

SHARING THE GREEN TECHNOLOGY

National Patents ZL 2019 1 0420648.7
ZL 2019 2 0722854.9



Patented Products



International
Quality System
Certification



CE Certification



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GV Series Intelligent Tower Type Hazardous Waste Shredding System



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GV Series Intelligent Tower Type Hazardous Waste Shredding System



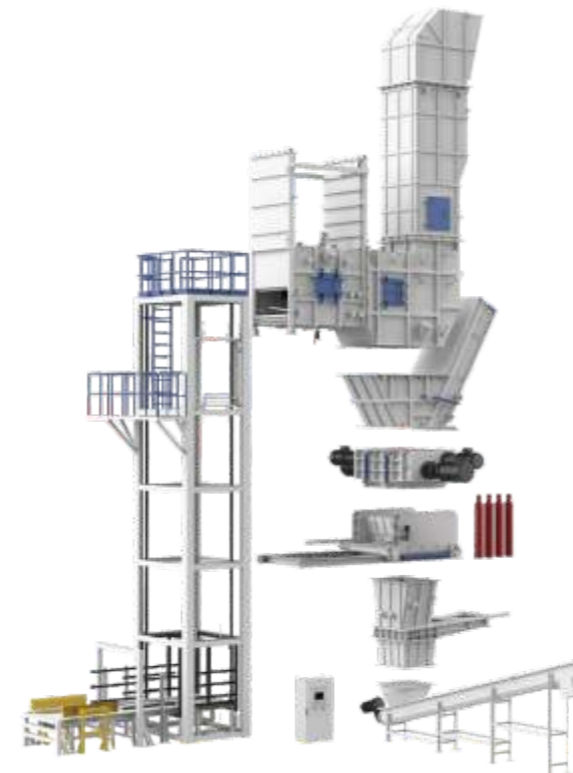
PRODUCT DESCRIPTION

The GV series intelligent tower type hazardous waste shredding system, addressing the characteristics of hazardous waste such as toxicity, corrosiveness, flammability, reactivity, and infectivity, etc. integrates fully automatic lifting feeding system, infeed system, feeding system, shredding system, discharge system, fire fighting system, repair and maintenance system, and intelligent monitoring system. It is designed in an integrated manner and has complete functions. The shredding system products are all self-developed shredder series products by GEP ECOTECH, with strong performance and high efficiency. They have undergone special treatment in anti-corrosion, leakage prevention, explosion-proof, and other aspects, ensuring quality assurance; The fire fighting system can provide extinguishing materials such as CO₂, dry powder, N₂, and high-pressure steam, etc. to prevent accidents before they occur; Equipped with an intelligent monitoring system and a retractable push-pull cutter box, it is more convenient to operate, maintain, and repair, and is more user-friendly.



» Working principle

Before starting the system, inject N₂ into the sealing cabin and shredding chamber in advance to reduce the O₂ concentration in the system. (When filling with N₂, all gate valves of the system are in a closed state.) After the O₂ concentration drops below the set value, the system starts. The fully automatic lifting feeding system lifts the pallets containing materials to be level with the sealing cabin, then open the front gate, and the materials enter the sealing cabin. Close the front gate, and (the rear gate is now in a closed state) then inject N₂ into the cabin. After the N₂ filling in the sealing cabin meets the requirements, open the rear gate, and the conveyor in the cabin sends the pallets and materials into the shredding chamber. Close the rear gate. With the assistance of a reciprocating feeding system, the materials are sheared and torn by the blades of the shredding system for shredding operations. After the shredding is completed, open the gate valve and the materials are discharged through the discharge hopper. If a discharge system is selected, the shredded materials will enter the screw conveyor through a chute and then be fed into the material pit. During system operation, the O₂ content online monitoring system continuously monitors the O₂ concentration in the system, and if necessary, adds N₂ to reach the O₂ concentration set value. When a fire occurs during the operation of the system, the intelligent monitoring system immediately alarms, the shredding system automatically shuts down, the front and rear gates of the sealing cabin and the gate valves of the feeding hopper automatically close, timely isolating the flame from air contact, and preventing the spread of the fire. At the same time, the CO₂ fire extinguishing system automatically starts, releasing extinguishing agents, and implementing fire extinguishing.



» Equipment composition

Fully automatic lifting feeding system, infeed system, feeding system, shredding system, discharge system, fire fighting system, repair and maintenance system, intelligent monitoring system

Product Highlights



01/

» Multiple fire protection

- A reliable fire protection system is built, including a CO₂ fire extinguishing system, an O₂ protection system, a safety relief system, etc. to ensure that the system operates in a safe environment. Even if there is a sudden fire, it can eliminate the fire in the initial stage, ensuring the safety of personnel and systems.



02/

» Intelligent monitoring system

- The intelligent monitoring system can control and monitor the operation status of all subsystems online, and automatically run the entire system based on comprehensive information; The functions of one click start/stop, abnormal alarm, emergency stop, overload protection, etc. effectively reduce the system failure rate and also ensure personal safety.



03/

» Tower type layout

- Highly intensive tower type spatial layout, compact structure, and small footprint; The various subsystems are cleverly linked, with powerful functions, reasonable processes, and smooth production; Modular steel structure design, which can be equipped with multi-level shredding system as needed to improve shredding efficiency.



04/

» Flexible configuration

- The shredding system can be flexibly configured with different models of shredders manufactured by GEP ECOTECH according to the materials. It is mature and stable, with strong applicability, a wide range of shredding materials, and strong processing capacity; Various forms of feeding methods, such as grabbing machine, belt conveyor, and lifting machine, etc. can also be selected as needed.



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共享绿色科技



**INTELLIGENT SOLID WASTE DISPOSAL SOLUTION
PROVIDER AND EQUIPMENT MANUFACTURER**

NATIONAL PATENT



A Shredder	Patent No.:ZL 2019 1 0420648.7
Shredder	Patent No.:ZL 2019 2 0722854.9
Cutter Box	Patent No.:ZL 2022 3 0014558.0
Shredder Movable Cutter	Patent No.:ZL 2022 2 0875642.6
Shredder Cutter Shaft Sealing Structure	Patent No.:ZL 2022 2 0430143.6
A Fixed Cutter Structure for Shredder Cutter Box	Patent No.:ZL 2019 2 0154367.7

SOFTWARE COPYRIGHT



Hazardous Waste Shredding Intelligent Control System	Registration number: 2019SR0053423
Crusher Operation Self-diagnosis System	Registration number: 2019SR0071856
Crusher O&M Monitoring System	Registration number: 2019SR0067379
Crusher Intelligent Monitoring System	Registration number: 2019SR0072287
Shredder Monitoring System	Registration number: 2019SR0071791
Shredder Self-diagnostic Analysis System	Registration number: 2019SR0067377



DIGITAL GEP ECOTECH

2012

Founded in 2012, GEP Group has taken resource recycling as our mission and is committed to the research and development, production, sales and service of intelligent solid waste shredding equipment and its supplementary equipment, as well as providing professional and customized system solutions for solid waste disposal production lines. With more than ten years of experience, GEP has covered dozens of countries and regions around the world, and has become a major force in the solid waste field.

66000

Our company have an efficient intelligent equipment manufacturing base with a total area of 66,000 square meters, equipped with complete high-precision equipment processing systems such as CNC vertical machining centers, CNC gantry machining centers, CNC lathes, CNC grinders, CNC wire cutting, and an experienced professional technical team. It can achieve the efficient production demand of 400 sets of intelligent environmental protection equipment per year, ensuring timely delivery of various customer orders.

150+

Our company has been awarded National High-Tech Enterprise, Henan Solid Waste Resource Recycling Equipment Engineering Technology Research Center, Henan Province "Professionalization, Refinement, Specialization, Novelty" Small and Medium Enterprise, Henan Province Science and Technology Small and Medium Enterprise, Zhengzhou City Science and Technology Little Giant and other enterprise awards. It has obtained 128 national patents and 39 software copyrights, and has successfully passed the ISO "three systems" certification for quality management, environment management, and occupational health and safety management, as well as the Europe Union CE certification.

70+

Our company has made achievements in eight fields, namely, bulky waste recycling, biomass recycling, industrial waste recycling, construction and demolition waste recycling, waste tires recycling, hazardous waste recycling, food waste recycling and MSW recycling, winning the favor of more than 70 overseas clients and successfully helped customers achieve the recycling of solid waste, showcasing the intelligent manufacturing capability of Chinese environmental protection equipment manufacturing enterprise to the world.

WORRY-FREE SERVICE

Our commitment

The service we supply is more than the products you buy
When you buy a product, you are buying a service that covers the entire life cycle of the product.

30

A response to technical enquiries
within 30 minutes

24

Engineer dispatch
within 24 hours

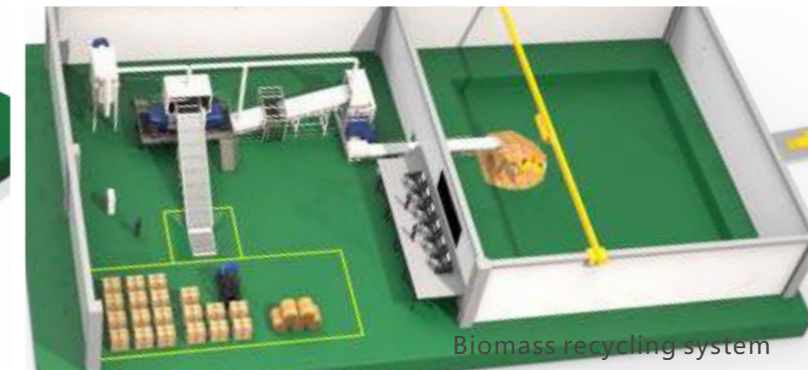
12

Free repair within 12 months
of delivery

365

365 days a year for
service requests

SERVICE SECTORS





Double-Shaft Bulky Waste Shredder



Double-Shaft Food Waste Shredder



Double-Shaft Industrial Waste Shredder



Double-Shaft Waste Tire Shredder



Pre-Shredder



Four-Shaft Shredder



Third Generation Europe Type Fine Shredder



Single Rotor Fine Shredder



Double-Shaft Biomass Shredder

PRODUCT FAMILY



Double Rotor Fine Shredder



Jaw Crusher



Impact Crusher



Cone Crusher



Vertical Shaft Impact Crusher



Mobile Crusher Plant



Mobile Shredder Plant



RDF Pelleting Mill



Wind Sifter