According to EU statistics, 90 million tonnes of food end up in the bin every year in Europe alone.

This amount corresponds to an energy value equivalent to approximately 7 billion litres of heating oil.

**Organic waste** 



is electricity



is gas



is heat



is biofertiliser





# Company profil Hybag AG

... Innovation and Swiss precision for more than four decades

... A leader and pioneer in the design and manufacture of machine systems for processing organic recyclables

... In-house developments and various patented machine technologies

... More than 100 systems installed worldwide

... Market leader in the processing of food waste

### Systems for organic waste recycling

### Food and preparation waste...

Hybag System Tutto: Whether food and preparation waste from the catering industry, industrial rejects, expired goods from large distributors, open and raw or packaged in plastic, tins or cans. Hybag Tutto is the world's leading and proven unpacking and processing system with its patented separation hammer mill.

### Screening waste in sewage treatment plants...

Hybag System Filtro: Reduces the amount and cost of incineration by up to 90%, feeds the organic portion into fermentation, increases gas yield accordingly while reducing CO2 emissions.

#### Organic recyclables from private households...

Hybag System Casa: The increased collection of small and micro quantities in urban areas is most efficiently carried out using waste bags, as we know from household waste. Hybag Casa processes these bags at collection points and separates the recyclable substrate from packaging and foreign materials.

#### **Unpacking press...**

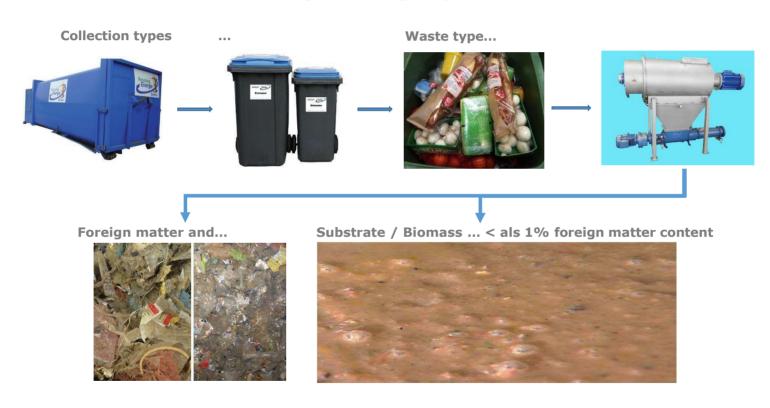
Hybag unpacking press: For unpacking market waste in cans, tubes, tins or other packaging units. The packaging is burst open under high pressure and the contents are pressed out. The packaging materials are formed into a flat, round briquette and ejected. The substrate is fed into further processing via a pump system.

#### Substrate...

Hybag separator: The Hybag separator filters foreign matter and residual particles out of the substrate.

The separator is preferably installed at the outlet of the fermentation process line. This system is particularly suitable if the substrate is subsequently spread on fields as fertiliser.

### **System Hybag Tutto**



# Hybag separation hammer mills NW500 NW600 NW800



The Hybag separation hammer mill is used to process large quantities of biogenic recyclables, whether raw, cooked, unpackaged or packaged.

The utilisation of biogenic recyclables in biogas plants usually requires not only shredding to particle sizes < 12 mm, but also a high degree of removal of the impurities contained therein.

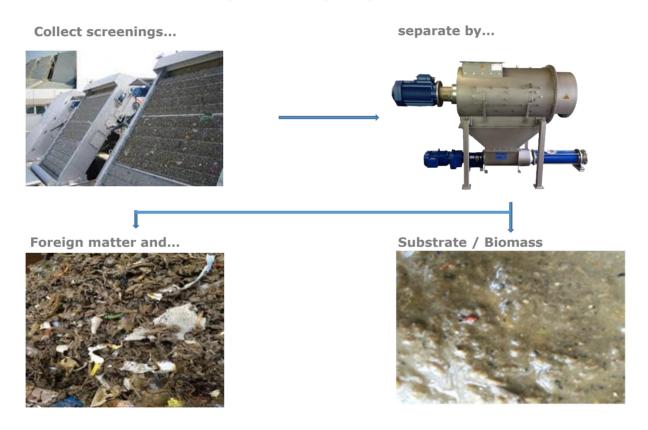
Hybag separation hammer mills achieve a particle size of 3-6 mm in the substrate.

The recyclable materials are crushed using the patented separation hammer mill and separated into biomass and foreign matter such as cutlery, plastic, sheet metal and other impurities.

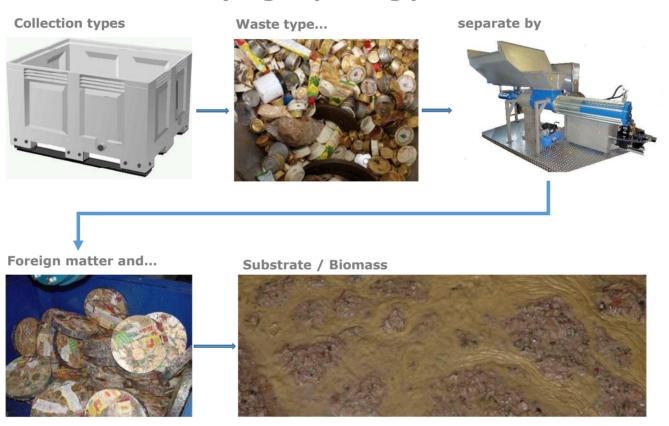
A conveyor system pumps the homogeneous biomass into a storage tank. From there, the substrate (biomass) can be transported to further processing steps.

Our machine technology complies with composting standards and achieves a foreign matter content of < 1% in the substrate.

### **System Hybag Filtro**

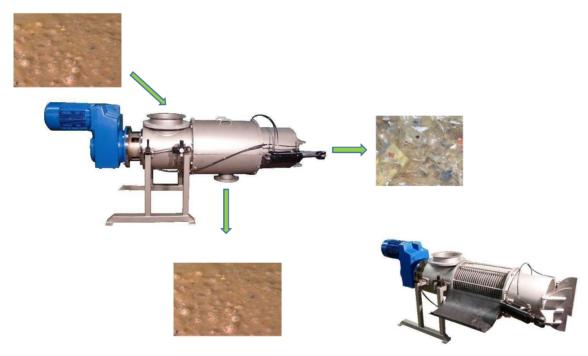


### **Hybag unpacking press**



### **Hybag Screw press separator**

The Hybag screw press separator filters out impurities and residual particles from the substrate. The separator is preferably installed at the outlet of the fermentation process line. This system is particularly suitable if the substrate is subsequently spread on fields as fertiliser.



### **Our clients**



#### **Disposal and recycling**

For energy production, foodstuffs are unpacked prior to processing and foreign matter is separated from the biomass.



#### **Catering**

Food and vegetable waste accumulates in commercial kitchens and must be disposed of at great expense.



#### **Food processing**

Production residues, offcuts and faulty batches are recejts, i.e. waste



**Food distributors** 

Transport damage, overstocking and expiry dates lead to waste



**Agriculture** 

Bad weather, overstocking or incorrect storage and non-standard foodstuffs lead to waste



**Waste water** 

Even washed-away material contains organic matter that can generate additional gas yield

### **Our services**

**Economic success begins with careful planning...** 

Quantity analyses (economic efficiency)...

Location analyses (disposal routes)...

Placement analysis (floor plan design, engineering)...

**Production and execution...** 

Assembly, commissioning and staff training...

**Service and maintenance** 

### **System chara**

... Environmentally friendly and resource-efficient

... Highly economical

... User-friendly

... Easy to maintain

... Modular components

... Low water and energy consumption

## Hybag technology: proven worldwide























