

**FROM
1985**



**PYROJIN ECO
INDUSTRIAL**

📍 Add: 300 meters east of South Train Station, Shangqiu City, Henan Province, China

☎ Tel: +86 17717382264

✉ E-mail: csr2@pyrolysis-machine.com

🌐 Web: www.pyrolysis-machine.com

MEDICAL WASTE (WASTE PLASTICS) PYROLYSIS PLANT

医疗废塑料高温裂化炼油生产线

NAMED ACCORDING TO CHINESE LAW

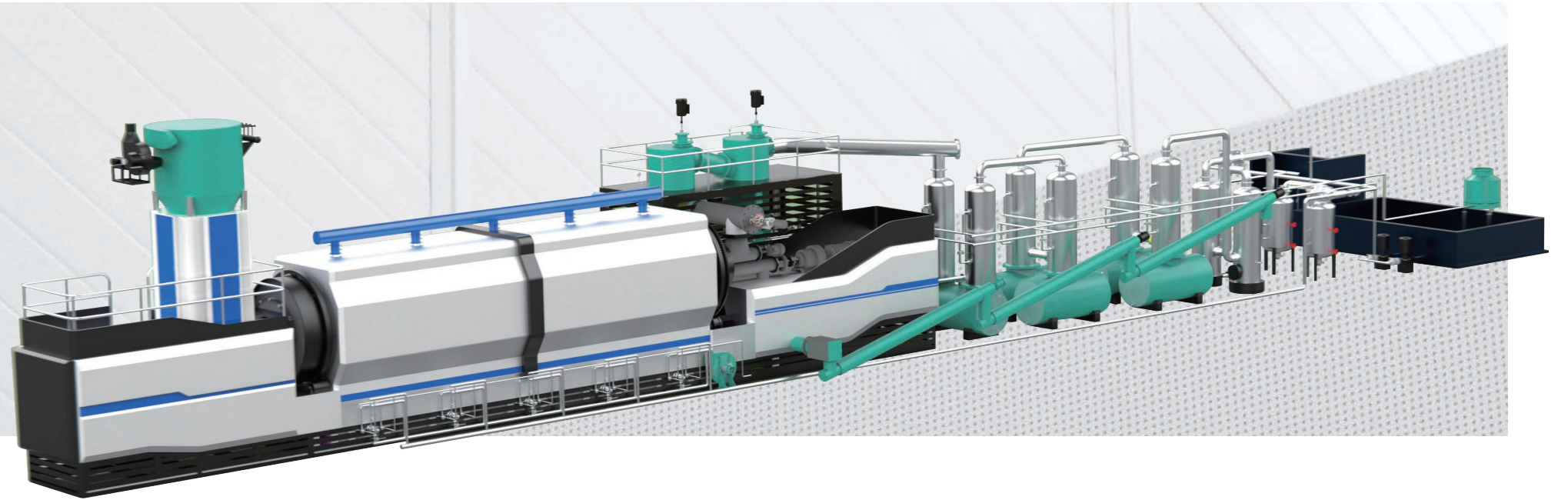
商丘金蓬实业股份有限公司

Pyrojin ECO Industrial Co.,Ltd.

Catalogue

环保无界 / 行动有边

Boundless Environmentalism
Purposeful Actions



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Company Profile

企业简介

金蓬实业

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商丘金蓬实业股份有限公司是一家省级高新技术企业，公司成立于2008年，于2016年12月12日在新三板市场挂牌上市，股票代码：金蓬股份（870188），是一家集科研、生产、销售于一体的专门从事废旧资源综合利用设备制造的专业机构。近年来，在政府及有关职能部门的大力支持下，公司迅速发展壮大，目前公司年产销各种大型成套环保设备100余台(套)，年主营业务收入超过1亿元，年出口创汇额900多万美元，年实现税收达千万元，连续多年被评为出口创汇先进企业、纳税先进单位。

公司的主营业务为环保专用设备的研发、生产和销售。在处理废橡胶、塑料、废油泥、精馏残渣等废弃资源循环再生综合利用方面经验丰富、技术领先。我公司经多年技术攻关，研制出国内独创的热解焚烧新工艺，具有设备投资少、生产工艺简单等优势。公司推出的设备是目前国内技术领先的环保处理设备。公司研发生产的设备技术已经通过ISO 9001：2015国际质量管理体系、ISO 14001：2015国际环境体系认证、欧美标准质量体系CE认证。凭借着高质量的产品，良好的信誉，优质的服务，产品畅销全国近三十多个省、市、自治区，远销全球五大洲。

60⁺

企业专利 Company Patents



6项发明专利和50多项国家研发专利
Invention Patents (6) & National R&D Patents (50+)

16⁺

技术&经验 Technology & Experience



长达16年的产品研发和服务经验
More than 16 years experience on product R&D and service

PYROJIN ECO INDUSTRIAL

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Pyrojin ECO Industrial Co.,Ltd. is a provincial-level high-tech enterprise founded in 2008. It was listed on the New Third Board market on December 12, 2016, with the stock code: Jinpeng Shares (870188). The company specializes in the research, production, and sales of plant for comprehensive utilization of waste resources. In recent years, with strong support from the government and relevant departments, the company has rapidly expanded. Currently, it annually produces and sells over 100 sets of various large-scale environmental protection plant, with annual main business revenue exceeding 100 million RMB, annual export earnings of over 9 million USD, and annual tax revenue reaching tens of millions of RMB. It has been rated as an advanced exporter and taxpayer for many consecutive years.

The company's main business is the research, production, and sales of environmental protection plant. We have rich experience and leading technology in the comprehensive utilization of waste resources such as waste rubber, plastic, waste oil sludge, and distillation residues. After years of technical breakthroughs, our company has developed a domestically innovative thermal decomposition and incineration process, which has the advantages of low investment and simple production process. The plant launched by the company is currently leading in environmental protection technology domestically. The technology developed and produced by the company has passed ISO 9001:2015 international quality management system certification, ISO 14001:2015 international environmental management system certification, and CE certification of European and American standard quality systems. With high-quality products, good reputation, and excellent service, the products are sold in nearly thirty provinces, municipalities, and autonomous regions nationwide, and are exported to five continents worldwide.

COMPANY
Profile

Development History

发展历史

1985

1985年开创了热解行业，有三十余年致力于固废危废综合处理项目的历史。

Pioneered the pyrolysis industry in 1985. Construction of integrated solid and hazardous waste treatment projects with over thirty years history.

2012

2012年公司建成一座省级研发中心。

Established a provincial-level research and development center in 2012.

2014

获得多项奖项。实现固废处理产业化、规模化、标准化。

Received several prizes. Achieving industrialization, scale, and standardization of solid waste treatment.

2016

公司新三板上市。于2016、2017年实现了年销售额达到1亿元以上的规模。

Went public on the New Third Board. In 2016 and 2017, the company achieved annual sales exceeding 100 million yuan.

2020

公司再次承担实施河南省重大科技专项。

Undertakes the implementation of major scientific and technological projects in Henan Province again.

Now

仍致力于设备的研发及危废的处理。

Still committed to plant research and development and hazardous waste treatment.

Company Culture



以质量赢得客户
以服务成就品牌

Winning customers by quality
Achieving brand by service

Cultural Value

文化价值

企业使命

Company Mission

用技术和智慧构建美好生活
Building a better life with
technology and intelligence



企业愿景

Corporate Vision

科技减污，资源循环，共筑
绿色地球。
Innovate for pollution
reduction, promote resource
recycling, and contribute to
building a green Earth.



核心价值观

Core values

客户第一、团队合作、持续
创新
Client First, Teamwork,
Continuous Innovation



金蓬精神

Pyrojin Spirit

专业、专注、创新、高效
Professional, Focused,
Innovative, Efficient



Material >>>

主营 环保专用设备的研发、生产和销售
处理废旧资源循环再生综合利用领域

Main in R&D, production and sales of plant for environmental protection and the comprehensive utilization of waste resource recycling



 医疗废物
Medical Waste

 废旧轮胎
Waste Tyre

 生活垃圾
Household Waste

 废油泥
Oil Sludge

 废塑料
Waste Plastic

 其他100多种经过试验的废物
Other 100+ Waste test with Trials

Products and Usage

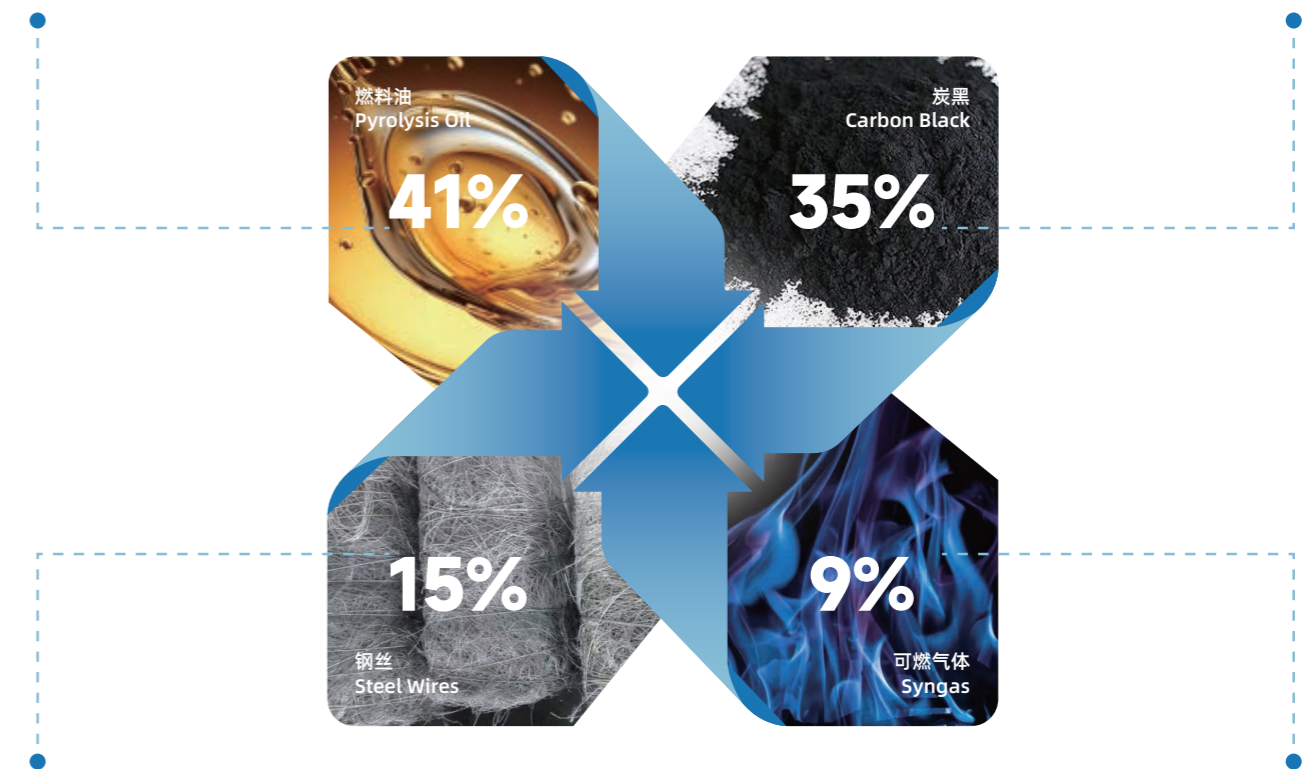
产品及用途

燃料油: 广泛用于钢铁厂、陶瓷厂等工业企业或化工企业以及宾馆、饭店等作为燃料使用, 也可用于重油发电机发电使用。

Fuel Oil: Widely used in Industries such as Steel & Iron factories, Ceramics or Chemical Industries or Hotels, Restaurants etc. as fuel oil, or used for heavy oil generators to get electricity.

炭黑: 粗炭黑可用于建筑用砖的原料, 也可深加工成工业炭黑、半补强炭黑、色素炭黑, 应用极其广泛。

Carbon Black: Crude carbon black can be used for construction bricks, or widely used as industrial carbon black N774, N660, N330 or color carbon black after deep-process.



钢丝: 在轮胎中的含量为15%, 可进行再加工。
Steel Wires: 12%-15% from tyres, sold or reprocessed.

可燃气体: 含量为9%左右, 可在生产过程中回收使用, 作为生产的燃料, 也可以收集甚至压缩成液化气, 可用于燃烧或发电。

Sync Gas: about 5%, can be recycled and used during process as fuel or collected even compressed into liquid gas, used as fuel or to generate electricity.

● **注:** 实际产量将取决于原材料的特性、工艺以及提取地点。
The actual output will depend on the properties of the raw material, the craft, and the extraction site.

Continuous Pyrolysis Plant Working Principle

连续热解设备流程描述

■ 工作原理 Working Principle

本项目利用负压热解技术对废旧轮胎进行无害化、资源化处理。该技术利用废旧橡塑中有机物的热不稳定性，在无氧条件下，加热热解炉内的固体橡塑原料，完成固体橡塑热解，经冷凝后形成各种气体、液体和固体，从中提取橡胶助剂、炭黑、钢丝和不凝气的过程。

This project utilizes negative pressure pyrolysis technology for the harmless and resourceful treatment of waste tires. The technology takes advantage of the thermal instability of organic materials in waste rubber and plastics. Under anaerobic conditions, the solid rubber and plastic raw materials are heated in a pyrolysis furnace, completing the pyrolysis process. The materials are then condensed to form various gases, liquids, and solids, from which rubber oil, carbon black, steel wire, and syngas are extracted.



01 进料系统 Feeding System

破碎后的胶粉原料经密封负压输送装置直接输送至热解设备的密封进料机，保证原料的稳定供给，整个过程全部自动化操作，输送效率高，无污染。

The crushed rubber powder is conveyed directly to the pyrolysis equipment through a sealed negative pressure conveyor device, ensuring a stable supply of raw materials. The entire process is automated, providing high transportation efficiency and no pollution.

02 热解处理系统 Pyrolysis Treatment System

进入热解炉的胶粉在微负压状态下采用间接加热的方式以天然气或者燃料油进行加热，通过热传递的方式对热解炉内的胶粉进行热解，当热解釜内温度达到200℃以上时，立体网状结构、大分子的橡胶热解成小分子量的低烃分子，油气经过汽包缓冲释压，进入冷凝器冷却，将可液化部分分离，从而得到高附加值的清洁橡胶助剂等资源化物质，冷却后的清洁橡胶助剂储存于储罐暂存，外售。

In the pyrolysis furnace, the rubber powder is heated indirectly using natural gas or fuel oil under slight negative pressure. The rubber powder undergoes thermal decomposition through heat transfer. When the temperature in the pyrolysis furnace exceeds 200°C, the large molecular rubber is broken down into low molecular weight hydrocarbons. The oil and gas pass through a vapor buffer to release pressure and enter the condenser for cooling, separating the liquefiable parts and obtaining high-value clean rubber oil and other resources. The cooled clean rubber oil are stored in tanks for temporary storage and sold externally.



03 气体处理系统 Gas Treatment System

不凝气经缓冲罐缓冲后进入气体净化罐除去少量颗粒物，处理后的气体进入加热底座当作加热燃料加热燃烧，作为微负压热解炉热源，既节约燃料能源又不污染环境；燃烧后产生的烟气先进入脱硫塔，与水泵抽送的碱液混合，通过中和反应，清除烟气中酸性物质，再通过吸附塔进行吸附处理，循环使用的碱液流回水池内，完成烟气的净化处理，清洁的烟气外排。

The syngas are buffered in a buffer tank before entering a gas purification tank to remove minor particulates. The treated gas is used as heating fuel in the heating base of the pyrolysis furnace, conserving fuel and avoiding environmental pollution. The combustion-generated flue gas first enters a desulfurization tower, mixing with alkaline liquid pumped by a water pump. The acid gases in the flue gas are neutralized and removed, and the gas is further treated in an adsorption tower. The alkaline liquid is recycled back to the water tank, completing the flue gas purification process, and clean flue gas is released.

04 出渣系统 Discharging System

热解结束后，混合固体材料通过密闭式螺旋出料机进入水冷式密闭出渣器，出渣器出口炭黑装入炭黑储存袋运送到炭黑储存区，整个生产过程都是自动化生产，而且通过管道密封连接，环保无污染。

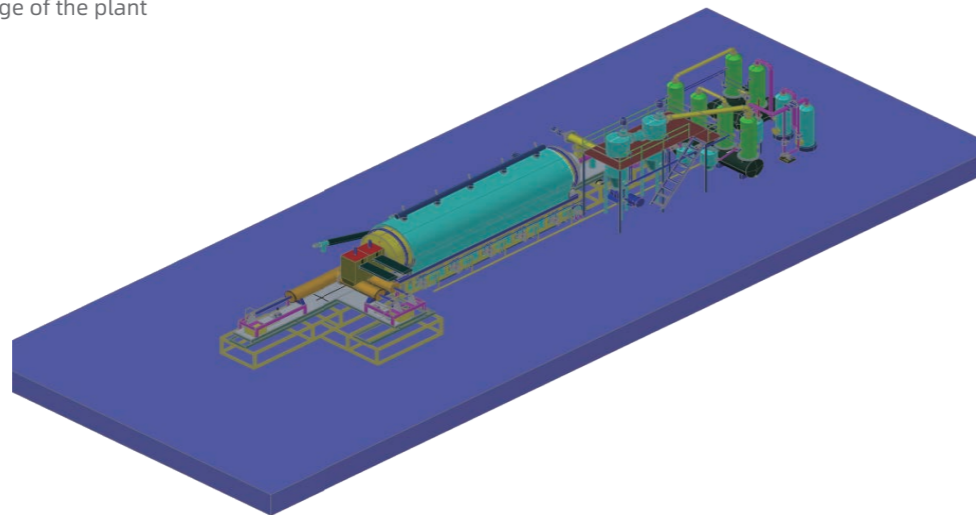
After pyrolysis, the mixed solid materials are transported to a water-cooled closed discharging device through a sealed screw discharger. The carbon black at the slag discharger's exit is packed into carbon black storage bags and transported to the carbon black storage area. The entire production process is automated and environmentally friendly, with sealed pipe connections ensuring no pollution.

Continuous Pyrolysis Plant

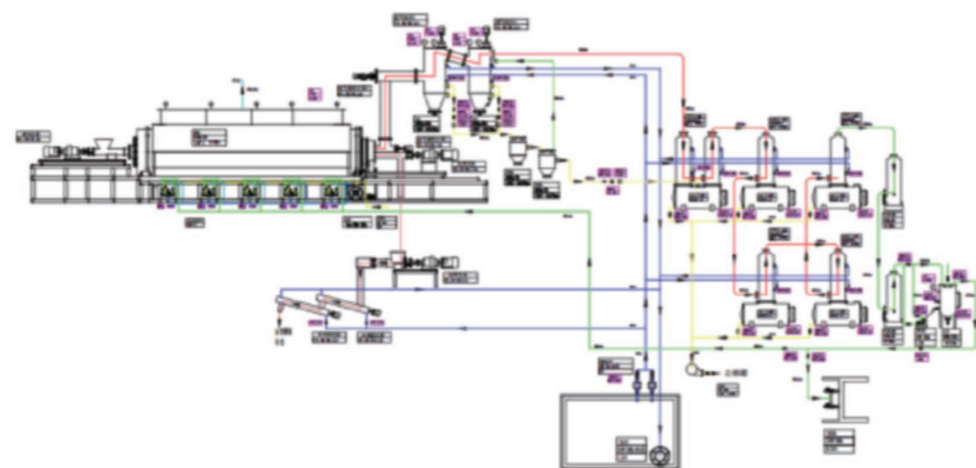
Continuous Pyrolysis Plant Diagram

连续热解设备图

01 设备效果图
Rendering image of the plant



02 设备工艺图
PID of the plant

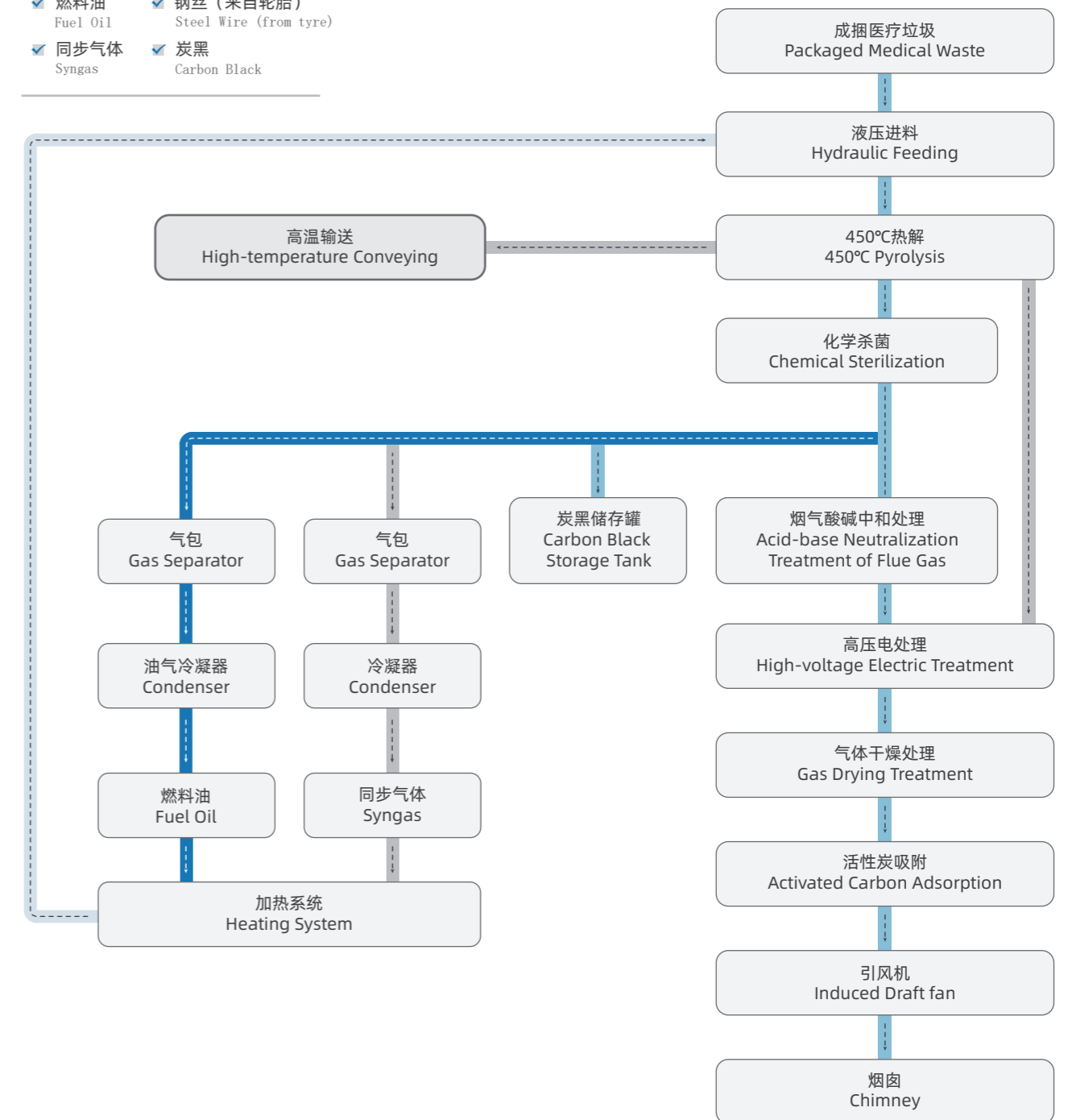


Medical Waste Processing Flow Chart

医疗垃圾处理流程图

生成物 Output

- ✓ 燃料油 Fuel Oil
- ✓ 同步气体 Syngas
- ✓ 钢丝 (来自轮胎) Steel Wire (from tyre)
- ✓ 炭黑 Carbon Black



THE WORLD IS SPLENDID BY PERSISTENT INNOVATION

世界，因执着创新而精彩



24H连续化生产
24H Continuous Production



自动化作业
Automated Operations



节能又高效
Energy Saving and High Efficiency

Continuous Pyrolysis Plant Characteristics

连续热解设备特点

自有专利 | 非标定制
Own Patents | Customization

- 01 进料系统采用全国独有双拔齿螺旋密封自动进料方式，进料量大。
The feeding system adopts a unique dual-pin spiral sealing automatic feeding method, allowing for a large feeding capacity.
- 02 出渣方式采用多级密封降温出渣，解决出渣堵塞、漏气问题。
The discharge employs multi-stage sealing and cooling, resolving blockage and gas leakage issues.
- 03 生产过程中采用微负压工艺系统，保证了所有气体不外漏更安全，符合欧盟安全标准。
The production process adopts a micro-negative pressure system to ensure all gases are contained, enhancing safety and meeting EU safety standards.
- 04 自动清理的专利技术，将主炉内部与冷凝器内部结焦部分自动清理并回收，连续运行周期增加5倍。
Patented automatic cleaning technology removes and recovers coking from the main furnace and condenser, increasing the continuous operation cycle by five times.
- 05 传动装置设计：外齿圈传动，拖轮轴承采用中国高铁专用锥形可微调轴承，耐磨，寿命长，设备运行平稳，噪音小。
The transmission device features an outer gear ring, and the roller bearing uses adjustable conical bearings from Chinese high-speed rail, offering durability, long life, stable operation, and low noise.
- 06 独特的加热外壳设计：优异的保温和节能效果。
A unique heating shell design provides excellent insulation and energy efficiency.
- 07 不凝气净化处理后进入加热底座当作燃料再利用，既节约燃料能源又不污染环境。
Syngas is purified and reused as fuel in the heating base, conserving fuel and preventing environmental pollution.
- 08 设备自动化程度高，操作简单易学只需3-5个人就可以进行生产。
The equipment has a high degree of automation and is simple to operate, requiring only 3-5 people for production.
- 09 加热底座炉膛采用最新传热工艺，可使温差控制在5°C之内，加热均匀快速，升温快，温度易控制，炉体寿命可延长5年。
The heating base furnace uses the latest heat transfer technology, maintaining temperature differences within 5°C, even and fast heating, easy temperature control, and extending furnace life by 5 years.
- 10 进料和出渣系统分别采用自动充氮技术置换炉内可燃气体，如有气体泄漏可自动进行氮气密封并报警，提高设备安全性。
The feeding and discharging systems use automatic nitrogen purging to replace flammable gases in the furnace. In case of gas leakage, nitrogen sealing and alarm systems automatically activate, enhancing safety.
- 11 设备安全性高，采用全自动埋弧焊接技术，使产品质量有保证，生产过程中安装有安全人工及自动安全检测装置。
The equipment features high safety standards with fully automatic submerged arc welding technology, ensuring product quality. Manual and automatic safety detection devices are installed during production.
- 12 操控系统自动化程度高，整条生产线运转情况可在操控台全面显示，更直观更全面。
The control system is highly automated, displaying the entire production line operation on the control panel for more intuitive and comprehensive monitoring.

Continuous Pyrolysis Plant Technical Parameter

连续热解设备相关技术参数

项目 Item	内容 Project
设备型号 Plant Model	PC
适用原材料 Suitable Raw Materials	医疗废物 Medical Waste
结构形式 Structure	卧式旋转 Horizontal Rotation Type
加热方式 Heating Method	间接加热 Indirect Heating
干馏釜尺寸 Reactor Size	Φ2500x12500mm
日处理量 Capacity (24h)	25Mt
工作压力 Work Pressure	微负压生产 Slightly Negative Pressure
总功率 Installed Power	110Kw
冷却方式 Cooling Method	循环水 Circulating Water
传动方式 Type of Drive	外齿圈传动 External Ring Gear Transmission
安装方式 Type of Installation	模块化 Modular
噪声 Noise db(A)	≤85
工作形式 Operating Mode	连续式 Continuous Operation
总重量 Total Weight(MT)	150Mt

Supply Limits

供货界限



装备提供方负责热解焚烧生产线范围内的设备、管路、附件及隔热保温材料，但不含土建、照明、消防、通风、采暖及给排水等相关的内容。双方供货界限划分详述如下：

The plant provider is responsible for the plant, pipelines, accessories, and insulation materials within the scope of the medical waste pyrolysis production line, but does not include related content such as civil engineering, lighting, fire protection, ventilation, heating, and plumbing. The delineation of supply boundaries between the two parties is detailed as follows:

01 原料及辅助物料 Raw materials and auxiliary materials

- 1 原材料：建设方将原材料送至供方指定工位；
Raw materials: The construction party will deliver the raw materials to the designated workstation of the supplier.
- 2 辅助燃料：建设方将天然气输送至供方提供的燃烧器进气管路处；
Auxiliary fuel: The construction party will transport natural gas to the inlet pipe of the burner provided by the supplier.
- 3 水：建设方将新鲜水输送至装备提供方的设备区内；
Water: The construction party will deliver fresh water to the equipment area provided by the equipment provider.
- 4 电：建设方将电源接至装备提供方提供的热解焚烧炉电控柜进线端。
Electricity: The construction party will connect the power supply to the line-in terminal of the pyrolysis incinerator control cabinet provided by the equipment provider.

02 产品 Products

固体产物：供方将产生的固体产物输送至热解焚烧区域外1m。
Solid products: The supplier will transport the generated solid products to 1 meter outside the pyrolysis incineration area.

03 外排（烟）气体 Exhaust (smoke) gases

- 1 气体产物：供方将不凝热解气体送至热解区域外1m；
Gas products: The supplier will transport the non-condensable pyrolysis gas to 1 meter outside the pyrolysis area.
- 2 外排烟气：供方将外排烟气送至热解区域外1m。
Exhaust smoke gases: The supplier will discharge the exhaust smoke gases to 1 meter outside the pyrolysis area.

Pros and Cons: Pyrolysis Incinerators vs. Traditional Incineration

热解焚烧炉与传统焚烧法优缺点对比

- 01 不产生二噁英:**
热解焚烧炉是在无氧状态下高温热解，没有二噁英生成的环境，所以不会产生有害气体“二恶英”，或者在规定的标准限制内只产生少量的“二恶英”；而传统焚烧法会产生大量的“二恶英”，处理成本高，处理难度大，很难持续达标排放，目前全国处理废塑料“二恶英”始终是共同的难点。
- 02 达标排放:**
热解焚烧法采用的工艺是无氧状态下对废塑料进行热解，因此各项常规污染物排放指标均能达到“国家污染物排放标准”以下，从而大大减少了大气污染物排放量；而传统焚烧法各项指标很难控制，难以达到“国家污染物排放标准”。
- 03 节能减排:**
热解焚烧炉大大减少了尾气排放量，且烟气排放量较传统焚烧减少了95%以上，而传统焚烧会产生大量的烟气排放。
热解焚烧炉按每天处置20吨废塑料计算，全年耗电55万元左右，其它耗材可忽略不计；而传统焚烧法年电费、碱片、石灰、二恶英填充料等，每年需要付出的设备运行费用大约在400万元左右。
- 04 循环经济、资源化利用:**
热解出来的可燃气体用来提高加热温度，该可燃气体形成循环利用，无须再用外部其它能源；而传统焚烧法是用外部能源进行提温和维持温度的。
热解焚烧炉焚烧废塑料可产生35%到45%的液体燃料并可进行综合利用，无残渣。而传统焚烧炉会产生30%左右没有价值的残渣和飞灰，且都需要付费填埋。
- 05 减量化、无害化:**
按处理100吨废塑料计算，热解焚烧炉只产生10%左右（10吨左右）的炭黑（炭黑有4000大卡以上热值，也可利用）；而传统焚烧法产生约30%左右（25吨左右）的残渣和飞灰。
- 06 无污水排放:**
热解焚烧炉不产生污水，无需建设污水处理站；而传统焚烧法，是要产生大量污水，并需建设污水处理站，处理成本高。
- 07 无布袋除尘器:**
热解焚烧炉由于不是直接焚烧废物，因此几乎没有颗粒物的产生，无需安装布袋除尘器，就能达到超低排放的效果；而传统焚烧法由于产生大量的烟气，必须安装布袋除尘器，将焚烧后产生飞灰进行拦截，运行成本高。
- 08 无急冷塔:**
热解焚烧炉不设置急冷塔，而传统焚烧法需要设置急冷塔。
- 09 无二燃室:**
热解焚烧炉不设置二燃室，而传统焚烧法需要设置二燃室，对产生的烟气进行再次焚烧处理。

»» 鉴于以上9点优缺点对比，热解焚烧设备确实能达到节能减排的目的：确实实现资源化、减量化、无害化处理目标；确实符合国家提出的碳达峰、碳中和的要求。

- 01 Dioxin-Free:**
Pyrolysis incinerators operate in an oxygen-free environment at high temperatures, preventing the generation of harmful dioxins. Therefore, they do not produce the toxic gas "dioxin" or produce only a small amount within specified standards. In contrast, traditional incineration methods produce large amounts of dioxins, leading to high treatment costs and difficulty in achieving continuous compliance with emission standards, which remains a common challenge in waste plastic treatment nationwide.
- 02 Compliance Emissions:**
The pyrolysis incineration process involves oxygen-free pyrolysis of waste plastic, allowing all conventional pollutant emission indicators to meet levels below the "National Pollutant Emission Standards," significantly reducing atmospheric pollutant emissions. In contrast, conventional incineration methods struggle to control various indicators and often fail to meet national pollutant emission standards.
- 03 Energy Saving and Emission Reduction:**
Pyrolysis incinerators greatly reduce exhaust emissions, with smoke emissions reduced by over 95% compared to traditional incineration methods, which emit significant quantities of smoke gases. With a daily disposal capacity of 20 tons of waste plastic, a pyrolysis incinerator consumes approximately 550,000 yuan in electricity annually, with negligible consumption of other materials. In contrast, traditional incineration methods incur annual operating costs of about 4 million yuan for electricity, alkali tablets, lime, and dioxin fillers.
- 04 Circular Economy and Resource Utilization:**
The combustible gas generated by pyrolysis is used to increase the heating temperature, achieving cyclic utilization without the need for additional external energy sources. In contrast, traditional incineration methods rely on external energy sources for heating and temperature maintenance. Pyrolysis incinerators produce 35% to 45% of liquid fuel from waste plastic, which can be comprehensively utilized without residue. In contrast, traditional incinerators produce around 30% of valueless residue and fly ash, all of which require paid landfill disposal.
- 05 Reduction and Harmlessness:**
For every 100 tons of waste plastic processed, pyrolysis incinerators produce only about 10% (approximately 10 tons) of carbon black, which has a calorific value of over 4,000 kilocalories and can also be utilized. In contrast, traditional incineration methods produce around 30% (approximately 25 tons) of residue and fly ash.
- 06 No Wastewater Discharge:**
Pyrolysis incinerators do not generate wastewater, eliminating the need for wastewater treatment stations, unlike traditional incineration methods, which produce large amounts of wastewater and require costly treatment facilities.
- 07 No Bag Filters:**
Due to the indirect incineration process, pyrolysis incinerators produce almost no particulate matter, eliminating the need for bag filters while achieving ultra-low emissions. In contrast, traditional incineration methods require bag filters to intercept fly ash generated during combustion, resulting in high operating costs.
- 08 No Rapid Cooling Tower:**
Pyrolysis incinerators do not require rapid cooling towers, unlike traditional incineration methods.
- 09 No Secondary Combustion Chamber:**
Pyrolysis incinerators do not require secondary combustion chambers, unlike traditional incineration methods, which necessitate them for the secondary combustion treatment of smoke gases.

»» Considering these nine points of comparison, pyrolysis incineration equipment can indeed achieve the goals of energy conservation, emission reduction, resource utilization, reduction, and harmlessness, aligning with national objectives for carbon peak and carbon neutrality.

Company Qualification & Honor

企业资质与荣誉



企业资质 Company Qualifications

我公司经多年技术攻关，研制出国内独创的热催化热解新工艺。公司研发生产的设备技术已通过：ISO9001;2015国际质量管理体系；ISO14001 ;2015国际环境体系认证；欧美标准质量体系CE认证。

2013至2019年累计获得河南省科学技术成果10项，其中多个发明专利分别获得“河南省科技进步二等奖”、“河南省科普成果奖”、“商丘市科技进步一等奖等”。

After extensive research, we've pioneered a unique domestic thermal catalytic pyrolysis process. The plant technology developed and produced by the company has passed; ISO9001;2015 international quality management system; ISO14001; 2015 international environmental system certification; European and American standard quality system CE certification.

From 2013 to 2019, a total of 10 scientific and technological achievements were obtained in Henan Province.

2012

建立了一所省级工程技术研究中心；河南省废旧橡塑综合利用设备工程技术研究中心。
Established provincial engineering technology research center; Henan Province Waste Rubber and Plastic Comprehensive Utilization Equipment Engineering Technology Research Center.

2014

河南省重大专项； 固体高分子废物热解制取燃油成套装备关键技术研究。
Major special projects in Henan Province; Research on key technologies of complete equipment for producing fuel by pyrolysis of solid polymer waste.

2018

研发废旧橡胶制品处理与资源化高值利用成套装备关键技术研究的项目，承担了2018年市级重大科技专项及2019年省级重大科技专项。
The project of research and development of key technologies for the treatment and high-value utilization of waste rubber products, undertaking the major municipal science and technology projects in 2018 and the major provincial science and technology projects in 2019.



发明专利 Invention Patents

6

- 设有自动出料装置的旋转式固体废弃物热解设备
- 节能环保型炭黑深加工设备
- 工业连续化废机油处理蒸馏设备
- 工业连续化环保节能型废轮胎热解设备
- 一种锅炉压力容器端面板环向焊接装置
- 炭黑、钢丝分离装置

- Rotary solid waste pyrolysis plant with automatic discharging unit
- Energy saving carbon black deep processing plant
- Industrial continuous waste engine oil treatment and distillation plant
- Industrial continuous energy saving waste tires pyrolysis plant
- A device for circumferential welding of end panels of boiler pressure vessels
- Carbon black and steel wire separator

实用型及其他专利 Utility & Other Patents



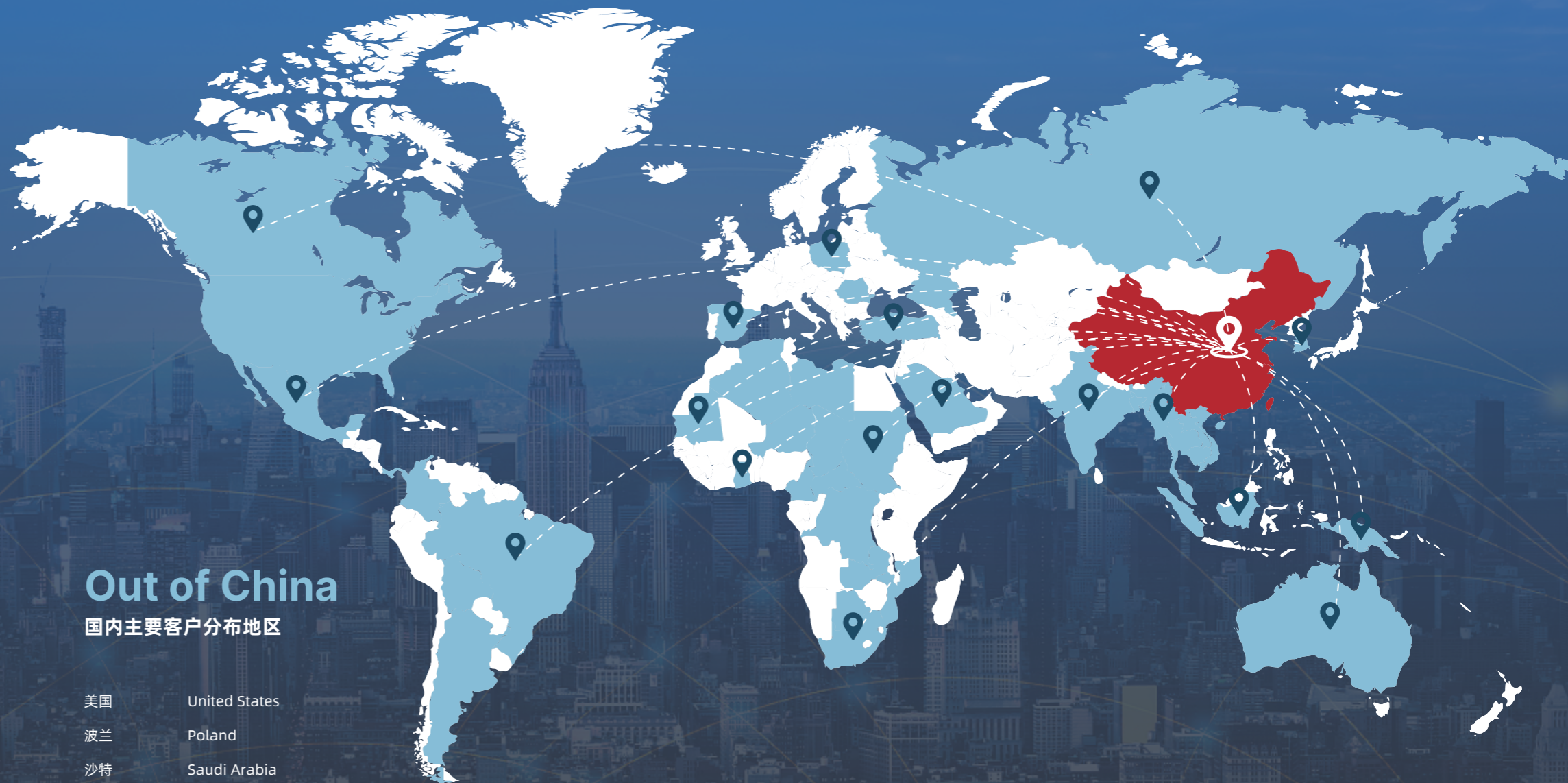
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- 外观设计专利 (4项) Appearance Patent (4)
- 实用型专利 (52项) Utility Patents (52)
- 软件著作权 (6项) Software copyrights (6)

Global Customers Distribution

全球客户分布图

■ 公司产品销售过的地区
 Regions where our company has conducted sales
■ 公司尚未开拓的市场
 Markets our company has not yet entered



1500 +

累计售出1500多套设备（间歇设备、连续设备）
Cumulative sales of more than 1500 sets of plant (Intermittent and continuous plant)

40 +

远销40多个国家和30多个中国地区
Export to over 40 countries all over the world and 30 region in China

16 +

长达16年的产品研发和服务经验
More than 16 years experience on product R&D and service

Out of China

国内主要客户分布地区

- 美国 United States
- 波兰 Poland
- 沙特 Saudi Arabia
- 巴西 Brazil
- 泰国 Thailand
- 土耳其 Turkey
- 奥地利 Austria
- 加纳 Ghana
- 罗马尼亚 Romania
- 葡萄牙 Portugal
- 苏丹 Sudan
- 韩国 Korea
- 印度等 India, etc.

In China

国内主要客户分布地区

- | | | |
|-----------------------|-------------------|-----------------------|
| 宁夏 Ningxia | 广州 Guangzhou | 河南鹤壁 Hebi, Henan |
| 山东济宁 Jining, Shandong | 内蒙 Inner Mongolia | 山东济宁 Jining, Shandong |
| 山西大同 Datong, Shanxi | 江西 Jiangxi | 新乡 Xinxiang |
| 新疆 Xinjiang | 贵州 Guizhou | 贵港 Guigang |
| 湖南 Hunan | 青岛 Qingdao | 聊城 Liaocheng |
| 邯郸 Handan | 陕西 Shaanxi | 云南等 Yunnan, etc. |

Terms and Conditions

付款条件

价格条款:

2020国际贸易术语解释通则中的FOB价，连云港港口。

付款条件:

第一：合同签订后，以电汇（T/T）方式预付合同金额的40%。

第二：60% 合同金额将在装货提供提单后通过电汇（T/T）。

买方为卖方工程师提供安装调试期间的双程机票、食宿、买方所在国当地交通及意外保障。买方还应支付工程师每天100美元的工资。

PRICE TERMS:

FOB LIAN YUNGANG price, as Incoterm 2020.

PAYMENT TERMS:

First: +40% of contract value will be paid by T/T in advance after signing the contract.

Second: +60% of contract value will be paid by T/T.

The buyer should provide double tickets, food, accommodation, Local traffic in buyer's country and accident assurance for seller's engineer during installation and commissioning. The Buyer should also pay the engineer's salary of 100 USD per day.

Delivery Terms

运输条款

交货:

- 装运港：中国连云港。
- 转运或分批装运：禁止。
- 发货日期：收到电汇定金之日起 60 天内。

标记：毛重/净重

价格有效期：30天

保修期：主反应器一年。

买方应根据卖方提供的操作手册来操作设备。

Delivery:

- Port of shipment: Lianyungang, China.
- Transshipment or Partial shipment: Prohibited.
- Shipment date: within 60 days upon the date receiving the deposit by T/T.

Marking: Gross weight /Net weight

Price Valid: 30 Days

Warranty: ONE YEAR for the main reactor.

The buyer should operate the plants according to the operation manual the seller supplied.

Shipping photos



Service and Support

售后服务与支持

交货：质量保修期：主反应器保修一年。

安装：根据买方要求，我公司派工程师到买方现场进行安装、调试，并对买方工人进行操作、维护等技能培训。

根据买方厂房及土地布置提供厂房布局设计图、土建资料、操作手册等。

对于用户造成的损坏，我公司按成本价提供配件。

我厂以成本价向客户提供易损件。

Delivery: Quality warranty period: One year warranty for the main reactor.

Installation: According to the requirements of the buyer, our company sends engineer for installation and commissioning in buyer's site including the training of skills of buyer's workers on operation, maintenance, etc.

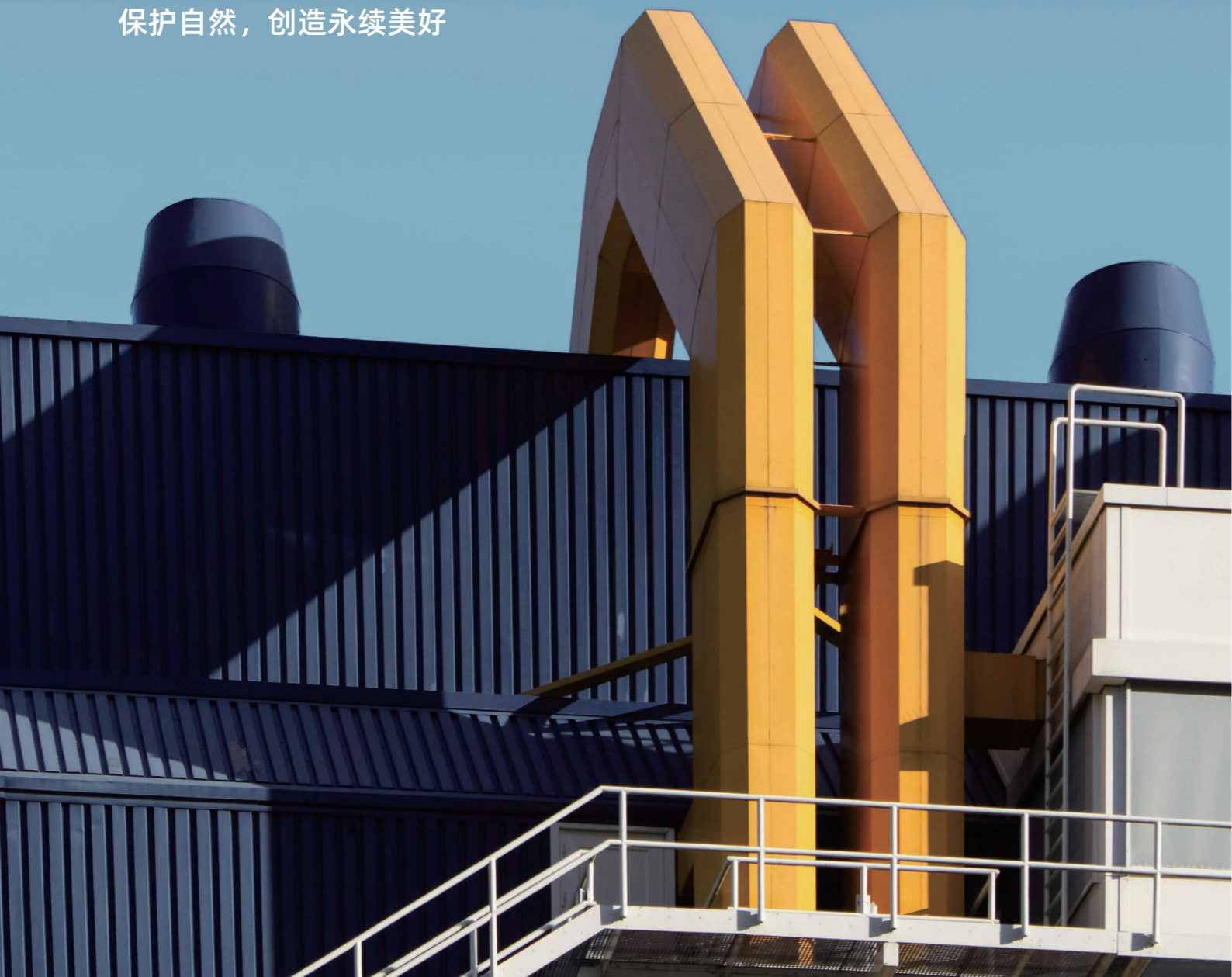
Supply layout according to buyer's workshop and land, civil works information, operation manuals, etc. to the buyer.

For the damage caused by the users, our company provides the parts and accessories with cost price.

Our factory supplies the wearing parts with the cost price to clients.

PROTECTING NATURE FOR A SUSTAINABLE FUTURE

保护自然，创造永续美好



技术研发
Principle Development



多项专利
Several Patents



品质保证
Quality Assurance



非标定制
Customization



可靠的有保障的服务 Reliable Guaranteed Service



以客户为中心，以质量求生存，以创新谋发展。
Customer centricity, survival through quality, and development through innovation.

4大优势 Four Major Advantages



完善的服务
Perfect service

稳定的性能
Stable performance



合理的价格
Reasonable price

诚信的行为
Honest behavior

质量管理体系 Quality Management System



质检小组把控质量
The quality inspection team controls the quality



项目小组全程服务
Full service provided by the project team



严控生产制作流程
Strictly control the production process



售后维护保证服务
After sales maintenance guarantee service

Service Guarantee

服务保障

Production Service

生产服务



对整个运输过程进行监控，确保安全性和及时性；
Monitor the entire transportation process to ensure safety and timeliness



根据需求，邀请客户到厂验证后发货；
According to demand, customers are invited to the factory for verification before shipment;



提前与客户联系，准备现场所需的辅助物品，确保在更短的时间内生产；
Contact customers in advance to prepare auxiliary items needed on site to ensure production in a shorter time;



提前向客户提供所需图纸，指导客户提前做好土建工作，确保在较短的时间内投产。
Provide customers with required drawings in advance, and guide customers to complete civil construction work to ensure that they can be put into production in a short period of time.



售前指导 Pre-sales Guidance

详细了解客户需求，分析规划并提供产品配置方案供客户选择。

Understand customer needs in detail, analyze planning and provide product configuration solutions for customers to choose.



售中咨询 Sales Consultation

邀请客户参观生产现场或厂区，介绍整个生产过程；为客户提供综合咨询、规划、实施等系列服务。

Invite customers to visit the production site or factory area and introduce the entire production process; provide customers with comprehensive consulting, planning, implementation and other series of services.



售后服务 After-sales service

- 01 独家交付经理和售后工程师双重服务；
Dual services of exclusive delivery manager and after-sales engineer;
- 02 现场安装、调试、生产，工程师全程保驾护航。
On-site installation, commissioning and production, engineers will escort you throughout the process.
- 03 提供专业的培训与相关技术咨询；
Provide professional training and related technical consultation;
- 04 售后部门设有24小时的紧急叫应服务系统；
The after-sales department has a 24-hour emergency response service system;
- 05 定期维护客户，保持高效沟通，并及时为客户解决问题；
Maintain customers regularly, maintain efficient communication, and solve problems for customers in a timely manner;
- 06 为客户终身提供成本价的易损件。
Provide customers with consumable parts at cost prices for life.