



ACERTECH
RECYCLING & PELLETIZING



Aceretech Machinery Co., Ltd

Tel: +86-512-58622012 Fax: +86-512-58622013
E-mail: info@acertech.com

Add: 18# Yuefeng road, Nanfeng town, Zhangjiagang city,
Jiangsu province, China.



ADVANCED
PLASTIC RECYCLING
TECHNOLOGY



www.acertech.com

EASY RECYCLING VALUABLE PLASTICS



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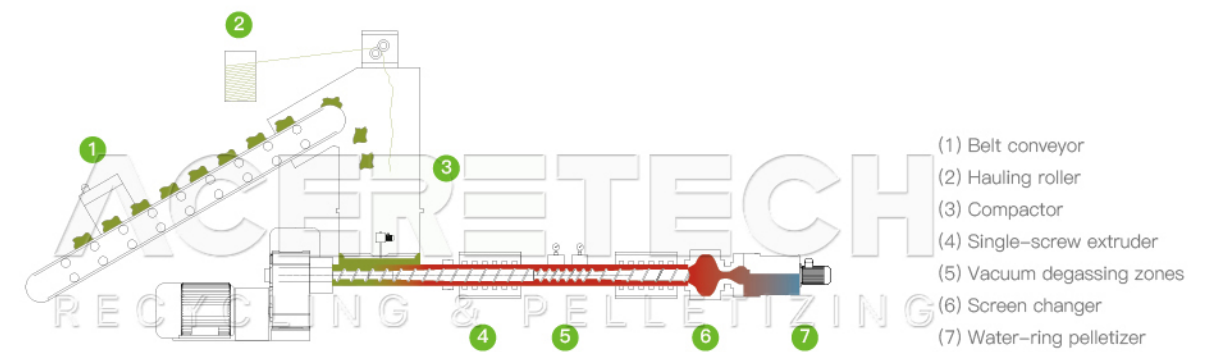
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ACS-H™

COMPACTING & PELLETIZING SYSTEM



3 in 1 integrated recycling system

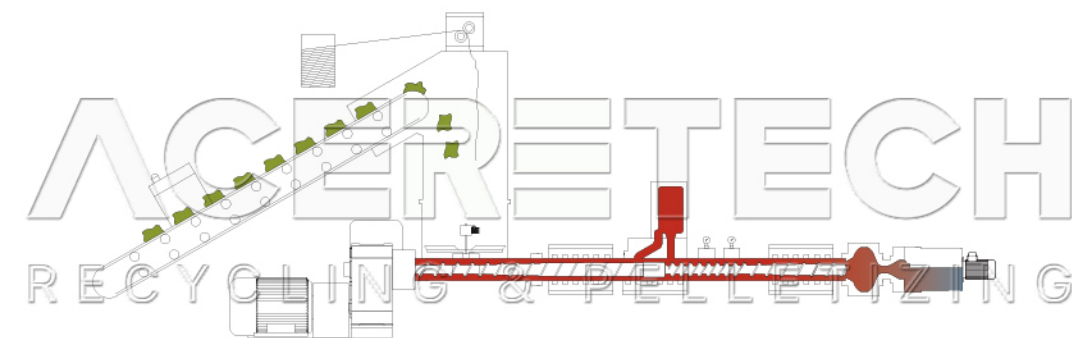
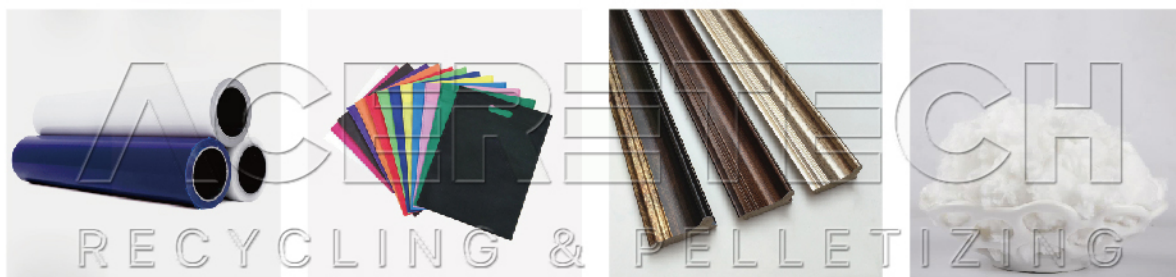
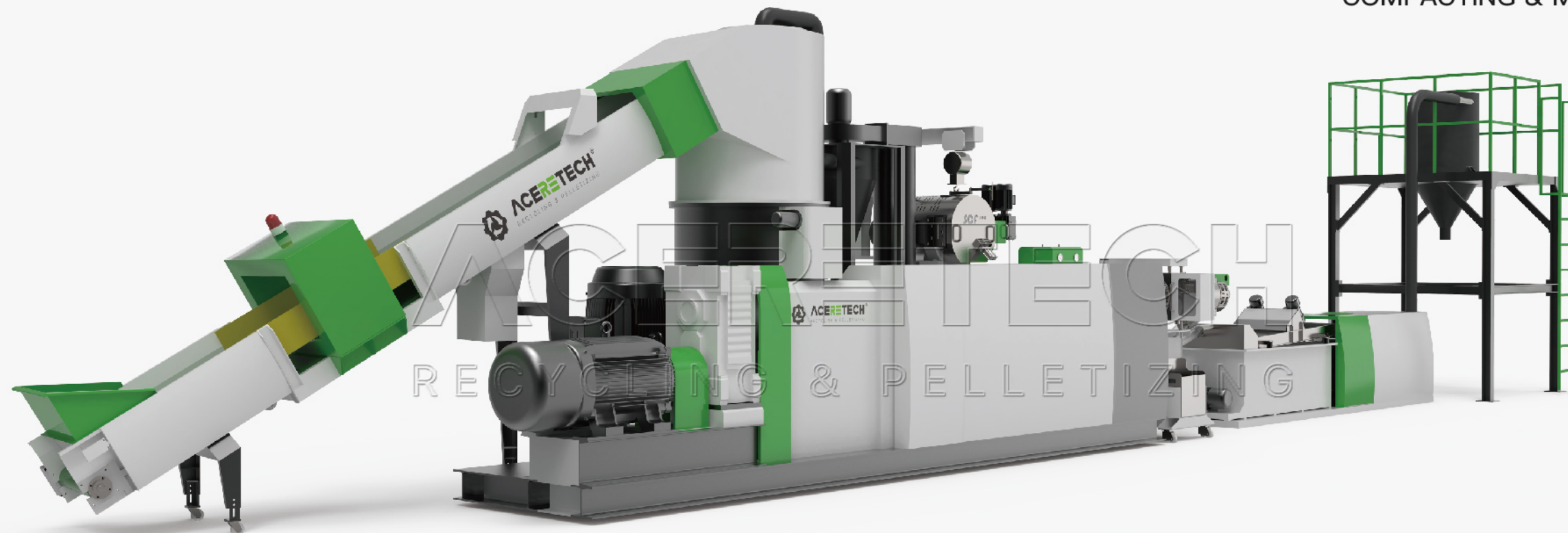
Size reduction, pre-heating and pelletizing, 3 in 1 integrated system, less cost.
 More effective and stable system for plastics of low bulk density.
 Higher output and lower energy consumption.
 Lower investment for a higher performance machine.
 Standard production and management in the workshop.

Combines size reduction, plasticization and pelletizing in an integrated system.
 Qualified for soft plastics as well as rigid flakes with innovative special design.



ACS-PRO

COMPACTING & MIDDLE FILTRATION



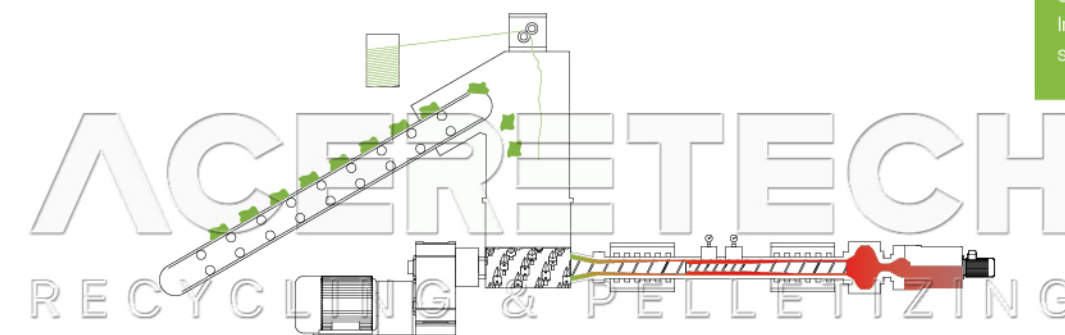
EXCELLENT DEGASSING AND FILTERING PERFORMANCE FOR RECYCLING

The ACS-Pro is the entirely new standard recycling and pelletizing system with optimized super long L/D ratio, filtering ahead of vacuum degassing, specially suit to the waste plastics such as high contaminated and heavily printed recycling and pelletizing.

The drive of compactor controlled by inverter, together with sliding gate device installed on the outlet of compactor room, to guarantee ACS-Pro not only handle losing material recycling but also rigid regrinds material re-pelletizing.

ASP™

SHREDDING & PELLETIZING SYSTEM



Suitable to both light/rigid plastic recycles;
Easier operation;
Smaller space occupation;
Intelligence: One-button start/stop;

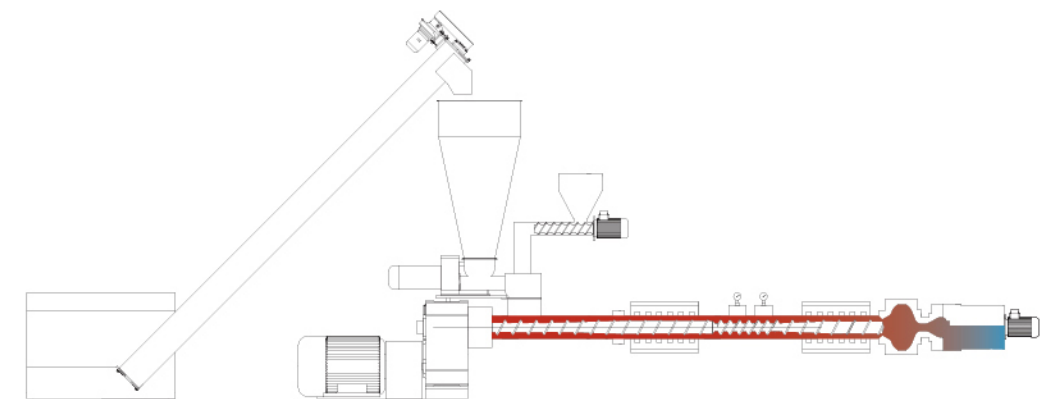
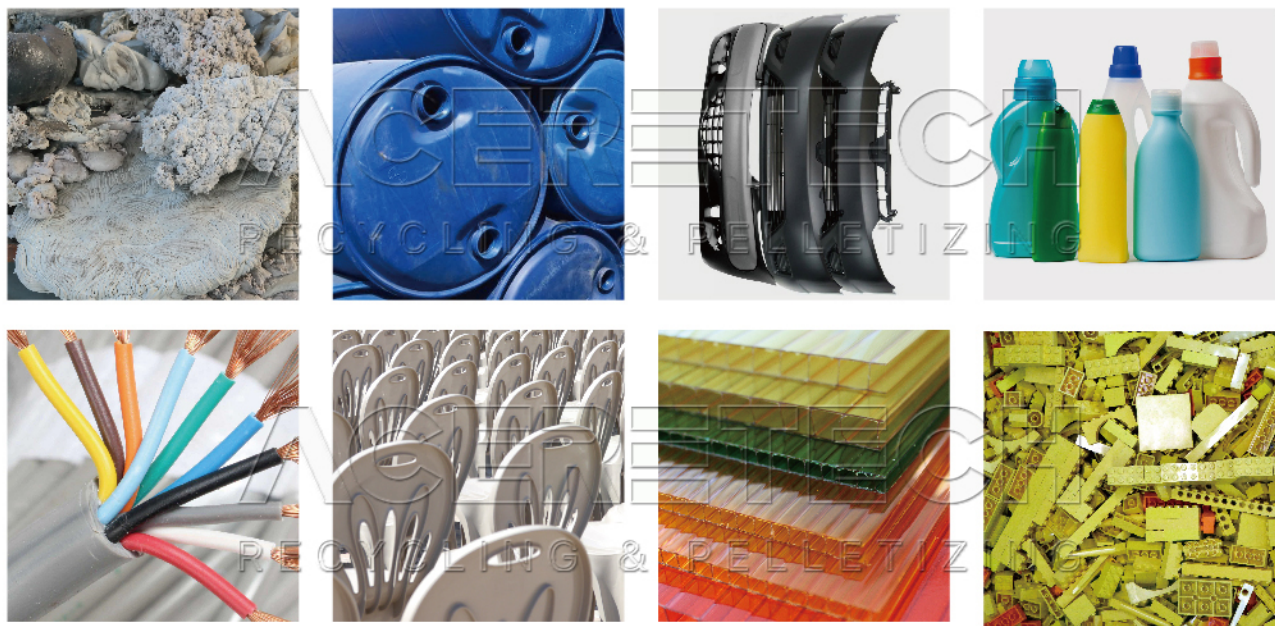
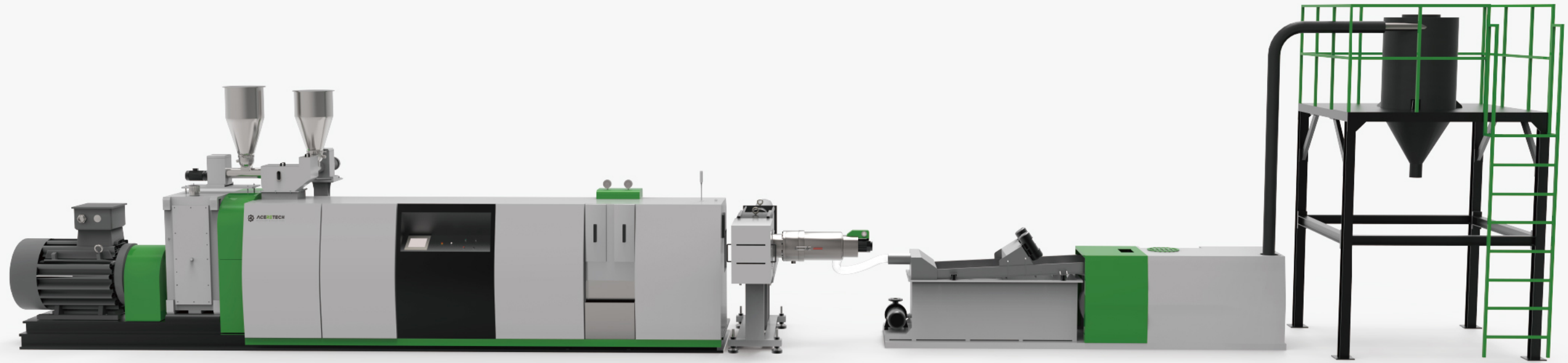
↓ 25%
Lower energy consumption

The ASP™ series shredding and pelletizing system combines function of shredding, crushing, enforcing feeding, plasticization and pelletizing in one system.

Applied in the plastics recycling and pelletizing process, ASP™ system is a integrated and cost-saving solution for every kind of plastic scrap, such as film, raffia, trim, purge, hollow part, bottle and foaming material in plant recycling.

ASE-H™

REGRINDING & PELLETIZING SYSTEM



Rigids Recycling Machine Pellet Quality Ensured

The ASE-H™ series single screw extrusion and pelletizing system, is a specialized and reliable system, suitable to the recycling and re-pelletizing job of rigid plastic scrap. It is an efficiency and continuous system that makes rigid plastics, such as flakes, regrinds, crushed plastics into granules again with gentle re-melting, significant volatilization and impurities-filtration.

Low Energy conical twin screw extruder

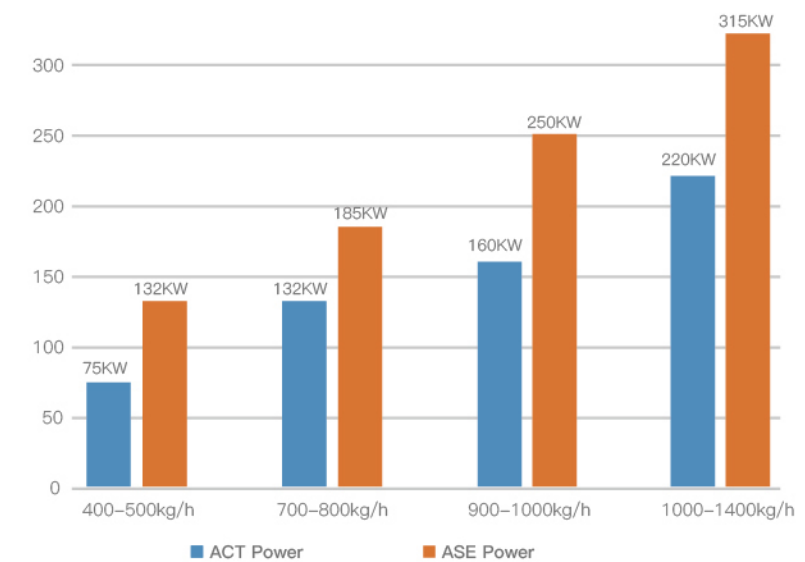


↓ 28%
Lower energy consumption

ACT series of conical twin-screw extruder is especially designed for recycling rigid plastic flakes. It's main feature is energy saving. Compared with single-screw extruder, ACT saves up to 28% energy.

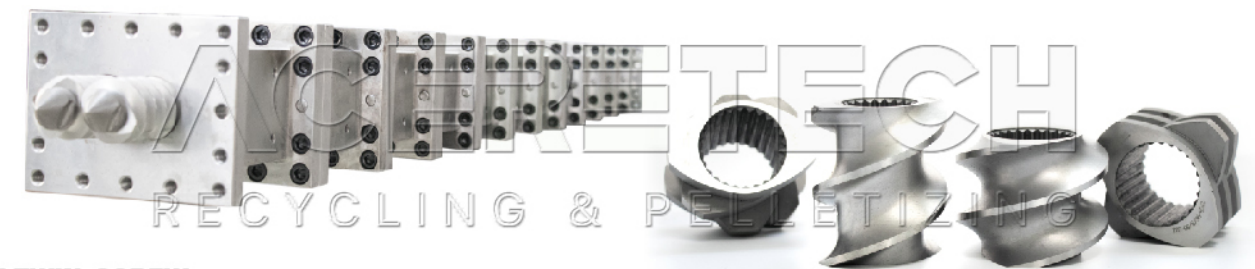
Special conical twin-screw structure, uniform mixing, low shearing force, minimizes possibility of polymer degradation, thus makes ACT very popular in field of engineer plastic recycling, and has become an 2 in 1 Super energy-saving extruder.

Energy consumption comparison chart for ACT conical twin screw extruder and ASE single screw extruder



ATE™

TWIN SCREW EXTRUDE



**ATE TWIN-SCREW:
MODULAR DESIGN FOR RECYCLING, EXTRUSION, COMPOUNDING.**

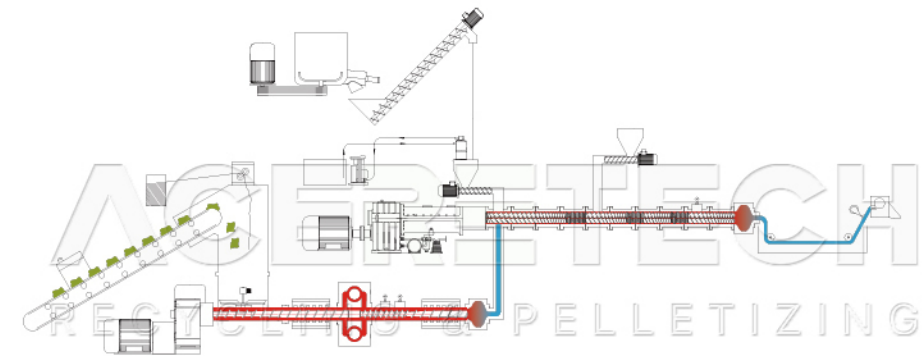
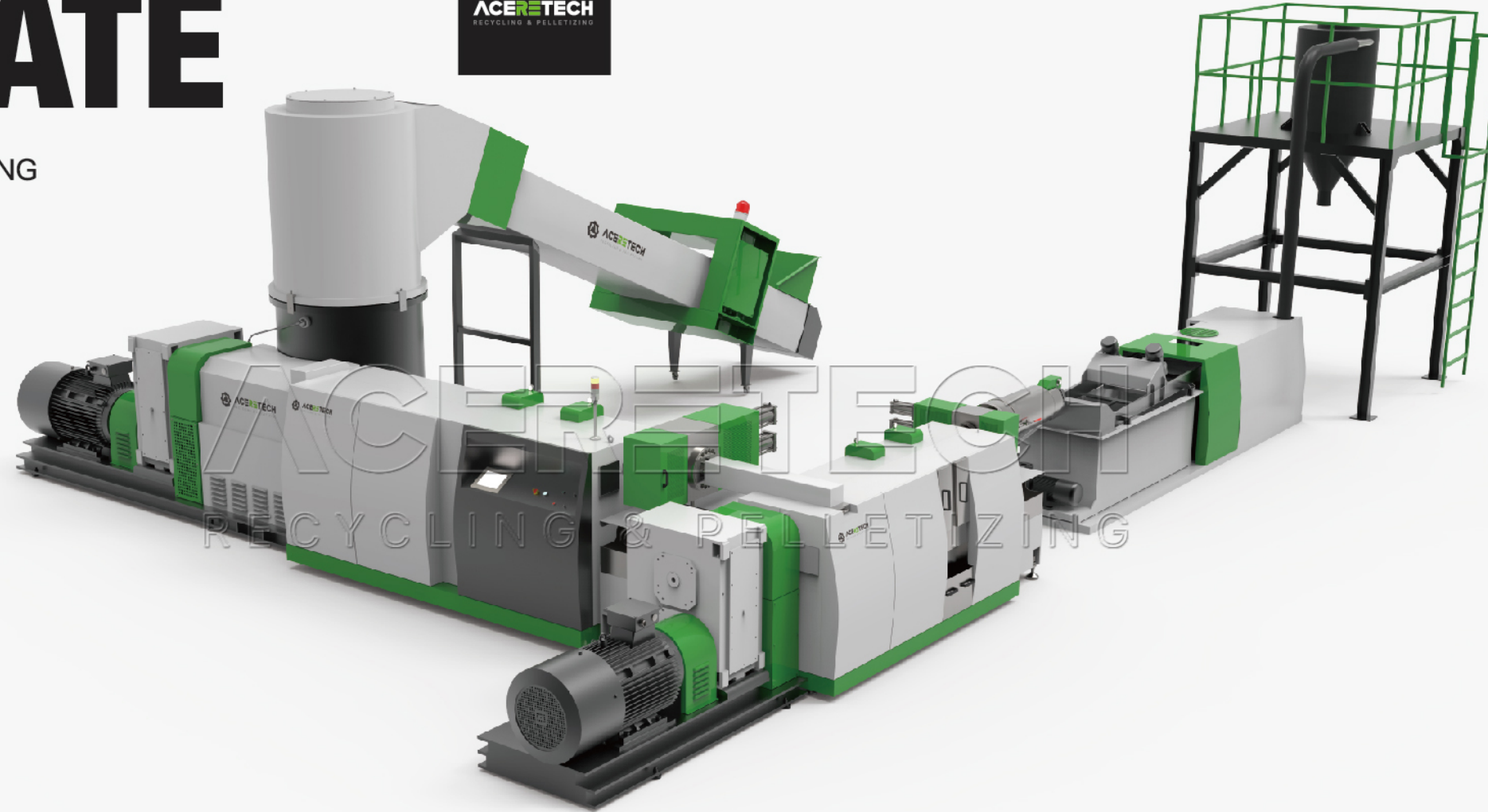
ATE Series Co-rotating Parallel Twin Screw Extruder consists of motor drive, torque distribution gearbox, processing section, temperature controlling units, dissection and down-stream pelletizing system, etc.

ATE Twin Screw Extruder adopts modular design principle, component standardization manufacturing, which can present stable and reliable performance.

Thanks to the modular principle, ATE extruders can provide highly customizable solutions according to customers' process and special requirements. Based on different output torque grade, ATE series extruders have basic type and efficiency type.

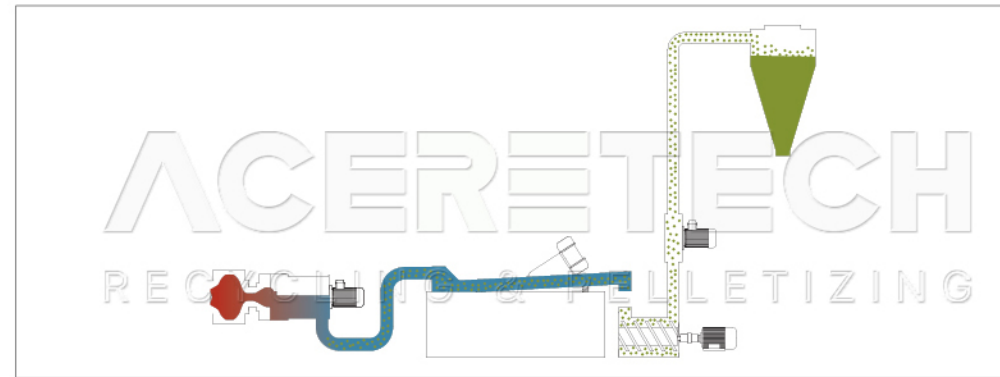
ACS+ATE

RECYCLING & COMPOUNDING

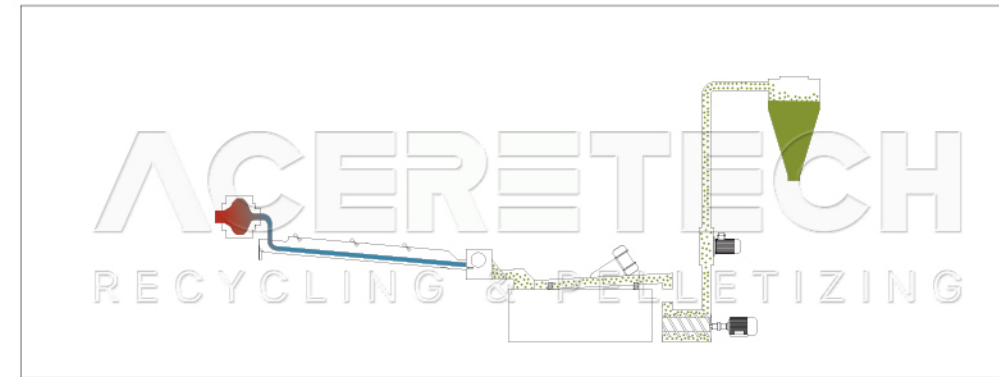


For recycling and compounding of loose materials, ACERETECH combines ACS (single-screw extruder with compactor) and ATE (parallel twin-screw extruder) extrusion systems. Materials such as film, filament, fabric, nonwoven, textile, are of small bulk density, which are loaded into ACS system for compacting, plasticization, exhaust, filtration, and then enter ATE twin-screw extrusion system for multi-component compounding, thus realizes recycling, filling, coloring, alloying and other modification operations in one line, which achieves lower energy consumption, better polymer performance maintain, less process steps, more environmentally friendly and more valuable for plastic recycling.

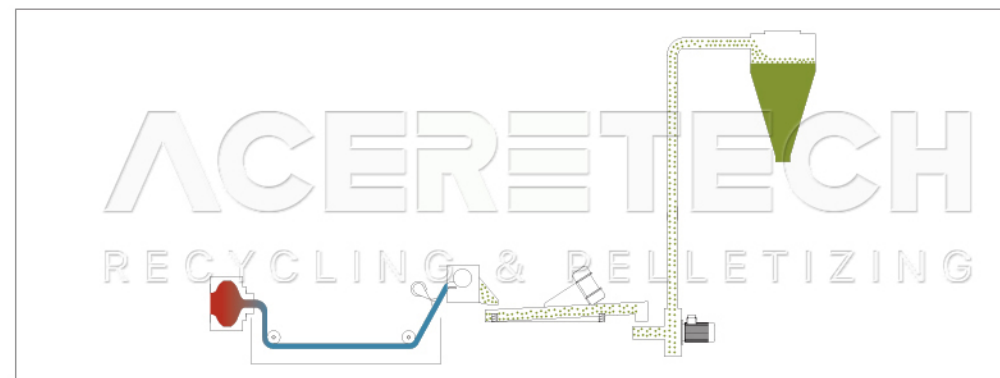
Pelletizing system



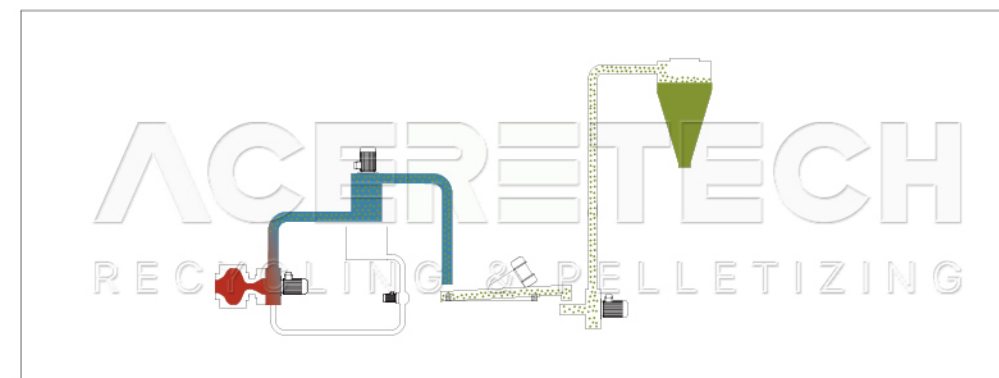
Water-ring pelletizing system



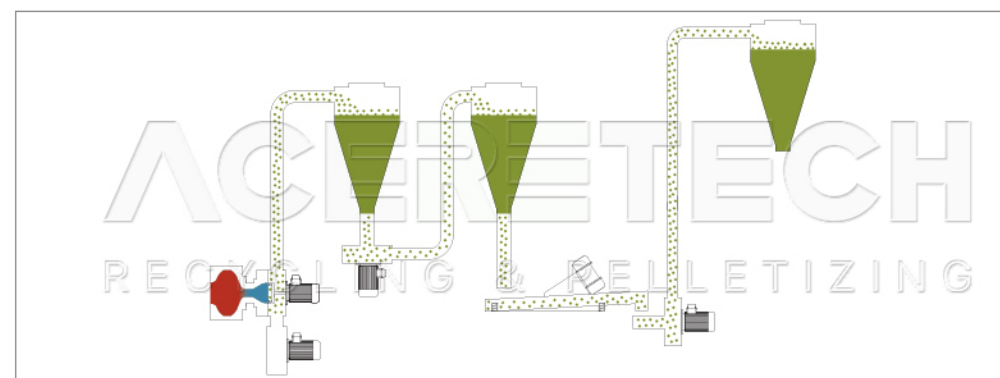
Automatic strands pelletizing system



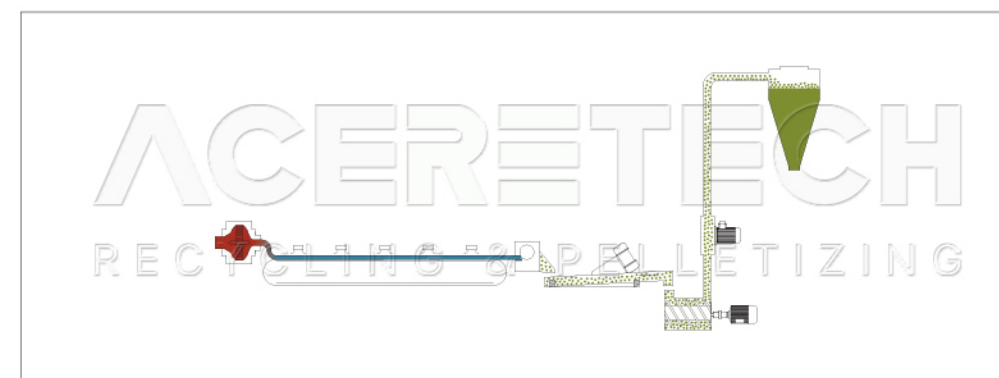
Water cooling strands pelletizing system



Under-water pelletizing system



Air cooling pelletizing system



Air cooling strands pelletizing system



SCF series disc-type self-cleaning filtration system

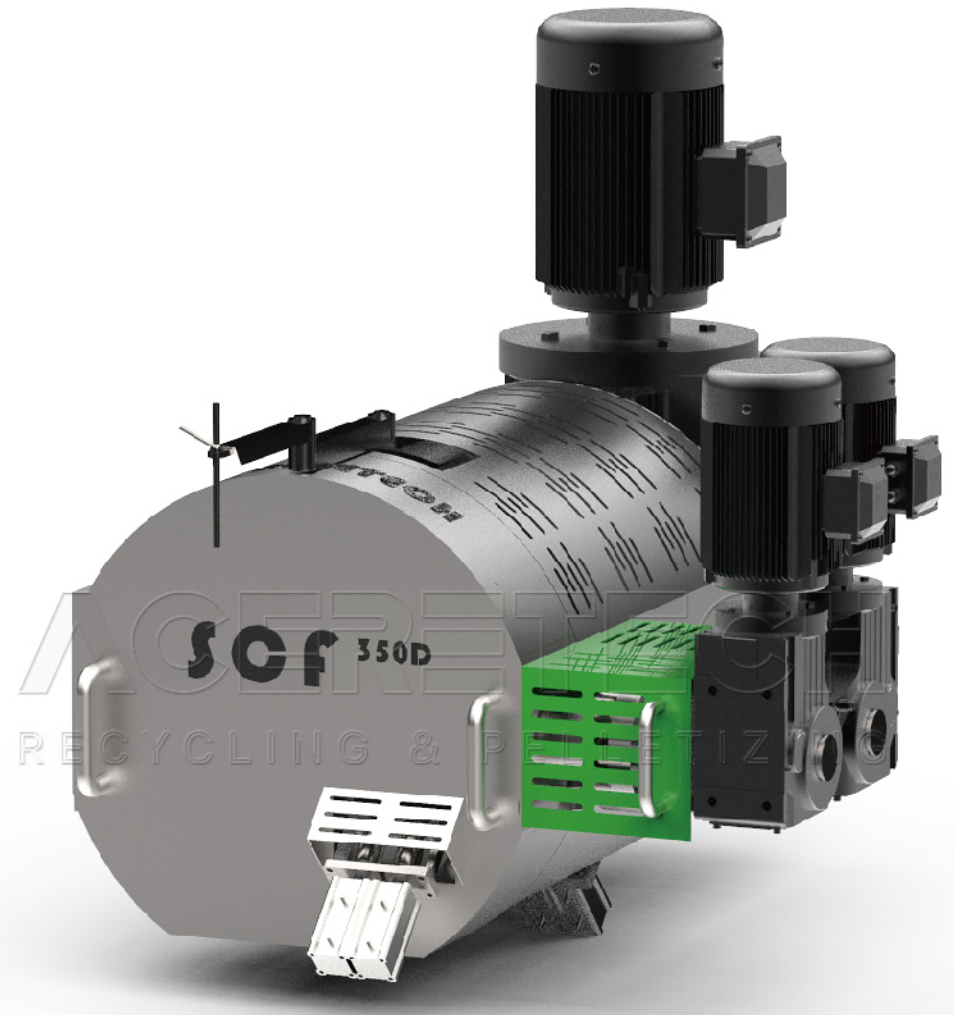
Non-mesh design

The new SCF self-cleaning filtration system makes non-stopping recycling extrusion, especially suitable to highly contaminated materials re-pelletizing. Different from traditional screen changers, which requires timely change the dirty wire mesh, the SCF system will present continuous filtering performance, and remove the contaminates from the surface of steel screen plate automatically.

The SCF filtration system consists of hardened steel screen plate, rotating unit, hydraulic section, contaminates removing blades and discharging screw.

UP TO 5%

SCF filtration system can handle and remove up to 5% contaminates in the melt flowing, can separate the contaminates as: paper, wood, aluminum, unmelted plastic and rubbers etc.



SCF typical features



Non wire-mesh required, long using life of disc screen plate



Reliable Continuous Filtration with stable pressure



Self-cleaning job done in the filtering room, friendly to the environment and not pollute the air



Filtering accuracy can reach **120µm**, can handle and remove up to **5%** contaminates



Less back-pressure in the filtering room thanks to short flowing channel and big filtering area



Larger filtering area, up to **2.32 million** micro-drilled holes



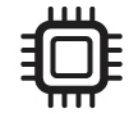
Automatically wiping action to assure constant self-cleaning of screen plate



Lower waste of melt stream while discharging the impurities



Easily operation for replacing the disc screen in **30** minutes



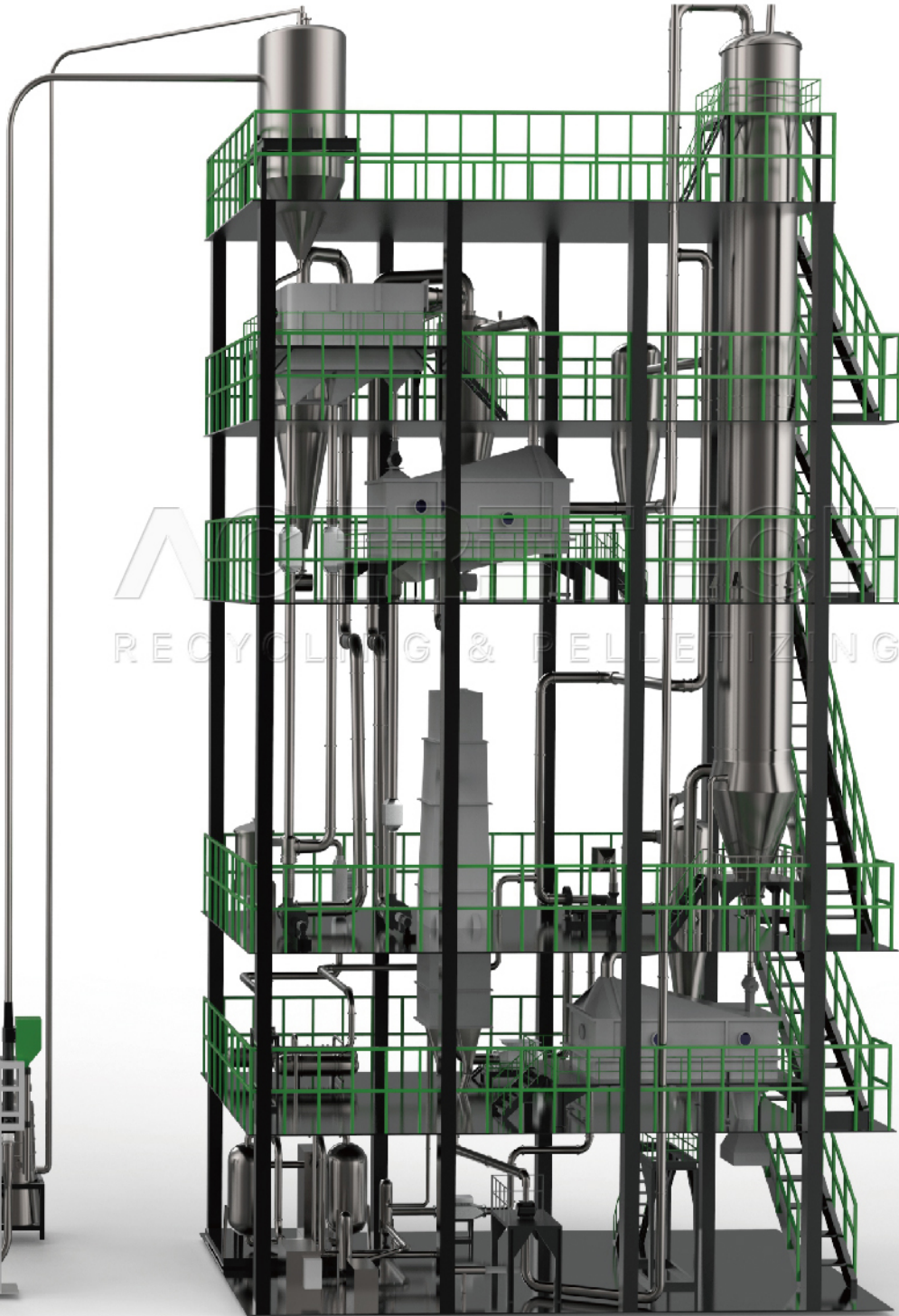
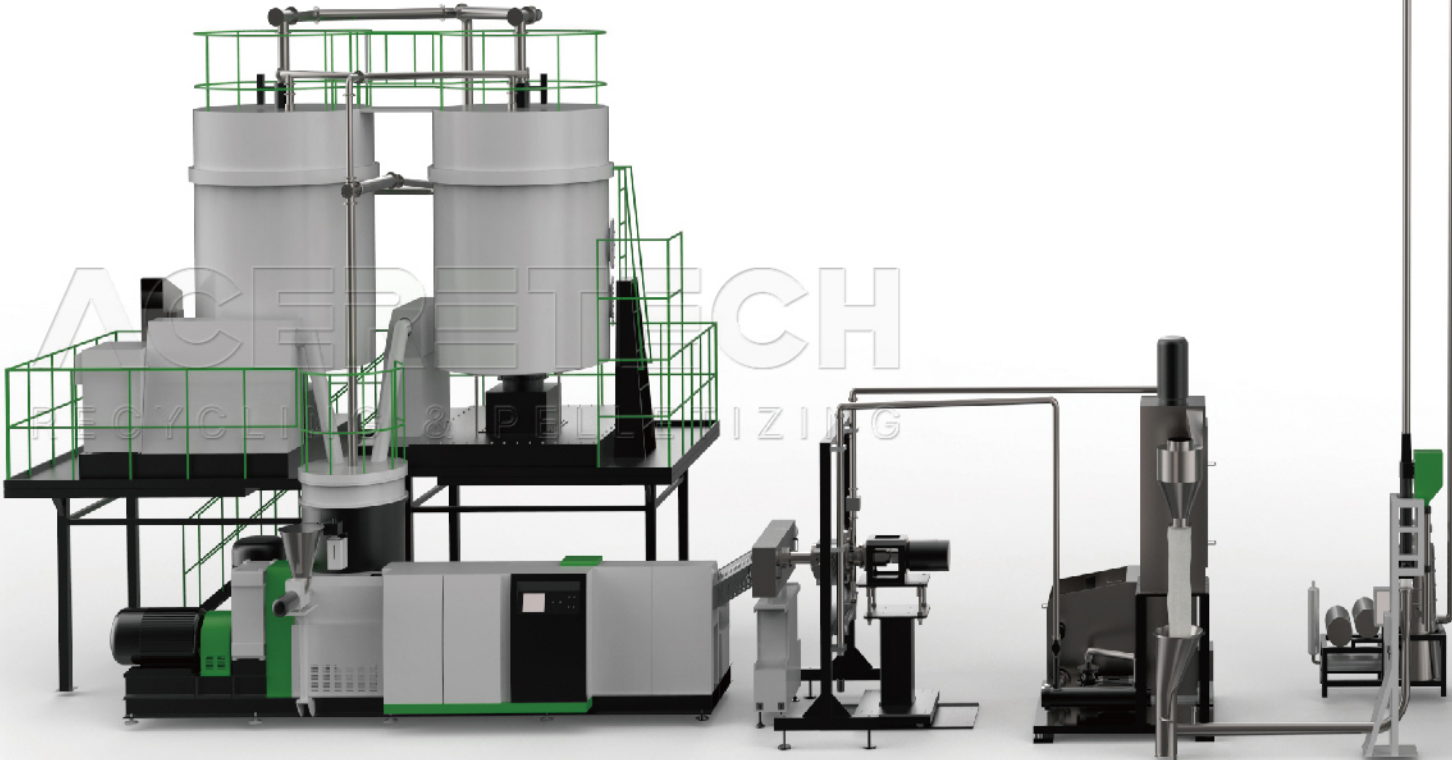
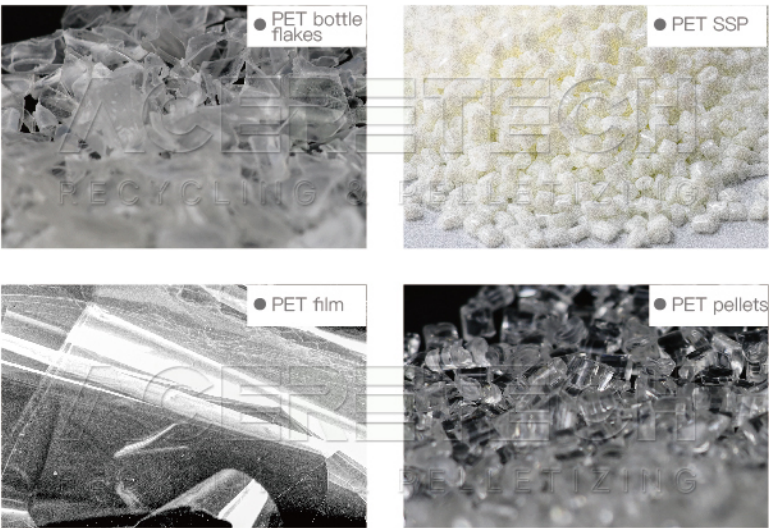
PLC control to present fully automation

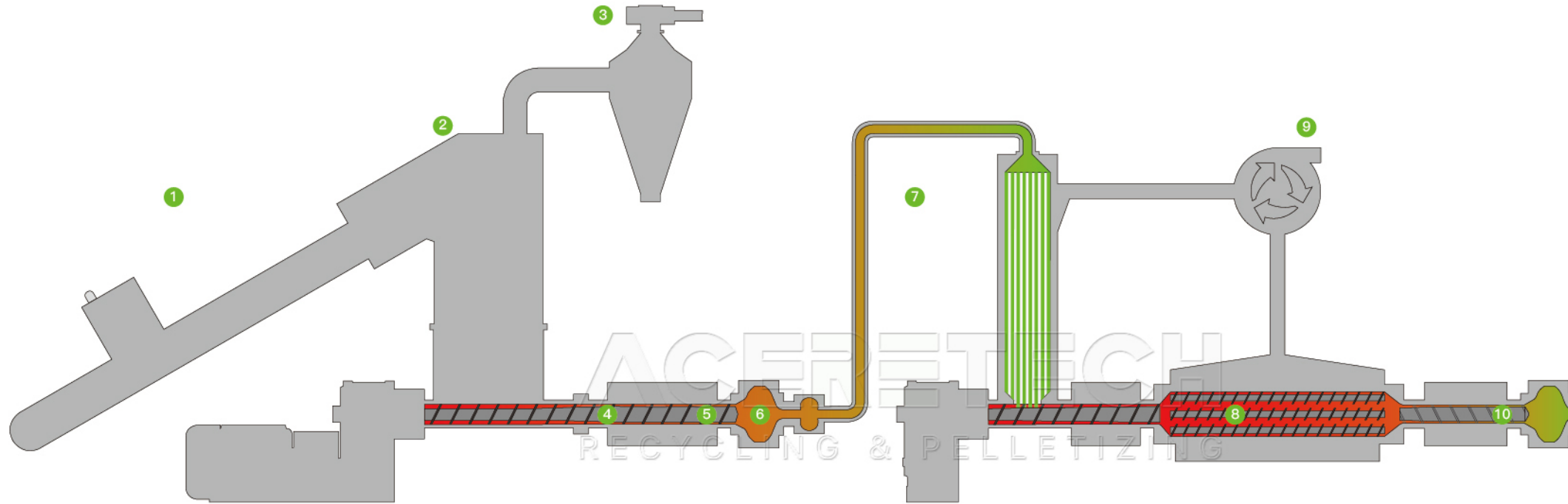




SSP recycling pelletizing system

The latest efficient recycling solution. Thanks to the vacuum technology, the SSP IV increasing technology, and the pelletizing extruder specially made by Aceretech, the IV value of the final PET granules can meet the requirements, and this value can be stably maintained. Even there are uneven IV values and moisture content of the raw materials, the final pellets can be maintained at a reasonable, qualified IV value within a set interval, meanwhile the quality and the output are always stable. It can maintain a stable IV value output for further downstream processing and molding, such as stretch blow molding, up to 100% bottle-to-bottle technology in new bottles.





- (1) Belt Conveyor
- (2) Compactor
- (3) Exhaust dehumidifier
- (4) Extruder
- (5) Filtration System
- (6) Melt Pump
- (7) Spray cooling type vacuum exhaust system
- (8) Multi-screw large area vacuum exhaust extruder
- (9) Powerful vacuum pump
- (10) Filtration System

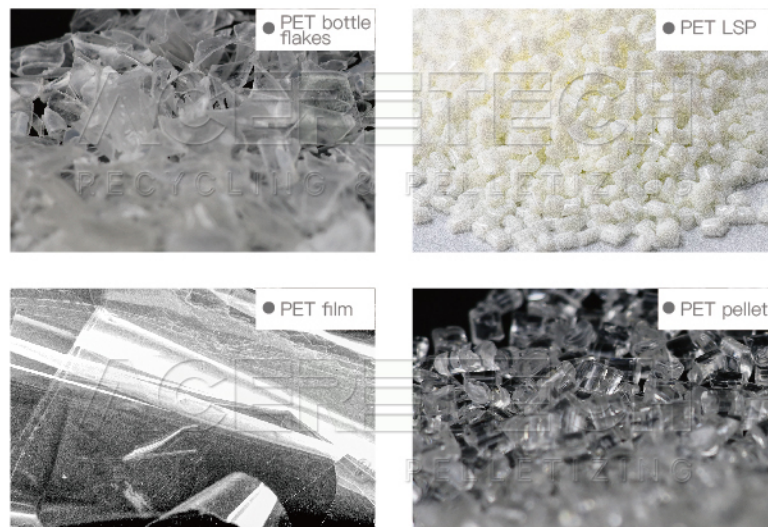
LSP liquid state polycondensation

Applicable materials

PET film, sheet, scrap, perforated waste or fabric fibers, polyester cloth and waste silk and etc.

Features

For this LSP equipment, the Spray cooling vacuum exhaust device and the multi-screw large area vacuum exhaust extruder are the core equipment. Compared with the normal exhaust device, the Spray cooling vacuum exhaust device can increase the empty surface area of PET melt to 1000 times, while the multi-screw large area vacuum exhaust extruder can not only increase the surface area of PET melt, but also can achieve PET homogenization. These two devices combined with a powerful vacuum pump can fully remove the glycol in PET and improve the degree of polymerization of the melt. This process will promote the production of PET new molecule, finally achieve the purpose of increasing the intrinsic viscosity (IV) of PET.





Shredder and Crusher

In the whole A to Z process of plastic recycling, shapes and sizes of waste plastics vary greatly. In order to facilitate the recycling operation, plastics are usually processed in a uniform size, that is “size reduction”, which helps a lot to further processing and transportation.

Generally process of size reduction is divided into two steps: pre-shredding and fine grinding. Large, thick and bulk materials need to be pre-shredded before further fine grinding. Fine crushing as second step, for size homogenization, which is convenient for transportation and subsequent operations.

As a professional manufacturer of plastic recycling equipment, ACERETECH provides series of single-rotor shredders and crushers for various plastic materials to get uniform size. With modular design and targeted rotor structure, it realizes uniformity, continuity and reliability of shredding and crushing.

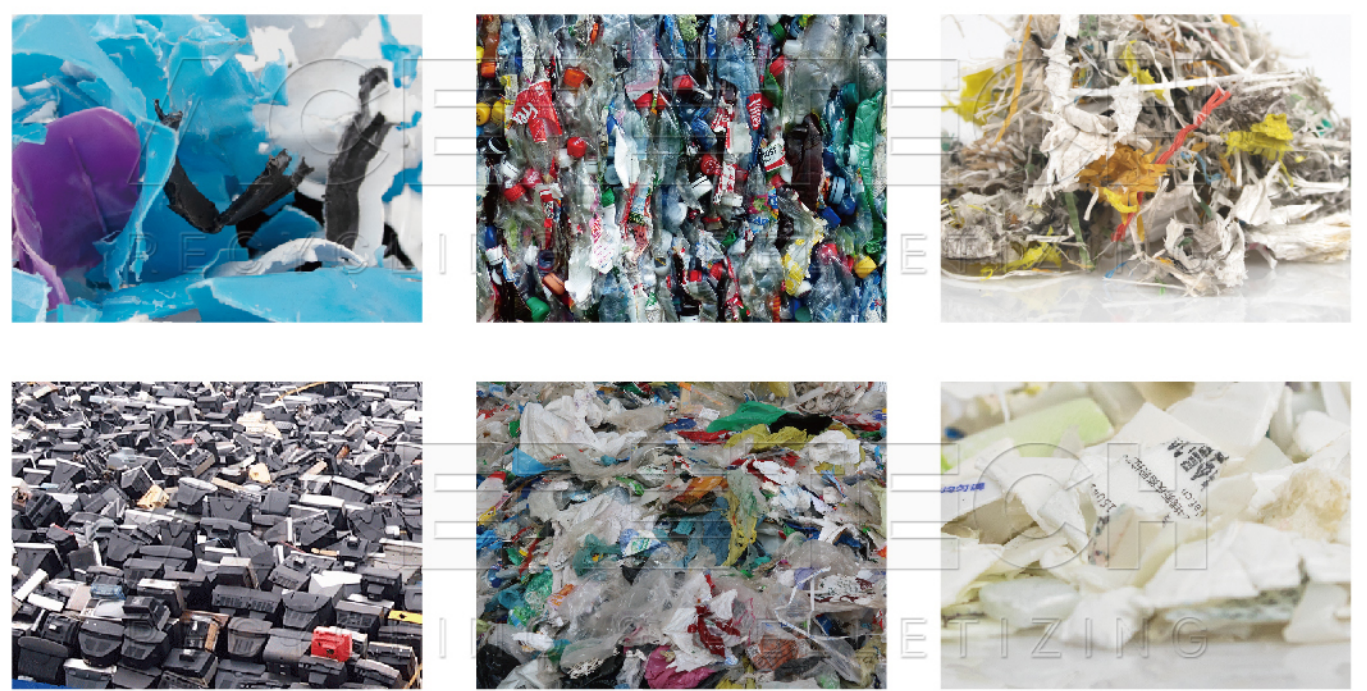
Design principle in full view: manufacture as needed

ACERETECH specializes in design, planning and manufacturing overall plan for recycling plastics. We provide optimized solutions for different application scenarios, so that shredder and crusher meet actual needs, and can be friendly applied to related operations, which is the original intention of our design and manufacture shredders and crushers.





Washing and pelletizing turn-key solution

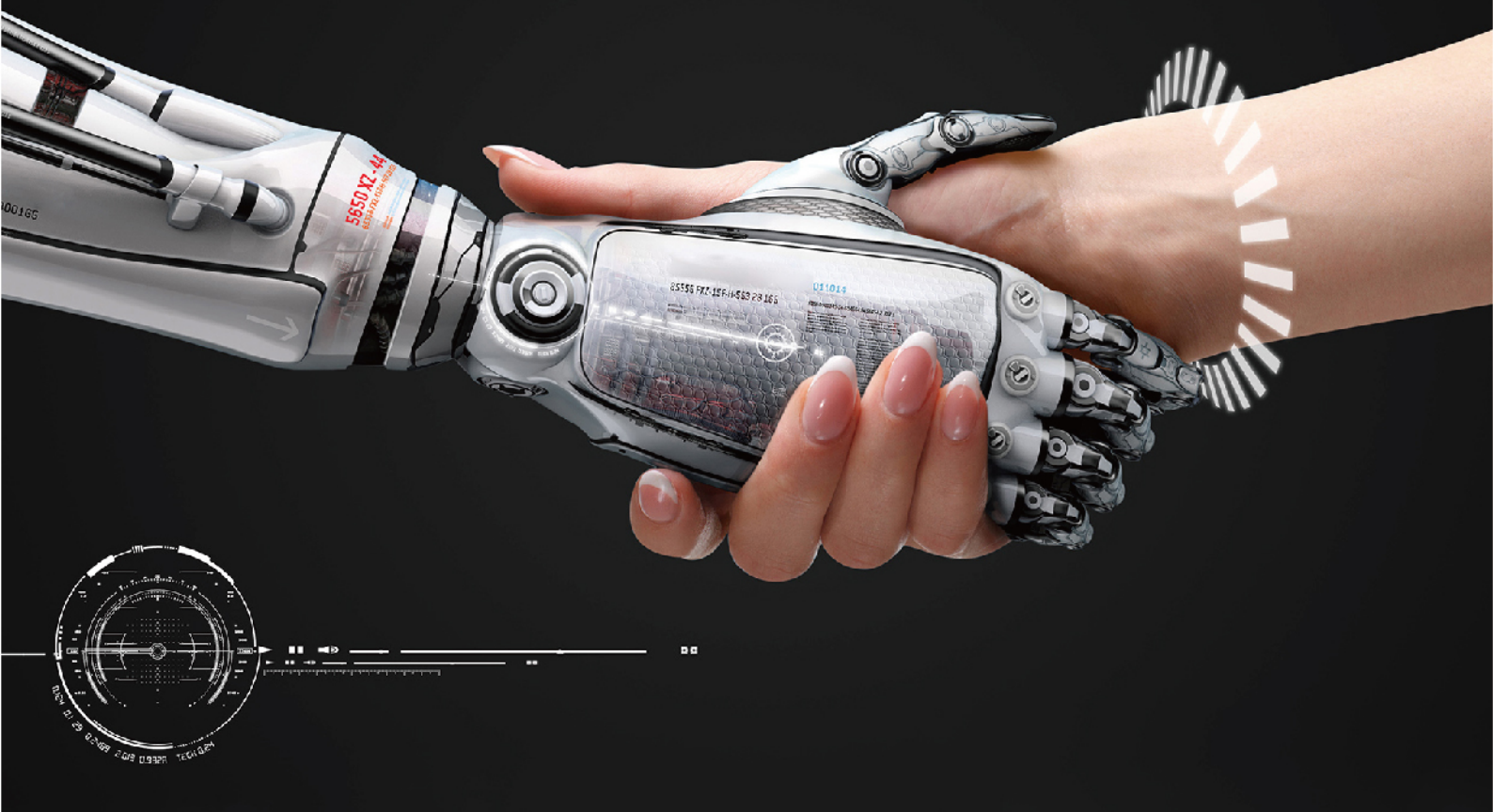


Washing line

For the plastic recycling industry, ACERTECH can offer a series of well-developed recycling washing and pelletizing lines for the efficient recycling of all kinds of plastics material.

Recyclable material:

- PE/PP washing line
- LDPE film washing line
- PP woven/jumbo bags washing line
- PS/ABS washing line
- PET bottle washing line
- Other recyclable plastics



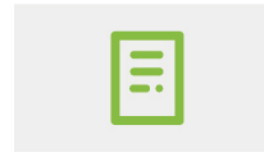
Data terminal consultant system for Intelligent Machine

ACERETECH in the digital process

Equipment maintenance includes functions such as automatic notification of planned maintenance of equipment, convenient and rapid formulation of work orders for equipment failure maintenance, and timely execution of maintenance and repair. All steps of execution and processing are sent online and in real time with short messages to ensure efficient maintenance of equipment and reduce downtime. Time, improve production efficiency, and ensure equipment utilization. Support data analysis and decision-making functions. The data provided by the system can grasp the production operation indicators such as equipment failure rate in time. The equipment maintenance data can be quickly analyzed and summarized, which is beneficial for management to make business decisions.



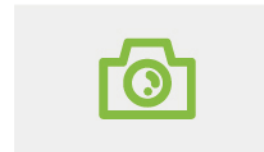
Aceretech intelligent manufacturing—cloud based MES manufacturing execution system
Build a digital factory, realize lean production



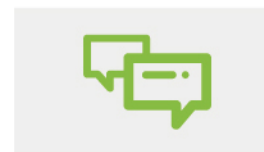
Fully electronic and standardized storage of equipment ledger for easy traceability and analysis; accurate production, work efficiently, reduce costs



Record equipment operation efficiency in real time for predictive maintenance; improve overall equipment efficiency, plant productivity, machine downtime

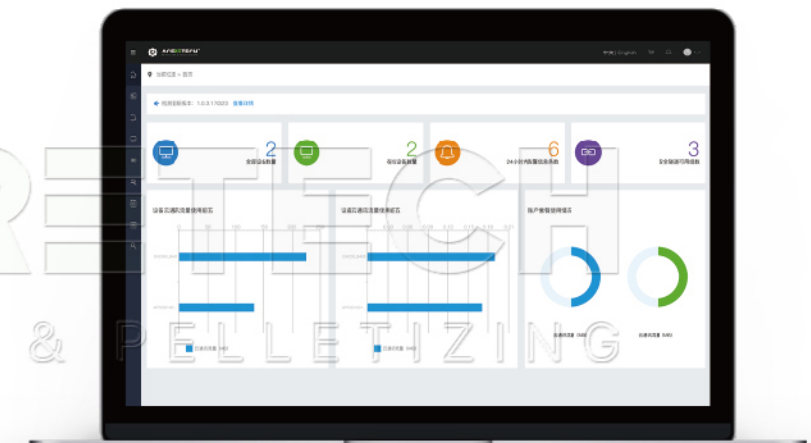
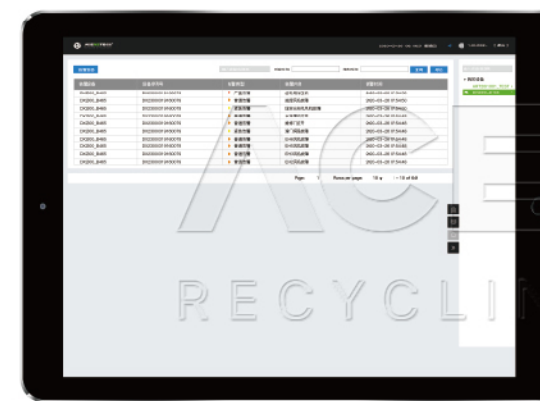


Support live photos, voice and text records and real-time feedback; production data intelligent analysis to guide production and find problems



Mobile end pushes maintenance tasks, quick response for maintenance; real-time monitoring machine status to improve planning flexibility

• Mobile and computer



ACERETECH
RECYCLING & PELLETIZING

ABOUT US



SERVICE AND SUPPORT



What can we do for you?

Aceretech can provide washing and pelletizing turn-key solution for all customers. Please contact professional sales team from Aceretech, they will provide you with the customized solutions. All the design drawings and technical specifications can be provided according to your request.

Installation, Testing and Training

Aceretech can arrange engineer to customers' factory for installation, testing and training according to your needs. It will facilitate a better integration for the new factory and new machine.

Engineer can offer training lessons at customer's factory during the installation, customer can also send their engineer to Aceretech for training. The technician from Aceretech will introduce all the parts of operation and maintenance equipment for customers' engineer. Aceretech will provide detail instruction manuals for all the customers, operation will be more convenient.

Before delivery, Aceretech will also provide you layout drawings and other installation requirements, it will help your operators are fully prepared for production, and improve operational efficiencies. Please contact sales from Aceretech arrange on-site work.

Spare Parts

Aceretech has spare parts in stock and our highly efficient service staff will ensure that any required parts are shipped without delay. Spare parts can be transported by air, by sea or by courier, depending on the emergency condition. We encourage our customers to hold their own key spare parts, such as pelletizing blades and rubber sealings to ensure best machine conditions and production performance incase spare parts delayed.

Service Support

Your Aceretech sales representative will provide you professional consult, ongoing service and spare parts.



让废塑料更有价值 让回收变得简单

EASY RECYCLING VALUABLE PLASTICS