



## Pretreatment Technology of Food Waste

**harden**

JUST SHRED IT

harden



Contact Harden for professional shredding and recycling solutions.

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JUST SHRED IT

## About Us

Harden Machinery Ltd. is a leading manufacturer of industrial shredder and waste disposal equipment in China. With a growing market and hundreds of successful cases we had built, Harden had became the most trustworthy brand in China, also it's being more popular worldwide. Thanks to rich experience and our strong R&D team, Harden always keeps advance in technologies.

Harden supplies competitive shredding machines worldwide, including single shaft shredder, double shaft shredder, quad shaft shredder, primary shredder and mobile shredder. We also offer a wide range of one-step solutions such as MRF system for MSW, SMP system for hazardous waste, shredding disposal system for organic waste, paper mill waste and bulky waste, etc.

## Core Advantages of Harden

### Professional Technologies

Focus on shredding technologies from beginning to now

### High Reliability

All parts in world brands / Advanced and mature designs

### Trustworthy Brand

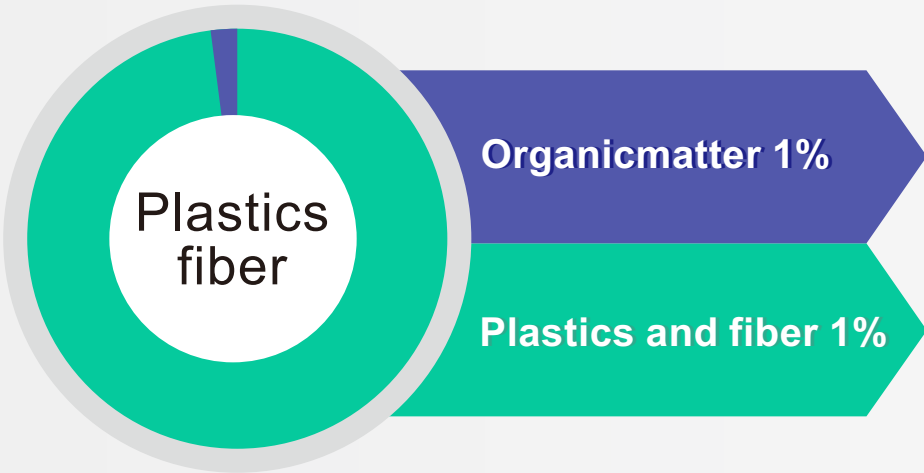
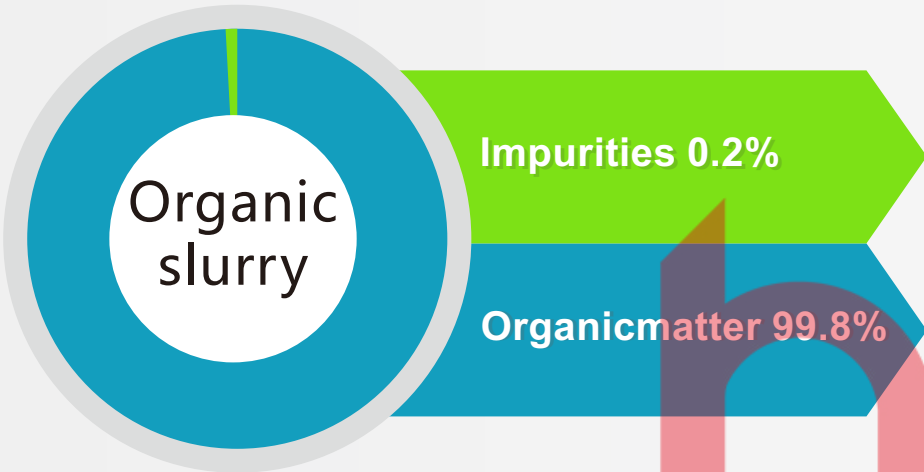
900+ successful projects / Wide recognition in market

### Aims the best ROI for customers

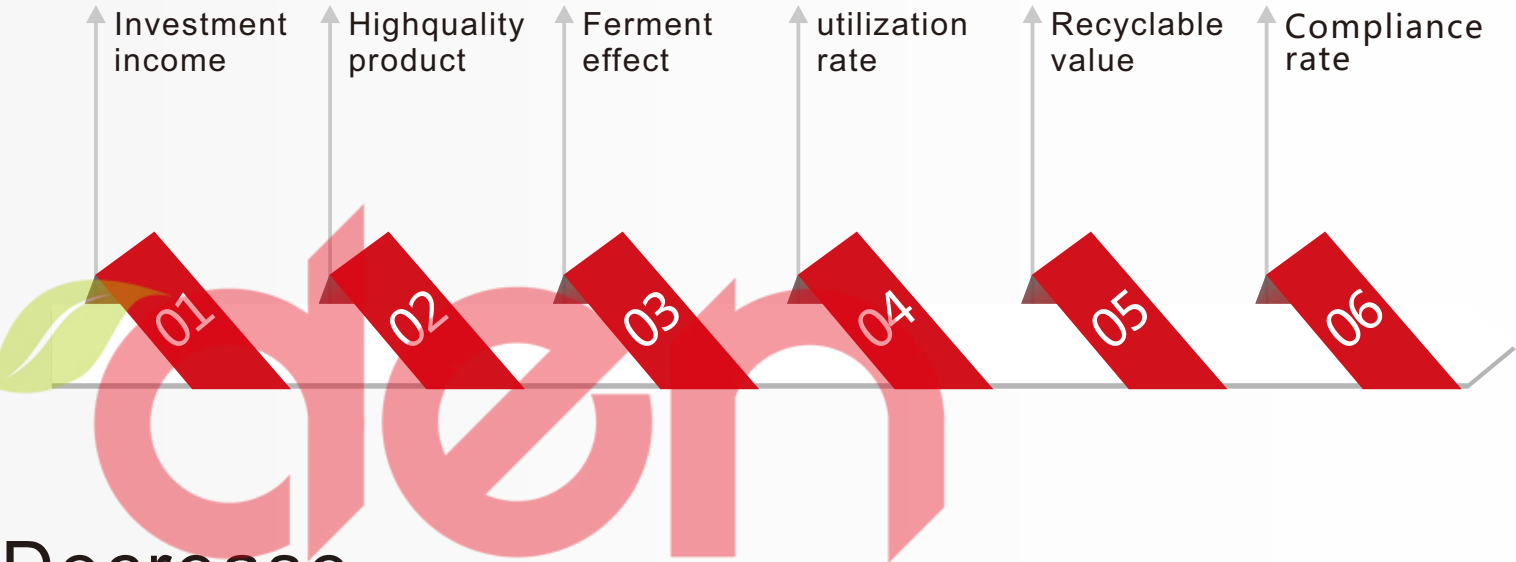
Batch production saves cost / High Durability Proven

# System Advantage

## Organic matter separation



## Increase



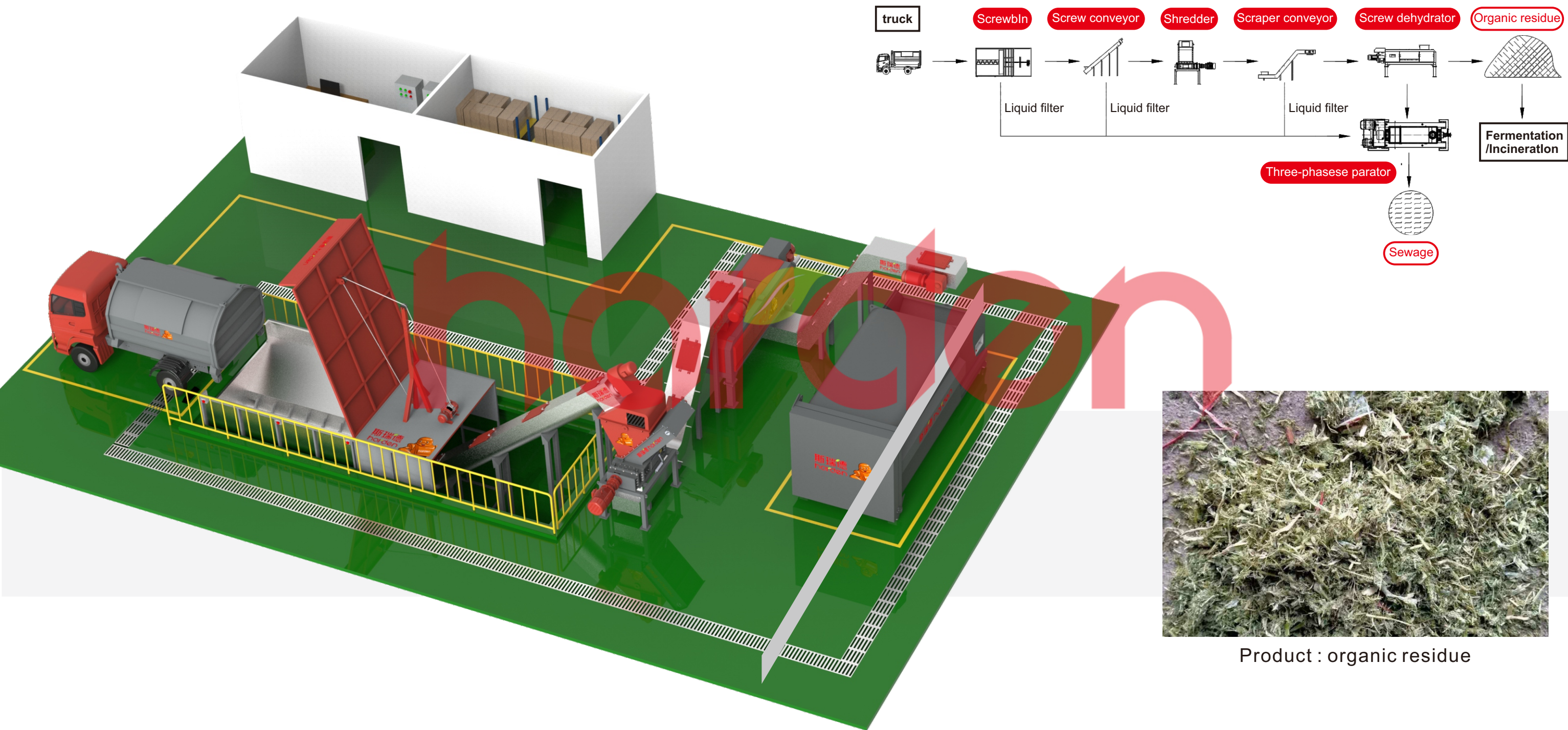
## Decrease





# Volume Reduction Pretreatment Solution of Food Waste

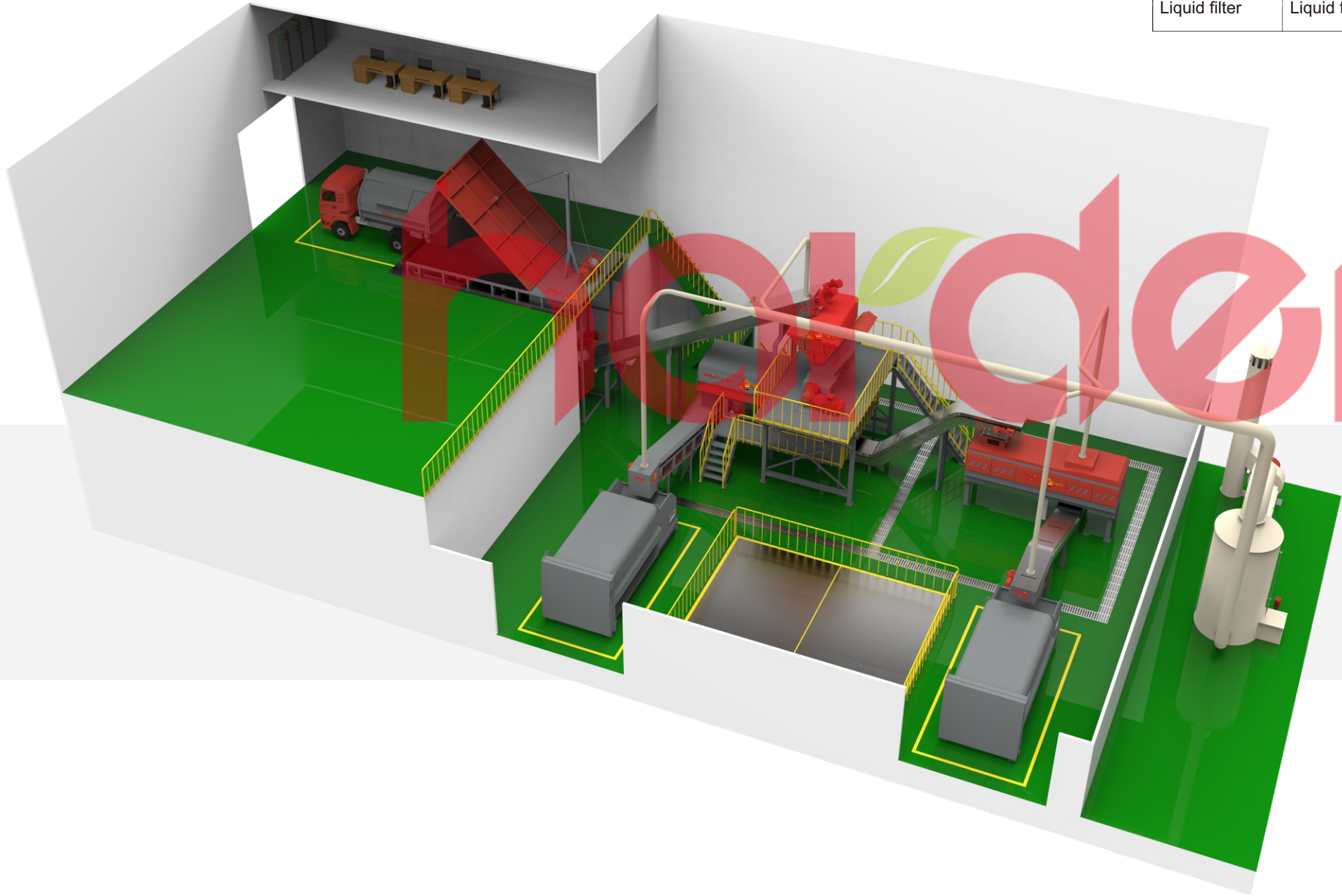
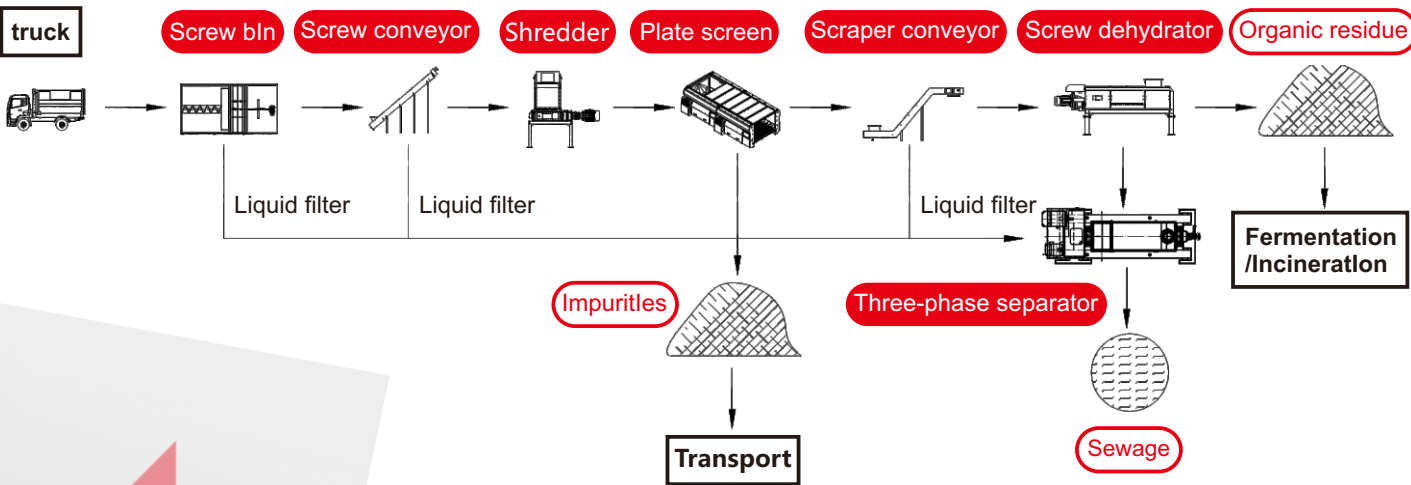
This system is mainly suitable for solid liquid separation and pretreatment of 5-10 t/h small output food waste and restaurant kitchen waste. After shredding and dehydration, solid and liquid phase are obtained. The liquid phase is equipped with three-phase separator or directly into the sewage system depend on the case may be, and most of the solid phase enters the aerobic fermentation system later.





# Coarse screen Pretreatment Solution of Food Waste

This system is mainly suitable for solid liquid separation and pretreatment of 10-15 t/h food waste and restaurant kitchen waste, uses specific plate screen which is designed for food waste to remove most of the plastics impurities. The solid and liquid phase will be obtained after screening, shredding and dehydrating. The liquid phase is equipped with three-phase separator or directly into the sewage system depend on the case may be, and most of the solid phase enters the aerobic fermentation system later.



Product : organic residue

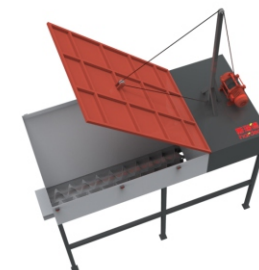


Product : impuritles



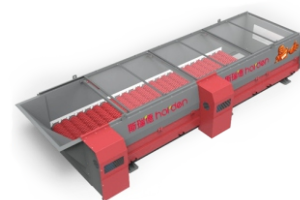
Double shaft shredder

The classic double shaft shredder can be equipped with the minimum size of 10mm blades, simultaneously shears the organic matter and impurities to small particle size, which guarantees the dehydration rate of material in the following processes.



Screw bin

Large capacity (8-10m³) silo, can accept the vehicle dumping directly; The screw bin adopts stainless steel material, with automatic sealing cover ; 1 or 2 shaftless screw are arranged at the bottom, and the linkage control is carried out with the back end.



Anti-blocking plate screen

Plate screen adopts multi-angle design which aims to mixed domestic waste, and the mesh is always in the process of dynamic changing to effectively prevent the mesh being blocked by organic matter. The patent designs of anti-winding and anti-jamming effectively avoid the hard objects is falling into the mesh hole, causing the breakdown of the machine.



Shaftless screw conveyor

Shaftless screw conveyor adopts no central shaft design, effectively avoid spindle winding and stuck of the machine, with the characteristics of stainless steel material, sealed design, bearing triple seal, etc., which effectively extend the bearing life.



Dehydrator

The extrusion pressure of the dehydrator can be adjusted dynamically, and it is matched with the spiral gradual spindle to ensure high working efficiency. The main shaft is made of alloy steel, which can withstand high torque and ensure long-term service life.



Large angle sealed scraper conveyor

The scraper will only lift the solid, thus initially filtering out part of the liquid, reducing the subsequent dehydration process burden, with the characteristics of stainless steel material, corrosion resistance and easy to take care of, seal structure, etc., effectively avoids water leakage and odor leakage.



Hydraulic bag breaker

The large output hydraulic bag breaker adopts the concept of open-ended shredding, In the front end can grab directly feed without vibrating feeder, the output can reach up to 80 t/h. Several types of cutters and running program can be selected in order to meet the domestic waste shredding requirements of different particle size, especially realize homogenous size of material to ensure the sorting effect in the following processes.



Shred and separate pulping machine

The pulping machine applies vertical separation concept, which ensures the separation rate of organic matter over 99.5 % and low moisture content of the discharged material. Metal or other impurities can easily accepted by this machine and without any breakdown. Screw feeding machine and discharging control screw are equipped to keep the smooth operation. In order to satisfy the need of different fermentation system, a variety of different mesh screens are optional for the customers.



Client Cases

