Smart Recycling，the Genius Way www．geniusplas．com


# Genius. <br> Your Smart Recycling Specialists 



G enius Machinery Co., Ltd. specializes in the comprehensive plant planning of plastic cycing equipment. With over 40 years of experience in designing and manufacturing plastic recycling equipments
Since its establishment, Genius Machinery Co., Ltd. has provided industries with plastic washing lines,

Innovative Technology


Our company pursues growth, excellence and environmental protection. Our professional R\&D team has paid unmatched attention to product quality and durability. Genius always meets the demands of customers with the latest design technology Experienced staff and state of the art processing technology are our strength which tells the difference between us and others. At Genius, we master welding and drilling skills which are essential parts of production.
plastic recycling machines, pelletizers, plastic squeeze dryers, crushers, shredders, and other complete series of manufacture line for one-stop services. The Genius brand is sold all over the world, and is an expert in plastic recycling equipment.

Machining Technology


GENIUS rigorously trains all its employees from time to time to keep them updated of new processes, techniques, and technologies to ensure that they follow the standard operating procedures in manufacturing and assembling machineries. Each engineer has an extensive experience, the needed skills, and technology that are essential in providing customers the highest quality products



## Professional

We pursue superior performance in the art of recycling, by rich comprehensive plastic recycling plant planning to provide the best, more professional, humanized recycling solutions.

## Breaking

 ThroughWe maintain an innovative attitude of surpassing ourselves, which is the key to our flexibility, so that we can use superior technology
to help our clients
increase their competitive edge.


Peace of Mind
We uphold / deliver absolute quality and thoughtful services to provide customized recycling systems according to the clients' needs presenting a smart and reliable brand.



## CUTTER COMPACTOR PLASTIC RECYCLING MACHINE

## APPLICABLE MATERIALS

PP, OPP, BOPP, HDPE, LDPE LLDPE, and more.
Especially for plastic films, foan woven, raffia, wash and squeezed films, flakes, edge-trimmed and cutting-edge materials.
SUPERIOR FEATURES
Easy Cleaning and Blade Replacing.

With the cleaning door, the operator can clean the compactor and replace the rotator blades
without dismantling the entrance covers. There are two windows, he operator can change the stationary blades without taking he covers apart.
Efficiency Compactor
Temperature Control System.
Triple cooling sections - air cooling system, compactor body water cooling system and water water cooling system and water can set the temperature of each to stably control the compactor's temperature.

COST SAVING


- abobrostreadicest $01 \sim 2$ operatos to operate whole plant


KRIEGER SERIES - SINGLE STAGE

| Model | KR-65 | KR-85 | KR-100 | KR-125 | KR-135 | KR-150 | KR-175 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Screw | ¢65mm | ¢85mm | ¢100mm | ¢125mm | ¢135mm | ¢150mm | Ф175mm |
| Main Drive | $\begin{gathered} 40 \mathrm{HP} \\ (30 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 75 \mathrm{HP} \\ (56 \mathrm{KW}) \end{gathered}$ | $\begin{aligned} & 125 \mathrm{HP} \\ & (94 \mathrm{KW}) \end{aligned}$ | $\begin{gathered} 175 \mathrm{HP} \\ (131 \mathrm{~kW}) \end{gathered}$ | $\begin{aligned} & 200 \mathrm{HP} \\ & (150 \mathrm{KW}) \end{aligned}$ | $\begin{aligned} & 250 \mathrm{HP} \\ & (188 \mathrm{KW}) \end{aligned}$ | $\begin{gathered} 350 \mathrm{HP} \\ (262 \mathrm{KW}) \end{gathered}$ |
| Compactor Drive | $\begin{gathered} 30 \mathrm{HP} \\ (23 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 60 \mathrm{HP} \\ (45 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 75 \mathrm{HP} \\ (56 \mathrm{KW}) \end{gathered}$ | $\begin{aligned} & \text { 100HP } \\ & (75 \mathrm{~kW}) \end{aligned}$ | $\begin{aligned} & \text { 125HP } \\ & (94 \mathrm{KW}) \end{aligned}$ | $\begin{gathered} \text { 150HP } \\ (112 \mathrm{~kW}) \end{gathered}$ | $\begin{gathered} \text { (1751 } \mathrm{kW} \text { ) } \end{gathered}$ |
| Output (kg/hr) | 80~100 $\uparrow$ | 200~300 $\uparrow$ | 300~400 $\uparrow$ | 450~600 $\uparrow$ | 650~850 $\uparrow$ | 700~800 $\uparrow$ | 900~1100 $\uparrow$ |

## Two Stage Cutter Compactor Plastic Recycling Machine

## APPLICABLE MATERIALS

PP, OPP, BOPP, HDPE, LDPE, LLDPE, and more
Especailly for plastic films, foam, woven, raffia, wash and squeezed films, flakes, materials with water content and post-consumer waste materials.
SUPERIOR FEATURES
Unrivaled Degassing
Up to triple optional degassing zones equiped with vacuum pump

No More Pollution
Exclusive development of
the two-stage extruder.
A completely enclosed flow design, which prevents the molten polymer from releasing smoke

High Performance Filtration
Optional Dual-Piston Filter Changer and Self-Cleaning Filter


| Model |  | KR-100i | KR-125i | KR-135i | KR-150i | KR-175i |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Main Extruder | Screw | Ф100mm | Ф125mm | ¢135mm | ¢150mm | ¢ 75mm |
|  | Drive | $\begin{aligned} & 125 \mathrm{HP} \\ & (94 \mathrm{KW}) \end{aligned}$ | $\begin{gathered} \text { (1751KP } \end{gathered}$ | $\begin{gathered} 200 \mathrm{HP} \\ (150 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 250 \mathrm{HP} \\ (188 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 300 \mathrm{HP} \\ (225 \mathrm{KW}) \end{gathered}$ |
| Sub Extruder | Screw | Ф125mm | Ф155mm | ¢155mm | Ф165mm | Ф200mm |
|  | Drive | $\begin{gathered} 40 \mathrm{HP} \\ (30 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 75 \mathrm{HP} \\ (56 \mathrm{KW}) \end{gathered}$ | $\begin{aligned} & 100 \mathrm{HP} \\ & (75 \mathrm{KW}) \end{aligned}$ | $\begin{gathered} 100 \mathrm{HP} \\ (75 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} \text { 150HP } \\ (113 \mathrm{KW}) \end{gathered}$ |
| Compactor Drive |  | $\begin{gathered} 75 \mathrm{HP} \\ (56 \mathrm{KW}) \end{gathered}$ | $\begin{aligned} & 100 \mathrm{HP} \\ & (75 \mathrm{KW}) \end{aligned}$ | $\begin{aligned} & 125 \mathrm{HP} \\ & (94 \mathrm{KW}) \end{aligned}$ | $\begin{aligned} & \text { (1150HP } \\ & (113 \mathrm{KW} \end{aligned}$ | $\begin{aligned} & 175 \mathrm{HP} \\ & (131 \mathrm{KW}) \end{aligned}$ |
| Output (kg/hr) |  | $300 \sim 400 \uparrow$ | 450~600 $\uparrow$ | 650~850 $\uparrow$ | $700 \sim 800 \uparrow$ | $900 \sim 1100 \uparrow$ |

## Force Side Feeding Plastic Recycling Machine

The Genius Recycling Solution

APPLICABLE MATERIALS
PP, OPP, BOPP, HDPE LDPE LDPE and more Suitable for kinds of plastic wastes, including foam, woven, raffia wash and squeezed films flakes, material with water content or post-consumer waste materials.

SUPERIOR FEATURES
Higher Energy Saving
Exclusive design, saves up to 30\%

Exclusive design, saves up to $30 \%$ of energy.

Higher Labor Saving
The feeding control system monitors the ampere and controls the feeding speed automatically. Only 2 operators are required for an entire plant.

More Eco-friendly
The unique two stage recycling machine processes polymers in a closed cycle. It won't leak or be exposed to the air anymore. No more excess smoke is emitted, therefore, No More Pollution!

## Higher Efficiency

The force side feeding device creates a very stable feeding flow. With stable feeding, the main screw is always fully loaded with materials, which ensure the highest output performance.
Increase up to $50 \%$ of output capacity.

RECO SERIES - SINGLE STAGE

| Model | RECO-85 | RECO-100 | RECO-125 | RECO-135 | RECO-150 | RECO-175 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Screw | Ф85mm | Ф100mm | Ф125mm | Ф135mm | \$150mm | Ф175mm |
| Main <br> Drive | 75 HP <br> $(56 \mathrm{KW})$ | 125 HP <br> $(94 \mathrm{~kW})$ | 175 HP <br> $(131 \mathrm{KW})$ | 200 HP <br> $(150 \mathrm{KW})$ | 200 HP <br> $(150 \mathrm{KW})$ | 300 HP <br> $(262 \mathrm{KW})$ |
| Output <br> (kg/hr) | $200 \sim 300 \uparrow$ | $300 \sim 400 \uparrow$ | $450 \sim 600 \uparrow$ | $650 \sim 850 \uparrow$ | $700 \sim 800 \uparrow$ | $900 \sim 1100 \uparrow$ |

RECOi SERIES - TWO STAGE

| Model |  | RECO-100i | RECO-125i | RECO-135i | RECO-150i | RECO175i |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Main Extruder | Screw | Ф100mm | Ф125mm | Ф135mm | Ф150mm | ¢ 75mm |
|  | Drive | $\underset{(94 \mathrm{KW})}{125 \mathrm{HP}}$ | $\stackrel{\underset{(131 \mathrm{KW})}{17 \mathrm{HP}}}{ }$ | $\begin{gathered} 200 \mathrm{HP} \\ (150 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} \text { 250HP } \\ (188 \mathrm{KW}) \end{gathered}$ | $\begin{aligned} & 300 \mathrm{HP} \\ & (225 \mathrm{KW}) \end{aligned}$ |
| Sub Extruder | Screw | ¢125mm | Ф155mm | Ф155mm | Ф165mm | Ф200mm |
|  | Drive | $\begin{gathered} 40 \mathrm{HP} \\ (30 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 75 \mathrm{HP} \\ (56 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 100 \mathrm{HP} \\ (75 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} 100 \mathrm{HP} \\ (75 \mathrm{KW}) \end{gathered}$ | $\begin{gathered} \text { 150HP } \\ (113 \mathrm{KW}) \end{gathered}$ |
| Output (kg/hr) |  | $300 \sim 400 \uparrow$ | 450~600 $\uparrow$ | 650~850 $\uparrow$ | 700~800 $\uparrow$ | 900~1100 $\uparrow$ |

## Pelletizing Systems

## Hot Die Face Pelletizing System

Applicable Materials
PE, PP, PS, and more.

## Cost Reuction

The molten polymer from the extruder is passed to the die head A rotating blade cuts the hot material as it exits the die hole and falls into a water ring for cooling. The operator does not need to draw the strands, which reduces the lump waste during re-drawing.

More Uniformity, More Profi
The pelletizing is a universal join design. The cutter adjusts the blade automatically during operation. Final plastic pellets are in uniform size in order to be sold at a higher price and bring you more profit.


## Strand Pelletizing System

## Applicable Materials

Minimize The Powder Waste
C, PA, ABS, and more. Suitable for higher MI or sticky materials. Production line equipped with high-precision pellets cutter and special designed vibrating screener.


## Filtration Systems

## Plate Filter

## Cost Reduction

The mesh can be re-used after cleaning up

Automatic Screen Monitor System

The automatic pressure monitor system is capable of non-stop operation with the pressure sensor from "GEFRAN Italy". The main purpose of the pressure sensor is to send data to the indicator. Pressure is crucial for a providing consistently uniform flow through the die and automatically warning the operator of the need to change the screens by the warning light and buzz sound.


## Dual-piston Filter

## 

Bigger The Filtration Zone, Longer The Service Life

Compared with slide type product, the dual-piston filter have a larger filtration zone. This both reduces he change frequency and the labor cost.

Non-Stop Dual-Piston Filter
The dual-piston screen changer is made in a continuous style with two filter flows. There is at least one filter working when the screen is changing. The piston moves slowly when the is changed. This allows the polymer melt to be filled in the filter area gradually to ensure low fluctuation of the extrusion pressure


## Blenders

## Scraps <br> Blender

Pre-mix and Temporary Storage Before Pelletizing

## Anti-bridge Design

The twin directional shaft prevents the material from getting stuck in the blender and pushing it to the middle output valve.

## Moisture Removal

The hot air blower is quipped to pre-heat and remove the moisture while mixing the materials.

## Pellets <br> Blender

## Stabilize The Pellet Quality

The screw transports the pellets to the upper opening and releases the pellets back to the mixing zone to form a circulating flow. The pellet's color and chemical properties become more stable after mixed. This minimizes the NPL ratio of the final products

Flexible Output Systems
From 25 KG bags to 1 ton big bags, the twin-way output system is suitable for both packages.


## Eco-Friendly!

Yield Improving!
Quality Boosting!
Labor Saving!
Cost Saving!

## HOW DOES IT WORK?

The two scraper in the filter remove the residues filtered from the surface of the special precision processed screen. Then, the processed screen. Then, the bottom of the hydraulic screw. With the pressure sensor and inverter, the pressure sensor and inverter,
this filter can control the scraping this filter can control the scraping
speed as well as stabilize and speed as well as stabilize and
maintain the pressure inside the maintain the press
flow automatically.
After this filter, over 80\% of residues can be reduced for the polymer.

## Applications



## 

## Success Stories

NOW AND IN THE FUTURE, GENIUS' SMART RECYCLING SYSTEM WILL HELP YOU REACH THE PINNACLE OF PLASTIC RECYCLING.


France
RECO-100 Plastic Recycling Machine in France.


Philippines
KRIEGER-85 Cutter
Compactor Plastic Recycling Machine Installed in the Philippines.


## Russia

KRIEGER-100 Plastic Recycling Machine in Russia.


Saudi Arabia
KRIEGER-65 Cutter KRIEGER-65 Cutte
Compactor Plastic Compactor Plastic
Recycling Machine Recycling Machine
Installed in Saudi Arabia Installed in Saudi Arabia.

What is Success? Genius Believe Our Clients' Success is the Real Success.

Constant Pursuit of Dreams The process that Genius become experts.

## Top Performance

The result of Genius meeting our client's needs and requirements.

Break Through The Boundaries The motivation for Genius to invest The motivation for Genius to invest
heavily in the plastic recycling world.

Intelligent Guidance
How Genius drives the new era of recycling industry chain.

Share The Successes
The evidence of growth that is unique to you and Genius.

## Global Sales, <br> Peace of Mind Service

The Genius team, headquartered in Taiwan with agents all over the world, work together to provide the most convenient procurement system and most complete after-sales services. With humanzed design, exceptional machine
performance, superior production performance, Genius recycling machinery has been sold to The U.S.A., Germany, Japan, Korea South Africa, Egypt, Indonesia, Malaysia, The Philippines, Vietnam, Thailand, Russia, Spain

Brazil, Congo Saudi Arabia, Algeria as well as other countries and regions, letting the world see he mature, advanced technology from Taiwan, and solidified the brand reputation as one with dependable quality.


