



No Sewage



No Exhaust Gas



No Waste

广西瑞杰炉渣装备制造有限公司

GUANGXI RUIJIE SLAG EQUIPMENT MANUFACTURING CO.,LTD.

Environmental protection

A top-tier service provider in the solid waste sorting and treatment industry, integrating R&D, manufacturing, sales, installation and after-sales service into one integrated system.

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公司简介

广西瑞杰炉渣装备制造有限公司是一家国家认定的高新技术企业，总部位于广西北流市，公司注册资金2000万元。是一家集研发、制造、销售、安装及售后服务于一体的专业固废分选设备、炉渣分选设备及淘金设备制造商，主要生产有中控设备、磁选设备、破碎设备、重选设备、筛分设备、输送设备、淘金设备、智能金属分选设备等系列产品。公司专注于再生资源回收利用领域，具备丰富的行业经验和独到的技术优势，拥有一支高素质专业化团队，可根据客户需求量身定制再生资源深加工处理设备 & 综合实用性强的解决方案和服务，提供高品质与满意度高的一条龙服务。

Guangxi Ruijie IBA Equipment Manufacturing Co., Ltd. is a nationally recognized high-tech enterprise headquartered in Beiliu, Guangxi, with a registered capital of 20 million RMB. It is a professional manufacturer of Solid Waste Sorting Equipment, incineration bottom ash (IBA) sorting equipment and gold mining equipments that integrate research & development, manufacturing, sales, installation and after-sales services. It mainly produces a series of products including central control equipment, magnetic separation equipment, crushing equipment, gravity sorting equipment, screening equipment, conveying equipment, gold mining equipment and intelligent metal sorting equipment etc.. Focusing on the field of renewable resources recycling & utilization, the company has rich industry experience and unique technological advantages. It has a high-quality team of professionals who can customize renewable resource deep processing equipment and comprehensive practical solutions and services to the customer's needs, providing a one-stop service with high quality and high satisfaction.

公司自成立以来，始终坚持依法合规经营，将持续提升自主创新能力作为企业核心竞争力，促进企业健康、稳定、可持续发展。迄今为止，我们的产品广泛应用于有色金属回收、矿山、建材、塑料、玻璃等多个行业。优良的设备、精湛的技术、用心的服务、周到的售后保障获得了客户和市场的高度认可。

Since its establishment, it has always adhered to operating in accordance with the laws and regulations, continuously improving its independent innovation ability as its core competitiveness, and promoting the healthy, stable, and sustainable development of the enterprise. Nowadays, its products are widely used in various industries such as non-ferrous metal recycling, mines, building materials, plastics, glass, etc. Excellent equipment, exquisite technology, attentive service and thoughtful after-sales guarantees have been highly recognized by customers and the market.

公司为持续提升和优化资源循环利用和再利用率，致力于不断研发与应用新技术，竭力为客户提供更优质的产品和服务。一如既往保持稳定的发展趋势，积极拓展多领域市场空间，为再生资源回收利用产业添砖加瓦，打造绿色可持续发展的生态环境。

In order to continuously improve and optimize the efficiency of resource recovery and reuse, it devotes itself to the continuous development & application of new technologies and strives to provide its customers with better products and services. It has maintained stable development trends as always, actively expanded market space in multiple areas, contributed to the recycling and utilization of renewable resources, and created a green and sustainable ecological environment.

公司以“变废为宝，让环境更美好”为使命，秉承“诚信、专注、务实、创新、分享、共赢”的企业价值观，贯彻“拼搏进取、高效执行、敢于担当、精益求精、永争一流”的企业精神，朝着“成为国际环保科技型领军企业”的愿景不断前进。未来，公司会不断加大研发投入，加强技术创新、完善管理制度，同时，公司将不断增强国内外市场开拓能力和市场快速响应能力，进一步优化公司现有产品结构、提升公司品牌影响力及主营产品市场占有率。瑞杰装备愿与各界人士携手并进，共创环保新未来！

It takes "turning waste into treasure, making the environment better" as its mission, adheres to the corporate values of "integrity, concentration, pragmatism, innovation, sharing, win-win", implements the corporate spirit of "struggle and enterprising, efficient execution, dare to take responsibility, keep improving, strive for first-class forever", and continuously advances towards the vision of "becoming an international environmental protection technology leading enterprise". In the future, it will continue to invest more in research and development, strengthen technological innovation and improve management systems. At the same time, it will continue to strengthen its domestic & foreign market development capabilities and rapid response capabilities, further optimize our existing product structure, enhance our brand influence and main product market share. Ruijie Equipment is willing to go hand in hand with people from all walks of life to create a new future of environmental protection!



公司使命

变废为宝，让环境更美好
To turn waste into treasure and make the environment better.

公司愿景

成为国际环保科技型领军企业
To become an international environmental protection technology leading enterprise.

企业精神

拼搏进取、高效执行、敢于担当、精益求精、永争一流
Struggle and enterprising, efficient execution, dare to take responsibility, keep improving, strive for first-class forever.

企业文化

团队理念

敬业、团结、高质、高效、包容、感恩
Dedication, unity, high quality, efficiency, tolerance, gratitude

企业价值观

诚信、专注、务实、创新、分享、共赢
Integrity, concentration, pragmatism, innovation, sharing, win-win.

战略目标

成为具有全球竞争力的再生资源回收设备研发制造商
To become a globally competitive R & D manufacturer of renewable resource recycling equipment.

文化活动策划 Cultural Activity



精英团队
Elite Team



团建活动
Team Building



年会活动
Annual Party



员工生日会
Staff Birthday Party



女神节聚餐
Goddess Festival Dinner



篮球炉渣杯球赛
Luzha Cup Basketball Tournament

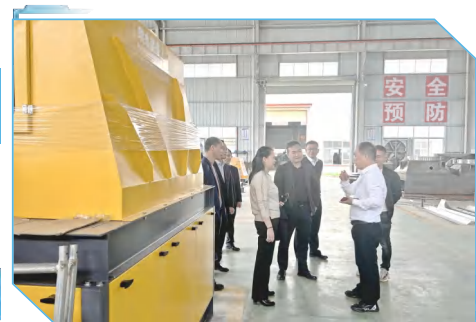
》》 交流学习 Exchange & Study



》》 政府视察，实力见证 Government inspection, witness of strength



客户参观 Customer Visit



展会活动 Exhibition Activities



南宁环保展
Nanning EP Expo



北流炉渣展
BL IBA Expo



上海展会
SH IBA Exhibition



第139届广交会
The 139th Canton Fair



第139届广交会
The 139th Canton Fair



广州炉渣展会
GZ IBA Exhibition



广州环保展
GZ EP Exhibition



东盟博览会
China-ASEAN Expo



越南环保展
VN Exhibition



越南环保展
VN Exhibition

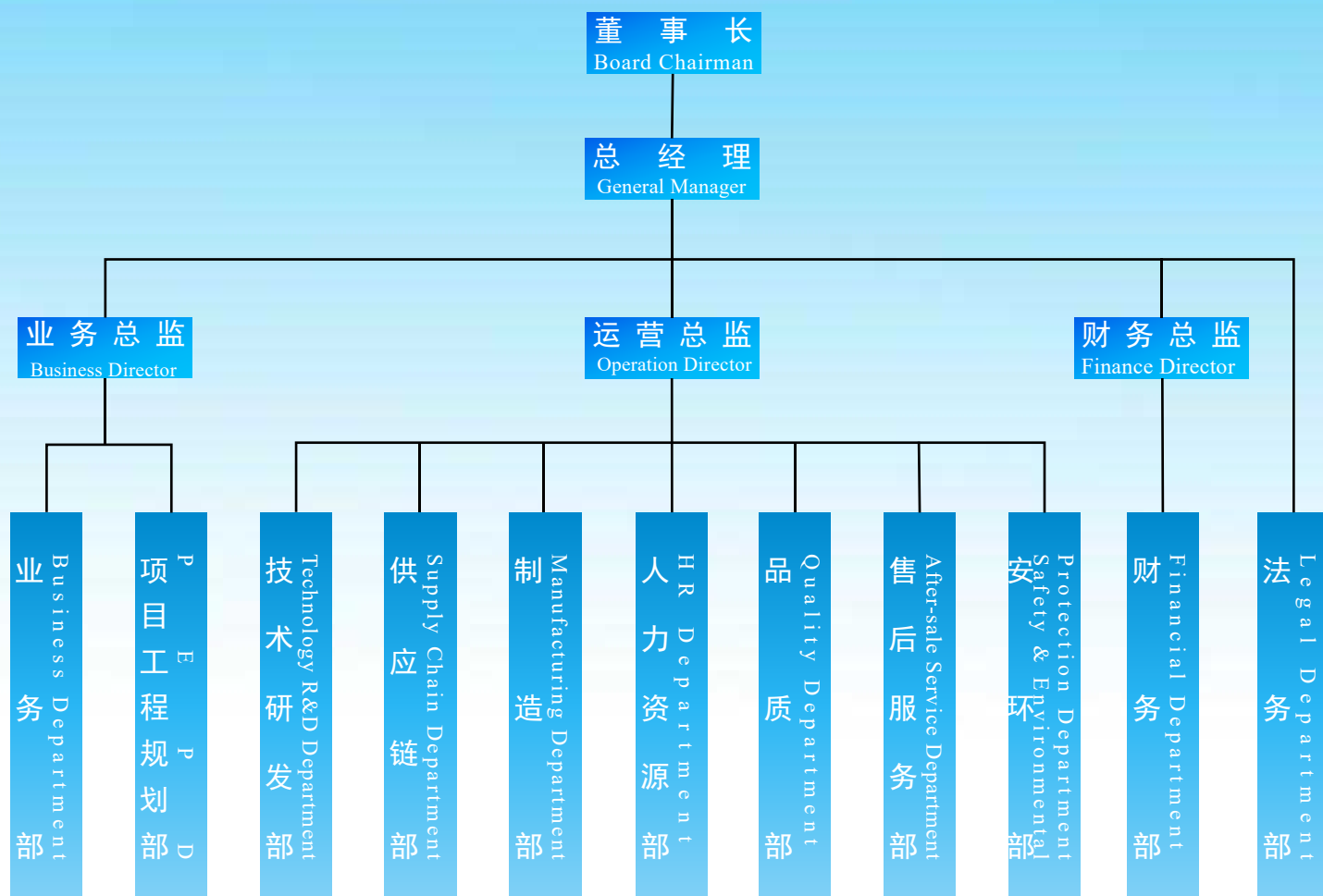


俄罗斯展会
RU Exhibition



俄罗斯展会
RU Exhibition

组织架构 Organizational Structure



安全环保理念 Safety and Environmental Concepts

- 

保护环境就是保护生产力
Protecting the environment is protecting productivity
- 

安全生产、环保优先、以人为本
Safe production, environmental priority, people-oriented
- 

关心员工健康从员工健康时开始
Caring for employees' health starts when the employees are healthy
- 

安全就是政治、安全就是稳定、安全就是形象、安全就是效益
Security is politics. Security is stability. Safety is image. Safety is benefit
- 

安全源于责任心、源于设计、源于质量、源于防范
Safety comes from responsibility, from design, from quality, from prevention

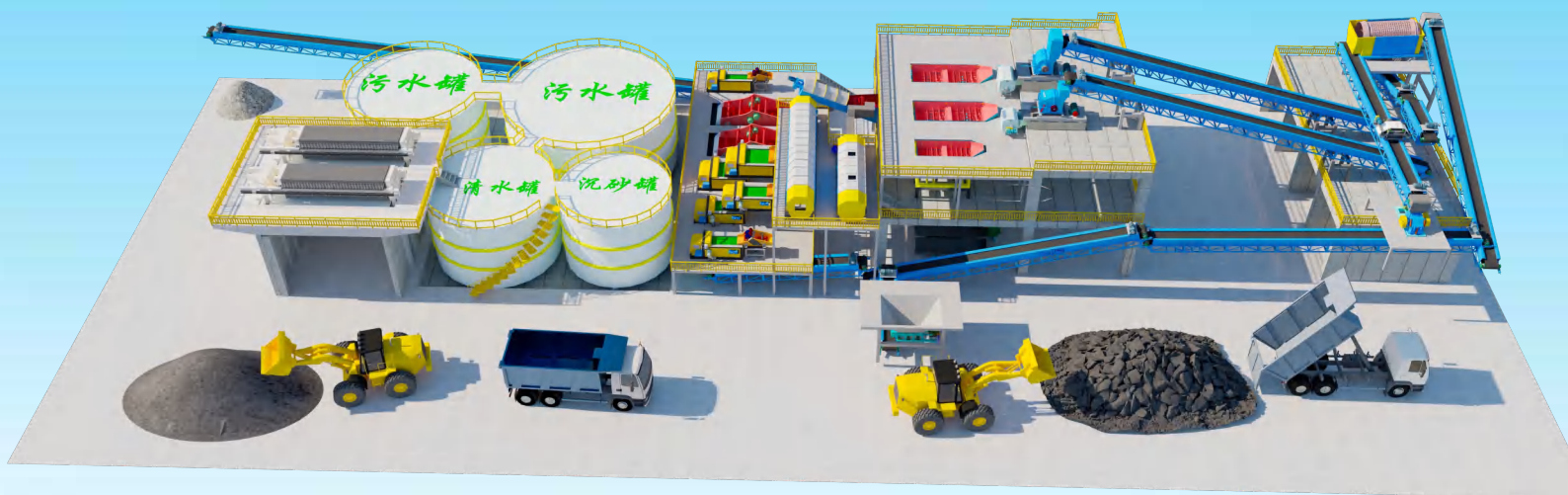
证书Certificates



专利 Patents



炉渣分选系统方案 IBA Sorting System Scheme



分选效果及处理方式 sorting effect and processing method



分选出来的铝类金属，由物资公司回收利用
The sorted aluminum metal is recycled by the material company.



分选出来的铁类金属，由物资公司回收利用
The sorted iron metal is recycled by the material company.



分选出来的铜类金属，由物资公司回收利用
The sorted copper metal is recycled by the material company.



经过处理的砂可作为路基材料、制作环保砖或填埋等
The treated sand can be used as roadbed material, making environmentally friendly bricks, or for landfill.

核心设备

Core Equipment



中控设备 Central Control Equipment



产品用途 Application

中控系统（中央控制系统）是一种集成化的智能管理平台，广泛应用于多个行业，其中包括：

- 炉渣分拣生产线：用于废渣处理和资源回收。
- 中小型矿山：提升矿山生产效率和管理水平。
- 大型矿山设备：包括露天矿和地下矿的开采作业。
- 矿石破碎与分选流程：实现矿石的高效破碎和分选。
- 运输系统智能调度：优化矿山内部的物料运输。
- 环境监测与安全管控：保障矿山生产的安全性和环保性。

The central control system (CNS) is an integrated intelligent management platform widely used in multiple industries, including:

- IBA sorting production line: used for waste residue treatment and resource recovery.
- Small and medium-sized mines: Improve mining production efficiency and management level.
- Large scale mining equipment: including mining operations in open-pit and underground mines.
- Ore crushing and sorting process: Achieve efficient crushing and sorting of ores.
- Intelligent scheduling of transportation system: Optimize material transportation within the mine.
- Environmental monitoring and safety control: ensuring the safety and environmental protection of mining production.

系统核心功能 System Core Functions



1. 全流程监控
 - 实时采集设备运行数据（磁选机、破碎机、跳汰机、脱水筛、滚筒筛、给料机、输送带等）
 - 3D可视化界面，全局掌控生产线动态
2. 智能预警与诊断
 - AI算法预判设备故障，减少停机损失
 - 自动生成维修建议，延长设备寿命
3. 能源优化管理
 - 动态调节设备能耗，综合节能达20%
4. 远程协同控制
 - 支持PC端、移动端多平台操作，随时随地远程管理



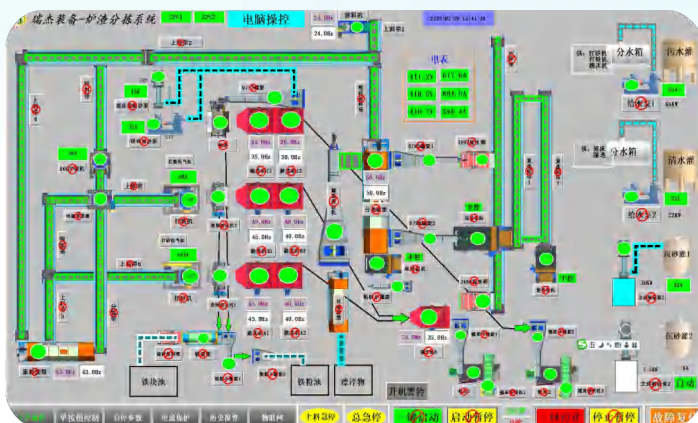
1. Full process monitoring
 - Real time collection of equipment operation data (magnetic separator, crusher, jig machine, dewatering screen, trommel screen, feeder, conveyor belt, etc.)
 - 3D visualization interface, global control of production line dynamics
2. Intelligent warning and diagnosis
 - AI algorithm predicts equipment failures and reduces downtime losses
 - Automatically generate repair suggestions to extend equipment lifespan
3. Energy optimization management
 - Dynamically adjust equipment energy consumption, achieving a comprehensive energy saving of up to 20%
4. Remote collaborative control
 - Supports multi platform operation on both PC and mobile devices, allowing for remote management anytime, anywhere



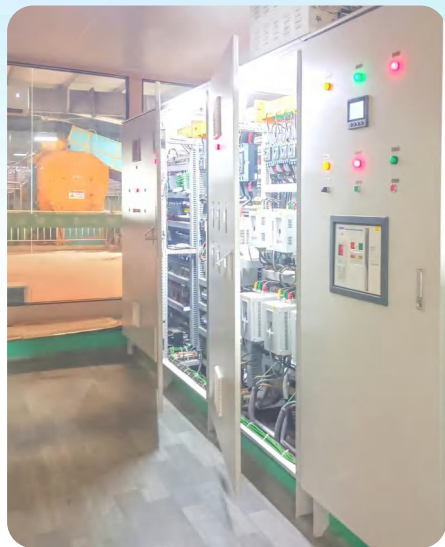
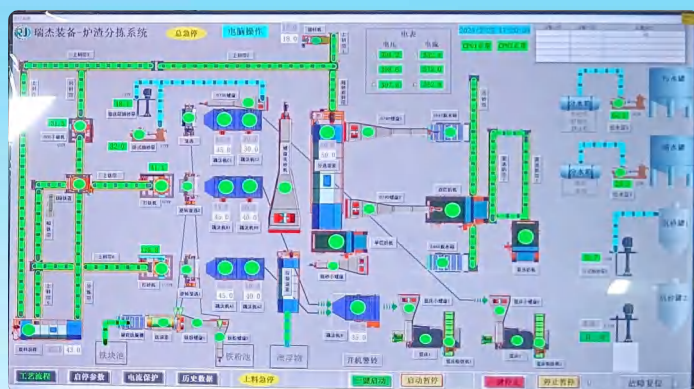
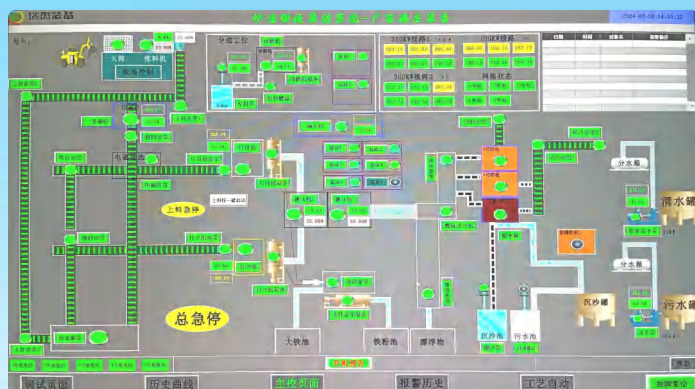
技术优势 Technical Advantage

- ✓ 高兼容性：适配主流品牌炉渣处理设备，无缝对接现有系统
- ✓ 军工级安全：数据加密传输，多层防火墙防护
- ✓ 模块化设计：按需扩展功能，降低升级成本
- ✓ 数据分析驱动：生成多维运营报告，助力科学决策

- ✓ High compatibility: compatible with mainstream brand IBA processing equipment, seamlessly integrated with existing systems
- ✓ Military grade security: data encryption transmission, multi-layer firewall protection
- ✓ Modular design: expand functionality as needed to reduce upgrade costs
- ✓ Data analysis driven: Generate multidimensional operational reports to assist in scientific decision-making



案例展示 Case Presentation



涡电流分选机 Eddy Current Separator

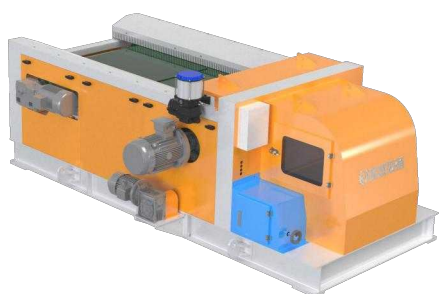
产品用途 Application

涡电流分选机对各类有色金属碎片(如铝、铜、银和其他合金类有色金属)有良好的分选效果，能有效地将非金属物料与有色金属实施自动分离，实现有色金属的高效回收，是目前应用于有色金属回收及分选领域经济高效的方式。可分选大到铝易拉罐，小至炉渣线路板粉碎料等多种粒状的物料。广泛应用于炉渣再生资源回收。



The eddy current separator has good sorting effects on various nonferrous metal fragments such as aluminum, copper, silver, and other alloy nonferrous metals. It can effectively separate non-metallic materials and non-ferrous metals automatically, and realize the efficient recovery of non-ferrous metals. It is currently an economical and efficient way applied in the field of non-ferrous metal recycling and sorting. It can sort various materials ranging from aluminum cans to IBA circuit board crushing materials. It is widely used in the recycling of IBA regeneration resources.

振动给料机作为涡电流分选机的配套设备，它的作用在于振动均匀给料，将物料的水分过滤，有利于涡电流分选机易损件的长久使用。



As the corollary equipment of the eddy current separator, the vibrating feeder is used to vibrate and evenly feed the material, filter the moisture of the material, and benefit the long-term use of the wearing parts of the eddy current separator.

工作原理 Principle



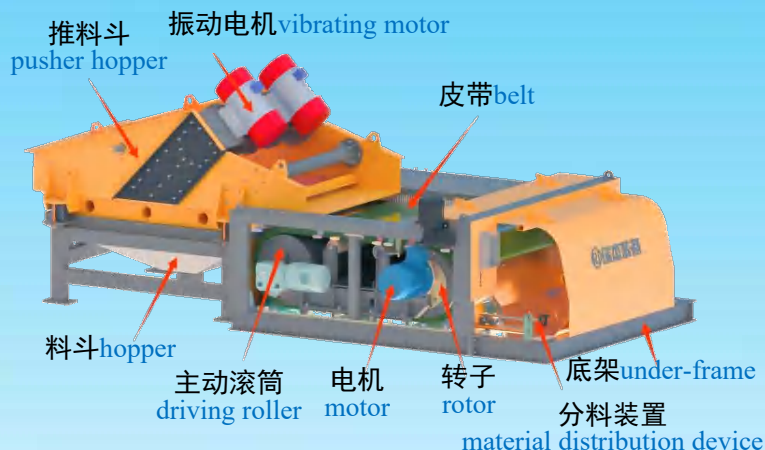
物料由输送带送入振动给料机，振动给料机通过高频振动将物料的水分过滤，并产生一个向前的推力，将物料均匀推入涡电流分选机。涡电流分选机工作时，随着磁滚筒的快速旋转，在分选滚筒表面产生高频交变的强磁场，当有色金属经过磁场时，会在其内部产生涡电流，此涡电流本身会产生与原磁场方向相反的磁场，有色金属（如铜、铝等）则会因磁场的排斥力作用而沿其输送方向向前跳跃，实现与其它非金属类物质的分离，达到分选的目的。

The material is sent to the vibrating feeder through a conveyor belt. The vibrating feeder filters the moisture from the material through high-frequency vibration, and generates a forward thrust to push the material evenly into the eddy current separator. When the eddy current separator operates, with the rapid rotation of the magnetic drum, a high frequency alternating strong magnetic field is generated on the surface of the sorting drum, when the non-ferrous metal passes through the magnetic field, an eddy current will be generated inside it, and this eddy current itself will generate a magnetic field opposite to the direction of the original magnetic field, non-ferrous metals (such as copper, aluminum, etc.) will jump forward along their transport direction due to the repulsive force of the magnetic field, achieving separation from other non-metallic substances and achieving the purpose of sorting.



产品特点 Features

- 可根据物料特性调节分料板，分选精度高。
- The material distribution plate can be adjusted according to the material characteristics, and the sorting accuracy is high.
- 皮带裙边设计加上防尘条双重防护。
- Belt skirt design plus dust-proof strip for double protection.
- 采用国内外知名配件，运行平稳，故障率低。
- Using well-known accessories at home and abroad, stable operation and low failure rate.
- 结构紧凑，安装方便，便于集成到现有系统中。
- Compact structure, easy to install and easy integration into existing systems.



使用说明Instructions

分料装置可根据物料特性六向调节；更换皮带方便快捷。

The material distribution device can be adjusted in six directions according to the material characteristics. Replacing the belt is convenient and fast.

产品结构Structure

技术参数Technical Parameter

型号 Model	皮带有效宽度 Effective Belt Width (mm)	皮带表面磁场 Belt surface (gs)	最佳处理量 Processing Capacity(t/h)	给料机规格 Feeder Specification (mm)	设备外形尺寸 Dimensions (L*W*H) (mm)
RJ40AL-R	400	3600~4300	2~8mm, 1.5t/h 8~30mm, 3t/h 30~80mm, 4t/h	1542*552*1339	2516*1430*1120
RJ065AL-R	650	3600~4300	2~8mm, 2t/h 8~30mm, 4t/h 30~80mm, 6.5t/h	1857*897*1671	3300*1779*1322
RJ080AL-R	800	3600~4300	2~8mm, 2.5t/h 8~30mm, 5t/h 30~80mm, 8t/h	2250*1090*1820	3310*2030*1335
RJ100AL-R	1000	3600~4300	2~8mm, 3.5t/h 8~30mm, 6.8t/h 30~80mm, 10t/h	2632*1356*1903	3300*2205*1330
RJ100AL-R2	1000	3600~4300	2~8mm, 3.5t/h 8~30mm, 6.8t/h 30~80mm, 10t/h	2632*1356*3263	upper : 3100*2187*1322 Lower : 3100*2187*1340
RJ150AL-R	1500	3600~4300	2~8mm, 6t/h 8~30mm, 12t/h 30~80mm, 15t/h	2632*1816*1929	3330*2770*1300
RJ150AL-R2	1500	3600~4300	2~8mm, 6t/h 8~30mm, 12t/h 30~80mm, 15t/h	2632*1816*3289	upper : 3100*2646*1322 Lower : 3100*2646*1340
RJ200AL-R	2000	3600~4300	2~8mm, 7.5t/h 8~30mm, 15t/h 30~80mm, 18t/h	3491*2417*2198	3300*3283*1322
RJ200AL-R2	2000	3600~4300	2~8mm, 7.5t/h 8~30mm, 15t/h 30~80mm, 18t/h	3491*2417*3558	upper : 3100*3283*1322 Lower : 3100*3283*1340

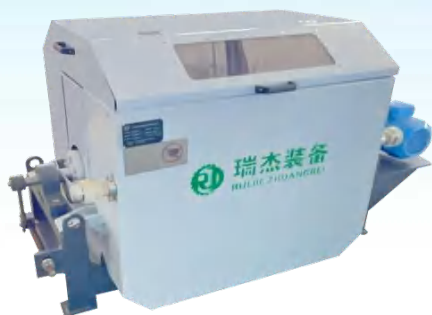
湿式磁选机 Wet Drum Magnetic Separator

产品用途 Application



磁选机根据选分介质分为干式和湿式，湿式磁选机适用于湿选法。湿式磁选机应用广泛，常用于筛选3mm以下的磁铁矿、磁黄铁矿、焙烧矿、钛铁矿等物料，也用于煤、非金属矿、建材等物料的除铁作业。

According to the sorting medium, magnetic separators are divided into dry-type and wet-type, and the wet drum magnetic separator is suitable for wet-type. Wet drum magnetic separator is widely used. It is often used to screen magnetite, pyrrhotite, roasted ore, ilmenite and other materials with the size no more than 3mm, and it is also used for iron removal operations of coal, non-metallic minerals, building materials, IBA and other materials.



工作原理 Principle

物料与水混合进入磁滚筒工作区域时，磁性颗粒吸附在强磁滚筒表面，形成磁链，由连续运转的滚筒运输至精料出口，在冲矿水管高压喷射下进行脱料，实现磁性颗粒的分离。

When the material is mixed with water and enters the working area of the magnetic drum, the magnetic particles are adsorbed on the surface of the strong magnetic drum, forming a magnetic chain, which is transported to the fine material outlet by a continuously operating drum. Magnetic particles are removed by the high-pressure injection of the ore flushing pipe to realize the separation of magnetic particles.



产品特点Features



- 退磁率低，可根据物料条件对磁力区进行上下调整。
- The demagnetization rate is low, and the magnetic region can be adjusted up and down according to the material conditions.
- 防锈耐用、结构简单、工作可靠，分选纯度高。
- Anti-rust and durable, simple structure, reliable operation, high sorting purity.

使用说明Instructions

产品结构Structure

可根据物料特性调整磁夹角。

The magnetic angle can be adjusted according to the material characteristics.

技术参数Technical Parameter

型号 Model	滚筒长度 Drum Length (mm)	转子表面磁场 Rotor Surface Magnetic Field (gs)	磁块材料 Magnetic Block Material	处理量 Processing Capacity (t/h)	外形尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
CTS-5090L	900	最高点4200 Highest Point 4200	钕铁硼 NdFeB	15~20	1790*930*1050	670
CTS-50120L	1200	最高点4200 Highest Point 4200	钕铁硼 NdFeB	20~25	2080*920*890	780
CTS-50120L	1200	最高点6000 Highest Point 6000	钕铁硼 NdFeB	20~25	2068*1137*963	788
CTS-50150L	1500	最高点4200 Highest Point 4200	钕铁硼 NdFeB	25~30	2460*915*1010	990
CTS-60150L	1500	最高点4200 Highest Point 4200	钕铁硼 NdFeB	30~35	2530*1039*1152	1493
CTS-60150L	1500	最高点6000 Highest Point 6000	钕铁硼 NdFeB	30~35	2530*1039*1152	1493

上吸式磁选机 Up-suction Magnetic Separator

产品用途 Application



磁选机根据选分介质分为干式和湿式，上吸式磁选机适用于湿选法。上吸式磁选机能有效从运动中的物料将铁料自动分离，主要应用于废钢、钢渣处理、炉渣分选等渣料选铁，此设备在极其恶劣的环境中仍能可靠运行。

According to the sorting medium, magnetic separators are divided into dry-type and wet-type, and the up-suction magnetic separators are suitable for wet-type. The up-suction magnetic separator can effectively separate the iron from the moving materials automatically. It is mainly used in the separation of iron from various IBA material, such as scrap steel, steel IBA treatment, and IBA sorting. This equipment can still operate reliably in extremely harsh environments.

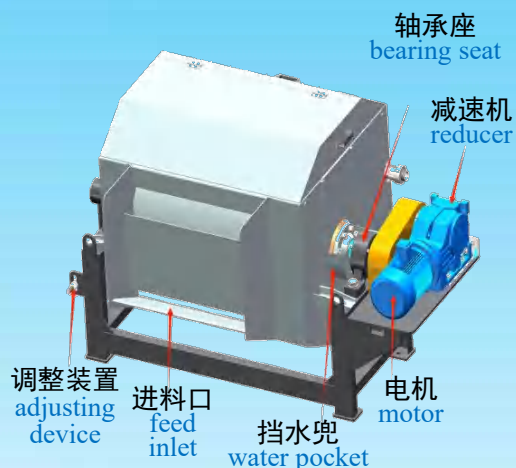


工作原理 Principle

当物料进入磁滚筒工作区域时，铁料会吸附在磁滚筒表面，随着滚筒向上转动过程中会旋转到非磁选区域，铁料由于重力与惯性作用，自行脱落至排料口，实现铁料的分离。

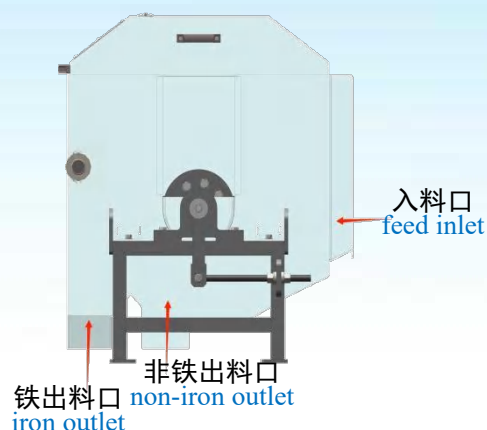
When the material enters the working area of the magnetic drum, the iron minerals will be adsorbed on the surface of the magnetic drum. As the drum rotates upward, it will rotate to the non-magnetic separation area, due to the action of gravity and inertia, the iron material will automatically fall off to the discharge port to realize the separation of magnetic minerals.





产品特点Features

- 退磁率低，可根据物料条件对磁力区进行上下调整。
- The demagnetization rate is low, and the magnetic region can be adjusted up and down according to the material conditions.
- 防锈耐用、结构简单、工作可靠，分选纯度高。
- Anti-rust and durable, simple structure, reliable operation, high sorting purity.



使用说明Instructions

上吸式磁选机可以架设于混凝土地面、钢结构地面，由总控制系统控制与启动。磁力区上下移位由调整装置调节。

The up-suction magnetic separator can be erected on concrete ground or steel structure ground, and is controlled and started by the general control system. The up and down displacements of the magnetic region are regulated by the adjustment device.

产品结构Structure

技术参数Technical Parameter

型号 Model	辊筒直径 Roller Diameter (mm)	辊筒转速 Roller Rotation Speed (r/min)	处理能力 Processing Capacity (t/h)	功率 Power (kw)	外形尺寸 Weight (L*W*H) (mm)	重量 Weight (kg)
SX6090R	600	22	22-27	3.0	2010*1270*1270	1090
SX60100R	600	22	25-30	3.0	2060*1220*1260	1130
SX60120R	600	22	30-35	3.0	2350*1336*1301	1210
SX60150R	600	22	36-42	4.0	2523*1267*1265	1428

摇床除铁器 Permanent Magnetic Separator

产品用途 Application



摇床除铁器的主要作用是筛选摇床上细小的铁料，能有效地将铁料与其他物料实施自动分离，达到纯度较高的铁料回收。

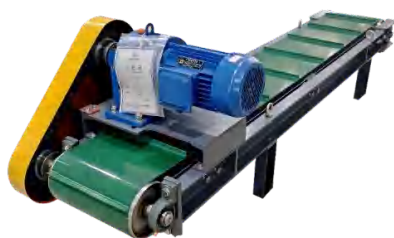
The main function of the permanent magnetic separator is to screen the fine iron on the table concentrator, which can effectively automatically separate the iron materials from other materials and achieve the recovery of iron with higher purity.



工作原理 Principle

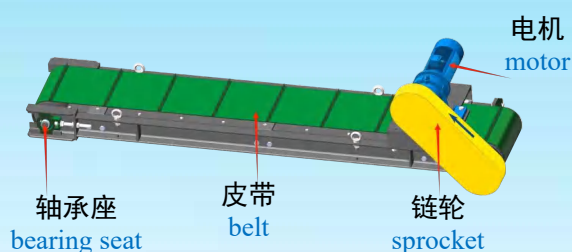
摇床除铁器工作时，摇床上的铁料到达磁系底部时会吸附在皮带表面，随着皮带转动过程中会旋转到非磁场区域，铁料由于重力与惯性作用，会自行脱落至接料装置，达到连续自动除铁的目的。

When the permanent magnetic separator is working, the iron material on the table concentrator will be adsorbed on the surface of the belt when it reaches the bottom of the magnetic system group. As the belt rotates, it will rotate to a non-magnetic field region. Due to the action of gravity and inertia, the iron material will automatically fall off to the receiving device, achieving the goal of continuous and automatic iron removal.



产品特点Features

- 结构简单、防锈耐用、工作可靠。
- Simple structure, anti-rust and durable, reliable operation.
- 磁力区可根据物料条件进行上下调整。
- The magnetic region can be adjusted up and down according to the material conditions.
- 退磁率低，分选纯度高。
- Low demagnetization rate and high sorting purity.



产品结构Structure

使用说明Instructions

本设备是由脚板与摇床两边的钢架用螺栓固定，可以通过钢架高度调整好皮带与摇床之间的高度。

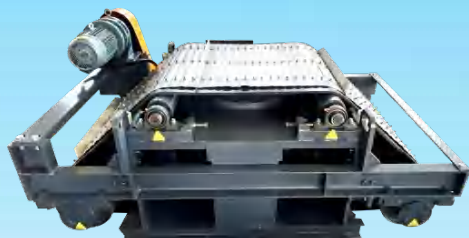
The equipment is fixed by bolts on the foot plate and the steel frame on both sides of the shaking table, and the height between the belt and the table concentrator can be adjusted by the height of the steel frame.

技术参数Technical Parameter

型号 Model	皮带有效宽度 Effective Belt Width(mm)	摇床宽度 Shaking Table Width (mm)	辊筒转速 Roller Rotation Speed(r/min)	处理能力 Processing Capacity (t/h)	电机功率 Motor Power (kw)	外形尺寸 Dimensions (L*W*H)(mm)	重量 Weight (kg)
RCYD3F	300	≤1800	85	12-18	1.5	2200*580*550	400

电磁挂选除铁器 Electromagnetic Over-band Separator

产品用途 Application



电磁挂选除铁器能有效将输送带中的铁料与其他物料实施自动分离，达到除铁的效果，避免铁料对后续磁选工序中涡电流分选机造成损伤，延长涡电流分选机的使用寿命。此设备广泛用于矿山、电厂、建材等行业。

The electromagnetic over-band separator can effectively separate the iron material in the conveyor belt from other materials automatically, achieve the effect of iron removal, avoid the damage caused by iron material to the eddy current separator in subsequent magnetic separation processes, and prolong the service life of the eddy current separator. The equipment is widely used in mines, power plants, building materials and other industries.



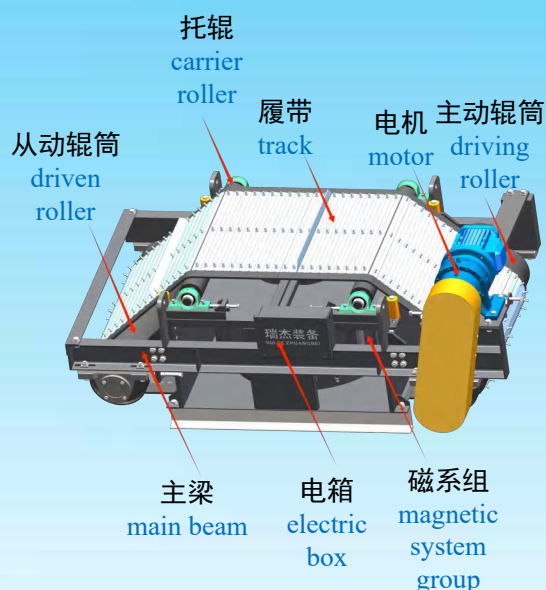
工作原理 Principle

电磁挂选除铁器工作时，输送带上的铁料到达电磁组底部时会吸附在履带表面，随着履带转动过程中会旋转到非磁场区域，自行脱落至料斗，达到连续自动除铁的目的。

During the operation of the electromagnetic over-band separator, the iron material on the conveyor belt is adsorbed on the track surface when it reaches the bottom of the electromagnetic group. As the track rotates, it rotates into a non-magnetic field region and automatically falls off into the hopper, achieving the goal of continuous and automatic iron removal.



产品特点Features



- 磁力大小通过电柜调节。
- The magnetic force is adjusted through the electric cabinet.
- 电磁组具有不会退磁，调节灵敏，分选纯度高等优点。
- The electromagnetic group has the advantages of non-demagnetization, sensitive adjustment, and high sorting purity.
- 防锈耐用、结构简单、工作可靠、效率高。
- Anti-rust and durable, simple structure, reliable operation and high efficiency.

产品结构Structure

使用说明Instructions

电磁挂选除铁器是用钢丝绳悬挂在流水线上，由配备的电柜控制与启动。履带与输送带之间的高度通过挂耳上的钢丝绳来调整。

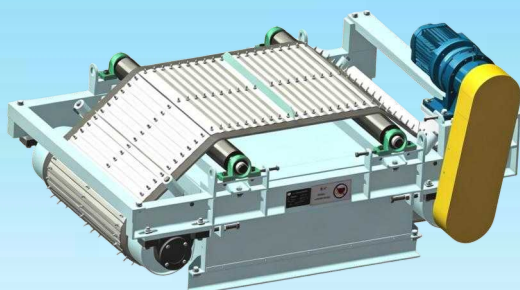
The electromagnetic over-band separator is handed on the assembly line with a steel wire rope and is controlled and started by an equipped electric cabinet. The height between the track and the conveyor belt is adjusted by a steel wire rope on the hangers.

技术参数Technical Parameter

型号 Model	履带有效宽度 Effective Track Width(mm)	输送带宽度 Conveyor Belt Width (mm)	处理能力 Processing Capacity(t/h)	电机功率 Motor Power (kw)	外形尺寸 Dimensions (L*W*H)(mm)	重量 Weight (kg)
RCDD-08	704	≤800	5	3.0	2300*1350*930	1920

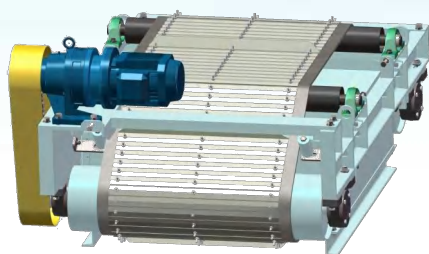
永磁挂选除铁器 Permanent Overband Magnetic Separator

产品用途Application



永磁挂选除铁器能有效将输送带中的铁料与其他物料实施自动分离，达到除铁效果，防止铁杂质损坏后续磁选工序设备，延长设备使用寿命。广泛适用于矿山、电厂、建材、煤炭、垃圾回收等行业。

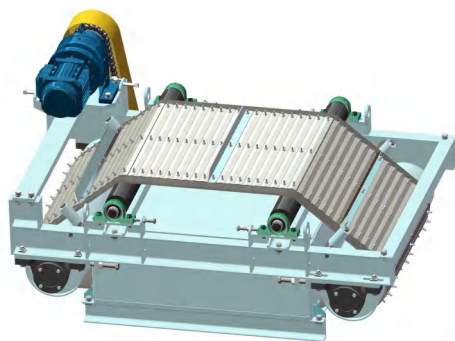
The permanent overband magnetic separator can automatically separate iron impurities from materials on the conveyor belt for efficient iron removal. It protects downstream magnetic separation equipment from damage and extends service life. It is widely used in mining, power plants, building materials, coal industry and waste recycling.



工作原理Principle

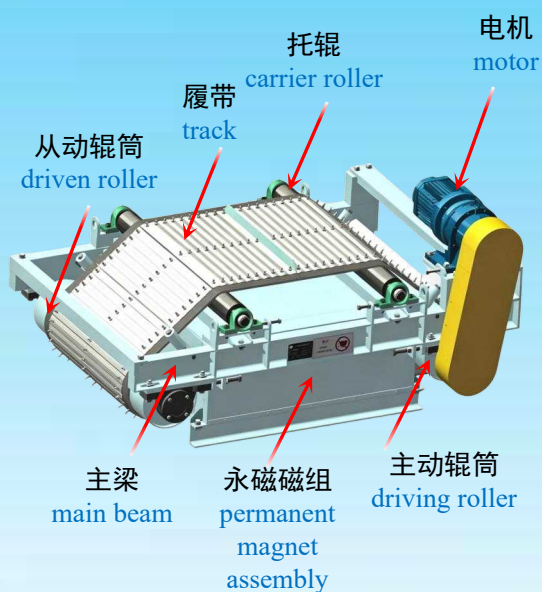
设备工作时，输送带上含铁物料运行至钕铁硼永磁组磁场区域，铁料被吸附在履带表面；随履带运转转移至无磁区域后，铁料自动脱落至集铁料斗，实现连续自动除铁。

During operation, when iron-containing materials on the conveyor pass through the magnetic field of NdFeB permanent magnet assembly, iron impurities are adsorbed on the track surface. As the track rotates and transfers the iron to the non-magnetic area, the iron falls automatically into the collecting hopper, realizing continuous automatic iron removal.



产品特点Features

- 无励磁耗电，超低功耗，节能省电，运行成本低；
- No excitation power consumption, ultra-low power loss, energy saving and low operating cost;
- 配置高梯度强磁系，磁场稳定、磁力持久；
- Adopt high-gradient strong magnetic system with stable and long-lasting magnetic force;



产品结构 Structure

- 自动吸铁、自动卸铁，可连续不间断作业；
- Automatic iron adsorption and unloading, supporting non-stop continuous operation;
- 运行低噪音，维护简便，适配矿山、建材、煤炭等恶劣工况及缺电地区；
- Low noise, easy maintenance, suitable for harsh working conditions such as mining, building materials and coal, as well as power-shortage areas;
- 防腐防锈、结构简洁、运行可靠、除铁效率高。
- Rust and corrosion resistant, simple structure, stable operation and high iron removal efficiency.

使用说明 Instructions

设备采用钢丝绳悬挂安装于流水线上，接通电机电源即可启动运行。履带与输送带之间的间距，可通过挂耳钢丝绳灵活调节。

The equipment is suspended above the production line with steel wire ropes. It can be put into operation by simply powering on the motor. The height between the track and the conveyor belt can be flexibly adjusted by the steel wire ropes on the hanging lugs.

技术参数 Technical Parameter

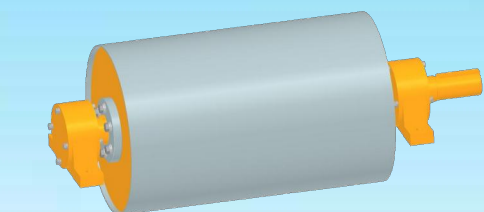
型号 Model	履带有效宽度 Effective Track Width(mm)	输送带宽度 Conveyor Belt Width (mm)	处理能力 Processing Capacity(t/h)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H)(mm)	重量 Weight (kg)
RCYD-08F	704	≤800	5	3.0	2077*1339*968	1373

永磁滚筒 Permanent Magnetic Drum

产品用途Application

永磁滚筒是一种利用永磁体产生磁场，在物料输送过程中自动分离铁磁性杂质的设备。主要安装在皮带输送机的头部位置，可直接代替传动滚筒，在正常输送物料的同时，同步完成除铁磁选作业。

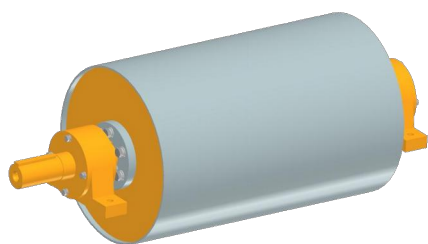
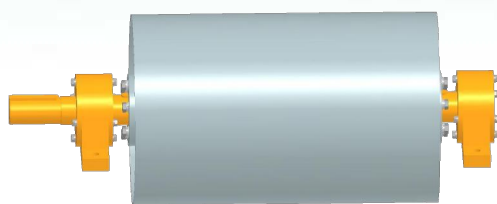
Permanent magnetic drum generates magnetic field through permanent magnets, which can automatically separate ferromagnetic impurities during material conveying. It is mainly installed at the head of the belt conveyor and can directly replace the drive drum, completing iron removal and magnetic separation simultaneously while transporting materials.



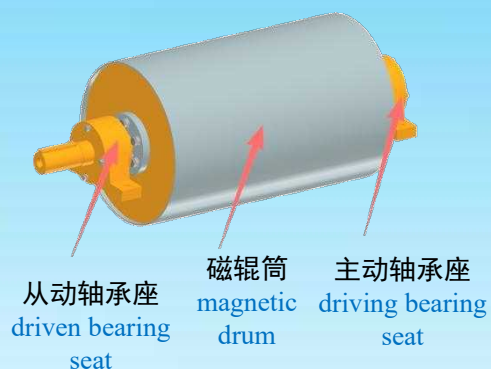
工作原理Principle

含铁磁性杂质的物料随输送带运行至永磁滚筒磁场区域时，铁质杂物被强磁场吸附于滚筒表面；矿石、砂石、塑料等非磁性物料不受磁力作用，沿抛物线轨迹自然下落卸料。被吸附的铁杂质随滚筒旋转脱离有效磁场范围后，自行落入另一侧集料斗，从而实现连续自动化除铁分选。

When materials containing ferromagnetic impurities are conveyed to the magnetic field area of the permanent magnetic drum, iron contaminants are firmly adsorbed onto the drum surface by the strong magnetic field. Non-magnetic materials such as ore, gravel and plastic are unaffected by magnetism and fall naturally along a parabolic trajectory. As the adsorbed iron impurities rotate with the drum away from the effective magnetic field, they drop automatically into the collecting hopper on the other side, realizing continuous and automatic iron removal and separation.



产品特点Features



产品结构Structure

使用说明Instructions

设备需水平牢固安装，确保两端轴承座中心处于同一水平基准。安装及吊运过程严禁撞击滚筒本体，避免内部磁体受损而发生退磁。

The equipment shall be installed horizontally and firmly. Ensure the centers of the two end bearing housings are on the same horizontal level. No impact shall be allowed on the drum body during installation and lifting, so as to prevent damage to the internal magnets and resultant demagnetization.

技术参数Technical Parameter

型号 Model	输送带宽度 Conveyor Belt Width (mm)	外形尺寸 Dimensions(L*W*H) (mm)	重量 Weight (kg)
RCT30*65	370	1131*343*300	220
RCT40*80	550	1281*400*400	390
RCT50*80	550	1281*500*500	470
RCT50*100	750	1486*500*500	560

破碎机 Hammer Crusher

产品用途 Application

锤式破碎机是以冲击形式对较大的物料进行击打破碎至所需大小的一种设备，用于破碎各种中硬且有腐蚀性的物料。可用于炉渣处理厂、砂石厂制砂。

The hammer crusher is a device for crushing large materials to the required size in the form of impact, and is used to crush all kinds of hard and corrosive materials. It can be used for IBA treatment plants and sand making at sand & gravel plants;



工作原理 Principle

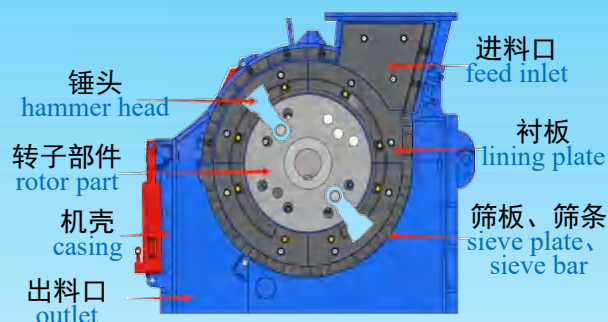
将物料输送至破碎机进料口，物料经高速转动的锤头打击、剪切、冲击、研磨作用面粉碎。在转子下部，设有筛板或筛条，粉碎物料中小于筛孔尺寸的粒级通过筛孔排出，大于筛孔的粗粒级阻留在筛板、筛条上继续受到锤子的作用破碎，直到能通过筛孔排出机外。

The material is transported to the feed inlet of the hammer crusher, and it is crushed by high-speed rotating hammerhead through striking, shearing, impacting, and grinding. A sieve plate or sieve bar is placed under the rotor. Particles smaller than the size of the sieve hole in the crushed material are discharged through the sieve hole, and the coarse particles larger than the sieve hole are retained on the sieve plate or sieve bar and continue to be crushed by the action of hammer until they can be discharged out of the machine through the sieve hole.



产品特点Features

- 结构简单合理、维修方便。
●Simple and reasonable structure, and convenient maintenance.
- 破碎率高、能耗低。
●High crushing rate and low energy consumption.
- 具有细碎、粗磨功能。
●With fine crushing and rough grinding functions.
- 受物料水分含量影响小，防漏水处理。
●Less affected by material moisture content, anti-leakage treatment.
- 产品粒形优异，呈立方体，针片状含量极低。
●The product has excellent particle shape and is cubic in shape; Needle flake content is extremely low.
- 材料更耐磨，耐腐蚀。
●The material is more wear-resistant and corrosion-resistant.



产品结构Structure

使用说明Instructions

经破碎机粉碎后的物料粒度大小可通过调整筛孔大小来获取，锤头可根据磨损程度调整锤头位置，以此提高锤头利用率，破碎腔内耐磨件可更换。

The particle size of the material crushed by the crusher can be obtained by adjusting the size of the sieve holes. The position of the hammerhead can be adjusted according to the degree of wear, so as to improve the utilization rate of the hammerhead, and the wear-resistant parts in the crushing chamber can be replaced.

技术参数Technical Parameter

型号 Model	入料口 Feed Inlet (mm)	功率 Power (kw)	转速 Rotation Speed (r/min)	处理量 Processing Capacity(t/h)	外型尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
GRDTT-400A	230*230	30-60	960-1200	1-2	1390*1285*1160	1480
GRDTT-500A	230*230	30-60	960-1200	2-3	1370*1400*1110	1634
GRDTT-650	400*210	40-80	960-1200	3-5	1365*1500*1090	1704
GRDS-650B	580*395	35-75	960-1200	20-40	1415*1510*1145	2406
GRDS-800B	760*355	75-90	960-1200	30-50	1455*1760*1185	2984
GRDS-800ZB	760*366	75-110	960-1200	50-70	1580*1780*1320	3875
GRDS-1000B	916*410	80-110	960-1200	50-80	1520*1960*1260	3512
GRDS-1200B	1116*355	80-120	960-1200	80-120	1575*2165*1290	4752
GRDT-650ZB	560*396	35-75	960-1200	2-4	1490*1580*1190	2598
GRDT-800ZB	760*366	75-110	960-1200	3-5	1500*1780*1320	3780
GRDT-1000ZB	910*366	80-120	960-1200	4-6	1500*1930*1320	4206

粉土机 Soil Crusher

产品用途 Application

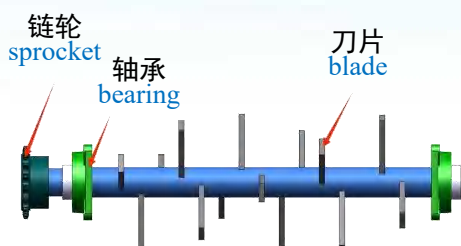


粉土机是一款多功能土壤破碎回收设备，广泛适用于园林、砖厂、化工厂、石灰厂等行业。

设备出料细腻、无需过筛，可轻松粉碎煤渣、煤泥、污泥、黏土、有机肥、草炭土、石膏板等各类干式中下硬度物料及粉状结晶块。

The soil crusher is a multifunctional soil crushing and recycling machine, widely used in gardens, brick factories, chemical plants and lime plants.

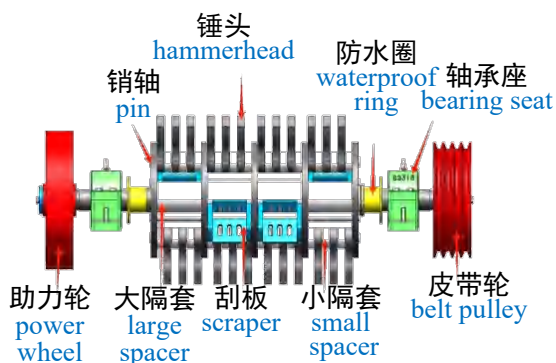
It features fine discharge without screening requirement, and can easily crush various dry materials of medium and low hardness as well as powdery crystal blocks, such as cinder, coal slime, sludge, clay, organic fertilizer, peat soil and gypsum board.



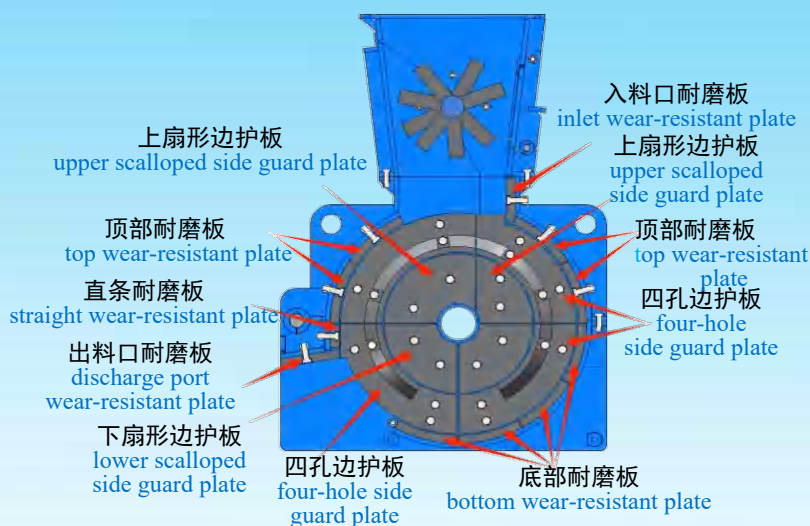
工作原理 Principle

粉土机的工作原理主要是通过电机等动力源，带动粉碎转子进行旋转，从而实现对材料的粉碎。在粉碎过程中，材料经过粉碎室的粉碎刀片，受到高速旋转的刀片冲击和剪切作用，逐渐被粉碎成细小的颗粒。

The working principle of a soil crusher is mainly driven by a power source such as a motor to rotate the crushing rotor, thereby achieving material pulverization. During the crushing process, the material passes through the crushing blades in the crushing chamber and is gradually crushed into small particles by high-speed rotating blade impact and shear action.



产品特点Features



产品结构Structure

- 高效率，低能耗。
- High efficiency, low energy consumption.
- 粉土机具有高效率的工作性能，能够在短时间内完成大量土壤的粉碎工作，同时保持较低的能耗，节约能源成本。
- The soil crusher has high efficiency and can complete a large amount of soil crushing work in a short period of time, while maintaining low energy consumption and saving energy costs.
- 使用寿命长、维护简单。
- Long service life and simple maintenance.
- 粉土机内部装有高锰钢内衬，整机使用寿命更长。采用合金钢锤头，更耐磨。便捷式开箱，更换配件更方便。
- The interior of the soil crusher is lined with high manganese steel, which prolongs the overall service life of the machine. Adopting alloy steel hammer head, more wear-resistant. Convenient unboxing, making it easier to replace accessories.

使用说明Instructions

本机应安装在混凝土基础上，设计基础时应考虑排料位置。

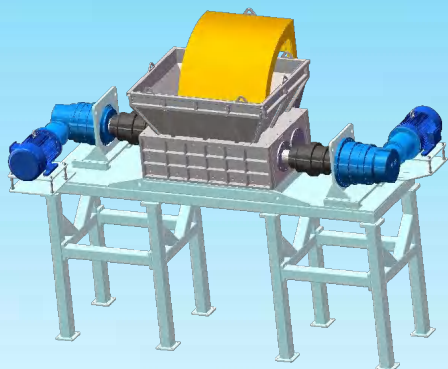
This machine should be installed on a concrete foundation, and the discharge position should be considered when designing the foundation.

技术参数Technical Parameter

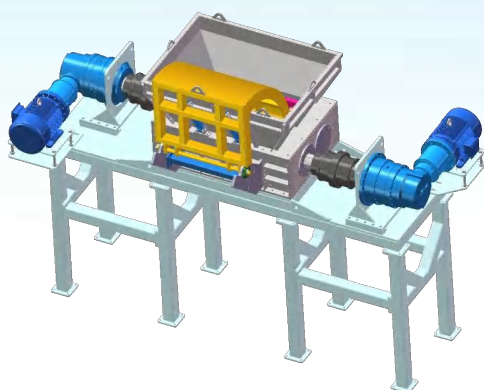
型号 Model	主体宽度 Body Width (mm)	入料口 Feed Inlet (mm)	处理量 Processing Capacity(t/h)	功率 Power (kw)	外型尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
FT-1000	1000	488*968	15-20	55	1870*1090*1560	2618

撕碎机Shredder

产品用途Application



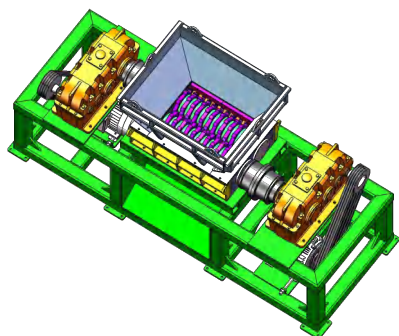
撕碎机可对各类塑料、橡胶、轮胎、纤维、纸张、木材、铁桶、废旧电器、废旧电缆、工业边角料、生活垃圾等实心或空心物料进行撕碎处理。将不合格产品或废旧回收物资撕碎成较小碎片，便于循环再利用；减小未加工原材料的体积，方便与其他物料混合使用；



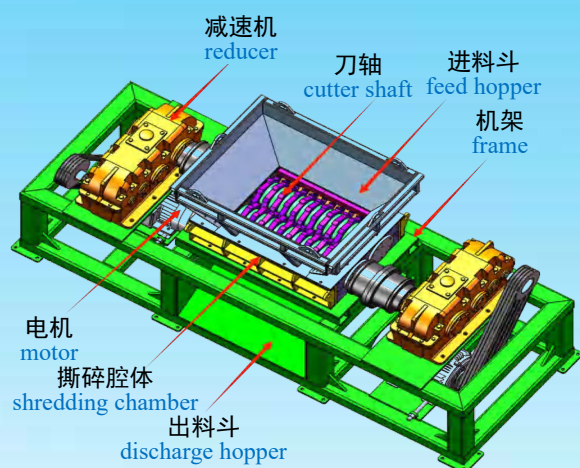
The shredder can shred various solid or hollow materials such as plastics, rubbers, tires, fibers, paper, wood, iron drums, waste electrical appliances, waste cables, industrial scraps, and household garbage. It can shred unqualified products or waste recycling materials into smaller fragments for recycling and reduce the volume of unprocessed raw materials for easy mixing with other materials;

工作原理Principle

物料被输送至撕碎机进料口后进入撕碎箱体，箱体内的两根撕碎刀轴做相对旋转，形成 V 型撕碎腔室；箱室内的物料在旋转刀片的撕扯、挤压、剪切作用下被撕碎成小块，最终从箱体底部排出。



After being conveyed to the feed inlet of the shredder, the material enters the shredding chamber. Inside the chamber, two shredding shafts rotate relative to each other, forming a V-shaped shredding chamber. The material within the chamber is shredded into small pieces under the tearing, squeezing, and shearing actions of the rotating blades, and is ultimately discharged from the bottom of the chamber.



产品结构 Structure

使用说明 Instructions

根据撕碎后物料颗粒大小更换不同厚度的撕碎刀片和刀片的刀爪数量。

Replace the thickness of the shredding blades and the number of blade claws according to the size of the shredded material particles.

技术参数 Technical Parameter

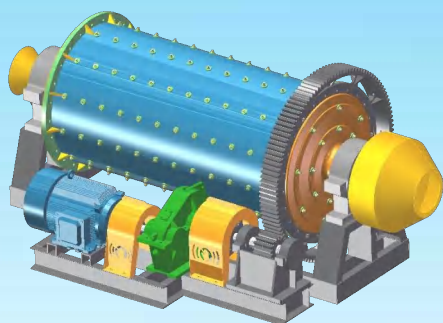
型号 Model	动刀外径*厚度 Blade OD * Thickness (mm)	功率 Power (kw)	刀轴转速 Cutter shaft Speed (r/min)	处理量 Processing Capacity(kg/h)	外型尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
800	350*39	30*2	10	900	4030*1500*2255	6900
1000	450*49	37*2	10	1000	4960*2500*4070	9835
1300	500*49	45*2	10	1200	5280*2530*4120	11190
1600	760*75	55*2	10	1500	6100*2820*4205	21570

产品特点 Features

- 刀组错位排布，可分散撕碎物料，阻力小、不易卡机。
- The knife group is misaligned, dispersing and shredding the material, with low resistance and less likelihood of jamming.
- 刀具采用特种合金钢制造，坚固耐用。
- The cutting tool is made of special alloy steel, which is sturdy and durable.
- 机身框架板材厚实，可承受高扭矩，结构稳固。
- The frame of the machine body is made of thick plates, capable of withstanding high torque and featuring a stable structure.
- 配备电控箱，具备启动、停止、自动过载检测及反转保护功能。
- Equipped with an electric control box, it features functions such as start, stop, automatic overload detection, and reverse rotation protection.
- 设备调节便捷，维护成本低，经济耐用。
- The equipment is easy to adjust, has low maintenance costs, and is economical and durable.

球磨机 Ball Mill

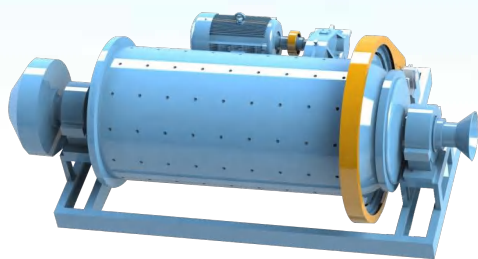
产品用途 Application



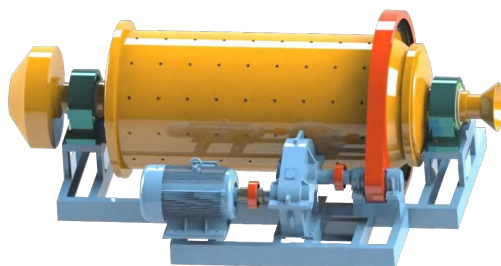
本系列球磨机为湿式格子型球磨机，适用于选矿、化工、水泥、建材等工业部门，对各种硬度的矿石及物料进行湿式粉磨作业。

This series are wet grid-type ball mills, suitable for mineral processing, chemical, cement, building materials and other industrial sectors, for wet grinding of ores and materials of various hardness.

工作原理 Principle

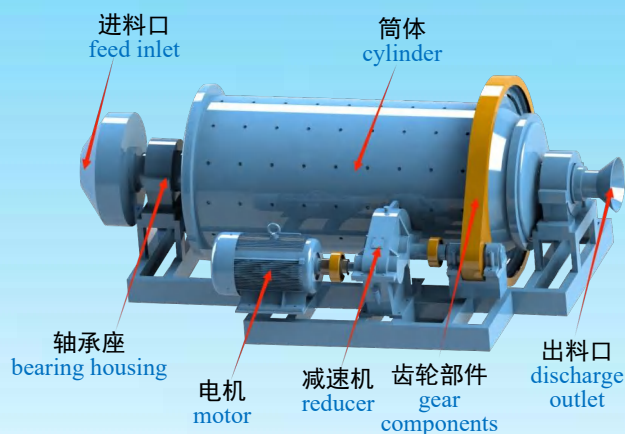


筒体内装有研磨体（钢球）。筒体旋转时，钢球在离心力作用下随筒体内壁一同旋转，被提升至一定高度后，依靠自身重力自由下落，对筒体内的物料进行冲击破碎。同时，在筒体旋转过程中，物料与钢球、筒体内壁之间产生研磨作用，从而实现物料的粉磨。



The ball mill cylinder is equipped with grinding media (steel balls). When the cylinder rotates, the steel balls revolve along with the inner wall of the cylinder under the influence of centrifugal force. After being lifted to a certain height, they fall freely due to their own gravity, impacting and crushing the material inside the cylinder. Meanwhile, during the rotation of the cylinder, grinding action occurs between the material, steel balls, and the inner wall of the cylinder, thereby achieving the grinding of the material.

产品特点Features



产品结构Structure

- 适用范围广。
- Wide application range.
- 易损件少，且更换简单。
- Few wearing parts and easy replacement.
- 操作简便。
- Simple operation.
- 结构简单。
- Simple structure.
- 工作可靠。
- Reliable performance.
- 维护方便。
- Easy maintenance.

使用说明Instructions

本机应安装在混凝土基础上，开机前检查设备及紧固件，确保正常。先空载启动，运转平稳后再均匀加料。运行中注意异响与振动，禁止超负荷。停机前先停止加料，物料磨完再停机。定期检查易损件，及时维护。

This machine shall be installed on a concrete foundation. Inspect the machine and fasteners before startup to ensure normal operation. Start the machine without load first, and feed materials evenly after it runs steadily. During operation, pay attention to abnormal noise and vibration; overloading is prohibited. Stop feeding before shutdown, and turn off the machine only after all materials are ground. Regularly inspect wearing parts and carry out timely maintenance.

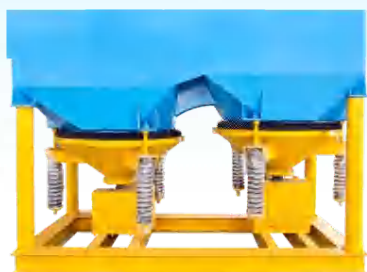
技术参数 Technical Parameter

型号 Model	球(棒)装入量 Ball (Rod) Charge(t)	最大进料粒度 Maximum Feed Size(mm)	出料粒度 Discharge Size(mm)	处理量 Processing Capacity(t/h)	电机功率 Power (kw)	外型尺寸 Dimensions (L*W*H) (mm)	重量 Weight (t)
MQG-0612	0.3	10	0.074-0.4	0.1-0.18	5.5	2652*1352*1020	1.8
MQG-0918	1.5	20	0.074-0.4	0.44-1.2	18.5	4966*2336*1165	5.34
MQG-0930	3	20	0.074-0.4	0.9-2.3	22	5943*1850*1400	8.8
MQG-1224	2.4	25	0.074-0.4	1.6-4.1	37	6583*2868*2540	10.8
MQG-1230	5.3	25	0.074-0.4	2.2-5.5	45	7311*2868*2540	12.6
MQG-1530	9	25	0.074-0.4	3.5-8	90	7311*3272*2766	18
MQG-1545	13.5	25	0.074-0.4	3.5-8.5	110	9000*3272*2766	23
MQG-1830	9	25	0.074-0.4	4-11	110	8600*4000*3200	37
MQG-1845	16	25	0.074-0.4	4-15	160	10200*4000*3200	43
MQG-2130	20	25	0.074-0.4	4.5-26	200	9300*4840*3795	58
MQG-2145	26	25	0.074-0.4	4.5-26	220	11000*4730*3795	65
MQG-2430	23	25	0.074-0.4	7-50	245	/	74
MQG-2445	30	25	0.074-0.4	8.5-60	320	/	87
MQG-2740	40	25	0.074-0.4	22-80	380	/	128

 跳汰机Jig Machine**产品用途Application**

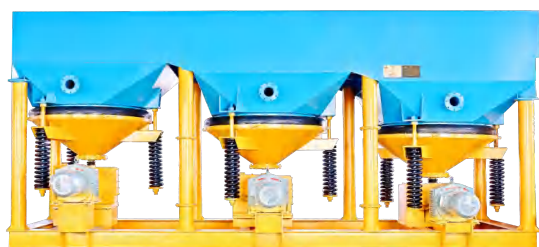
跳汰机在生产中广泛用于选别铜、银、锡、钨、钽、铌、钛、锆、铬的原生矿石和砂矿，并成功应用在方铅矿、闪锌矿、锑矿、红柱石、萤石等的选别，同时也是选别金刚石和重晶石的主要方法之一，用于氧化铅锌矿石的选别同样能获得良好效果。

The jig machine is widely used in the production to separate copper, silver, tin, tungsten, tantalum, niobium, titanium, zirconium, primary ores and placers of chromium, and has been successfully applied in the separation of galena, sphalerite, antimony ore, andalusite, fluorite, etc. At the same time, it is also one of the main methods for the separation of diamond and barite, and can also obtain good results for the separation of lead-zinc oxide ores.

**工作原理Principle**

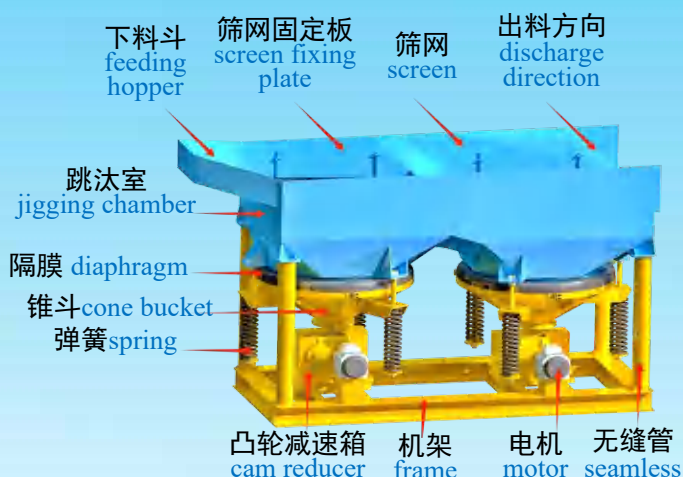
利用矿石与脉石的比重差进行分选，比重不同的矿物原料在垂直交变的水流中沉降速度不同，比重较大的矿物沉降速度较快，占据跳汰机分选槽的下部，比重较小的矿物沉降速度较慢，占据了分选槽的上部，通过特殊的堰板将不同的矿物分别排出，实现了按比重分选的效果。

Sorting by using the specific gravity difference between ore and gangue. Mineral raw materials with different specific gravity have different settling velocities in vertically alternating water flows. Minerals with larger specific gravity settle faster and occupy the lower part of the jig machine sorting tank. Minerals with small specific gravity settle more slowly and occupy the upper part of the jig machine sorting tank. Different minerals are discharged separately through special weir plates, achieving the effect of sorting by specific gravity.



产品特点Features

- 结构紧凑，占地面积小，单位面积处理能力大。
●Compact structure, small footprint, and large processing capacity per unit area.
- 细粒级有用矿物的回收率高，对细粒度物料的选择矿效果绝佳。
●The recovery rate of fine-grained useful minerals is high, and the beneficiation effect of fine-grained materials is excellent.
- 省水，连续工作时间长。
●Water saving, long continuous working time.
- 冲程，冲次调节方便，安装与维护简单。
●Stroke and jig frequency are easy to adjust, easy to install and maintain.



产品结构Structure

使用说明Instructions

可将设备安装在混凝土上，用地脚螺栓来将其固定，让跳汰机在工作过程中，更稳定，更安全。在安装过程中，请注意主机体和水平垂直的协调性，避免倾斜。

The equipment can be installed on concrete and fixed with anchor bolts, making the jig machine more stable and safe during operation. During the installation process, please pay attention to the coordination between the main body and the horizontal & vertical, and avoid tilting.

技术参数Technical Parameter

型号 Model	跳汰室 Jigging Chamber		隔膜 Diaphragm		给矿粒度 Feed Particle Size (mm)	处理量 Processing Capacity (t/h)	电机功率 Power (kw)	外形尺寸 Dimension (L*W*H) (mm)	重量 Weight (kg)
	形状 Shape	面积 Area (m ²)	冲程 Stroke (mm)	冲次 Jig Frequency (c/min)					
JT1.2	Trapezia	1.2	M30	40~90	<15	10~20	5.5	1652*1826*2122	1585
JTY21	Trapezia	2.25	M30	40~90	<15	15~35	5.5	2230*1740*2600	2100
JTY41	Trapezia	4	M30	40~90	<15	30~50	11	2900*2400*3165	4330
JTY42	Trapezia	4.5	M30	40~90	<15	30~50	5.5*2	4030*1980*2650	4200
JTY63	Trapezia	6.75	M30	40~90	<15	40~70	5.5*2, 7.5*1	5560*1885*2650	5916
JTY82	Trapezia	8	M30	40~90	<15	60~90	11*2	5200*2400*3250	8365

脱水筛 Dewatering Screen

产品用途 Application

脱水筛主要作用是脱水、脱泥，可用于砂石料厂水洗砂、炉渣处理厂处理炉渣、选煤厂煤泥回收、选矿厂尾矿干排等。

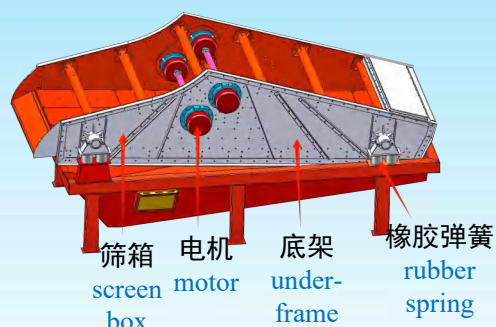
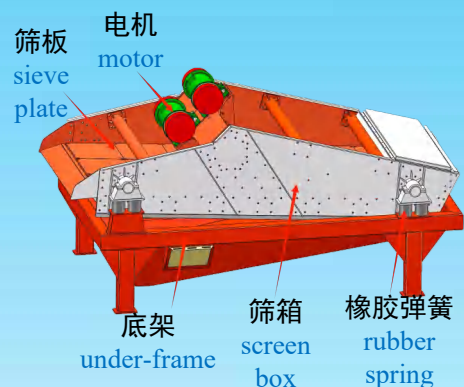
The main function of the dewatering screen is dehydration & desliming. It can be used for sand washing in sand and gravel plants, IBA treatment in IBA treatment plants, coal slime recovery in coal preparation plants and dry discharge of tailings from beneficiation plant.etc.

工作原理 Principle

双电机系列脱水筛是由两台振动电机做同步反向运转时，其偏心块所产生的激振力在平行于电机轴线的方向相互抵消，在垂直于电机轴的方向叠为一合力，因此物料在直线振动筛机上的运动轨迹为直线向前做抛物线运动，两电机轴相对筛面有一定倾角，在激振力作用下物料在筛面上被抛起跳跃式向前作直线运动，从而达到对物料进行筛选和分级的及脱水目的。

The dual-motor series dewatering screen is operated synchronously and in reverse by two vibrating motors, the excitation force generated by its eccentric blocks cancels each other in the direction parallel to the motor axis, and are superimposed into a combined force in the direction perpendicular to the motor axis. Therefore, the movement trajectory of the material on the linear vibrating screen is a straight forward parabolic motion. Two motor shafts have a certain inclination angle relative to the screen surface, under the action of the excitation force, the material is thrown up on the screen surface and jumps forward in a straight line motion, thereby achieving the purpose of screening, grading, and dehydration.

侧板电机系列脱水筛，通过侧板振动电机偏心块调整振动幅度和激振力，通过万向传动轴分别连接四台互不联系的侧板振动电机作同步反向运转，四台八组偏心质量产生的离心力沿振动方向的分力叠加，反向离心抵消，从而形成单一的沿振动方向的激振力，使筛床做直线运动，从而达到对物料进行筛选和分级的及脱水目的。



产品结构Structure

使用说明Instructions

可根据物料干湿程度调节脱水筛的激振力，偏干增加激振力，反之则减小，经脱水后的物料由出料端排出。

The excitation force of the dewatering screen can be adjusted according to the degree of dryness and wetness of the material. For dry material, increases the excitation force, otherwise it decreases, and the dehydrated material will be expelled from the discharge end.

技术参数Technical Parameter

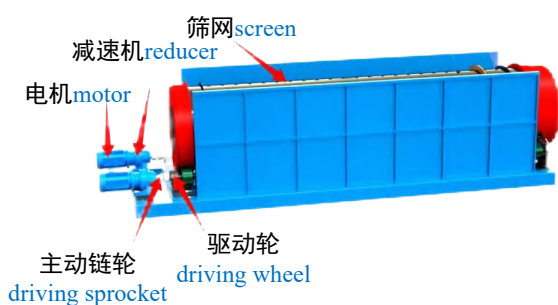
型号 Model	筛网面积 Screen Area(m ²)	功率 Power (kw)	砂厂处理量 Sand Factory Processing Capacity(t/h)	炉渣处理量 IBA Processing Capacity(t/h)	进料粒度 Feed Size (mm)	外形尺寸 Dimensions (mm)	重量 Weight (kg)
TSS21025	2.5	1.5*2	10-30	5-15	≤10	2600*1570*1575	2150
TSS21524	3.6	2.4*2	20-40	10-20	≤10	2750*2070*1853	2368
TSS21842	7.86	3.7*2	50-70	20-40	≤10	4860*2470*2567	5430
TSS41842	7.86	2.4*4	60-80	30-50	≤10	4900*2470*2785	6250
TSS41860	10.2	3.7*4	100-120	40-60	≤10	6100*2470*2910	7850
TSS42460	13.26	4.5*4	140-160	60-80	≤10	6100*3070*2910	8750

The side-plate motor series dewatering screen adjusts the vibration amplitude and excitation force through the eccentric block of the side plate vibration motor, and respectively connects four unconnected side plate vibration motors through universal transmission shafts for synchronous and reverse rotation. The centrifugal force generated by four motors and eight sets of eccentric blocks is superimposed along the vibration direction, and the reverse centrifugal force is offset, so as to form a single excitation force along the vibration direction, making the sieve bed move in a straight line, so as to achieve the purpose of screening and grading and dehydration of materials.

产品特点Features

- 筛分能力处理大，效率高。
- Large screening capacity and high efficiency.
- 能耗低，筛床振动平稳、噪声小，使用寿命长。
- Low energy consumption, stable vibration of the sieve bed, low noise, and long service life.
- 安装简单，维修成本低。
- Simple installation and low maintenance cost.

滚筒筛 Trommel Screen



WGT 系列(驱动轮传动)
WGT series (drive wheel)

产品用途Application

当物料进入滚筒装置后，由于滚筒装置的倾斜与转动，使筛面上的物料翻转与滚动。物料在翻滚过程中，经过不同孔径时（孔径大小可根据客户要求定制），直径小于孔径则会从筛孔排出，直径大于孔径则从滚筒尾部的排料口排出。

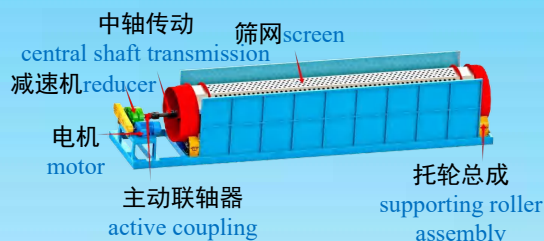
When the material enters the drum device, the material on the screen surface is turned and rolled due to the inclination and rotation of the drum device. During the rolling process, when the material passes through different apertures (the aperture size can be customized according to customer requirements), if the diameter is smaller than the aperture, it will be discharged from the sieve hole; If the diameter is larger than the aperture, it will be discharged from the discharge port at the tail of the drum.

工作原理Principle

滚筒筛是对物料的颗粒大小进行分级处理，广泛应用于电力、矿山、建材等生产行业。石料场中用于大小石子分级以及分离出泥土和石粉；沙石场中用于沙石分离；煤炭行业用于块煤与煤粉分离以及洗煤（洗煤机械的组成部分）；选矿行业用于大小块状物分级及分离粉状物质。

The trommel screen is used to classify the particle size of material, and is widely used in electric power, mines, building materials and other production industries. In the stone yard, it is used for grading large & small stones and separating soil & stone powder. It is used to separate sand & gravel in sand and gravel yards. And it is used for separating lump coal & pulverized coal and coal washing in the coal industry (components of coal washing machinery). In the mineral processing industry, it is used to grade large & small lumps and to separate powdery substances.

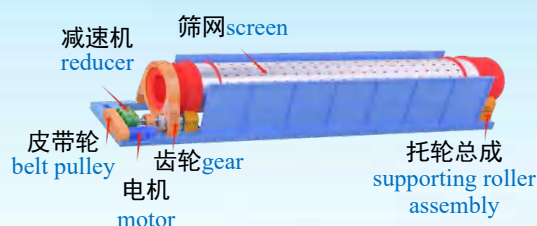
产品特点Features



GT 系列(中轴传动)
GT series(central shaft transmission)

- 结构简单、操作方便；旋转式筛分，低阻塞。
- The trommel screen has the characteristics of simple structure, convenient operation, rotary screening, low blockage, etc.
- 有全封闭、半封闭，全封闭能有效防尘和降低噪音。
- There are fully enclosed & semi-enclosed, and fully enclosed can effectively prevent dust and reduce noise.

使用说明Instructions



GTC系列(齿轮传动)
GTC series (gear transmission)

滚筒装置倾斜安装于机架上。电动机经减速机与滚筒装置通过联轴器连接在一起，驱动滚筒装置绕其轴线转动（双电机结构为电机与减速机一体化，减速机带动驱动轮和驱动滚筒装置绕其轴线转动）。

The drum device is installed obliquely on the frame. The motor is connected with the drum device by a coupling through the reducer, and the drum device is driven to rotate around its axis (The double motor structure is the integration of the motor and the reducer, the reducer drives the driving wheel and the driving drum device to rotate around its axis) .

产品结构Structure

技术参数Technical Parameter

1. WGT系列(驱动轮传动) WGT series (drive wheel transmission)

型号 Model	功率 Power (kw)	筒体转速 Cylinder Rotation Speed(r/min)	最大进料粒度 Maximum Feed Particle Size (mm)	处理量 Processing Capacity (t/h)	外形尺寸 Dimensions (mm)	重量 Weight (kg)
WGT0818	1.5*2	25	Mesh Size*2.5	5-20	3044*1300*1100	1062
WGT0918	1.5*2	23	Mesh Size*2.5	10-30	3054*1450*1160	1171
WGT1245	5.5*2	20	Mesh Size*2.5	20-50	6583*1750*1720	2650
WGT1248	5.5*2	20	Mesh Size*2.5	30-60	6883*1750*1720	2900
WGT1530	7.5*2	17	Mesh Size*2.5	50-100	4649*2000*1998	3501
WGT1830	7.5*2	15	Mesh Size*2.5	80-120	4633*2300*2241	3862

2. GT系列(中轴传动) GT series(central shaft transmission)

型号 Model	功率 Power (kw)	筒体转速 Cylinder Rotation Speed(r/min)	最大进料粒度 Maximum Feed particle size (mm)	处理量 Processing Capacity (t/h)	外形尺寸 Dimensions (mm)	重量 Weight (kg)
GT0612	1.5	23	Mesh Size*2.5	2-10	2150*820*823	600
GT1245	7.5	20	Mesh Size*2.5	20-50	6328*1750*1700	2500
GT1360	11	20	Mesh Size*2.5	25-70	7828*1800*1784	3800
GT1378	11	20	Mesh Size*2.5	30-70	9628*1800*1784	4500
GT1560	15	19	Mesh Size*2.5	40-80	8160*2000*2000	4180
GT1578	15	19	Mesh Size*2.5	70-120	9760*2000*2000	5280

3. GTC系列(齿轮传动) GTC series (gear transmission)

型号 Model	功率 Power (kw)	筒体转速 Cylinder Rotation Speed(r/min)	最大进料粒度 Maximum Feed particle size (mm)	处理量 Processing Capacity (t/h)	外形尺寸 Dimensions (mm)	重量 Weight (kg)
GTC0818A	3	24	Mesh Size*2.5	5-20	2895*1300*1120	1555
GTC1248A	7.5	22	Mesh Size*2.5	20-50	6537*1850*1710	4396
GTC1255A	7.5	22	Mesh Size*2.5	22-52	7700*1850*1904 (全封闭Full Cover)	5598
GTC1360A	11	22	Mesh Size*2.5	25-60	7687*1900*1710	4553
GTC1556A	15	19	Mesh Size*2.5	30-70	7923*2050*2130	5326
GTC1576A	15	19	Mesh Size*2.5	70-120	9930*2050*2130 (全封闭Full Cover)	7500
GTC1665A	15	19	Mesh Size*2.5	50-100	8823*2200*2100	6325
GTC1830A	15	16.5	Mesh Size*2.5	80-120	5350*2300*2281 (全封闭Full Cover)	5660

给料机Reciprocating Feeder

产品用途Application

往复式给料机适用于煤、炉渣或其他磨琢性小、粘性小的松散粒状物料的给料，将料斗的物料连续均匀地卸落到运输设备或其他筛选设备中。

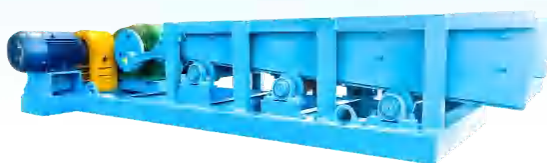
Reciprocating feeder is suitable for the feeding of coal, IBA or other loose granular materials with small grindability and viscosity, and unloads the materials in the hopper continuously and evenly into the transportation equipment or other screening equipment.



工作原理Principle

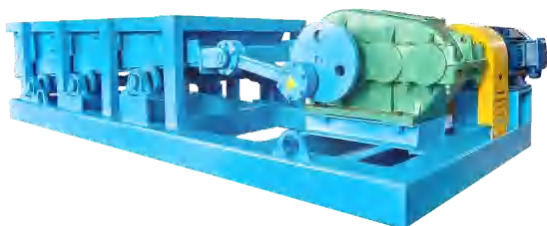
当电动机开动后，经联轴器、减速器、曲柄连杆机构拖动倾斜的底板在托辊上做直线往复运动，将物料均匀地卸到运输机或其他筛选设备上。

When the motor is started, the inclined bottom plate is dragged by the coupling, reducer and crank linkage mechanism to make linear reciprocating motion on the carrier roller, and the material is evenly unloaded onto the conveyor or other screening equipment.

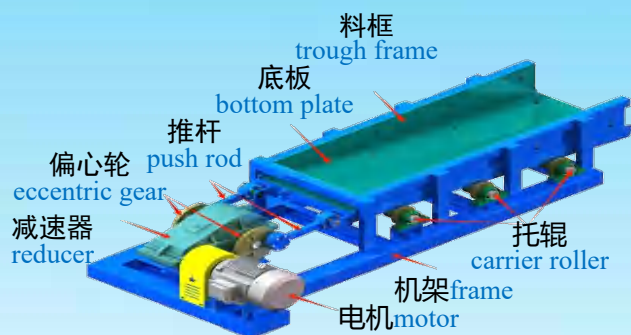


产品特点Features

- 外形高度小、结构简单、工作可靠。
- Small height, simple structure and reliable operation;
- 给料均匀、给料量可调。
- Uniform feeding, adjustable feeding amount;
- 物料适应性强，输送能力大。
- Strong material adaptability, large conveying capacity;
- 多档给料量调节。
- Multi-gear adjustment;



使用说明Instructions



产品结构Structure

往复给料机可安装在地面上，或在料仓的出口下吊装。槽形底板为往复运动，行程频率为46次/分钟，行程频率为160-200mm。行程可以通过驱动轮的偏心安装孔来改变，偏心距离为行程的一半。

The reciprocating feeder can be erected on the ground or hoisted under the discharge port of the stock bin. The trough bottom plate is in reciprocating motion, its frequency of stroke is 46 times /min and stroke is 160-200mm. The stroke can be changed by the drive wheel eccentric mounting hole, the eccentric distance is half of the stroke.

技术参数Technical Parameter

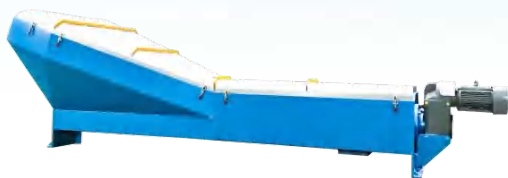
型号 Model	槽宽 Trough Width(mm)	行程 Stroke	处理能力 Processing Capacity(t/h)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H)(mm)	重量 Weight (kg)
K-600B	600	160-200	40-70	7.5	3070*1305*580	1070
K-800B	800	200-240	70-100	7.5	3175*1415*580	1260

螺旋输送机Screw Conveyor

产品用途Application

螺旋输送机适用于输送各种粉状、粒状、小块状的散状物料，不宜输送粘性大，易结块、易变质的物料。可与其他输送工作装置配合使用，完成集运、分送、搅拌、混合、脱水、卸载等项作业。

The screw conveyor is suitable for conveying a variety of powdery, granular and small bulk materials. It is not suitable for conveying materials with high viscosity, easy to agglomerate, and easy to deteriorate. It can be used in conjunction with other conveying devices to complete concentrated transportation, distribution, stirring, mixing, dehydration, unloading and other operations.

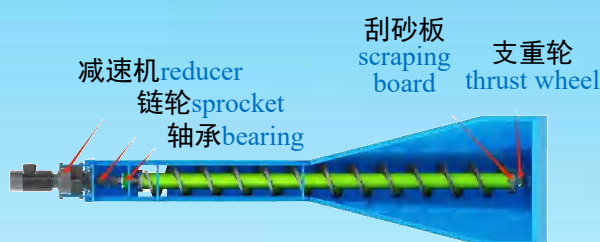


工作原理Principle

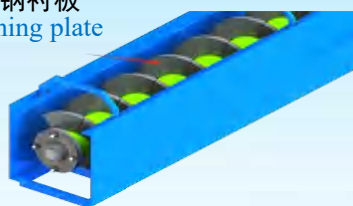
旋转的螺旋叶片将物料推移而进行螺旋输送机输送。当螺旋轴转动时，由于物料的重力及其与槽体壁所产生的摩擦力，使物料只能在叶片的推送下沿着输送机的槽底向前移动，其情况好像不能旋转的螺母沿着旋转的螺杆做平移运动一样。物料的主要前进动力是来自螺旋叶片在轴向旋转时将物料沿叶片切线方向向上和向前的做用力。

Rotating screw blades push material to convey through the screw conveyor. When the screw shaft rotates, due to the gravity of the material and the friction generated between the material and the trough wall, the material can only move forward along the bottom of the conveyor trough under the push of the blade, as if the non-rotating nut moves in a translational motion along a rotating screw. The main forward force of the material is the force that comes from the screw blade in the axial rotation to move the material up and forward along the tangential direction of the blade.

产品特点Features



铸造合金钢衬板
cast alloy lining plate



产品结构Structure

使用说明Instructions

该螺旋输送机对于含水量较大的物料，推荐倾斜安装，斜盖呈水平。

For materials with high water content, this screw conveyor is recommended to be inclined installation, and the inclined cover is horizontal.

技术参数Technical Parameter

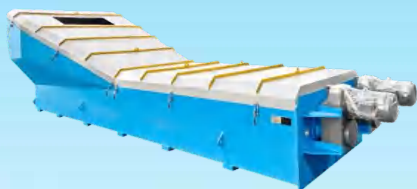
型号 Model	螺旋直径 Spiral Diameter(mm)	槽长 Tank Length(mm)	转速 Rotation Speed(r/min)	处理能力 Processing Capacity(t/h)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H)(mm)	重量 Weight (kg)
LSF-3000	320	3000	17	6-8	3	3755*1200*1170	870
LSF-6000	320	6000	16	5-7	4	6860*1200*1170	1470

槽长、转速可接受定制The tank length and rotation speed can be customized.

- 结构紧凑，体积小，重量轻，工作可靠，输送效率高，维护管理简便。
- Compact structure, small size, light weight, reliable operation, high conveying efficiency and easy maintenance and management.
- 可输送含水量大的物料，倾斜安装使用。
- It can convey materials with high water content and be installed obliquely for use.
- 封闭输送，有利于输送易飞扬的物料，可减少对环境的污染。
- Closed conveying is conducive to conveying materials that are easy to fly and can reduce environmental pollution.
- 槽内通铺超高分子聚乙烯内衬，可更换，极大降低料槽因输送物料造成的磨损与腐蚀，寿命长。
- The tank is fully covered with ultra-high molecular polyethylene lining, which can be replaced, greatly reducing the wear and corrosion of the trough caused by conveying materials, and has a long service life.
- 螺旋叶片大径安装胶板，更加耐磨，减少易损件更换频率，设备使用寿命更长。
- Screw blade large diameter rubber plate installation, more wear resistance, reduces the frequency of wearing parts replacement, longer service life of the equipment.

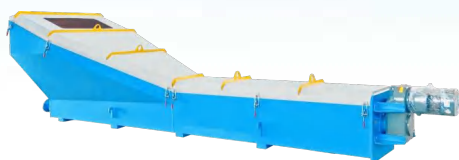
螺旋洗砂机 Spiral Sand Washing Machine

产品用途 Application



螺旋洗砂机主要用于建筑工地、砂石料厂、预制厂、选矿厂、水电站等大量砂石料的洗涤、分级、除杂。可对常见的矿石、矿渣、炉渣等物料进行清洗加工，它能除去覆盖砂石表面的杂质，同时破坏包覆砂粒的水汽层，以利于脱水，起到高效清洗作用。

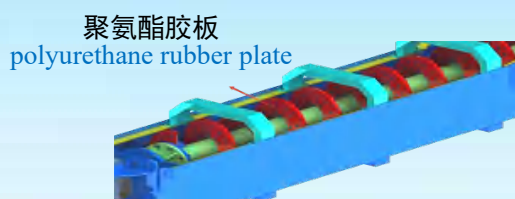
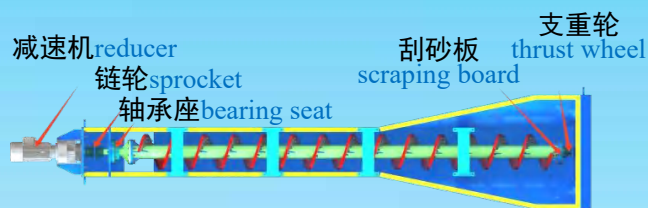
The spiral sand washing machine is mainly used for washing, grading and impurity removal of large quantities of sand and stone materials at construction sites, sand and gravel plants, prefabrication plants, mineral processing plants and hydropower stations. It can clean and process common ore, IBA and other materials. It removes the impurities that cover the surface of sand & gravel and destroys the water vapor layer that covers the sand, so as to facilitate dehydration and play an efficient cleaning role.



工作原理 Principle



在工作时，电机通过减速机减速后带动螺旋叶缓慢转动，砂石由给料槽进入洗槽中，在螺旋叶的带动下翻滚，并互相研磨，除去覆盖砂石表面的杂质，同时破坏包覆砂粒的水汽层，以利于脱水；同时加水，形成强大水流，及时将杂质及比重小的异物带走，并从溢出口排出。干净的砂石由螺旋叶带走，最后砂石从旋转的螺旋叶片推入出料槽，完成砂石的清洗作用。



产品结构Structure

When working, the motor decelerates through the reducer and drives the screw blade to rotate slowly, the sand enters the washing tank from the feed trough, rolls under the drive of the screw blade, and grinds each other to remove impurities that cover the sand surface and destroys the water vapor layer that covers the sand to facilitate dehydration; At the same time, water is added to form a strong water flow, timely remove impurities and small specific gravity foreign matters, and discharge them from the overflow outlet. Clean sand is carried away by the screw blade and finally the sand is pushed into the discharge chute by the rotating screw blade, completing the cleaning function of the sand.

产品特点Features

- 结构简单，性能稳定，故障率低。
- Simple structure, stable performance, low failure rate.
- 物料流失少，洗净度高。
- Low material loss, high cleanliness.
- 一次性处理量大，能够满足大批量、高产能作业要求。
- Large one-time processing capacity, can meet the requirements of large batch and high productivity operations.
- 更加耐磨，减少易损件更换频率，设备使用寿命更长。
- More wear resistance, reduce the frequency of wearing parts replacement, longer service life of equipment.

使用说明Instructions

旋转时应按固定方向旋转，禁止反向旋转。工作场地周边尽量不要堆放杂物，还应装置光线充足的照明设备。螺旋洗砂机的安装角度受物料颗粒大小和安装地面确实程度的影响。

When rotating, it should rotate in a fixed direction, and reverse rotation is prohibited. Do not pile up sundries around the work site, and should also be equipped with lighting equipment with sufficient light. The installation angle of the spiral sand washing machine is affected by the size of the material particles and the hardness of the installation ground.

技术参数Technical Parameter

型号 Model	螺旋直径 Spiral Diameter(mm)	槽长 Tank Length(mm)	转速 Rotation Speed(r/min)	处理能力 Processing Capacity(t/h)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
LXS-0550	500	5000	29	20-30	7.5	5920*1800*1480	2100
LXS-7550	750	5000	27	40-60	11	6100*2200*1745	3050
LXS-1065	915	6500	19	60-80	15	7730*2800*2320	5100
LXS-2065	915	6500	19	120-160	2*15	7730*2800*2320	8200
LXS-1265	1115	6500	19	100-150	18.5	7820*2800*2370	6300
LXS-1580	1415	8000	14	150-220	22	9465*2800*2845	10700

槽长与转速可接受定制The tank length and rotation speed can be customized.

TJ30100淘金设备 TJ30100 Gold Mining Equipment

产品用途Application

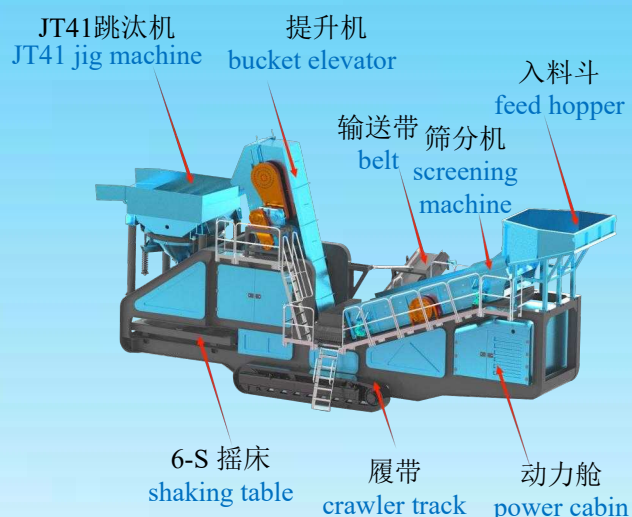
TJ30100淘金设备主要用于从金矿中分选黄金。该设备通过高效的选矿技术，能够有效分离矿石中的金颗粒，广泛应用于金矿开采和选矿领域。

TJ30100 gold mining equipment is mainly used for sorting gold from gold mines. This equipment can effectively separate gold particles from ores through efficient mineral processing technology, and is widely used in the fields of gold mining and mineral processing.

工作原理Principle

破碎后的金矿石由挖掘机铲送入料斗，经筛分机筛选分级后，通过提升机输送至跳汰机。跳汰机借助垂直变速水流进行矿物分选：比重较大的粗粒金矿石滞留在筛网上方，比重较大的细粒金矿石透过筛网由精矿口排出，比重较轻的非含金废石则从尾矿口排出。

从精矿口排出的细粒金矿石随后进入摇床进一步分选。摇床为斜面流重选设备，依靠倾斜床面的不对称往复运动，配合涡流作用使矿砂层松散并按密度分层，最终将密度最高的金精矿有效分离出来。



产品结构Structure

产品特点Features

- 移动方便：采用集成化设计，能够适应野外复杂地形。
- 操作简单：操作人员少，节约人力成本。
- 处理量大：能够处理大量的矿石，提高工作效率。
- 回收率高：高效的选金技术，确保较高的黄金回收率。
- 适应性强：能够适应不同的地质条件和作业环境。
- 维护简便：设计考虑维护便捷性，降低长期使用维护成本。

技术参数Technical Parameter

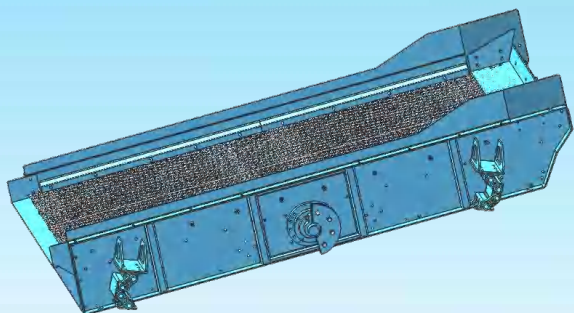
Crushed gold ore is shoveled into the feeding hopper by an excavator, screened and classified by a screener, then conveyed to a jig concentrator by a bucket elevator. The jig machine performs mineral separation using vertical variable-speed water flow: coarse gold ore with high specific gravity is retained above the screen; fine gold ore with high specific gravity passes through the screen and is discharged from the concentrate outlet; and low-gravity non-gold waste rock is discharged from the tailings outlet.

Fine-grained gold ore from the concentrate outlet then enters a shaking table for further separation. As an inclined-flow gravity separation device, the shaking table uses the asymmetric reciprocating motion of its inclined bed surface together with vortex action to loosen the ore bed and stratify it by density, thereby effectively separating the highest-density gold concentrate.

- Easy to move: It adopts integrated design and can adapt to complex terrain in the wild.
- Easy to operate: fewer operators, saving labor costs.
- Large processing capacity: can process a large amount of ore and improve work efficiency
- High recovery rate: Efficient gold selection technology ensures a high gold recovery rate.
- Strong adaptability: able to adapt to different geological conditions and working environments.
- Easy maintenance: The design considers maintenance convenience and reduces long-term use and maintenance costs.

型号 Model	进料粒度 Feed Size (mm)	处理能力 Processing Capacity(t/h)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H)(mm)	重量 Weight (excluding generator and crawler tracks) (kg)
TJ30100	≤300	40-60	100	12670*6600*6010	30000

筛分机 Screening Machine



产品用途 Application

筛分机主要作用是对物料筛选和分级，可用于砂石料厂水洗砂、炉渣处理厂处理炉渣、选煤厂煤泥回收、选矿厂尾矿干排、矿石筛选和分级等。

The screening machine is mainly used for material screening and grading. It can be used for sand washing in sand and gravel plants, slag treatment in slag treatment plants, coal slime recovery in coal preparation plants, dry discharge of tailings in ore preparation plants, ore screening and grading, etc.

工作原理 Principle

筛分机工作时，偏心块旋转产生的离心力可分解为垂直筛面与平行筛面的两个分力，二者合成方向恒定的直线激振力。在该激振力下，物料被抛起并向前做跳跃式运动，从而完成物料输送与筛分作业。

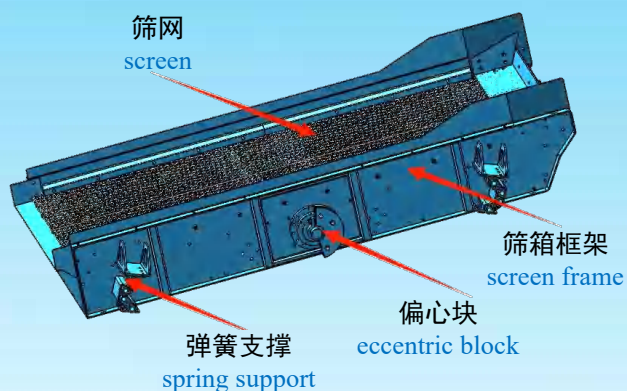
During operation, the centrifugal force generated by the rotating eccentric blocks of the screening machine is resolved into two components: perpendicular and parallel to the screen surface. These two forces combine to form a linear excitation force with a fixed direction. Driven by this force, materials are thrown up and move forward in a jumping trajectory, achieving material conveying and screening.

产品特点Features

ZK型直线振动筛与其他类型的振动筛相比具有以下特点：

Compared with other types of vibrating screens, ZK linear vibrating screen has the following characteristics:

- 体积小，重量轻，安装方便，维修容易；
- Small size, light weight, easy installation, and easy maintenance;
- 噪声小，耗能少，效率高；
- Low noise, low energy consumption, and high efficiency;
- 采用块偏心激振器，调整拆卸方便；
- Adopting block eccentric exciter, easy to adjust and disassemble;



产品结构Structure

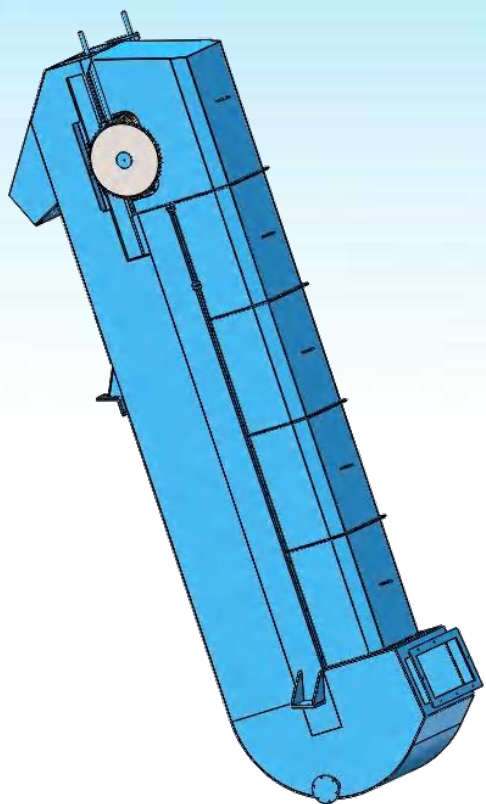
技术参数Technical Parameter

型号 Model	筛网面积 Screen Area(m ²)	进料粒度 Feed Size (mm)	处理能力 Processing Capacity(t/h)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H)(mm)	重量 Weight (kg)
SF1540	5.8	≤300	60-80	7.5	4650*2270*960	2300

 提升机 Bucket Elevator**产品用途 Application**

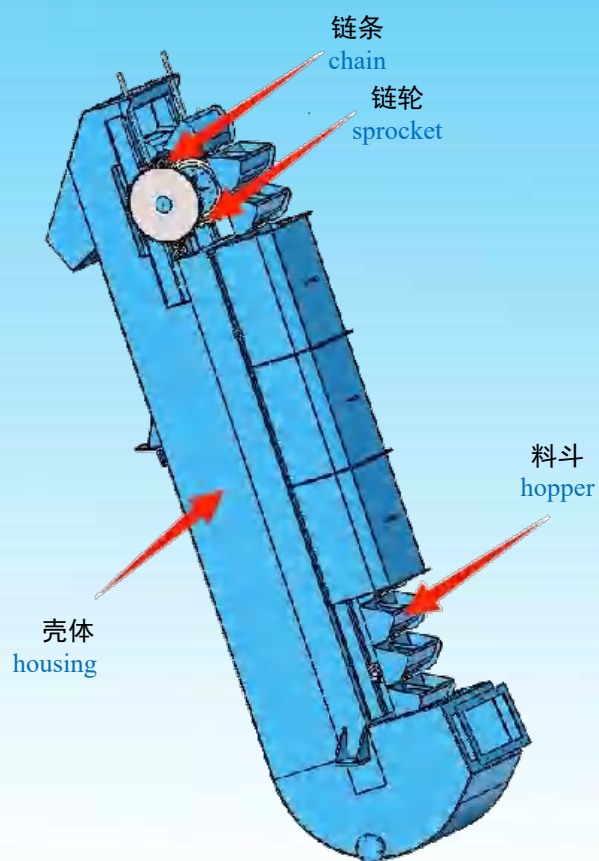
通过料斗将物料从低处舀取、垂直提升至高处后抛卸出料，广泛应用于矿山、炉渣输送等领域。设备结构紧凑、占地面积小、自重轻、密封性好、输送效率高，工艺布置灵活，安装、拆卸与转运便捷，运行安全可靠；支持大倾角安装，可实现 60° - 90° 近垂直输送，有效克服地形高差。

Equipped with buckets, this equipment scoops materials from a low position, lifts them vertically to a high level, and discharges them through the outlet. It is widely used in mining, IBA conveying and other industries. Featuring compact structure, small footprint, light weight, excellent sealing performance, high conveying efficiency, flexible process layout, easy installation, disassembly and relocation, as well as safe operation, it supports large-inclination installation, enabling near-vertical (typically 60° - 90°) conveying to effectively overcome terrain elevation differences.

**工作原理 Principle**

提升机在驱动装置的带动下，通过固定在牵引构件上的料斗，将物料从低处“舀起”，垂直提升至高处，然后利用离心力或重力将其抛入指定出料口。

Driven by the power unit, the bucket elevator scoops materials from a low position using buckets securely attached to the tension member. It then conveys the materials vertically to a high level and discharges them precisely into the designated outlet through centrifugal force or gravity.



产品结构Structure

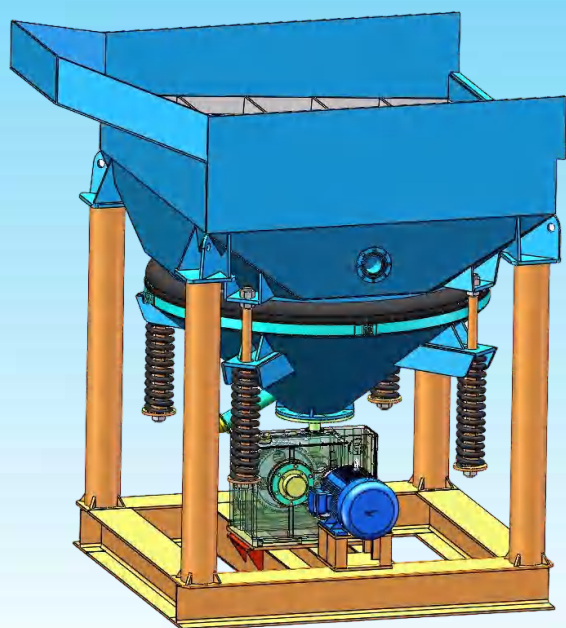
产品特点Features

- 结构紧凑，运行可靠，输送效率高，维护便捷。
- Compact structure, reliable operation, high conveying efficiency and easy maintenance.
- 封闭输送，有利于输送易飞扬的物料，可减少对环境的污染。
- Fully enclosed conveying, ideal for dust-prone materials, effectively reducing environmental pollution.
- 大倾角能力：可适应近垂直（通常 60° - 90° ）输送，克服地形高差。
- Large-inclination conveying: Capable of near-vertical operation (typically 60° — 90°) to easily overcome terrain elevation differences.

技术参数Technical Parameter

型号 Model	输送速度 Conveying Speed (m/s)	处理能力 Processing Capacity(t/h)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
TSJ1360	0.3	40-60	7.5	5950*1300*1950	3200

JT41 跳汰机 JT41 Jig Machine



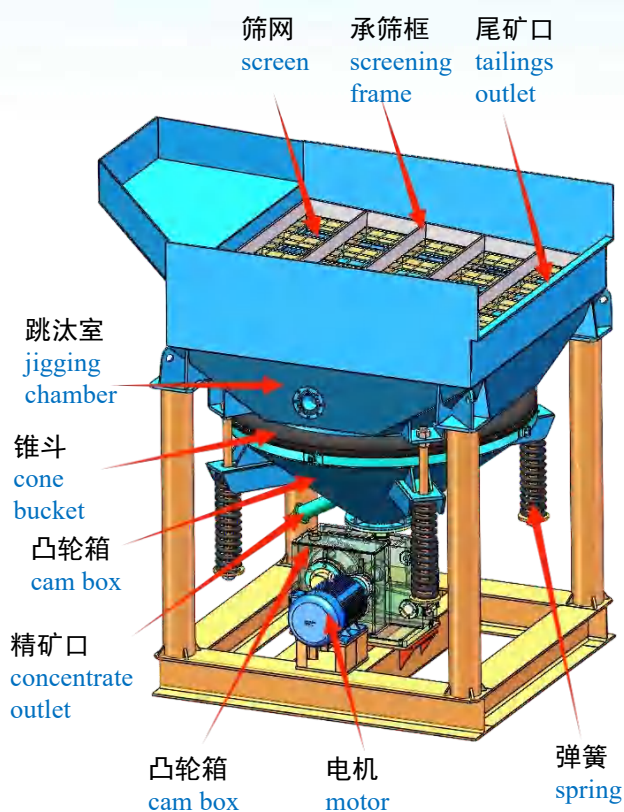
产品用途Application

锯齿波跳汰机因其操作简单、处理量大，除了极细物料外，几乎可以处理各种粒度的矿物原料，并能在一次选别中得到某种最终产品。因此，在生产中广泛应用于金、锡、钨、钽、铌、钛、锆、铬等原生矿石和砂矿的选别，并成功应用于方铅矿、闪锌矿、锑矿、红柱石、萤石等的选别。它也是选别金刚石和重晶石的主要方法之一，用于氧化铅锌矿石的选别同样能获得良好效果。

矿石中待分离的矿物密度差越大，可入选粒度范围就越宽。对于含金砂矿，在给料粒度小于15毫米时，可以不进行分级入选，这不仅有效改善了分选指标，还提高了设备的处理量。

Sawtooth wave jig machine is easy to operate and has a large processing capacity. It can process almost all mineral raw materials of various particle sizes except for extremely fine materials and can obtain a certain final product in one selection. Therefore, it is widely used in the separation of primary ores and sand ores such as gold, tin, tungsten, tantalum niobium, titanium, zirconium, and chromium in production, and has been successfully applied in the separation of galena, sphalerite, antimony ore, rhodochrosite, fluorite, etc. It is also one of the main methods for separating diamond and barite, and can also achieve good results in the separation of oxidized lead and zinc ores.

The larger the density difference of the minerals to be separated in the ore, the wider the range of particle sizes that can be selected. For gold-bearing placer ore, when the feeding particle size is less than 15 mm, classification selection can be omitted, which not only effectively improves the sorting index but also increases the processing capacity of the equipment.



产品结构Structure

工作原理Principle

跳汰选矿是重力选矿的主要方法之一。跳汰机的工作原理是基于重力选矿，利用矿石与脉石的比重差进行分选。比重不同的矿物原料在垂直交变的水流中沉降速度不同，比重较大的矿物沉降速度较快，占据跳汰机分选槽的下部，比重较小的矿物沉降速度较慢，占据分选槽的上部。通过特殊的堰板将不同的矿物分别排出，实现按比重分选的效果。

锯齿波跳汰机是在传统正弦波跳汰机基础上研制成功的一种高效节能重选设备。与传统正弦波跳汰机的区别在于：锯齿波跳汰机的水流脉动曲线为锯齿波，其上升水流快，下降水流慢，床层在上升水流的作用下上升、松散，再缓慢沉降，有效作用时间长，可大大节省筛下补给水量，并大幅度降低粒度的回收下限。与正弦波跳汰机对比，其作业回收率分别提高Sn：3.01%，W：5.5%，耗水量减少30%~40%。

Jigging beneficiation is one of the main methods of gravity beneficiation. The working principle of the jig machine is based on gravity beneficiation, using the difference in specific gravity between ore and gangue for sorting. Mineral raw materials with different specific gravities have different sedimentation speeds in the vertical alternating water flow. Minerals with larger specific gravity settle faster and occupy the lower part of the jig sorting tank, while minerals with smaller specific gravity settle slower and occupy the upper part of the sorting tank. Different minerals are discharged separately through special weir plates to achieve the effect of sorting by specific gravity.

The sawtooth wave jig machine is a highly efficient and energy-saving gravity separation equipment successfully developed on the basis of the traditional sine wave jig machine. The difference between the sawtooth wave jig machine and the traditional sine wave jig machine is that the water flow pulsation curve of the sawtooth wave jig machine is a sawtooth wave, with a fast rising water flow and a slow falling water flow. The bed layer rises and loosens under the action of the rising water flow, and then slowly settles. The effective action time is long, which can greatly save the amount of water under the screen and greatly reduce the lower limit of particle size recovery. Compared with the sine wave jig machine, its operating recovery rate is increased by Sn: 3.01%, W: 5.5%, and water consumption is reduced by 30%~40%.

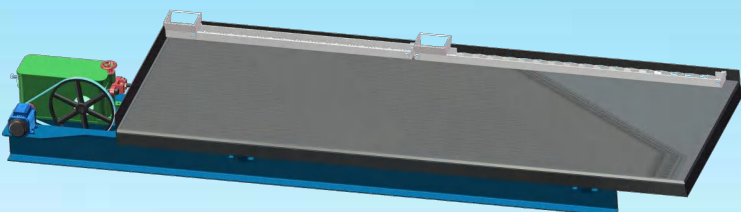
产品特点Features

- 结构紧凑，占地面积小，单位面积处理能力大。
- 采用下动式传动结构，使设备结构更加紧凑，单位占地面积处理量较大。
- 采用凸轮机构传动，产生的锯齿波形脉动曲线使跳汰机上升水流均匀，下降水流迅速，有效提高了细粒级有用矿物的回收率，对细粒度物料的选矿效果绝佳。
- 具有省水、连续工作的特点。
- 冲次调节方便，安装和维护简单。

- Compact structure, small footprint, and large processing capacity per unit area.
- Adopts a down-moving transmission structure, which makes the equipment structure more compact and has a larger processing capacity per unit area.
- The cam mechanism is used for transmission, and the sawtooth waveform pulsation curve produced makes the rising water flow of the jig machine uniform and the descending water flow rapid, which effectively improves the recovery rate of fine-grained useful minerals and has an excellent beneficiation effect on fine-grained materials.
- It has the characteristics of water saving and continuous operation.
- Easy to adjust, easy to install and maintain.

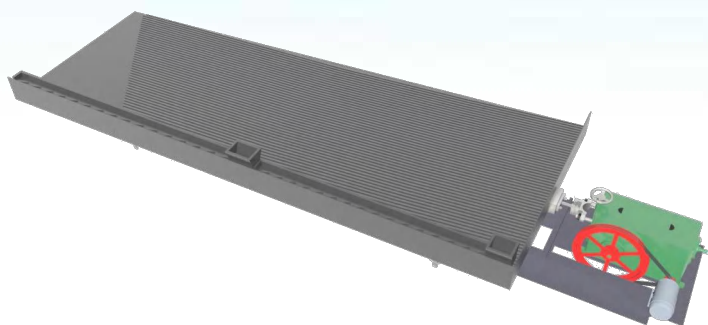
技术参数Technical Parameter

型号 Model	跳汰室 Jigging Chamber		隔膜 Diaphragm		给矿粒度 Feed Particle Size (mm)	处理量 Processing Capacity (t/h)	电机功率 Power (kw)	外形尺寸 Dimension (L*W*H) (mm)	重量 Weight (kg)
	形状 Shape	面积 Area (m²)	冲程 Stroke (mm)	冲次 Jig Frequency (c/min)					
JTY41	Rectangle	4	M30	40~90	≤50	30~50	11	2900*2400*3165	4330

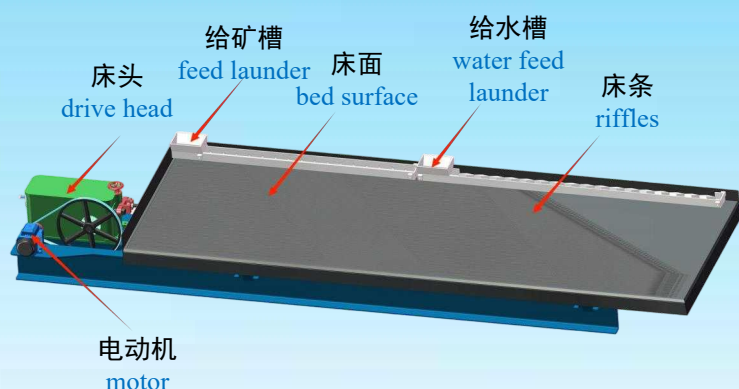
 6-S摇床6-S Shaking Table**产品用途Application**

6-S摇床属于重力选矿设备，由平面溜槽发展而来，以其不对称往复运动为特征，自成体系。适用于选别2-0.037毫米的矿砂及矿泥级别的金、钨、锡、钽铌、铁、锰、铬、钛、铋、铅等有色金属、黑色金属、稀贵金属。也适用于选别4-0.037毫米的硫铁矿；适当改换床条形式后，可选别末煤和煤泥、独居石、金、红石等非金属，以及分选其他具有足够比重差及粒度组成合适的混合物料。

The 6-S shaking table belongs to gravity beneficiation equipment, developed from a flat chute and characterized by its asymmetric reciprocating motion, forming its own system. It is suitable for sorting non-ferrous metals, ferrous metals, rare and precious metals such as gold, tungsten, tin, tantalum, niobium, iron, manganese, chromium, titanium, bismuth and lead in ore sand and ore slime of 2-0.037 mm. It is also suitable for selecting pyrite with a size of 4-0.037 mm. After changing the bed strip form appropriately, it can select fine coal and coal slime, monazite, gold, red stone and other non-metallic materials, as well as other mixed materials with sufficient specific gravity difference and suitable particle size composition.

**工作原理Principle**

摇床分选是在床面摇动和横向水流的共同作用下实现的。床面上的床条是纵向排列的，与水流方向近乎垂直。当水流横向流过并跨越一个个床条时，在沟槽内形成涡流。涡流和床面摇动的共同作用可以使矿砂层松散并按密度分层：重矿物转向下层，轻矿物转向上层。上层轻矿粒受到的水流冲力较大，而下层重矿粒受到的冲力较小。因此，轻矿粒在床面上的横向运动速度大于重矿粒在床面上的横向运动速度。这一过程称为“析离分层”。



产品结构Structure

Shaking table sorting is achieved by the combined action of bed shaking and lateral water flow. The strips on the bed are arranged longitudinally, almost perpendicular to the direction of water flow. When the water flows horizontally across the strips, eddies are formed in the grooves. The combined effect of eddies and bed shaking can loosen the ore layers and stratify them according to density: heavy minerals move to the lower layer, and light minerals move to the upper layer. The upper layer of light mineral particles is subject to greater water flow impact, while the lower layer of heavy mineral particles is subject to less impact. Therefore, the lateral movement speed of light mineral particles on the bed surface is greater than that of heavy mineral particles on the bed surface. This process is called "segregation and stratification."

产品特点Features

- 分选效率高：适用于0.037~2mm的细粒物料分选，尤其对微细颗粒（如0.037~0.5mm）的分选效果显著。通过床面的不对称往复运动及冲洗水作用，实现矿粒按密度分层，分选精度高。
- 独特的床面设计：床面采用玻璃钢或木质结构，覆盖耐磨橡胶或刻槽床条，增强矿粒的松散和分层能力。横向坡度可调（通常 $0^{\circ} \sim 10^{\circ}$ ），适应不同矿种和粒度需求。

- High sorting efficiency: It is suitable for sorting fine-grained materials of 0.037~2mm, especially for fine particles (such as 0.037~0.5mm). Through the asymmetric reciprocating motion of the bed surface and the action of flushing water, the mineral particles are layered according to density, and the sorting accuracy is high.

- Unique bed surface design: The bed surface is made of fiberglass or wooden structure, covered with wear-resistant rubber or grooved bed strips to enhance the loosening and stratification of mineral particles. The horizontal slope is adjustable (usually $0^{\circ} \sim 10^{\circ}$) to meet the needs of different mineral types and particle sizes.

- 不对称往复运动：采用凸轮杠杆机构驱动，产生非对称的加速度，促进矿粒的纵向搬运和分层。冲程（8~36mm）和冲次（250~400次/分钟）可调，灵活应对不同分选条件。
- 节水节能：耗水量较低（约3~8吨/小时），相比传统溜槽更环保，无需复杂动力系统，能耗较低。
- 操作灵活：通过调节冲程、冲次、床面倾角、冲洗水量等参数，可优化分选效果，适合处理低品位矿石，富集比高。
- 结构稳固，维护简便：钢结构机架耐腐蚀，床面耐磨设计延长使用寿命，运动部件少，故障率低，维护成本低。

- Asymmetric reciprocating motion: driven by a cam lever mechanism, it generates asymmetric acceleration to promote the longitudinal transport and stratification of mineral particles. The stroke (8~36mm) and stroke frequency (250~400 times/minute) are adjustable to flexibly cope with different sorting conditions.
- Water and energy saving: low water consumption (about 3-8 tons/hour), more environmentally friendly than traditional chutes, no need for complex power systems, and low energy consumption.
- Flexible operation: By adjusting parameters such as stroke, flushing frequency, bed inclination angle, and flushing water volume, the sorting effect can be optimized, suitable for processing low-grade ores with high enrichment ratio.
- Stable structure and easy maintenance: The steel frame is corrosion-resistant, and the wear-resistant design of the bed surface extends its service life. There are fewer moving parts, low failure rate, and low maintenance cost.

技术参数 Technical Parameter

型号 Model	面积 Area (m ²)	冲程 Stroke (mm)	冲次 Jig Frequency (c/min)	给矿粒度 Feed Particle Size (mm)			处理量 Processing Capacity(t/h)			电机功率 Power (kw)	外形尺寸 Dimension (L*W*H)(mm)
				粗砂 Coarse Sand	细砂 Fine Sand	矿泥 Slime	粗砂 Coarse Sand	细砂 Fine Sand	矿泥 Slime		
LY	0.51	9-17	130-210	2-0.5	0.5-0.074	0.074-0.037	0.1-0.2	0.05-0.1	0.03-0.05	0.55	1100*500*430
6-S	2	10-30	210-360	2-0.5	0.5-0.074	0.074-0.037	0.4-0.8	0.2-0.5	0.1-0.4	1.1	2100*1050*850
6-S	4.08	10-30	210-360	2-0.5	0.5-0.074	0.074-0.037	0.6-1.5	0.3-0.8	0.2-0.6	1.1	3000*1620*1100
6-S	7.76	10-30	240-360	2-0.5	0.5-0.074	0.074-0.037	1-2.5	0.8-1.2	0.3-0.9	1.1	4500*1850*1560

移动式滚筒筛 Mobile Trommel Screen

产品用途 Application

GS1230履带移动滚筒筛是通用筛分机械之一，它具有结构简便、操作简单，更换筛网可在一定范围内获取不同粒度的物料等特点，它适用不同矿物的分选，方便转移场地。

The GS1230 crawler mobile rotary trommel screen is a type of general-purpose screening machinery. It features a simple structure and easy operation. By changing the screen mesh, materials of different particle sizes can be obtained within a certain range. It is suitable for the screening of various minerals and allows convenient site transfer.

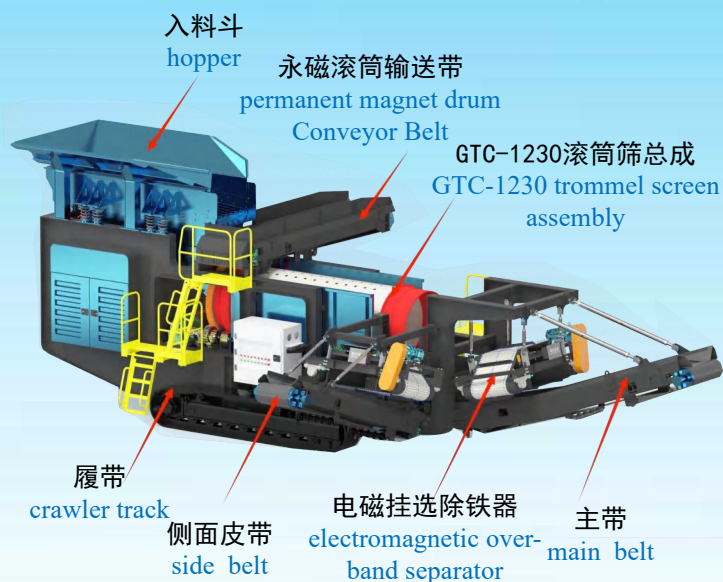
工作原理 Principle

物料经入料斗送入给料机，均匀进入 GTC-1230 滚筒筛。小于筛网孔径的物料落入筛下主输送带，主带上方的 RCDD-8 电磁除铁器同步吸除含铁杂质，其余合格物料沿主带输送排出；大于筛网孔径的物料则从滚筒筛出料端排出，经侧输送带输送。

Material is fed from the feed hopper to the feeder, then uniformly enters the GTC-1230 trommel screen. Materials smaller than the screen mesh fall onto the main conveyor belt under the screen. The RCDD-8 electromagnetic iron separator installed above the main belt synchronously removes iron-containing impurities, while the remaining qualified materials are conveyed and discharged along the main belt. Materials larger than the screen mesh are discharged from the outlet of the trommel screen and conveyed via the side conveyor belt.

产品特点Features

- 适配性强：通用型筛分设备，换筛网即可获不同粒度物料，适配多矿种分选。
- Wide Adaptability : Versatile screening equipment, obtain different particle sizes by replacing screens, suitable for various ores.
- 操作简便：结构简洁，易上手，调试维护省心。
- Easy Operation : Simple structure, easy to operate and maintain.
- 转场灵活：履带式设计，矿山 / 工地等复杂场地可快速转场。
- Flexible Mobility: Crawler-mounted design for quick site transfer in mines, construction sites, etc.
- 筛分除铁一体：集成电磁除铁器，同步除铁，提升成品纯度。
- Integrated Screening & Iron Removal: Built-in electromagnetic iron separator removes impurities synchronously, improving product purity.



产品结构Structure

- 分流高效：主 / 侧输送带有序分流筛下 / 筛上物料，避免混杂。
- Efficient Material Diverting: Main/side conveyors separate undersize/oversize materials to avoid mixing.
- 一体化作业：集成给料、筛分、输送全流程，无需额外辅件。
- All-in-One Operation: Integrated feeding, screening and conveying, no extra accessories required.

技术参数Technical Parameter

型号 Model	功率 Power (kw)	处理量 Processing Capacity (t/h)	重量 Weight (kg)	外形尺寸 Dimensions (mm)
GS1230	39.4	50-70	31200	13100*7850*4360

电磁感应分选机 Electromagnetic Induction Separator

产品用途 Application

电磁感应分选机主要应用于废物回收、金属回收 流程、工业垃圾以及生活垃圾废料中。其作用是确保最终回收的材料中不含有任何金属。通常在精细分选操作中使用，安装在磁选设备和涡流分选机之后，以去除所有残余金属，例如不锈钢、导线(电缆)和电路板。

Electromagnetic induction separators are mainly used in waste recycling, metal recycling processes, industrial waste, and household waste. Its function is to ensure that the final recycled material does not contain any metals. Usually used in fine sorting operations, installed after magnetic separation equipment and eddy current sorting machines to remove all residual metals, such as stainless steel, wires (cables), and circuit boards.

工作原理 Principle

感应分选系统配备一条加速输送带，待分选物料以平稳状态输送通过检测区域。输送带下方设有高精度感应金属传感器，可产生感应电磁场。该传感器检测灵敏度极高，即使是小于 1 毫米的微细金属颗粒，在通过检测区域时也能被精准识别，并从物料流中自动剔除。

The induction sorting system is equipped with an accelerating conveyor belt. Materials to be sorted are conveyed through the detection zone in a stable state. A high-precision inductive metal sensor is installed beneath the conveyor belt, which can generate an electromagnetic field. This sensor features ultra-high detection sensitivity. Even fine metal particles smaller than 1 mm can be accurately identified and automatically ejected from the material flow when passing through the detection area.

产品特点Features

- 一键分选：简单的交互界面控制着软件系统和气动系统，轻松实现智能化分选。
- 高度适应性：感应器可调，能够适应不同金属分选，能够处理混合材料。
- 高吞吐量：吞吐量高于同类设备，特别适合大规模操作。
- 高纯度，高回收率：提高资源回收率并减少人工劳动成本。

- One-Click Sorting: A simple interactive interface controls the software and pneumatic systems, easily achieving intelligent sorting.
- High Throughput: Higher throughput than similar equipment, making it particularly suitable for large-scale operations.
- High Adaptability: Adjustable sensors allow for sorting of different metals and handling mixed materials.
- High Purity, High Recovery Rate: Improves resource recovery rates and reduces labor costs.

使用说明Instructions

开机前检查电源、气源、输送带及传感器。使用后清洁传感器与皮带，检查气路电路。设备需专人操作，运行时禁止伸手入机，检修必须断电断气。

Check the power supply, air source, conveyor belt, and sensors before starting up. Clean the sensor and belt after use, and check the air circuit. The equipment needs to be operated by a dedicated person, and it is forbidden to reach into the machine during operation. Power and gas must be cut off during maintenance.

技术参数Technical Parameter

型号 Model	皮带有效宽度 Effective Belt Width(mm)	功率 Power (kw)	处理量 Processing Capacity(t/h)	外形尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
ESS120	1200	4	3-5	6000*2240*2260	3890
ESS180	1800	4	7-10	6000*2840*2260	6500
ESS240	2400	5.5	12-15	6000*3440*2260	7500

X射线分选机 X-ray Separator



产品用途Application

X 射线分选机是一款融合人工智能技术与工业智能软件的先进绿色智能分选设备。它主要用于再生铝提纯预处理、有色金属精细分选、再生资源加工及垃圾回收利用，工业异物检测，矿石预选等蓬勃发展的回收行业。

The X-ray separator is an advanced green intelligent sorting equipment integrated with AI technology and industrial intelligent software. It is mainly used for the booming recycling industries such as purification and pre-treatment of recycled aluminum, fine sorting of non-ferrous metals, renewable resources processing and waste recycling, industrial foreign matter detection and ore pre-separation.

工作原理Principle

X 射线分选机通过 X 射线投射扫描物料，经 AI 算法对大量数据进行智能处理，精准识别不同物料的成分与密度差异，最终由高压气阀完成精准分离，实现高效智能分选。

X-ray separator scans materials by X-ray projection. It intelligently processes mass data through AI algorithms to accurately identify differences in composition and density of various materials. Precise separation is then completed by high-pressure air valves, realizing efficient and intelligent material sorting.

产品特点Features

- 高精度 AI 算法，识别率达 99.9%。
 - 多通道自适应，多物料一键切换。
 - 分离精度高，定制气阀组实现高效回收。
 - 安全合规，辐射量极低。
 - 进口高端核心部件，运行稳定。
 - 售后完善，免费数据库更新。
- High-precision AI algorithm with 99.9% recognition rate,.
 - Multi-channel adaptive, one-click material switching.
 - High separation accuracy with customized air valve group for efficient recycling.
 - Safe & compliant with ultra-low radiation.
 - Premium imported core components for stable operation.
 - Comprehensive after-sales service, free database updates.

使用说明Instructions

X 射线分选机使用时需先完成安装检查、通电自检，再匀速进料、选择对应物料模式启动分选并实时监控；停机按顺序操作，日常做好清洁维护，严格遵守安全规范。

For X-ray separator operation, complete installation check and power-on self-inspection first, then feed materials uniformly, select the corresponding material mode to start sorting and monitor in real time; shut down in sequence, perform daily cleaning and maintenance, and strictly follow safety regulations.

技术参数Technical Parameter

型号 Model	进料速度 Feed Rate (kg)	功率 Power (kw)	外形尺寸 Dimensions (L*W*H) (mm)	重量 Weight (kg)
1200	5000	10	5988*2125*2245	3900
1800	7000	10	7188*2725*2663	6800
2400	10000	10	7188*3325*2663	7500

工程案例 Engineering Case

枞阳海创环保科技有限责任公司

Zongyang Haichuang Environmental Protection Technology Co., Ltd.

电厂规模：焚烧垃圾量1000吨/天

Power plant scale: waste incineration volume 1000 tons/day

炉渣厂建设处理规模：400吨/8小时

Construction and processing scale of slag plant: 400 tons/8 hours

电厂炉渣量：300吨/8小时

Power plant slag volume: 300 tons/8 hours

业办单位：枞阳海创环保科技有限责任公司

Sponsor: Zongyang Haichuang Environmental Protection Technology Co., Ltd



卡万塔能源（中国）投资有限公司（赵县）

Cavanta Energy (China) Investment Co., Ltd. (Zhao County)



电厂规模：焚烧垃圾量1800吨/天

Power plant scale: waste incineration volume 1800 tons/day

炉渣厂建设处理规模：750吨/8小时

Construction and processing scale of slag plant: 750 tons/8 hours

电厂炉渣量：540吨/8小时

Power plant slag volume: 540 tons/8 hours

业办单位：卡万塔能源（中国）投资有限公司（赵县）

Sponsor: Sponsor: Cavanta Energy (China) Investment Co., Ltd. (Zhao Xian)

工程案例 Engineering Case

中节能（行唐）环保能源有限公司 CECEP (Xingtang) Environmental Energy Co., Ltd

电厂规模：焚烧垃圾量1400吨/天

Power plant scale: waste incineration volume 1400 tons/day

炉渣厂建设处理规模：600吨/8小时

Construction and processing scale of slag plant: 600 tons/8 hours

电厂炉渣量：420吨/8小时

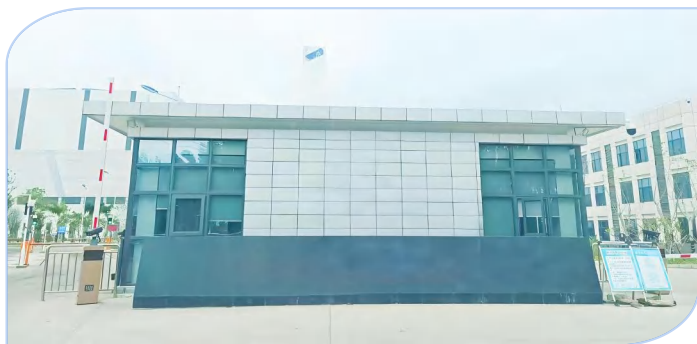
Power plant slag volume: 420 tons/8 hours

业办单位：中节能（行唐）环保能源有限公司

Sponsor: CECEP (Xingtang) Environmental Energy Co., Ltd



北海北控环境科技发展有限公司 Beihai Beikong Environmental Technology Development Co., Ltd



电厂规模：焚烧垃圾量1400吨/天

Power plant scale: waste incineration volume 1400 tons/day

炉渣厂建设处理规模：600吨/8小时

Construction and processing scale of slag plant: 600 tons/8 hours

电厂炉渣量：420吨/8小时

Power plant slag volume: 420 tons/8 hours

业办单位：北海北控环境科技发展有限公司

Sponsor: Beihai Beikong Environmental Technology Development Co., Ltd

案例及发展规划 Cases and Development Planning



炉渣板块 IBA plate

行业分析 Industry Analysis

随着城市化的不断推进，垃圾围城步步紧逼，垃圾焚烧发电行业进入快速发展阶段。业内保守估计，自2016年起，我国垃圾焚烧发电行业的市场规模将突破1000亿元。2016—2022年，垃圾焚烧发电行业新增市场规模近千亿元。垃圾焚烧发电产业下游的炉渣处理行业，随着垃圾焚烧发电领域的快速增长，必将迎来黄金发展期。目前国内大部分炉渣处理仍然处于发展起步的阶段，“小作坊”经营居多，无环保，无报建，“脏乱差”现象普遍存在。

As urbanization continues to advance, the garbage besieges the city, pressing forward step by step. The waste incineration power generation industry has entered a rapid development stage. According to conservative industry estimates, the market size of the country's waste incineration power generation industry will exceed 100 billion yuan from 2016. From 2016 to 2022, the newly increased market size of the waste incineration power generation industry was nearly 100 billion. The IBA treatment industry is the downstream industry of waste incineration power generation industry. With the rapid growth of waste incineration power generation, it is bound to usher in a golden period of development. Currently, most of China's IBA treatment is still in its initial stages of development. "Small workshop" operation is in the majority, no environmental protection, no construction application, "dirty and messy" phenomenon is common.

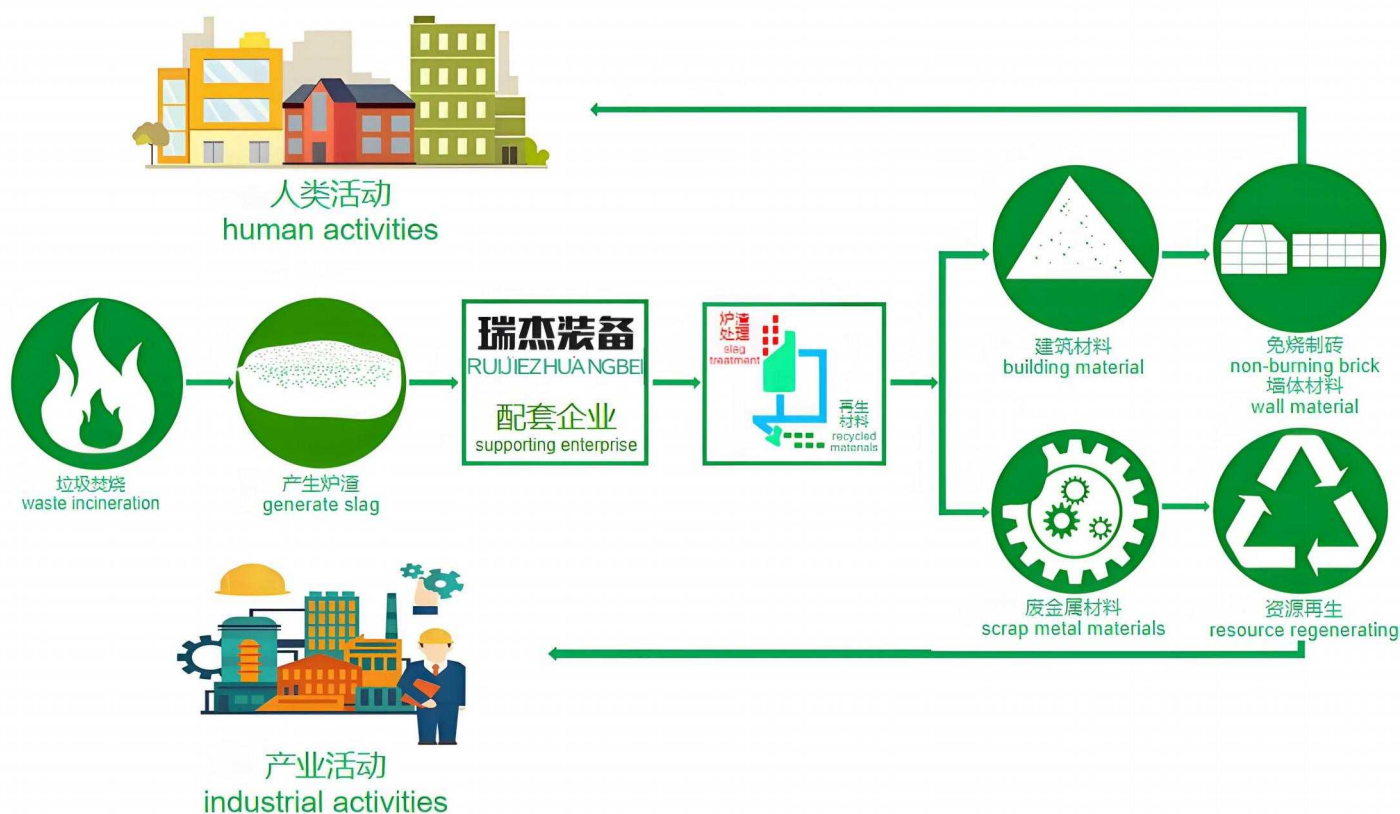
未来在炉渣处理行业中，谁更规范，更环保，有更充裕的资金，就能建立技术、资金和规模壁垒，有望成为行业领导者。

In the future, whoever is more standardized, more environmentally friendly and has more abundant funds will be able to build technology, capital and scale barriers and hopefully to become the industry leader in the IBA treatment industry.

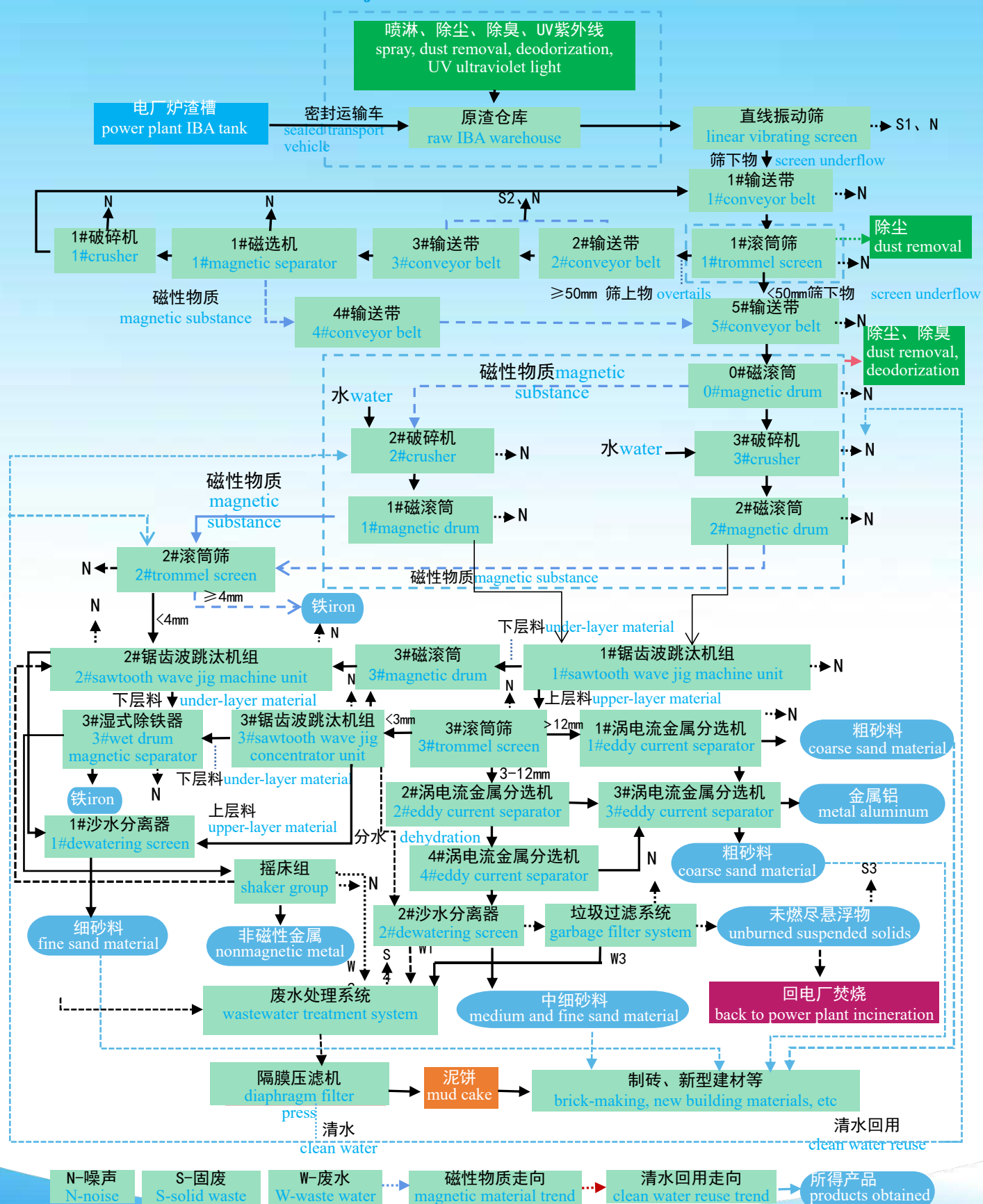
工艺流程 Process Flow

我司主要通过物理方法（包括粒径筛分、磁选、浮力选和涡电流分选等）对垃圾焚烧发电厂的炉渣进行再处理，分选出铁、金属铝和少量的非磁性金属（金属铜等），同时得到建筑用砂料（粗、中、细砂料）。分选出的金属类物质外售给回收单位再利用；粗、中、细砂料制砖或建筑材料生产厂再利用。具体生产工艺流程及产污环节图见下图：

Our company mainly reprocesses the IBA from the waste incineration power plant by physical methods (including particle size screening, magnetic separation, buoyancy separation and eddy current separation), separates out iron, metal aluminum and a small amount of non-magnetic metals (metal copper, etc.), and construction sand (coarse, medium, and fine sand) can be obtained at the same time. The sorted metal materials are sold to recycling units for reuse; Coarse, medium and fine sand materials are used in brick-making or reusing by building material production plants. The specific production process flow and pollution production process diagram are shown in the figure:



项目生产工艺流程图 Project Production Process Flow Chart



工艺流程说明 Process Flow Description

(a) 从渣槽通过渣吊把渣抓到炉渣运输车(前四后八个车轮), 运输到原渣仓库做短暂停留, 以便流出储藏在里面的水。

(b) 铲车上料, 将稍晾干水的炉渣, 铲到直线振动筛上, 其主要做用是能把过大的石头, 砖块, 大生料分选出来(未燃尽垃圾重新送回垃圾焚烧炉焚烧), 之后其余料经过1#带式输送机运到1#滚筒筛(孔洞直径为50mm), 再进一步分选中小部分生料出来, 从而减少后面机械的压力和提高砂的质量。滚筒筛截留出来的物料再通过2#带式输送机送到1#锤式破碎机进一步破碎, 之后, 再人工送到直线振动筛再进行处理。

(c) 通过滚筒筛的物料通过3#带式输送机送到2#、4#锤式破碎机进行处理。4#带式输送机上部设置的2#悬挂式电磁除铁器将物料中的铁类R物料磁选出来, 再通过输送渠道跌落到4#锤式破碎机处理, 处理后的物料通过设置的3#悬挂式电磁除铁器磁选铁类物料后再跌落到孔洞直径为6mm的2#滚筒筛进一步筛选, 该部分筛选出来的物料再通过摇床进一步回收金属类物料。以上筛选出来的金属类可以直接回收利用。

(a) Grab the IBA from the IBA tank to the IBA transport vehicle (the front four and the rear eight wheels) by the IBA crane, and transport it to the original IBA warehouse for a short stay, so as to discharge the water stored in it.

(b) Loading by a forklift, shoveling the slightly dried IBA onto the linear vibrating screen, its main function is to sort out the oversized stones, bricks, and large raw materials (the unburned waste is sent back to the waste incinerator for incineration), and then the rest of the material is transported to the 1# trommel screen (hole diameter is 50mm) through the 1# belt conveyor; The small & medium sized parts of the raw material are further sorted, thereby reducing pressure on the rear machinery and improving the quality grade of the sand. The material retained by the trommel screen is sent to the 1# hammer crusher for further crushing through the 2# belt conveyor, and then manually sent to the linear vibrating screen for further processing.

(c) The material passing through the trommel screen is sent to the 2# and 4# hammer crushers for treatment by 3# belt conveyor. The 2# electromagnetic overband magnetic separator installed on the upper part of the 4# belt conveyor will magnetically separate the iron material from the material, and then drop it to the 4# hammer crusher for processing through the conveying channel, the processed materials pass through the 3# electromagnetic overband magnetic separator to magnetically separate the iron material, and then fall to the 2# trommel screen with the hole diameter of 6mm for further screening. The material screened in this section is further recovered the metal material by means of table concentrator. The metals screened above can be directly recycled.

工艺运行和管理 Process operation and management

(a) 整体工艺控制

炉渣厂整体工艺控制由专门的工艺管理员负责，工艺管理员定时抽样检测炉渣处理效果，根据检测结果合理调控各工艺段运行，确保炉渣处理品质达标。

(a) Overall process control

The overall process control of the IBA plant is in the charge of the dedicated process administrator, who regularly takes samples to test the IBA treatment effect, and reasonably regulates the operation of each process section according to the test results to ensure that the quality of the IBA treatment reaches the standard.

(b) 工艺段运行控制

a. 初级筛选工艺控制

确保分离直径小于100mm和直径大于100mm的炉渣颗粒。

(b) Process section operation control

a.Primary screening process control

Ensure that IBA particles with diameters less than 100mm and greater than 100mm are separated; Ensure that the incompletely burned waste is selected.

b. 一级破碎和一级磁选工艺控制

严格控制扬尘数量。

b. Primary crushing and primary magnetic separation process control

Strictly control the amount of fugitive dust.

c. 二级破碎工艺控制

严格控制扬尘数量；确保炉渣被粉碎成目标细度。

c. Secondary crushing process control

Strictly control the amount of fugitive dust; Ensure that the IBA is crushed to the target fineness.

d. 二级磁选和非金属尾砂沉淀工艺控制

确保分离所有金属物质和非金属物质。

d. Secondary magnetism and non-metallic tailings sedimentation process control

Make sure to separate all metallic and non-metallic substances.

e. 炉渣干燥工艺控制

确保炉渣含水量低于 2%。

e. IBA drying process control

Make sure the IBA moisture content is below 2%.

f. 炉渣研磨工艺控制

确保研磨后的炉渣颗粒大小在 0.001mm 之内。

g. 环保砖生产工艺控制

确保环保砖达到质量要求

h. 工艺水流程工艺控制

确保污水零排放。

f. IBA grinding process control

Ensure that the size of IBA particles after grinding is within 0.001 mm.

g. Environmental protection brick production process control

Ensure that the environmental protection bricks meet the quality requirements.

h. Process water process control

Ensure zero discharge of sewage.

工艺特点 Process characteristics



水处理系统 Water treatment system

炉渣处置工艺特点 Features of this IBA disposal process

a. 无大气污染。生产上料过程采用洒水，并进行注水粉碎，密封破碎等措施避免粉尘散逸，无大气污染物排放。

b. 无废水污染。生产加工用水首先通过大型压滤机进行过滤、净化处理，然后进入集水池，再通过水循环系统进行100%循环使用，达到无污水排放的目的。

c. 无噪声污染。生产采用低噪声、低振动设备，并且采用隔音、减振、吸声等措施，确保各项设备运行时噪声排放达到限定标准。

d. 百分之百利用。加工处理后，分离出的金属进行回收利用，炉渣用于制作免烧砖产品，炉渣将得到100%的综合利用，无固体废物排放。

a.No air pollution. Water spraying is used in the feeding process of production, and measures such as water injection crushing, seal crushing are used to prevent dust from escaping, no air pollutant discharge.

b.No waste water pollution. Production and processing water is filtered and purified through a large filter press first, then enters the collecting tank, and then 100% recycled through the water circulation system to achieve the purpose of no sewage discharge.

c.No noise pollution. Production adopts low-noise, low-vibration equipment, and measures such as sound insulation, vibration reduction, sound absorption are adopted to ensure that the noise emission of various equipment meets the limit standards during operation.

d.100% utilization. After processing, the separated metals are recycled, and the IBA is used to make baking-free brick products. The IBA will be 100% comprehensively utilized without solid waste discharge.

该技术方案是国内最成熟的炉渣综合利用方案，是在济南、潍坊、曲靖、聊城、沧州、滕州、无锡等厂多年成功运行经验的基础上进行技术改造，现在成功运行的潍坊市生活垃圾焚烧厂炉渣综合利用项目正是利用该技术方案（效果很好）。该方案不但解决了炉渣的根本出路问题而且有效防止了炉渣的二次污染，是科学环保、百分百综合利用的炉渣综合处置方案，得到了当地政府以及行业主管部门的一致好评。

This technical scheme is the most mature IBA comprehensive application scheme in China. It is a technical transformation based on years of successful operation experience at plants in Jinan, Weifang, Qujing, Liaocheng, Cangzhou, Tengzhou and Wuxi. Now the comprehensive utilization project of IBA which is successful operation in Weifang Municipal Domestic Waste Incineration Plant is precisely using this technical scheme (with good effect). This scheme not only solves the fundamental way out problem of IBA, but also effectively prevents the secondary pollution of IBA. It is a scientific and environmentally friendly, 100% comprehensive utilization of IBA comprehensive disposal scheme, and has won unanimous praise by the local government and industry competent departments.

炉渣处置工艺特点 Features of this IBA disposal process

01

炉渣处理工艺：废金属回收率高，产出环保砂，干净、含金属、玻璃、泥和杂质量少，整个生产过程机械自动化。新生产线具有防尘、降噪、污水循环过滤利用等优势。
 IBA treatment process: high recovery of scrap metal, clean production of environmentally friendly sand, containing less metal, glass, mud and impurities, and the whole production process is mechanically automatic. The new production line has the advantages of dustproof, noise reduction, sewage circulation filtration and utilization.

02

破碎系列产品：新增简易检修方式与防水处理，比传统设备运行更稳定、出料更细，处理量更大。
 Crushing series products: new simple maintenance methods and waterproof treatment are added, which are more stable than traditional equipment, with finer output and larger processing capacity.

03

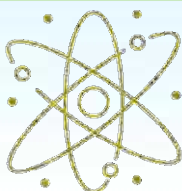
跳汰系列产品：优化凸轮传动机构，比传统设备金属回收率更高、更节能耐用。
 Jig series products: optimized cam transmission mechanism, higher metal recovery rate than traditional equipment, more energy-saving and durable.

04

磁选系列产品：采用高剩磁、高矫顽力稀土钕铁硼磁块作为底部磁源，退磁率低，分选纯度高。
 Magnetic separation series products: high remanence, high coercivity rare earth NdFeB magnetic block are as the bottom magnetic source, with low demagnetization rate, high separation purity.

05

筛分系列产品：比传统筛分设备处理量大、筛分精度高，筛分效率高，筛分效率高，筛分效率高，筛分效率高。
 Screening series products: compared with traditional screening equipment, the processing capacity is larger, the efficiency is higher, the screening accuracy is higher, and the operation is fully enclosed to avoid flying dust.

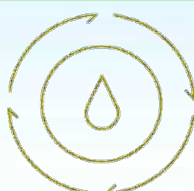


炉渣金属资源化利用技术

IBA metal resource utilization technology



- ◆采用三级磁浮两级回收专利技术
- ◆Adopting three-stage maglev and two-stage recovery patent technology
- ◆无废气排放，首创密闭注水破碎工艺
- ◆No waste gas emission, the first closed water injection crushing process
- ◆金属回收率达 98% 以上
- ◆More than 98% metal recovery

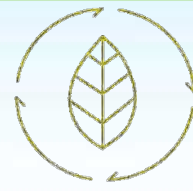


水循环综合利用技术

Water cycle comprehensive utilization technology



- ◆采用封闭式循环回用技术
- ◆Adopt closed cyclic recycling technology
- ◆采用全自动化设备生产线
- ◆Adopt closed cyclic recycling technology
- ◆实现废水零排放
- ◆Zero water discharge



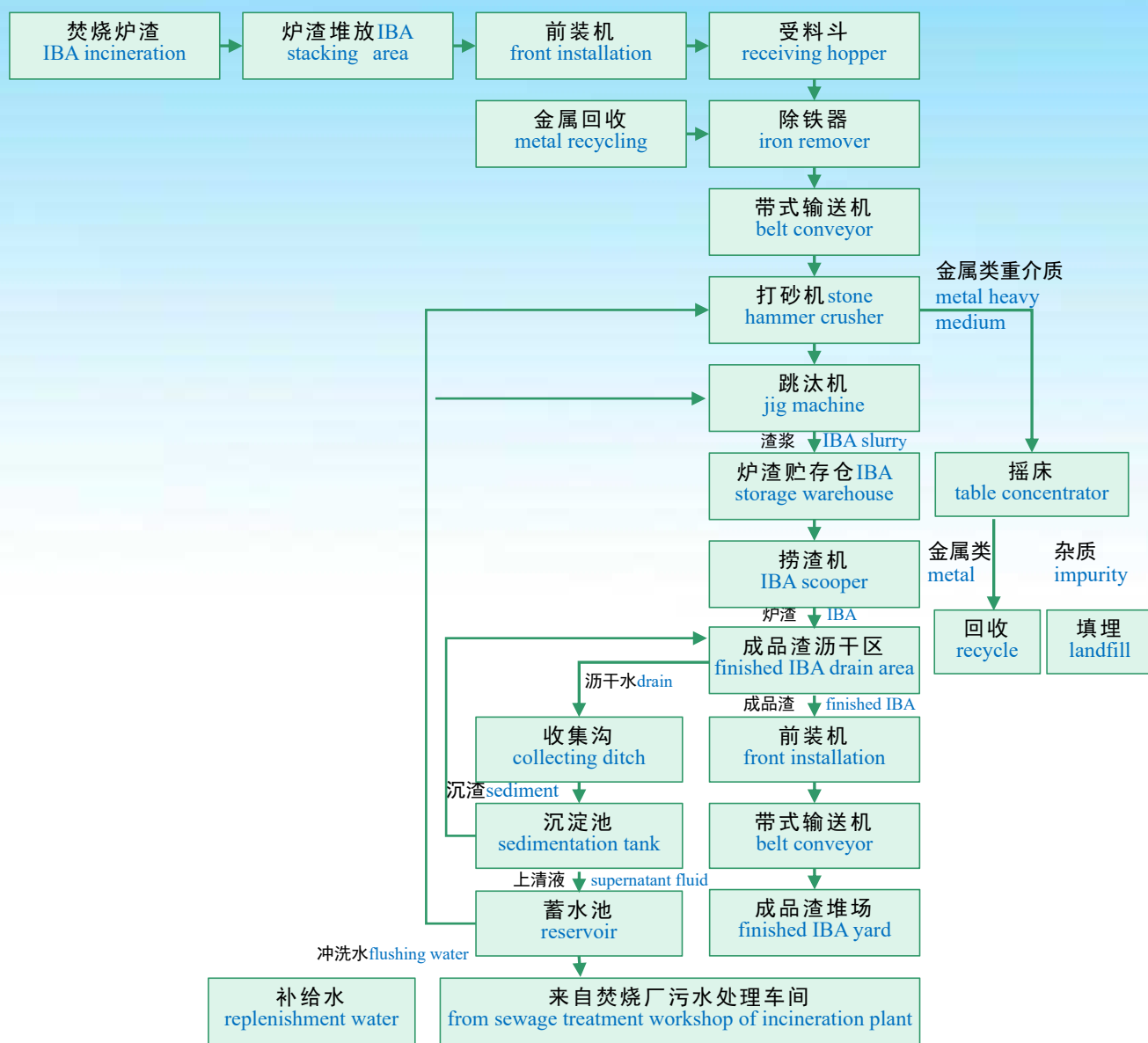
炉渣制砖（砂）资源化利用技术

IBA brick (sand) resource utilization technology



- ◆采用全自动化流水线式制砖生产设备
- ◆Adopt fully automatic assembly line brick making production equipment
- ◆采用黏土和煤渣作为原燃料
- ◆No clay and coal IBA as raw fuel
- ◆采用与上海建科院联合制定的专利技术
- ◆Adopt the patented technology jointly formulated with Shanghai Academy of Construction Sciences

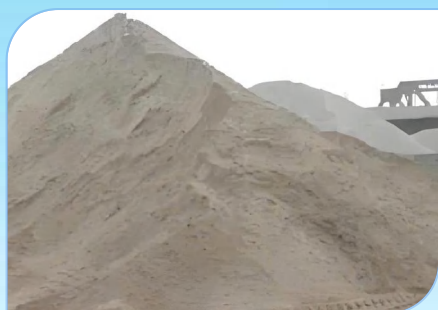
废金属回收利用工艺流程图 Scrap metal recycling process flow chart



炉渣路基材料 IBA subgrade material

经过处理的炉渣，还可作为路基材料。

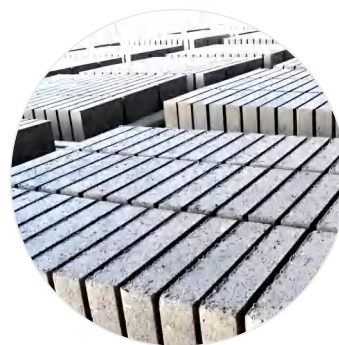
The treated IBA can also be used as roadbed material.



环保建材的制备 The preparation of environmentally friendly building materials

环保砖(免烧砖、彩色道路砖、保温材料)是以炉渣为主要原料，将炉渣预处理(风化及去除金属)，按一定比例加入水泥、固化剂、活化剂(或颜料)等材料，再压制成型。该工艺不烧结，不蒸压，其前期强度形成主要靠成型机的压力，后期强度主要靠水泥的胶结及炉渣活性的发挥，是一种成熟的工艺。

Environmental protection bricks (unburned bricks, colored road bricks, thermal insulation materials) use IBA as the main raw material. The IBA is pretreated (weathered and metal removed), and materials such as cement, curing agent, activator (or pigment) are added in a certain proportion, and then pressed into shape. This process does not or autoclave. Its early strength is mainly formed by the pressure of the molding machine, and its later strength is mainly formed by the cement cementation and the exertion of IBA activity. It is a mature process.



炉渣资源化综合利用 Comprehensive Utilization of IBA Resources

炉渣定义 IBA Definition

焚烧炉渣，根据生态环境制定的《生活垃圾焚烧污染控制标准》(GB18485)的定义为：炉渣是生活垃圾焚烧后从炉床直接排出的残渣，为一般固体废物。

炉渣的资源化：炉渣直接填埋会造成资源浪费，当中含有 2% 左右的废金属（废铁、废铜废铝等），经过废金属回收预处理后的炉渣，可以制备环保建材（含新型建材）、路基材料、填埋场覆土等。

炉渣处理工艺：炉渣处理行业原本的技术工艺上，通过与贵州大学固废教研室共同合作，对技术进行升级改造，将废金属的提取比例和尾砂资源化利用提升到行业领先水平。

技术优点：与知名企业合作，改造升级生产设备，建设高规格标准工业厂房，实行现代化企业管理。废金属回收及后期资源化利用的处理过程规范、环保标准，均属与行业领导地位。

生产过程无工业三废外排，污水零排放，有良好的扬尘治理，降噪措施。

炉渣处理生产线适用与垃圾处理量3000吨/日的垃圾焚烧发电厂。

Incineration IBA, the definition of "Pollution Control Standards for Domestic Waste Incineration" (GB18485) formulated according to the ecological environment: IBA is the residue directly discharged from the hearth after the incineration of domestic waste which is general solid waste.

Resource utilization of IBA: Directly landfilling of IBA will cause waste of resources, which contains about 2% of scrap metal (scrap iron, scrap copper, scrap aluminum, etc.), and the IBA after pretreatment of scrap metal recycling can be used to prepare environmentally friendly building materials (synthetic new building materials), roadbed materials, landfill covering soil, etc.

IBA treatment process: Based on the original technical process of IBA treatment industry, through the cooperation with the Solid Waste Teaching and Research Office of Guizhou University, the technology has been upgraded and reformed, and the extraction proportion of scrap metal and the resource utilization of tail sand have been raised to the industry-leading level.

Technical advantages: cooperate with well-known enterprises to transform and upgrade production equipment, build high-standard industrial plants, and implement modern enterprise management. The treatment process specification and environmental protection standard of scrap metal recovery and later resource utilization belong to the leading position in the industry.

The production process has no industrial waste (Waste gas, waste water, waste residue) discharge, zero sewage discharge, good dust control and good noise reduction measures.

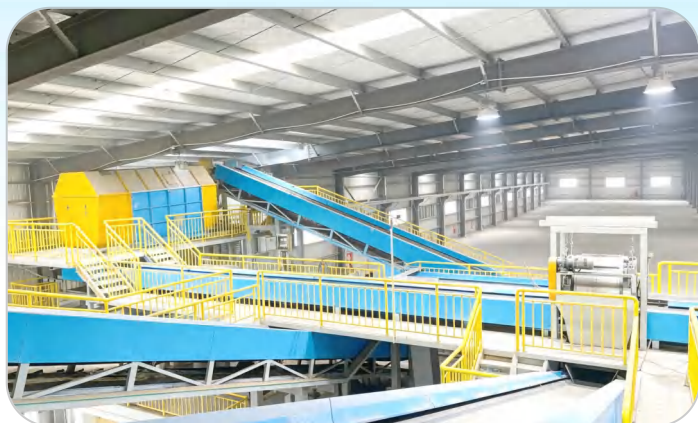
The IBA treatment production line is suitable for waste incineration power plants with a waste treatment capacity of 3,000 tons per day.

最新炉渣综合利用生产线 The latest IBA comprehensive utilization production line



海口炉渣综合利用项目(处理量：1500T/7H)

Haikou IBA comprehensive utilization production line (Processing Capacity: 1500T/7H)



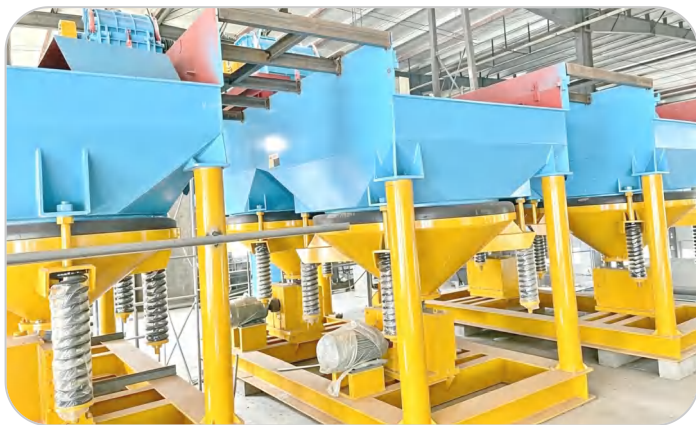
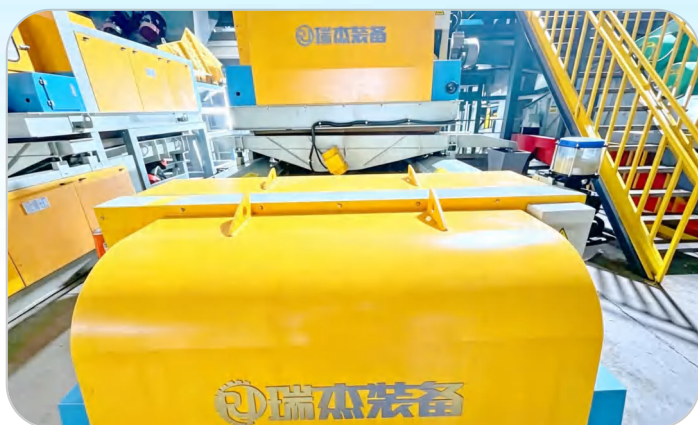
临沂炉渣综合利用项目(处理量：1400T/7H)

Linyi IBA comprehensive utilization production line(Processing Capacity: 1400T/7H)



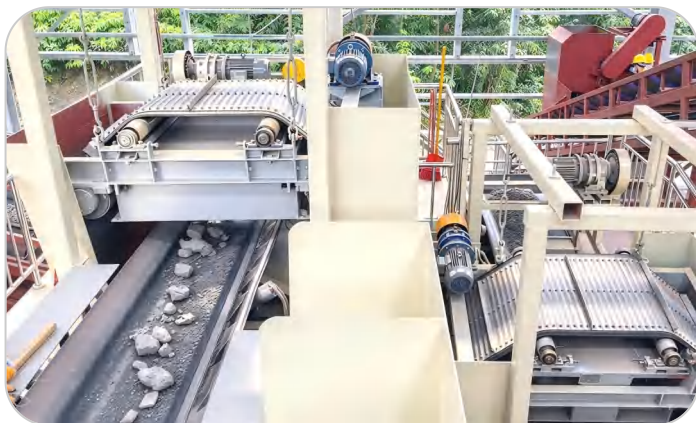
浙江九峰炉渣综合利用项目(处理量：800T/7H)

Zhejiang Jiufeng IBA Comprehensive Utilization Project(Processing Capacity: 800T/7H)



宜宾炉渣综合利用项目(处理量：600T/7H)

Yibin IBA comprehensive utilization production line(Processing Capacity: 600T/7H)



广西北海炉渣综合利用项目(处理量：600T/7H)

Guangxi Beihai IBA Comprehensive Utilization Project(Processing Capacity: 600T/7H)



生态化
ECOLOGICALIZATION

规范化
STANDARDIZATION

国际化
INTERNATIONALIZATION



石家庄行唐炉渣综合利用项目（处理量：1000T/7H）

Shijiazhuang Xingtang IBA Comprehensive Utilization Project(Processing Capacity: 1000T/7H)



智能化
INTELLIGENTIZE

数字化
DIGITIZATION

信息化
INFORMATIZATION



湖南娄底炉渣综合利用项目(350T/7H)

Hunan Loudi IBA Comprehensive Utilization Project(Processing Capacity: 350T/7H)



创 新 化
I N N O V A T I O N

技 术 化
T E C H N I C A L I Z A T I O N

自 动 化
A U T O M A T I O N



河北赵县炉渣综合利用项目(600T/7H)

Hebei Zhaoxian IBA Comprehensive Utilization Project(Processing Capacity: 600T/7H)



无 害 化
H A R M L E S S

资 源 化
R E C Y C L I N G

减 量 化
R E D U C T I O N



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