度，如果按照常规方式输送，会对管道等产生比较大的磨损。
- 维杰针对物料的特性，根据客户实际现场情况，在管道材质选择，设备位置摆放，风量风速设计上拥有丰富经验，很大程度上减轻磨损，避免管道等的损坏。
- Materials with high hardness typically refer to those whose hardness exceeds that of conventional pipeline materials. If transported using standard methods, these materials can cause significant wear to pipelines and other components.
- Leveraging extensive experience, Wijay addresses the characteristics of such materials and adapts to the specific conditions of each client's site. By optimizing pipeline material selection, equipment placement, and airflow design, wear is substantially reduced, preventing damage to pipelines and related infrastructure.



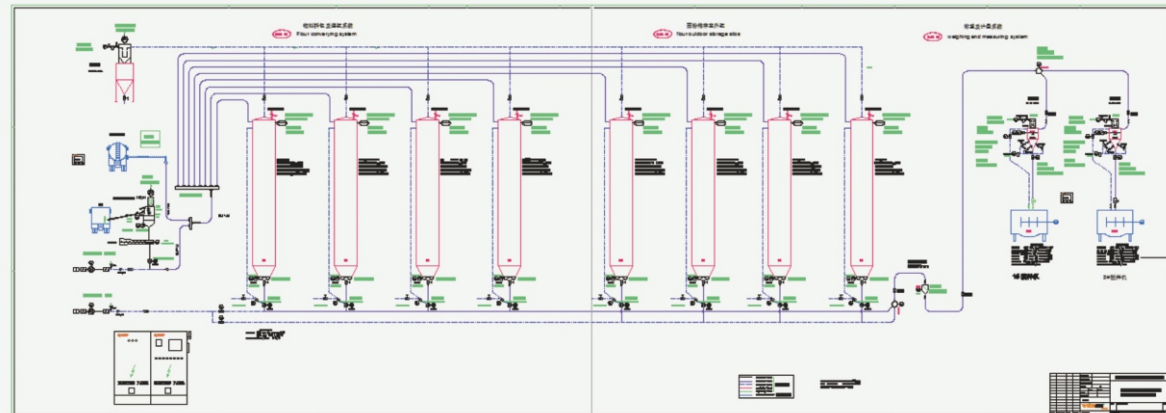
小微物料 Small and Micro Material

- 小微物料是指相对主物料的批次用量或连续用量少于5%，并且批次用量少于50KG或连续用量少于5KG/分钟。
- 小微物料是影响客户产品的关键特性，维杰具有独特技术的“小微物料计量输送系统”，不但可以实现计量的高精度，并且与主物料系统进行通信，受“配方管理系统”控制，同时在“配方管理系统”中，记录小微物料的实际使用数据，实现产品受控与可追溯。
- Micro-Ingredients refer to those materials whose batch usage or continuous consumption is less than 5% relative to the main ingredients, with a batch quantity under 50 kg or a continuous feed rate below 5 kg/min.
- Although used in small amounts, micro-ingredients are critical to the key characteristics of the customer's end product. Vijay's uniquely engineered Micro-Ingredient Metering and Conveying System not only achieves high metering precision but also communicates with the main ingredient system. Governed by the Recipe Management System, it records the actual usage data of micro-ingredients, ensuring product control and full traceability.

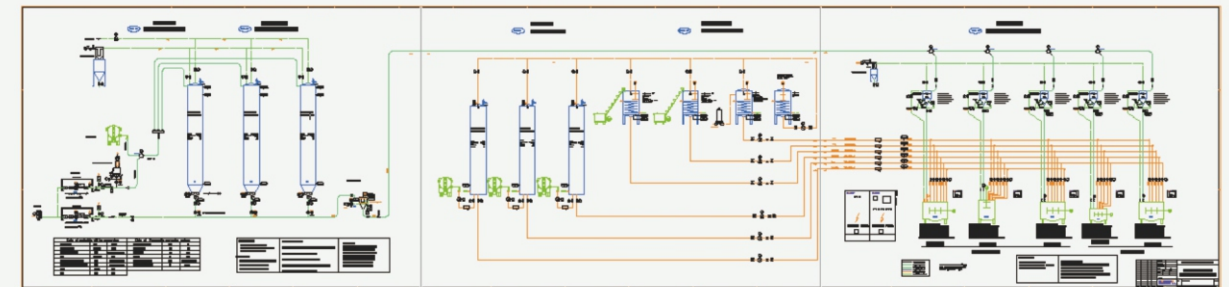


我们专业为以下行业提供解决方案
We provide solutions for the following industries

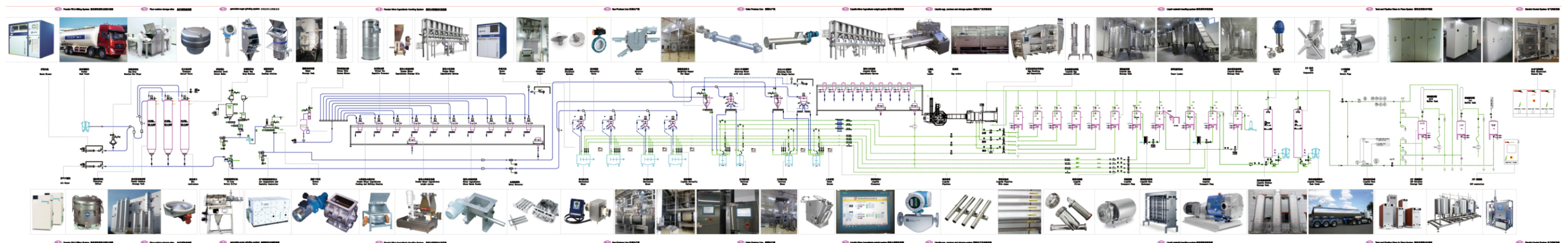
建材行业 Building Material Industry



涂料行业 Coatings industry



整厂规则、设计 Plant-wide Planning and Design



维杰在全国各地，利用面向未来的高科技，帮助广大客户实现具有创新性的项目，对每一个WIJAY解决方案，维杰均作出“设计合理”、“系统稳定”的承诺。

借助物料自动化系统解决方案，巩固您的领先优势，维杰是您实现的首选！

Leveraging future-oriented technology nationwide, WIJAY helps a diverse clientele bring innovative projects to life. For every WIJAY solution, we commit to "Robust Design" and "System Reliability."

Strengthen your competitive edge with our automated material handling solutions. WIJAY is your preferred partner to make it happen.

某大学下属企业物料自动化处理系统

Material Automation Processing System of a University Subordinate Enterprise

客户公司隶属某大学新材料研究院，主营生态环保建材的设备研发与制造。该公司新建立的生产防火板材生产线，需要使用多达8种的粉体物料及多种流体物料。

维杰公司为客户公司设计的物料自动化处理系统，可以机器全自动实现对物料的收储、输送、计量，从而节省了大量的人工费用，并确保了物料的供应安全。

防火板材的使用粉体物料包括了多种目数的砂石、碳酸钙、硫酸钙、工业锅炉灰等特性物理完全不同的物料，维杰独有的气力输送技术，不仅实现了输送，而且整个系统运行高效，大幅降低了客户方的设备投资。



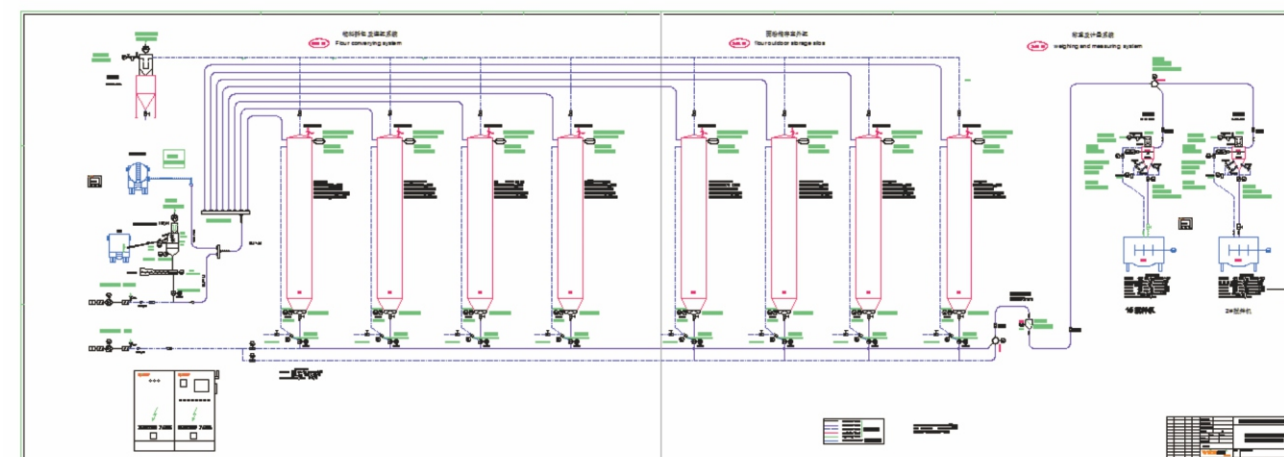
The client company is affiliated with a New Materials Research Institute of a university and specializes in the R&D and manufacturing of eco-friendly building materials equipment. Their newly established production line for fireproof panels requires the use of up to 8 types of powdered materials and various fluid materials.

The automated material handling system designed by WIJAY for the client fully automates the storage, conveying, and metering of materials, significantly reducing labor costs while ensuring a secure and reliable material supply.

The powdered materials used in the fireproof panels include sands of various mesh sizes, calcium carbonate, calcium sulfate, industrial boiler ash, and others with entirely different physical characteristics. Leveraging WIJAY's unique pneumatic conveying technology, the system not only ensures efficient transportation but also operates with high overall efficiency, substantially reducing the client's equipment investment.

支持项目各个阶段

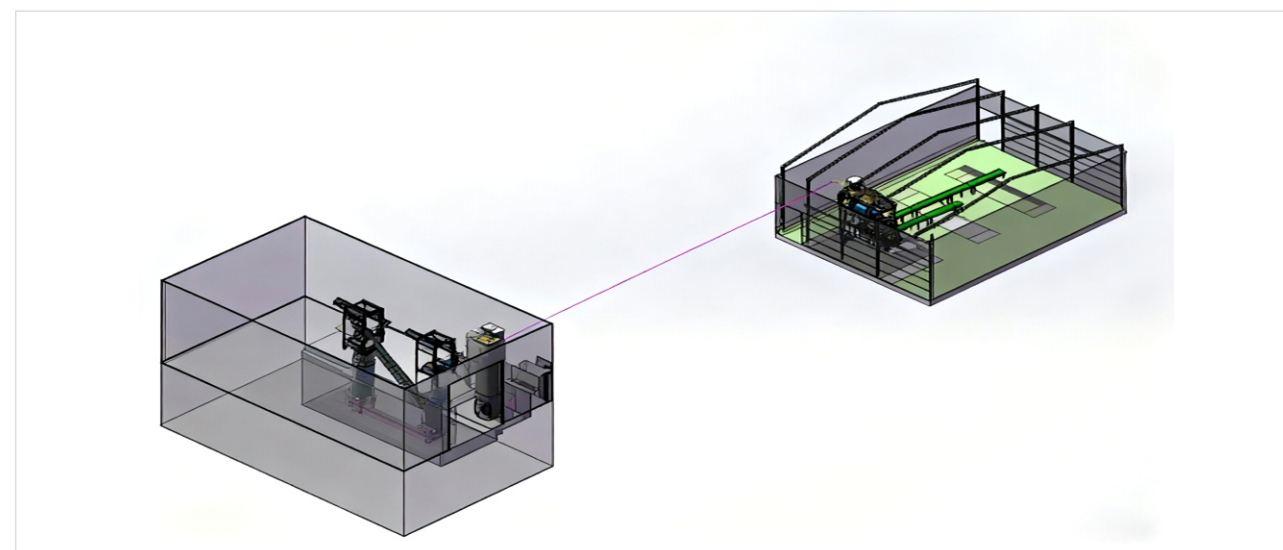
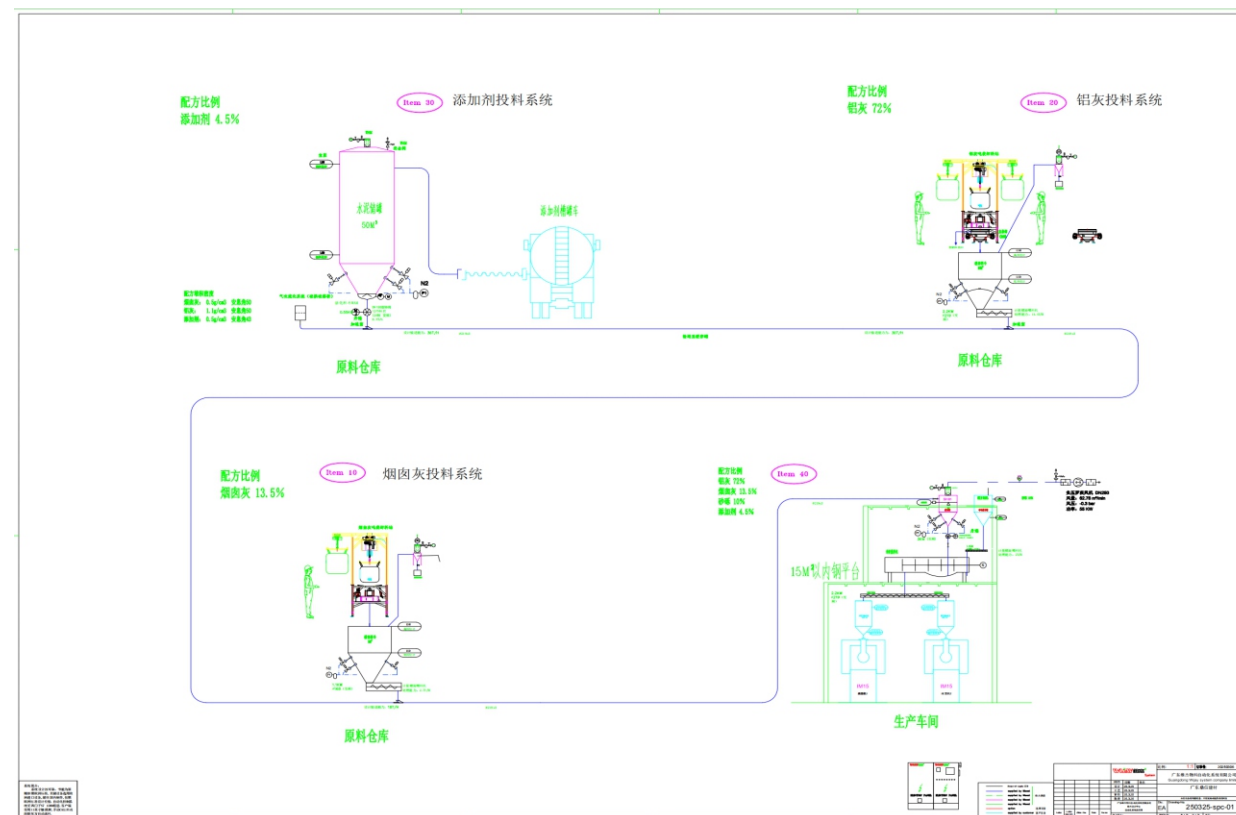
Support various stages of the project



仿古砖原料自动化处理系统

Antique Brick Raw Material Automatic Processing System

本项目为某仿古砖生产线定制全套粉体及颗粒物料气力输送与计量系统，涵盖水泥等三种物料的密闭输送、筛分及连续混合工艺。系统输送能力达36吨/小时，水平输送距离120米，垂直提升高度25米。核心设备包括投料站、50m³筒仓、气力输送装置、筛分设备、在线计量系统及连续混合机组，实现从原料进仓、精准配比到混合出料的全程自动化控制。系统采用全密闭管道输送，有效控制粉尘外溢，确保生产环境清洁；高精度计量与连续混合模块保障配比稳定性和批次一致性，显著提升生产效率与产品质量，为建材行业提供高效、环保、可靠的散料处理解决方案。



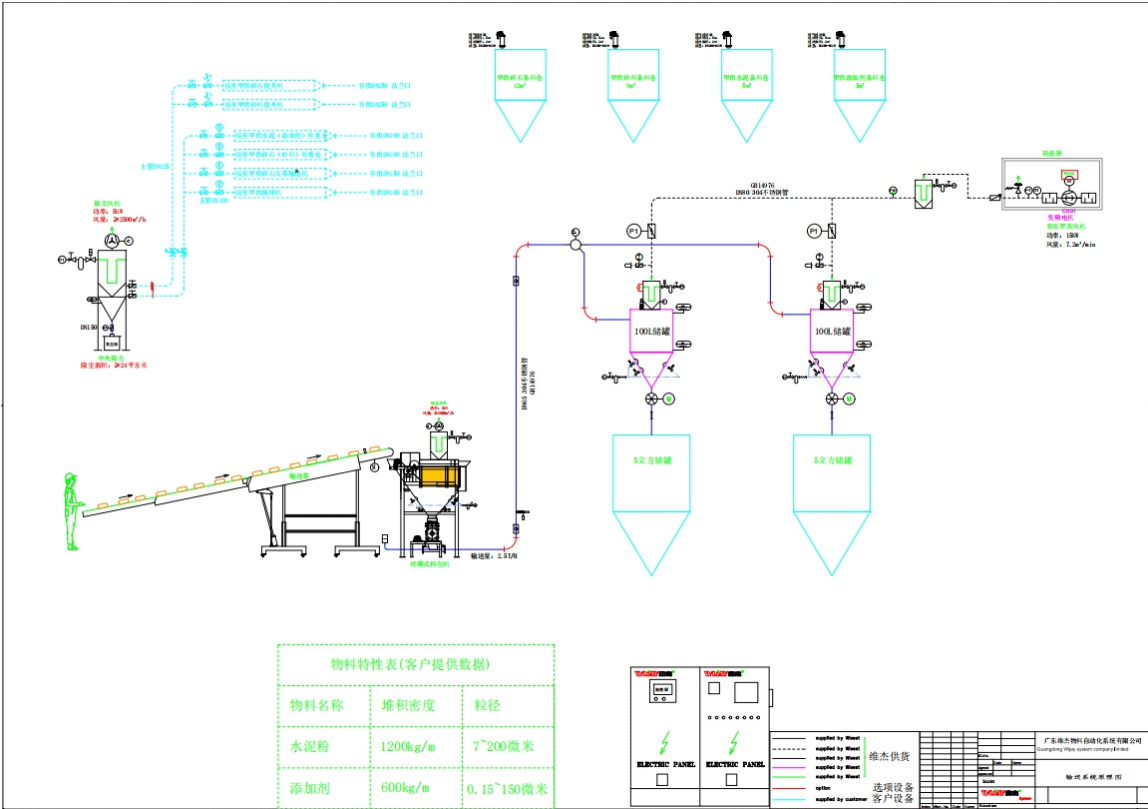
We provide a comprehensive pneumatic conveying and metering system tailored for powder and granular materials in antique brick production. The system handles cement and two other materials through enclosed conveying, screening, and continuous mixing, with a throughput of 36 T/H over a 120-meter horizontal distance and 25-meter vertical lift. Core components include a feeding station, 50m³ silo, pneumatic conveying units, screeners, in-line weighing, and a continuous mixing skid—delivering end-to-end automation from raw material intake to proportioned discharge. Fully sealed piping ensures dust-free operation and a clean production environment. High-accuracy metering and continuous mixing guarantee consistent formulations and batch uniformity, driving higher efficiency and superior product quality. This is a high-performance, sustainable, and dependable bulk material solution for the building materials industry.



核废料处理装置水泥处理系统

Nuclear Waste Treatment Facility – Cement Processing System

本项目为核废料处理装置配套设计水泥粉体自动化处理系统，实现从原料接收、储存、输送到计量混合的全封闭自动化作业。系统输送能力为5吨/小时，水平输送距离150米，垂直提升高度28米。核心设备包括自动投料站、50m³筒仓、气力输送装置、筛分设备及计量混合系统，各单元协同运行，确保水泥粉体在严格密封环境下稳定输送与精准配比。系统针对核废料固化处理的高安全性要求，采用多重防泄漏设计与在线监控机制，有效避免放射性粉尘外逸，保障操作人员与环境安全。高精度计量与混合模块确保固化配比的一致性与可靠性，为核废料安全处置提供高效、稳定、可追溯的粉体处理保障，满足核工业领域对设备性能与安全标准的严苛要求。



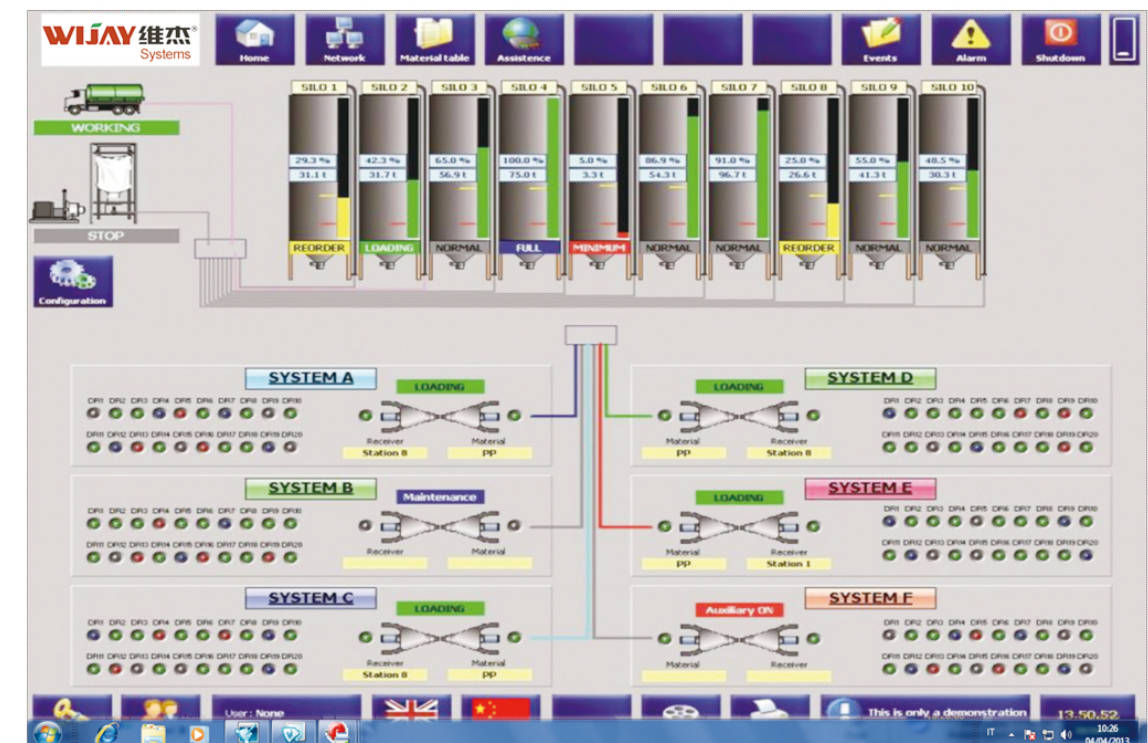
This project delivers an automated cement powder processing system for a nuclear waste treatment facility, covering receiving, storage, conveying, metering, and mixing in a fully enclosed automatic process. Capacity: 5 T/H, horizontal distance: 150 m, vertical lift: 28 m. Core equipment includes an automatic feeding station, 50m³ silo, pneumatic conveyors, screeners, and a metering/mixing system. Multiple leak-proof designs and online monitoring prevent radioactive dust escape, ensuring operator and environmental safety. High-precision metering and mixing guarantee formulation consistency and reliability, meeting the strict performance and safety standards of the nuclear industry.



建材行业集中供料系统

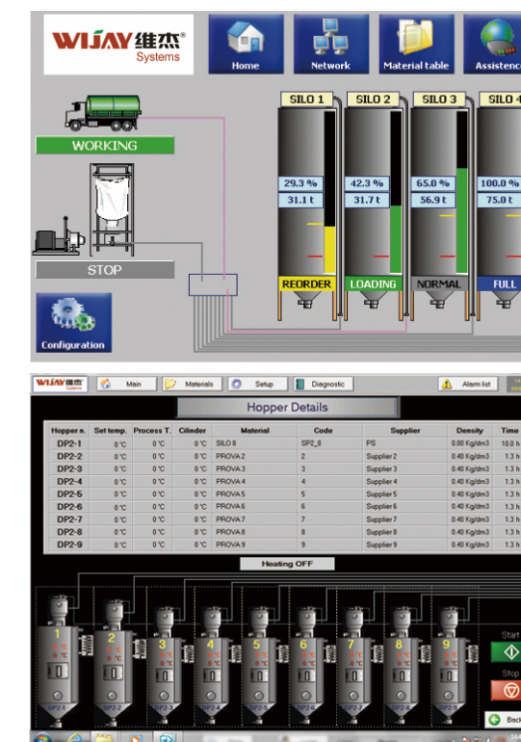
Centralized Feeding System for Building Materials Industry

本项目为核废料处理装置配套设计水泥粉体自动化处理系统，实现从原料接收、储存、输送到计量混合的全封闭自动化作业。系统输送能力为5吨/小时，水平输送距离150米，垂直提升高度28米。核心设备包括自动投料站、50m³筒仓、气力输送装置、筛分设备及计量混合系统，各单元协同运行，确保水泥粉体在严格密封环境下稳定输送与精准配比。系统针对核废料固化处理的高安全性要求，采用多重防泄漏设计与在线监控机制，有效避免放射性粉尘外逸，保障操作人员与环境安全。高精度计量与混合模块确保固化配比的一致性与可靠性，为核废料安全处置提供高效、稳定、可追溯的粉体处理保障，满足核工业领域对设备性能与安全标准的严苛要求。



The wijay system design features conveying pipelines and equipment that are simple, highly efficient, and exceptionally reliable. It integrates material receiving, centralized drying, conveying, metering, and management into one holistic system, rather than assembling disparate standalone units.

Compared to conventional systems from traditional plastic auxiliary equipment suppliers, the Weijie design uses only 30% of the piping and typically less than 40% of the equipment. This streamlined approach has made the Weijie automation system widely recognized for its outstanding energy efficiency and operational excellence.



涂料行业集中供料系统
Centralized Feeding System for the Coatings Industry

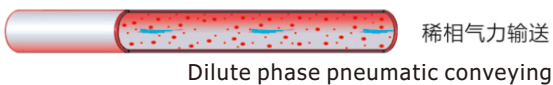
供料系统可以使众多的物料管理变得轻松和高效率
The feeding system can make the management of numerous materials easy and efficient



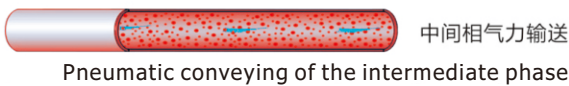
- 节省人工和原料成本
- 保持工厂环境整洁
- 物料品质稳定
- 原料数据可追溯
- 物料管理信息化
- 与ERP系统连接
- 制造执行系统的组建
- 工业4.0的实现

- Cost savings in labor and raw material expenses
- Maintenance of a clean and organized factory environment
- Ensured stability in material quality
- Traceability of raw material data
- Informatization of material management
- Seamless integration with ERP systems
- Establishment of a manufacturing execution system
- Implementation of Industry 4.0 principles

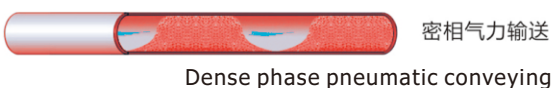
常见的气力输送形式
Common forms of pneumatic conveying



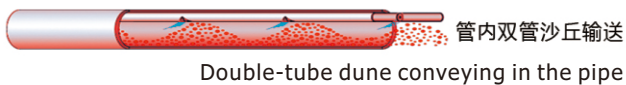
Dilute phase pneumatic conveying



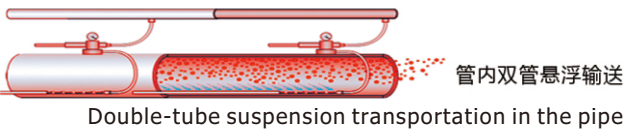
Pneumatic conveying of the intermediate phase



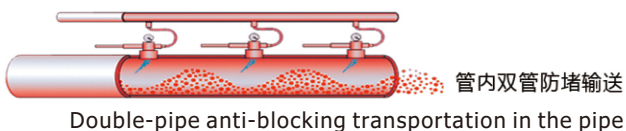
Dense phase pneumatic conveying



Double-tube dune conveying in the pipe



Double-tube suspension transportation in the pipe



Double-pipe anti-blocking transportation in the pipe

不同输送系统的特征及推荐

	稀相输送	密相输送	中间相输送	水力输送
风速	v=25-40m/s	v=2-10m/s	v=15-25m/s	v=15-25m/s
相密度	1-10:1	15-60:1	5-25:1	1-2:1
输送压力	0.1-1.0Barg	p=0.5-3.5Barg	p=0.5-2.5Barg	p=1-5Barg
物料于管道中的状态	悬浮状态	栓塞状态	悬浮状态但具有较高固气比	悬浮状态

Characteristics and Recommendations of Different Conveying Systems

	Dilute Phase Convey	Dense Phase Convey	WIJAY Intermediate Phase Conveying	WIJAY Hydraulic Conveying
wind speed	v=25-40m/s	v=2-10m/s	v=15-25m/s	v=15-25m/s
phase density	1-10:1	15-60:1	5-25:1	1-2:1
Delivery pressure	0.1-1.0Barg	p=0.5-3.5Barg	p=0.5-2.5Barg	p=1-5Barg
The state of the material in the pipeline	suspended state	embolic state	suspended state but with high solid to gas ratio	suspended state

输送技术的推荐方法

	稀相输送	密相输送	中间相输送	水力输送
输送速度<20T/H 输送距离<150M	★★★★	★★★	★★★★★	★
输送速度<20T/H 输送距离<150M	★★★★	★	★★★★★	★★★
输送速度<20T/H 输送距离<150M	★★★★	★	★★★★★	★★★
输送速度<20T/H 输送距离<150M	★★★★★		★★★★	★★★★★
总体概述	低设备投资成本，略高运行费用，较低的技术难度，适用不碎的物料。	高低设备投资成本，略高运行费用，略有的技术，适用易碎怕碎的物料。	低设备投资成本，低运行费用，较高的技术难度，适用范围广泛。	略高设备投资成本，低运行费用，较高的技术难度，特别适合需要降温清洁的材料。

Recommended Methods for Conveying Technology

	Dilute Phase Convey	Dense Phase Convey	intermediate phase conveying	hydraulic conveying
Conveying speed<20T/H Conveying distance<150M	★★★★	★★★	★★★★★	★
Conveying speed<20T/H Conveying distance<150M	★★★★	★	★★★★★	★★★
Conveying speed<20T/H Conveying distance<150M	★★★★	★	★★★★★	★★★
Conveying speed<20T/H Conveying distance<150M	★★★★★		★★★★	★★★★★
General description	Low equipment investment cost, slightly higher operating costs, and lower technical difficulty; suitable for non-crushing materials.	High and low equipment investment costs, slightly higher operating costs, and slightly advanced technology; suitable for fragile and brittle materials. and fragile materials	Low equipment investment cost, low operating cost, high technical difficulty, and wide applicability.	Slightly high equipment investment cost, low operating costs, and high technical difficulty; especially suitable for materials that require cooling and cleaning.

输送系统及管件对产生粉尘及拉丝的影响
Impact of the Conveying System and Fittings on Dust Generation and Stringing

输送系统对物料的影响及后续处理的比较
Comparison of Material Impact and Subsequent Handling by Conveying Systems

输送类型	稀相输送气力输送	密相输送气力输送	W i j a y 中间相气力输送	W i j a y 水力输送
对物料的影响	1. 细粉 2. 粗粉 3. 较长的拉丝 4. 较长的薄膜	1. 大量静电超细粉尘 2. 少量粗粉尘	1. 少量粗粉 2. 少量短拉丝	完好
后续处理工序	1. 安装淘洗器 2. 安装过滤器	1. 安装淘洗	1. 安装淘洗	1. 需脱水干燥
粉尘含量	多	少	少	无
设备投资成本	低	高	适中	高

Types of Conveying	Dilute Phase Pneumatic Conveying	Dense Phase Pneumatic Conveying	Wijay Intermediate Phase Pneumatic Conveying	Wijay Hydraulic Conveying
Impact on Materials	1.Fine Powder 2.Coarse Powder 3.Long Filaments 4.Long Thin Films	1.Abundant Electrostatic Ultrafine Dust 2.Small Amount of Coarse Dust	1.Small Amount of Coarse Powder 2.Small Amount of Short Filaments	In Good Condition
Subsequent Handling Processes	1.Installation of Scrubbers 2.Installation of Filters	Installation of Scrubbers	Installation of Scrubbers	Requires Dehydration and Drying
Dust Content	Many	Few	Few	None
Equipment Investment Cost	Low	High	Moderate	High

除了选择合适的输送系统外，在系统设计过程中通过以下三方面可以减少粉尘与拉丝形成

- **输送条件**
将原料温度降至最低 将输送气体温度降至最低
将输送速度降至最低 将输送压力降至最低
- **系统设计**
改善管道路径 减少弯头数量
选用适合的管道材质及内处理方案 避免管道段差
- **固体物料风送系统速度过快所造成的损害**
颗粒物料-->当输送速度越快，对颗粒的破碎及磨损程度越严重。
塑料颗粒-->当输送塑料颗粒时，速度越快，其粉尘及拉丝的比例越高。
磨损性物料-->当输送磨损物料时，速度越快，对管道及设备的磨损比例越高。

In addition to choosing suitable conveying systems, the following three aspects can be addressed in the system design process to reduce dust and filament formation.

- **Conveying Conditions**
Minimize the temperature of the raw material Minimize the temperature of the conveying gas
Minimize the conveying speed Minimize the conveying pressure
- **System Design**
Improve the pipeline path Reduce the number of bends
Select suitable pipeline materials and internal treatment solutions Avoid differences in pipeline sections
- **Damage caused by high-speed pneumatic conveying of solid materials**
Particle Materials: The faster the conveying speed, the more severe the particle breakage and wear.
Plastic Granules: The faster the conveying speed, the higher the proportion of dust and filament formation.
Abrasive Materials: The faster the conveying speed, the higher the wear on the pipelines and equipment.

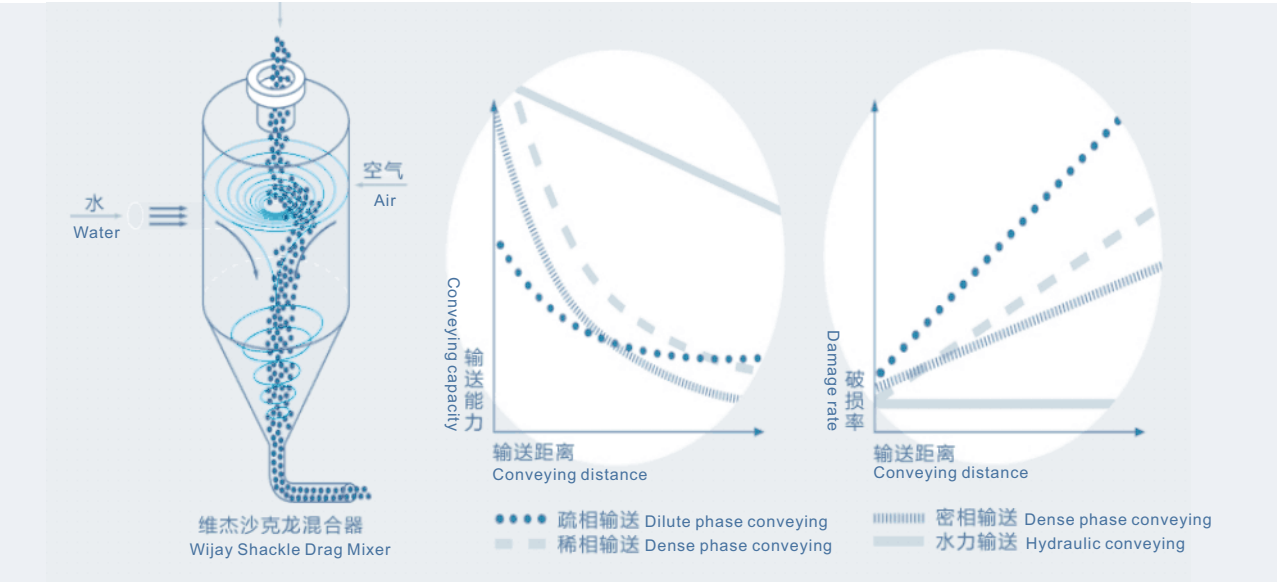


维杰水力输送技术

在一些特别的生产工序，有着非常好的应用效果。输送物料的同时，对物料进行了快速的降温，并淘洗物料中存在的粉尘和异物。在需要降温 and 清洁粉尘的物料输送场合，水力输送是您理想的方式。

Wijay Hydraulic Conveying Technology

In some special production processes, it has a very good application effect. While conveying the material, the material is quickly cooled down and the dust and foreign matter in the material are washed out. In the occasions where the material needs to be cooled down and the dust needs to be cleaned, hydraulic conveying is your ideal way.



维杰自主研发的系统 Wijay's self-developed system

多组份自动计量干粉连续混合系统 Multi component automatic metering dry powder continuous mixing system

维杰物料自动化系统有限公司自主研发的连续多组份自动计量混合系统实现的物料配比与混合同时进行，并且可以通过调整搅拌机构角度及速度来平衡混合效率与混合均匀度，从而实现了工艺及配方的广泛适应。应用工况及行业：食品行业的粉料混合。

WIJAY Material Automation System Co., Ltd. has successfully developed a multi-component automatic continuous metering mixing system. This system enables simultaneous material ratio adjustment and mixing, achieving a fine balance between mixing efficiency and uniformity. By adjusting the angles and speed of the mixing mechanism, it offers extensive adaptability to various processes and formulas. This system finds wide application in the food industry, specifically in powder mixing.



负压计量输送混合系统 Negative pressure metering and conveying mixing system

维杰物料自动化系统有限公司自主研发的负压计量输送混合系统实现了物料配比与混集成于混合机上，并且可以通过混合机的控制界面轻松修改配方，从且使得仅需一位操作人即可同时完成投料及生产的任务，能极大的节省人工成本。

WIJAY Material Automation System Co., Ltd. has independently developed a negative pressure metering conveying mixing system. This system integrates material ratio adjustment and mixing within the mixer itself. It provides a user-friendly control interface that allows easy modification of formulas. With this system, a single operator can handle both feeding and production tasks, significantly reducing labor costs.



投料配料系统 Feeding and batching system

特点

1. 配料精度千分之三
2. 简洁高效，即买即用
3. 全程监控，数据可溯源，便于智能管理
4. PLC系统、配方管理功能，低运行成本
5. 投料无尘环保，适合现代工厂洁净生产需求

Peculiarity:

1. The batching accuracy is three thousandths
2. Simple and efficient, ready to use
3. The whole process is monitored, the data can be traced, which is convenient for intelligent management
4. PLC system, formula management function, low operating cost
5. Dust-free and environmentally friendly feeding, suitable for the clean production needs of modern factories

流体自动卸料平台装置 Fluid automatic discharge platform device

特点

1. 系统自动判别原料桶中的液位。
2. 根据液位情况自动举升倾斜原料桶，降低原料桶内原料残留减少原料浪费。
3. 全自动化避免人工过多干预，极大减少人工劳动力。
4. 实时监控原料储罐内液位，当储罐内液位过高时自动停止上油，避免原料溢出。
5. 可根据生产使用需求灵活控制原料桶上料数量。
6. 实时记录上料情况信息，统计原料消耗记录。
7. 原料剩余情况一目了然，实时了解余料情况。

peculiarity

1. The system automatically determines the liquid level in the raw material barrel.
2. Automatically lift and tilt the raw material barrel according to the liquid level to reduce the raw material residue in the raw material barrel and reduce the waste of raw materials.
3. Fully automated, avoid excessive manual intervention, and greatly reduce manual labor.
4. Real-time monitoring of the liquid level in the raw material storage tank, when the liquid level in the storage tank is too high, automatically stop the oiling, to avoid the overflow of raw materials.
5. The quantity of raw material barrels can be flexibly controlled according to the needs of production and use.
6. Real-time recording of feeding information, statistics of raw material consumption records.
7. The remaining situation of raw materials is clear at a glance, and the remaining materials can be understood in real time.



维杰自主研发的系统 Wijay's self-developed system

粉体小料计量系统

Powder Small Material Metering System

维杰公司自主研发的粉体小料计量系统，成功实现了小微粉末物料的自动存储计量，并且准确输送至生产线的混合设备。

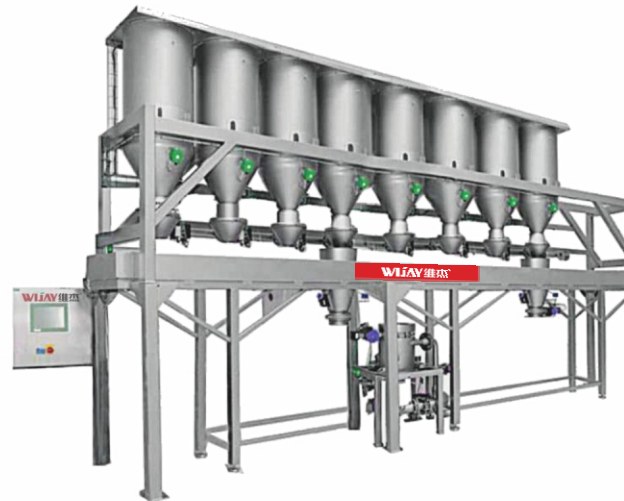
优点

1. 计量精度高
2. 配合主料输送系统，达到所有原料的全自动控制
3. 设备投资费用低、运行和维护成本也较低
4. 占地面积小
5. 自动化程度高

The powder and small material metering system independently developed by Weijie Company has successfully realized the automatic storage and measurement of small and micro powder materials, and accurately transported to the mixing equipment of the production line.

Advantages

1. High measurement accuracy
2. Cooperate with the main material conveying system to achieve fully automatic control of all raw materials
3. Low equipment investment cost, low operation and maintenance cost
4. Small footprint
5. High degree of automation



流体小料计量系统

Fluid material metering system

维杰公司自主研发的流体小料计量系统，精确和可重复的计量和输送流体小微物料，配合主料输送系统，达到所有原料的全自动控制。

优点

1. 计量精度高
2. 自动化程度高
3. 占地面积小
4. 设备投资费用低、运行和维护成本也较低

The liquid material metering system independently developed by Wijay Company can accurately and repeatably measure and convey fluid small and micro materials, and cooperate with the main material conveying system to achieve fully automatic control of all raw materials.

Advantages

1. High measurement accuracy
2. High degree of automation
3. Compact design, requiring minimal space
4. Low equipment investment costs and low operation and maintenance costs



密相输送系统

Dense phase conveying system

维杰公司自主研发的密相输送系统技术先进，符合高洁行业的卫生要求，可应用于食品行业。

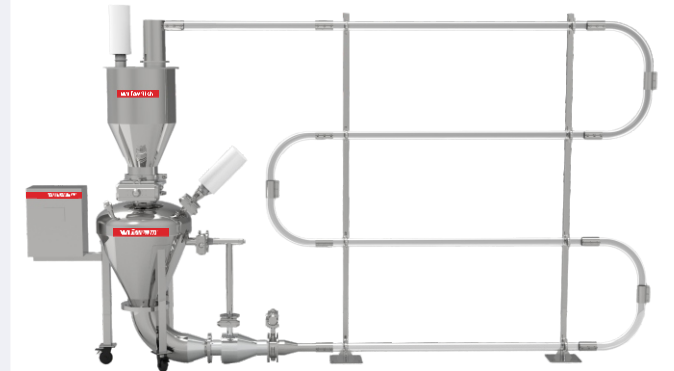
优点

1. 远距离输送，可达200米
2. 最小的物料破损率
3. 较低运行及维护费用
4. 无磨损部件，无物料污染风险

Wijay Company has developed an advanced dense-phase conveying system that meets the strict hygiene requirements of the food industry.

Advantages

1. Long-distance transmission capability, up to 200 meters
2. Minimal material breakage rate during transportation
3. Low operating and maintenance costs
4. No wear parts, eliminating the risk of material contamination



管链输送机

Pipe chain conveyor

管链输送机是输送坚果、谷类、豆类等食品颗粒物料的连续输送设备，在密闭管道内，以料线和料盘为传动构件带动物料沿管道运动。

优点

1. 节能环保
2. 机体小巧灵活
3. 轻柔输送-较少破损
4. 噪音低-65分贝以下
5. CIP功能，高洁生产
6. 无尘密封系统-无须过滤装置

The pipe chain conveyor is a continuous conveying equipment designed for transporting food particles such as nuts, cereals, and beans. It utilizes a closed pipeline system, with the material line and material tray serving as transmission components to drive the material along the pipeline.

Advantages

1. Energy-saving and eco-friendly operation
2. Compact and flexible body for easy installation
3. Gentle conveying process, minimizing material breakage
4. Low noise emission, below 65 dB
5. CIP function for clean and hygienic production
6. Dust-free sealing system, no need for filtration



技术交流，与欧洲同步 Technical exchange, synchronized with Europe

维杰保持进取和创新的精神，与欧洲百年企业达成战略合作协议，定期与欧洲最优秀的企业一起探讨行业发展和交流技术难题的解决办法。

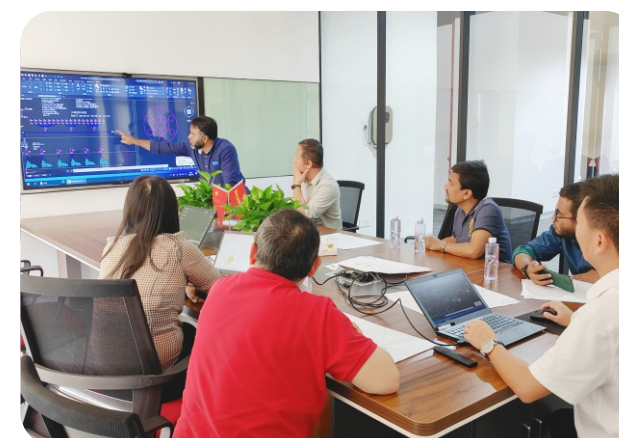
维杰在十年的技术积累中，重视研发和知识产权，取得了十多项发明和专利。

Wijay maintains a spirit of progress and innovation, establishing strategic cooperation agreements with century old European companies, and regularly engaging in discussions on industry development and exchanging solutions to technical problems with the best European companies.



维杰专注系统设计、专利技术的开发及项目管理，提供物料自动化的整体解决方案，维杰会定期展开培训会议，巩固基础，提升技术能力，打造完美的技术团队，服务多家全球知名的顶尖企业。

Focusing on system design, the development of patented technologies and project management, we provide overall solutions for material automation, and we will hold regular training meetings to consolidate the foundation, improve technical capabilities, build a perfect technical team, and serve a number of world-renowned top enterprises.

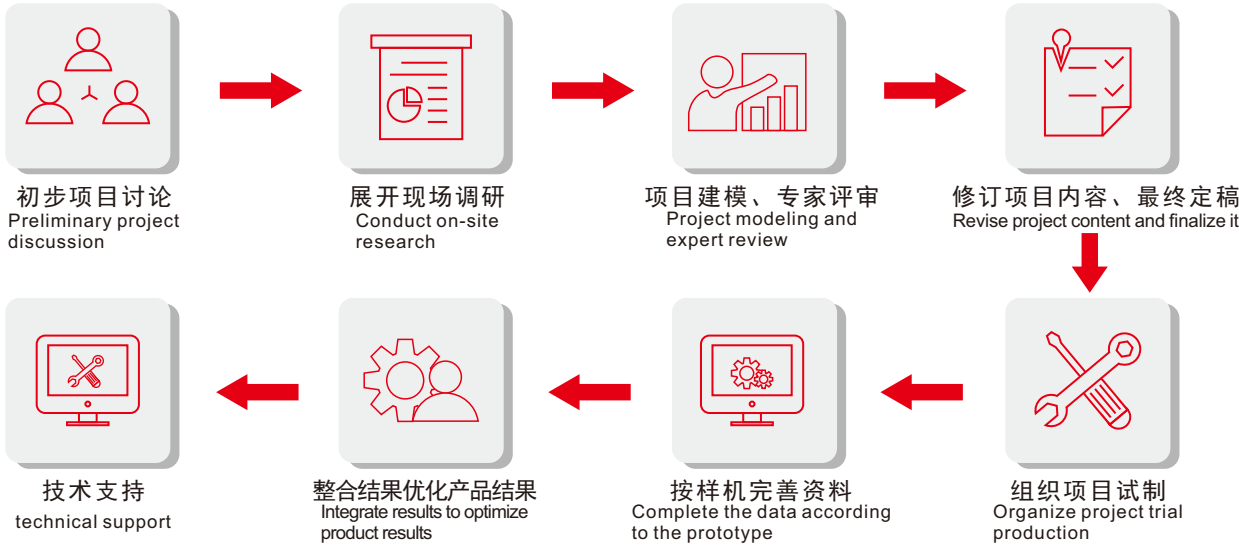


研发与制造

R&D and manufacturing

维杰公司坚持以技术创新引领企业发展。加大对技术研发的投入，组建了强大的物料自动化系统及核心设备研发设计团队，涵括行业优秀的科研技术人才。

Wijay Company adheres to lead the development of the enterprise with technological innovation. We have increased investment in technological research and development, and established a strong material automation system as well as and a core equipment research and design team, including outstanding scientific research and technical talents in the industry.



持续研发

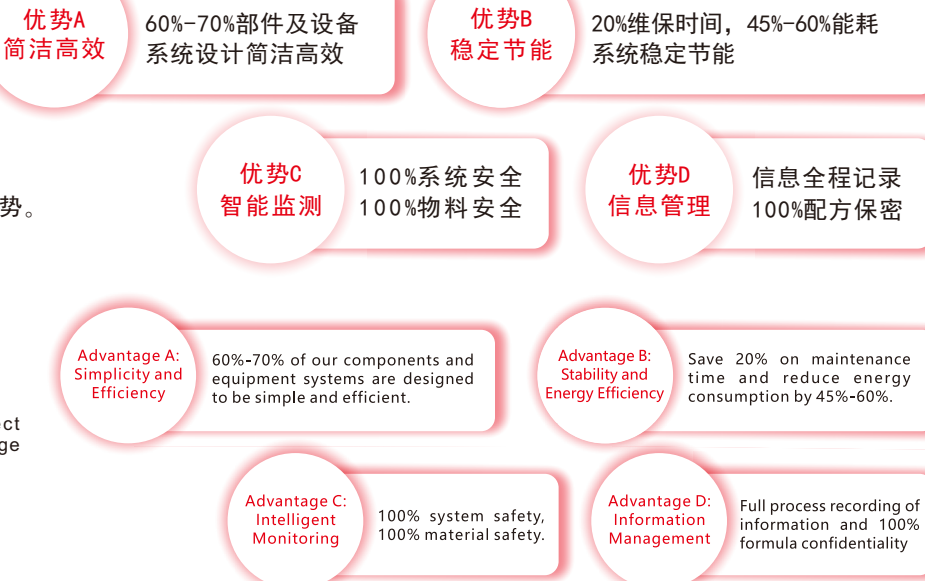
维杰公司致力于高洁行业的物料自动化系统规划、设计、安装、调试等全过程项目管理，在以固体物料为侧重点的项目过程中，维杰已经自主研发出了多套系统，在行业内享有极高的声誉。维杰公司也具有丰富的膏状物料及流体物料的处理经验，维杰将持续创新，研发出更多让客户满意的系统。

Continuous Research and Development

Wijay Corporation specializes in end-to-end project management of automated material handling systems for high-hygiene industries, encompassing system planning, design, installation, and commissioning. With a focus on solid material processing, we have independently developed multiple proprietary systems that have earned an exceptional reputation in the industry. Our expertise also extends to handling paste materials and fluid materials. Committed to continuous innovation, Wijay Corporation will persistently develop new systems to exceed customer expectations.

系统优势

维杰公司多年以来的项目经验，设计的系统与同行相比较，具有显著的优势。



Our Advantage

Wijay Company's extensive project experience gives us a significant edge over our peers.

我们的客户

Our customers



国际质量水准

International Quality Standards
20%营收自世界500强
20% of our revenue comes from Fortune 500 companies
60%客户行业排名前三
60% of our clients rank in the top 3 in their industries
80%客户年营收超20亿
80% of our clients have an annual revenue exceeding 2 billion

全面安全保障

Comprehensive Safety Assurance
物料安全评估测试
Material safety assessment and testing
防/抑/泄/隔爆设计
Explosion-proof design for prevention, suppression, containment, and isolation
设计实施安全审查
Safety review during design and implementation

准时高效交付

On-time and Efficient Delivery
<15天工艺机械电气设计
<15 days for process, mechanical, and electrical design
<45天设备电控生产制造
<45 days for equipment, electrical control, and manufacturing
<15天现场安装调试测试
<15 days for on-site installation, commissioning, and testing

极致性价比

Ultimate Cost-Effectiveness
极简设计理念
Minimalist design philosophy
极致效率团队
highly efficient team
部件自研自制
Self-developed and self-manufactured components

