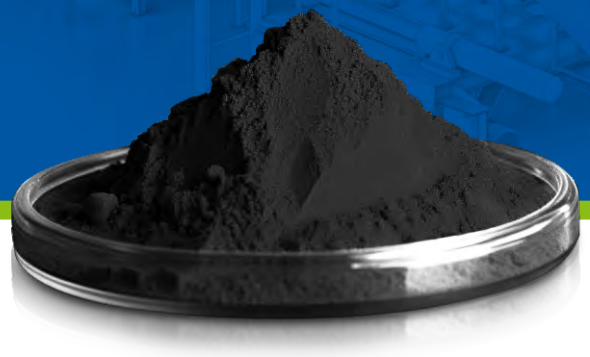
SHARING THE
| GREEN TECHNOLOGY |
共享绿色科技

废旧轮胎
破碎磨粉生产线

WASTE TIRE SHREDDING
AND GRINDING LINE

洁普抖音号　洁普公众号　洁普百家号



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洁普智能环保
GEP ECOTECH

郑州洁普智能环保技术有限公司

ZHENGZHOU GEP ECOTECH CO., LTD

郑州洁普智能环保技术有限公司，是一家科技创新与社会责任双驱动发展的固废装备制造企业。GEP源自"GREEN ENVIRONMENT PROTECTION"的缩写，投身环保事业，共享绿色科技，是时代赋予我们的责任与使命。

公司依托加工制造优势、物联网技术和固废处置经验，为客户提供共享工厂、智能软件、远程监测、远程诊断、系统集成、装备制造、安装调试、备品备件等智能化服务，帮助客户提高固废回收处置效率，降低投资运营成本。

Zhengzhou GEP ECOTECH Co., Ltd. is a solid waste equipment manufacturer driven by both technological innovation and social responsibility. GEP is derived from the abbreviation of "GREEN ENVIRONMENT PROTECTION", it is the responsibility and mission given to us by the times to join the cause of environmental protection and share the green technology.

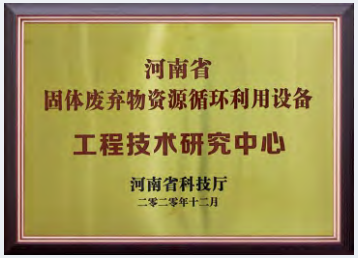
Relying on the advantages of processing and manufacturing, IOT technology and solid waste disposal experience, the company provides customers with intelligent services such as shared factories, intelligent software, remote monitoring, remote diagnosis, system integration, equipment manufacturing, installation and commissioning, spare parts, etc. to help customers improve the efficiency of solid waste recycling and disposal, reduce investment and operating costs.

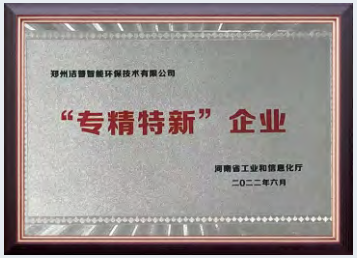
OUR STRENGTH
企业实力

洁普智能环保致力于绿色科技的持续发展和固体废弃物的再生利用

PATENT CERTICICATES

证书及专利





12 项发明专利
Invention Patents

50 项已授权专利
Granted Patents

25 项申请中专利
Patents In Progress

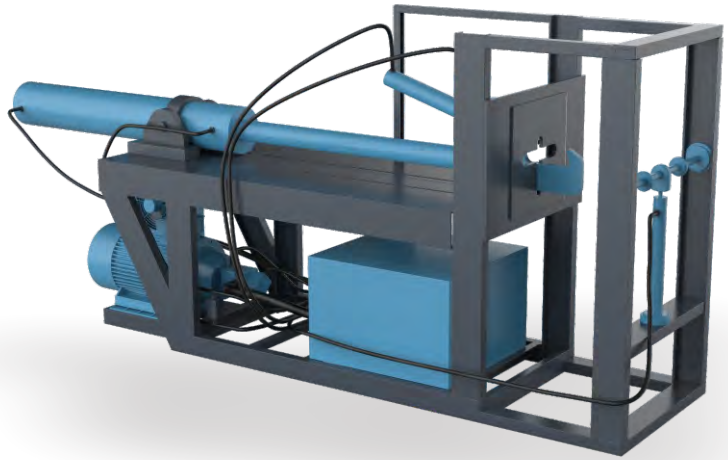
75 项国家专利
National Patents

MAIN PRODUCTS

主要设备

轮胎抽丝机

TIRE BEAD WIRE PULLER



轮胎抽丝机是将轮胎两侧大股钢丝一次性完整拉出、顺利分离钢丝和橡胶的专利设备（专利号：ZL202021197406.0），其作用是便于后续的轮胎破碎作业。

The tire bead wire puller is patented equipment (patent number: ZL202021197406.0) that can pull out the large strands of steel wire on both sides of the tire in one go and smoothly separate the steel wire and rubber. Its function is to facilitate subsequent tire shredding operations.

PERFORMANCE CHARACTERISTICS

性能特点

01

整机结构紧凑，有效压缩占地面积，便于运输和安装。

The whole machine has a compact structure, effectively compresses the footprint, and is easy to transport and install.

02

采用双钩拉丝，提升物料分离效率，降低操作人员劳动强度。

Adopting double-hook pulling to improve material separation efficiency and reduce the labor intensity of operators.

03

核心部件精选高品质耐磨材料，并经特殊工艺处理，强度高耐磨损，使用寿命长。

The core components are made of high-quality wear-resistant materials and treated with special processes, which have high strength, wear resistance, and long service life.

04

设有轮胎抬升装置，轻松适配多种规格轮胎，实现便捷安放，显著降低操作难度，提升作业舒适度。

The core components are made of high-quality wear-resistant materials and treated with special processes, which have high strength, wear resistance, and long service life.

05

液压系统采用先进的恒功率变量柱塞泵技术，噪音低，压力高，提升运行的稳定性和可靠性，同时增强控制系统的安全性能。

The hydraulic system adopts advanced constant power variable displacement piston pump technology, which has low noise, high pressure, improves the stability and reliability of operation, and enhances the safety performance of the control system.

06

采用手动控制轮胎提升与拉丝的前后运动，确保钢丝定位准确无误，提高工作效率和作业精度。

Adopt manual control of tire lifting and wire pulling forward and backward movements to ensure accurate steel wire positioning and improve work efficiency and accuracy.

TECHNICAL PARAMETERS

规格参数

型号 Model	处理能力(pc/h) Capacity	功率(kW) Power	轮胎尺寸(mm) Tire external diameter
GRT1200	20-60	11-22	800-1200

轮胎撕碎机
TIRE SHREDDER

GDT双轴轮胎撕碎机集高效破碎与环形滚筒筛分于一体，以独特的刀具设计和排列结构，实现轮胎精准破碎与即时筛分，提升处理效率，简化操作流程，是专为轮胎裂解预处理、燃烧发电原料制备及精细粉碎回收领域精心研发的革新设备。

The GDT double shaft tire shredder integrates efficient shredding and circular drum screening. With a unique cutter design and arrangement structure, it achieves precise tire shredding and instant screening, improves processing efficiency, simplifies operation processes, and is innovative equipment specially developed for tire pyrolysis pretreatment, combustion power generation raw material preparation, and fine shredding and recycling.

PERFORMANCE CHARACTERISTICS
性能特点

01

刀具采用优质合金钢，高破碎强度，耐磨且可循环修复，显著降低更换成本。S型刀具布局提升抓取破碎效率，更换便捷。

The cutters are made of high-quality alloy steel, with high shredding strength, wear resistance, and recyclable repair, significantly reducing replacement costs. The S-shaped cutter layout improves the gripping and shredding efficiency, and is easy to replace.

02

独立可拆卸定刀、高强度主轴、便捷联轴器、不可破碎物排料门等细节设计，展现精益品质。

Independent and detachable fixed cutters, high-strength cutter shaft, convenient coupling, unshreddable material discharge door and other detailed designs showcase lean quality.

03

双轴破碎与环形滚筒筛融合，同步破碎和筛分，功能集成，节省空间与投资（小型号）。

Double shaft shredding and circular drum screen integration, synchronous shredding and screening, functional integration, saving space and investment (for smaller models).

04

自动注油系统（专利号：ZL201721351290.X），智能管理，精准控制，减少人工干预，提升效率与安全。

Automatic oil injection system (patent number: ZL201721351290.X), intelligent management, precise control, reduces manual intervention, improves efficiency and safety.

05

智能监测系统，远程监控设备状态，预警潜在问题，多重防护保障设备安全。

Intelligent monitoring system, remote monitoring of equipment status, warning of potential problems, and multiple protective measures to ensure equipment safety.

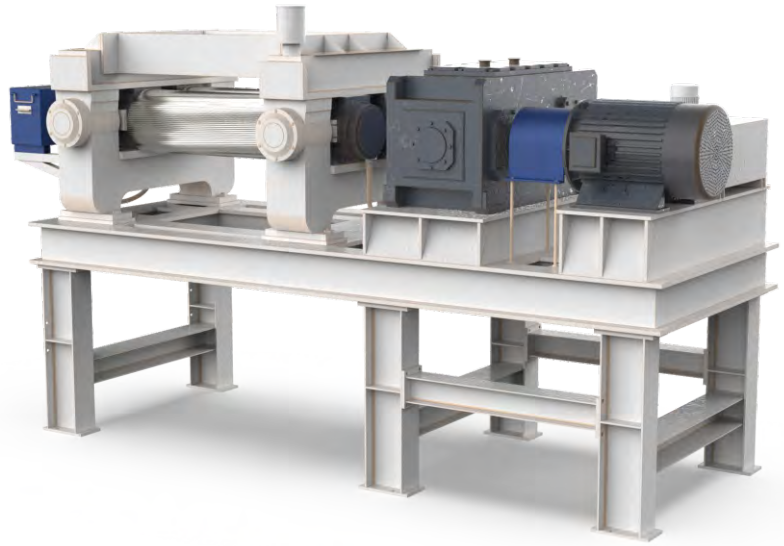
TECHNICAL PARAMETERS
规格参数

设备型号 Model	处理能力 (t/h) Capacity	出料尺寸(mm) Power	外形尺寸(mm) Tire external diameter
GDT6	1-3	50-300	4100×3200×3060
GDT8	2-6	50-300	4300×3200×3160
GDT9	4-8	50-300	5400×3200×3260
GDT10	5-12	50-300	5500×2780×3457
GDT12	8-15	50-300	6000×3260×3656
GDT13	10-20	50-300	6350×3490×4025
GDT15	12-30	50-300	6900×3700×4500

破胶机
RUBBER BREAKER

GPT破胶机是对粗碎后的橡胶块进一步粉碎碾磨的设备，具有细碎、分离钢丝与橡胶的作用。

GPT series rubber breaker is equipment that further crushes and granulates rough rubber blocks, and has the function of finely granulating and separating steel wires and rubber.



PERFORMANCE CHARACTERISTICS
性能特点

01

辊筒采用复合工艺结构，辊面下50mm均为冷却水槽，实现辊面温度快速降低，显著提升冷却效果。

The rotor adopts a composite process structure, with a cooling water tank located 50mm below the rotor surface, achieving rapid temperature reduction on the rotor surface and significantly improving the cooling effect.

02

辊筒主体选用优质钢材，表层通过堆焊技术覆盖耐磨合金层，增强了耐磨性；焊接性能出色，便于后期堆焊修复，延长使用寿命。

The main body of the rotor is made of high-quality steel, and the surface is covered with a wear-resistant alloy layer through surfacing welding technology to enhance wear resistance; Excellent welding performance, convenient for later surfacing welding repair, extending service life.

03

设备自动化程度高，采用电动调距、电动加油，操作简便，提升了工作效率。

The equipment has a high degree of automation, adopting electric distance adjustment and electric refueling, which is easy to operate and improves work efficiency.

04

设备整体采用模块化结构，便于快速拆装与更换，降低维修与维护的复杂性和时间成本。

The equipment adopts a modular structure as a whole, easy to quickly disassemble and replace, reducing the complexity and time cost of maintenance and repair.

05

复合结构辊筒，线速度大幅提高，单机产量也随之提高，且该设计有效降低生产的胶粉温度，大大提升了产品质量。

The composite structure rotor has significantly increased linear speed and single machine output, and this design effectively reduces the temperature of the rubber powder produced, greatly improving product quality.

TECHNICAL PARAMETERS
规格参数

型号 Model	GPT560	GPT660	GPT800
规格 Specification	560×510×1000	660×610×1100	800×600×1300
电机功率(kW) Motor power (kW)	132	220	280
主动辊直径（斜沟辊）(mm) Active rotor diameter (inclined groove rotor)	560	660	800

型号 Model	GPT560	GPT660	GPT800
从动辊直径（直沟辊）(mm) Driven rotor diameter (straight groove rotor)	510	610	660
辊面长度(mm) Rotor surface length	1000	1100	1300
主、从辊速比 Speed ratio of active and driven rotors	1.58:1	1.7:1	1.7:1
主动辊转速(r/min) Active rotor speed	24.5	31	31
主动辊线速度(m/min) Driven rotor speed (r/min)	40	64	78
辊筒材质 Rotor material	钢母体堆焊合金 Steel matrix surfacing welding alloy		
辊筒支撑方式 Rotor support method	8×24056CA/W33 双联轴承Duplex bearing	8×24054CA/W33 双联轴承Duplex bearing	8×24080CA/W33 双联轴承Duplex bearing
辊筒冷却方式 Rotor cooling method	中空冷却 Hollow cooling	周边钻孔冷却 Surrounding drilling cooling	周边钻孔冷却 Surrounding drilling cooling
轴承润滑方式 Bearing lubrication method	手动干油泵 Manual dry oil pump	电动干油泵 Electric dry oil pump	电动干油泵 Electric dry oil pump
调距方式 Distance adjustment method	手动调距 Manual	电动调距 Electric	电动调距 Electric
制动装置 Brake rigging	电磁抱闸 Electromagnetic brake		
产量（24目胶粉）(kg/h) Capacity(24 mesh rubber powder)	⩾500±100	⩾1000±100	⩾1600±100
外型尺寸(mm) Overall dimensions	5304×1960×1695	5910×2230×1750	7160×2200×1825
整机重量(t) Whole machine weight	≈17	≈26.5	≈26.5

橡胶磨粉机
RUBBER GRINDING MACHINE

GTM橡胶磨粉机是一种在常温下，可将进料规格为15-25目（无钢丝和其它高硬度杂质）的橡胶颗粒，一次性研磨成40-60目的精细橡胶粉的专用设备。若进料规格为60-80目，则出料为80-120目的超精细橡胶粉。其研磨范围可根据用户对橡胶粉的粒度需求进行调节。

The GTM rubber grinding machine is specialized equipment that can grind rubber granules with a feeding specification of 15-25 mesh (without steel wires and other high hardness impurities) into fine rubber powder of 40-60 mesh at room temperature in one go. If the feeding specification is 60-80 mesh, the discharge will be 80-120 mesh ultra-fine rubber powder. The grinding range can be adjusted according to the user's particle size requirements for rubber powder.

PRODUCT HIGHLIGHTS

性能特点

01

设备结构紧凑美观，占地面积小，无论是运输中的空间利用率还是安装现场的灵活布置，都展现出很大地便利性。

The equipment has a compact and beautiful structure, with a small footprint, which demonstrates great convenience in terms of space utilization during transportation and flexible layout at the installation site.

02

设备采用先进的研磨技术，在保证产品质量的同时，实现高产量的处理，且能耗小，降低了运行成本。

The equipment adopts advanced grinding technology, which ensures product quality while achieving high capacity processing, with low energy consumption, reducing operation costs.

03

设备结构设计合理，拆装方便，易于维护和保养，从而节省了维护时间和成本。

The equipment structure design is reasonable, easy to disassemble and assemble, and easy to maintain, thereby saving maintenance time and costs.

04

设备研磨范围灵活可调，能够精确响应不同用户对橡胶粉粒度的特定要求。

The equipment structure design is reasonable, easy to disassemble and assemble, and easy to maintain, thereby saving maintenance time and costs.

TECHNICAL PARAMETERS

规格参数

型号Model	GTM280	GTM320
主电机功率(kW) Main motor power	30	37
副电机功率(kW) Auxiliary motor power	0.2	1.5
进料尺寸(目) Feeding size(mesh)	15-25	5-15
出料尺寸(目) Discharge size(mesh)	40-160	40-160
磨盘直径(mm) Grinding disc diameter	280	320
产量(kg/h) Capacity	100	150-200
冷却方式 Cooling method	循环水冷却 Circulating water cooling	
进水压力(Mpa) Water inlet pressure	≥0.3	≥2.5
设备重量(kg) Equipment weight (kg)	1050	1450
外形尺寸(mm) Overall dimensions	1550×600×1320	1750×800×1520

皮带输送机
BELT CONVEYOR

皮带输送机利用输送带的连续或间歇运动来输送100kg以下的松散物料，具有输送能力强、输送距离远、运送平稳可靠、拆装方便、易于维护、使用成本低等特点。

The belt conveyor uses the continuous or intermittent motion of conveyor belts to transport loose materials weighing less than 100kg. It has the characteristics of strong conveying capacity, long conveying distance, smooth and reliable transportation, easy disassembly and assembly, easy maintenance, and low operation cost.

筛分机
SCREENING MACHINE

筛分机专为高效筛分粉状或颗粒状干物料而设计。该机采用多角度激振源，物料在筛分过程中经历多维度的振动作用，被精准地分为多个不同粒度级别，满足多样化的生产需求。

The screening machine is designed specifically for efficient screening of powdered or granular dry materials. The machine adopts a multi angle excitation source, and the material undergoes multidimensional vibration during the screening process, which is accurately divided into multiple different particle size levels to meet diverse production needs.

磁选机
MAGNETIC SEPARATOR

磁选机凭借其磁辊(或磁筒)所释放的强大磁场能量与磁感应强度,在橡胶轮胎破碎后的处理过程中,成为了分离钢丝与提纯橡胶的关键设备。

The magnetic separator, relying on the powerful magnetic field energy and magnetic induction intensity released by its magnetic rotor (or magnetic drum), has become key equipment for separating steel wires and purifying rubber during the processing after rubber tire shredding.

纤维分离机
FIBER SEPARATOR

纤维分离机是将胶粒或胶粉中混杂的绒毛纤维分离出来的空气分选机械,其目的在于提高胶粉的纯度和再生胶产品的质量。该机基于胶粉和纤维间的比重差,在气流的作用下,通过调节风叶板的角度,改变机体内部气流速度,从而实现高精度分离。

The fiber separator is an air separation machine that separates the fluff fibers mixed in rubber granules or rubber powder, with the aim of improving the purity of powder and the quality of recycled rubber products. This machine is based on the specific gravity difference between rubber powder and fibers. Under the action of airflow, the angle of the fan blade is adjusted to change the internal airflow velocity of the machine, thereby achieving high-precision separation.