



*“Mavitec Green Energy’s food waste and depackaging solutions are designed to handle, depack and resize your organic by-products in the most efficient and cost effective way”*

## FOOD WASTE & DEPACKAGING SOLUTIONS

# Maximize the value of your organic by-products

**MAVITEC**  
Green Energy



## MAVITEC GROUP

Mavitec Green Energy is part of Mavitec Group, a Dutch company providing solutions for businesses with large quantities of animal by-products, biomass and other fuel sources. Mavitec is specialized in high quality recycling processes and is an expert in building, coordination and delivery of individual components up to complete turnkey projects. With a lot of expertise in engineering, construction, installation, process control, delivery and after sales, we provide complex process solutions in a simple and effective way, customized to the needs of our clients. Mavitec headquarters is based in The Netherlands and has sales and service offices worldwide.

## MAVITEC GREEN ENERGY

Mavitec Green Energy is a process technology company active in the food recycling industry. We are an expert in designing and producing recycling systems for processing organic by-products from the food industry and agricultural sector. With large installed base and proven concepts that comply with latest legislation, we help you convert your organic fraction into value. We engineer, deliver and install systems for:

- **Unpacking of (semi) wet and dry co-products**
- **Recycling of kerbside/brown bin waste**
- **Melting of fats/yellow grease**
- **Size reduction of agricultural co-products**
- **Sterilization and pasteurization of co-products**

With decades of experience we are able to fine tune your processes to ensure higher quality end-products and a better turnover as a result. Our goal is maximizing your turnover and reducing your operational expenses.

Mavitec Green Energy is specialized in food waste and depackaging solutions with short payback times, high separation efficiency and proven concepts. Our machines are designed to separate the organic material from the packaging and deliver the cleanest organic product that is extremely suitable for several purposes such as biogas installations.

*“Mavitec Green Energy solutions provide the highest separation results in the market”*

## HIGH QUALITY OUTPUT

Mavitec Green Energy equipment provides the best output quality.

- With official lab results **> 99,5%** clean organic output
- Organic soup **< 0,5%** inorganic in the organic
- Cleans the packaging close to **zero** contamination
- Resized into easy pumpable soup between **< 1 - 50 mm**



# Systems & Solutions



## Resizing

Resize organic food waste into a product that is suitable for biogas or animal feed and save on your disposal costs! Our machines resize several types of organic products, from outdated products to process left overs or by-products.

Example of materials that can be handled:

- **Vegetables**
- **Fruit & nuts**
- **Agricultural waste**
- **Unpacked food waste**
- **Factory by-products**

If your process creates a lot of unpacked food waste and your bin or container is being collected nearly every day, we advise to convert the material into a pumpable slurry. Your waste is converted into a valuable and easy to handle organic soup that can be used as input material for digesters or animal feed. By closing the system it will be free of odour.



## Depackaging

Mavitec Green Energy depackaging machines separate the organic fraction from the packaging and deliver the highest separation results in the market. They are the heart of your recycling process for various kinds of waste.

Example of materials that can be handled:

- **Supermarket waste**
- **Agricultural waste**
- **Restaurant/hotel, kerbside waste**
- **Shop return waste**
- **Organic household waste**
- **Commercial organic waste**

The key success of our depackaging solutions is that they produce the cleanest organic soup and the cleanest packaging fraction possible, that complies with latest legislation (< 0,5% on dry matter).

Our latest innovation is a recycling line, designed to handle a diverse organic waste stream with low operational costs, minimal maintenance and downtime. This line consists of a feed hopper, a Paddle Depacker and an organic/packaging discharge arrangement.



## Storage & Handling

Your process starts with storage and handling of your material. Mavitec Green Energy offers high quality solutions for storage of a wide variety of raw materials or finished products, liquid and dry.

Looking for a bin, hopper or storage tank? With over thirty years of experience in storing and handling materials, we are able to offer cost effective solutions that provide the best handling of your material with the appropriate hygiene standards.

Example of materials that can be handled:

- **Food waste (packed & unpacked)**
- **Agricultural waste**
- **Manure / litter**
- **Feathers, intestines, dead animals**
- **Blood, liquid whey**
- **Waste water**
- **Bones**

Our storage solutions are available in a wide range of configurations. From small 1 m<sup>3</sup> hoppers up to 200 m<sup>3</sup> in floor bunkers with multiple bottom conveyors and hydraulic opening covers. Custom made solutions also possible.

# Resizing Systems

## Resize your organic waste

### FUNCTION

Mavitec Green Energy's resizing systems are designed to grind fruits, vegetables, shop returns, restaurant returns and other organic waste streams into a pumpable slurry that is suitable for use as biogas feed-stock or animal feed.

Our resizing system consists of a reception hopper/tipper/bin or belt that feeds the material directly into the Martinater: a fast swinging hammer mill that smashes your product to the required size (screens are available between 1 and 50 mm).

The slurry coming out the Martinater will be automatically pumped to intermediate storage tank.

### FEATURES

- **Heavy duty**
- **Carbon & stainless steel**
- **Compact size**
- **Swinging hammers**
- **Variable screens**
- **Easy maintenance**



#### MARTINATER 500

Capacity / hour	4,5 m <sup>3</sup> - 10 m <sup>3</sup>
Installed power	22 - 30 kW



#### MARTINATER 700

Capacity / hour	7,5 m <sup>3</sup> - 20 m <sup>3</sup>
Installed power	37 - 45 kW

### OUTPUT

*Mavitec Green Energy machines produce the smallest size possible*



### INPUT MATERIALS

#### List of examples:

Potato's, Fruits, Vegetables, Pumpkin, Shop return waste, Manure/Straw, Food production failures, Carrots, Corn, Unpacked food, Plastic bottles, Sandwiches, Tetra Pak Containers, Soft packaging, Sachets, Confectionery, Pet foods, Processed meats, Tea, Beans, Cereals, Pharmaceuticals, Cosmetics, Ice cream, Popsicle, Beverages (bottles & cans), Cigarettes, Insecticides, Sauces, Yogurt, Biscuits.





# Depackaging Systems

## Separate organic fraction from the packaging

### FUNCTION

Mavitec Green Energy Depackaging systems are designed to separate the organic fraction from the packaging. Our machines are able to depack a wide variety of organic food waste and produce a very clean organic output that is extremely suitable for biogas installations. With official lab results > 99,5% clean organic soups as well as the cleanest packaging fraction in the market.

The Paddle Depacker is available with a capacity up to 30 m<sup>3</sup> per hour and also in a compact sized model.

### FEATURES

- Heavy duty
- Carbon & stainless steel
- Variable screen sizes
- Click & go system for paddles and screens
- Process control
- Leak free & low water usage
- Low noise & minimal downtime
- Easy maintenance
- Hydraulic opening doors for easy cleaning (Paddle Depacker)



### PADDLE DEPACKER

Capacity / hour	15 m <sup>3</sup> - 30 m <sup>3</sup>
Installed power	45 kW

### PADDLE DEPACKER MODEL S

Capacity / hour	1 m <sup>3</sup> - 5 m <sup>3</sup>
Installed power	11 - 18 kW

### OUTPUT

*Mavitec Green Energy machines produce the cleanest organic soups*

> 99,5%  
clean

### INPUT MATERIALS

#### List of examples:

Kerbside waste, Hotel/Restaurant waste, Bread products, Food production failures, Shop return waste, Canned products, Drums, Various containers, Baby foods, Household products, Deodorants, Powdered milk, Potato's, Fruits, Vegetables, Pumpkin, Returns, Manure/Straw, Carrots, Corn, Cole slaw, Unpacked food, Tetra Pak Containers, Soft packaging, Sachets, Confectionery, Pet foods, Processed meats.



# Storage & Handling Solutions

## Raw / finished / dry / liquid materials

With over thirty years of experience in designing and manufacturing of storage and handling equipment, we are able to offer cost effective solutions that guarantee the best handling of your material with the best appropriate hygiene standards.

### FEATURES

- Heavy duty
- Easy maintenance
- Standard or custom made
- Special demands/designs possible

### INPUT MATERIALS

List of examples:

Food waste (packed & unpacked), Agricultural waste, Manure, Feathers, Intestines, Complete dead animals, Blood, Liquid whey, Waste water, Bones.



### Bins & Tanks

Capacity
1 m <sup>3</sup> - 200 m <sup>3</sup>



### Hoppers

Capacity
0,5 m <sup>3</sup> - 7 m <sup>3</sup>



### Conveyors

Dimensions
Ø 225 / 300 / 400 / 500 / 600 mm

+ options key hole

### FEATURES

- Carbon, stainless or ST52 steel
- Above or sunk into the ground
- Hydraulic controlled bin lids
- Splash shields
- Air ventilation connection holes
- Draining systems
- Mixers / heated coils / loading cells
- 1 up to 4 bottom conveyors
- Process control
- Odour control

### FEATURES

- Heavy duty
- High quality
- Low maintenance
- Wide range input

### FEATURES

- Center shaft or shaftless
- Wear plates in different materials: carbon, stainless or ST52 steel
- Easy opening covers
- Safety discharge boxes
- Different kinds and/or brands of drives possible
- Draining system/perforation
- Heated coil/shaft or trough
- Flighting thickness 3 - 20 mm, single pressed



# Test your own material

Want to try the Paddle Depacker on your own site? Our machines are also available for rental! We offer you this unique opportunity to see the machine running and test your own material on your own site. Within a few hours the test unit is up and running.

- Trailer system (Paddle Depacker)
- Portable skid unit (Paddle Depacker Model S)

Ask our Sales Department for more information and rental options.



## OTHER SOLUTIONS

Mavitec Green Energy also offers a wide range of stand alone equipment with applications for:

- **Washing**
- **Pressing**
- **Degritting**
- **Sterilizing**
- **Drying**

Ask our sales department to advise the best solution for your business.

## TURN-KEY SOLUTIONS

Besides standard or custom made equipment and full processing lines we are also your partner for turn-key solutions. From engineering to building, Mavitec Green Energy is responsible for the complete factory until your installation is operational.

## REFERENCES

Mavitec Green Energy has installed many installations in The Netherlands, Germany, Denmark, England, France, Spain, Russia and many more countries. Contact our sales department to learn what we can do for your business or ask for a reference visit.

## CONTROL PANELS & REMOTE CONTROL

Control panels are built in-house with latest available technologies and software, according to customer needs. The panels offer a complete visualisation of your process and provide the required management information and live process data. Our service engineers offer thorough analysis and problem solving for mechanical and PLC/electrical issues to assure optimal performance. If remote engineering is installed in your plant, we can access the system to check and support.



*Custom made control panels and remote support to guarantee optimal performance, efficient support, low service costs and minimum downtime.*

## AFTER SALES SERVICE & SUPPORT

We offer lifetime support: 24/7, all around the world. We combine in-depth knowledge of processes and techniques to realize process improvement, cost reduction, optimal product quality and highest line efficiency. With decades of experience on process optimization, machine spare parts, overhaul, revisions and improvements, we can make your plant more profitable.

- Custom made solutions & services
- Mechanical and PLC / electrical inspections
- Original spare parts: one-stop-shop & large warehouses
- 24/7 Helpdesk & Emergency Service
- Local presence, local languages

*Service you can count on!*



## THE SUCCESS OF MAVITEC

- In house mechanical engineering & control panels
- Private owned manufacturing of equipment
- Dedicated After Sales Department (24/7 service)
- Worldwide spare part warehouses
- Export to 50 countries worldwide
- Over 200 installations operational
- Standard, custom made and turn-key solutions
- Experienced supervisor for installation and training of local staff
- Original Equipment Manufacturer
- ISO 9001 certified



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