



MAVITEC
— Green Energy —

Paddle Depacker





Mavitec Green Energy

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 which is extremely suitable for biogas/biodiesel installations, with results showing organic soups which are >99,7% *pure as well as the cleanest packaging fraction in the market.

The Paddle Depacker comes in various capacities, ranging from 2m³ up to 30m³ per hour for each machine.

* >99,7% clean on dry matter

FEATURES PADDLE DEPACKER

- Heavy duty execution
- Hydraulic opening doors
- One machine suitable for a wide variety of input materials
- Variable screen sizes
- Click & run system for paddles and screens
- Low noise & minimal downtime
- Easy maintenance & cleaning
- Carbon or stainless steel
- Low water consumption

Food waste depackaging solutions

The **Paddle Depacker Model S** separates packaging from organic material to produce clean organic output up to 99,7% * clean. Its user friendly, low-maintenance design sets it apart from other systems. The Paddle Depacker Model S has a production rate up to 3 tons per hour.

The **Paddle Depacker** offers similar features but with greater robustness and higher throughput. Like the Model S the Paddle Depacker can process both wet and dry materials, reaching the same organic cleanness of up to 99,7% *. For large capacity plants, several units can be placed in parallel.

The **Paddle Washer** is designed to wash packaging and decrease the weight of packaging output. The machine discharges an extremely clean plastic and raises organic yield. The cleaner plastics can be disposed of at a lower cost.

The **Mavitec Grit Separator** is designed to separate solids as glass, stone and other types of grit from organic liquids. The solids are separated by the centrifugal forces in the cyclone.

	<u>PADDLE DEPACKER MODEL S</u>	<div>SPECS</div> <div>Capacity: up to 5m³ per hour Power: 15 kW Weight: 1200 kg Dimensions: L:2200 x W:850 x H:1320mm</div>
	<u>PADDLE DEPACKER</u>	<div>SPECS</div> <div>Capacity: up to 30m³ per hour Power: 45 kW - 55 kW Weight: 5500 kg Dimensions: L:3672 x W:1252 x H:2057mm</div>
	<u>PADDLE WASHER</u>	<div>SPECS</div> <div>Capacity: up to 12m³ per hour Power: 37 kW Weight: 3500 kg Dimensions: L:3899 x W:1460 x H:4191mm</div>
	<u>GRIT CYCLONE</u>	<div>SPECS</div> <div>Capacity: up to 80m³ per hour Power: 25 kW Weight: 3750 kg Dimensions: L:4321 x W:3073 x H:3817mm</div>

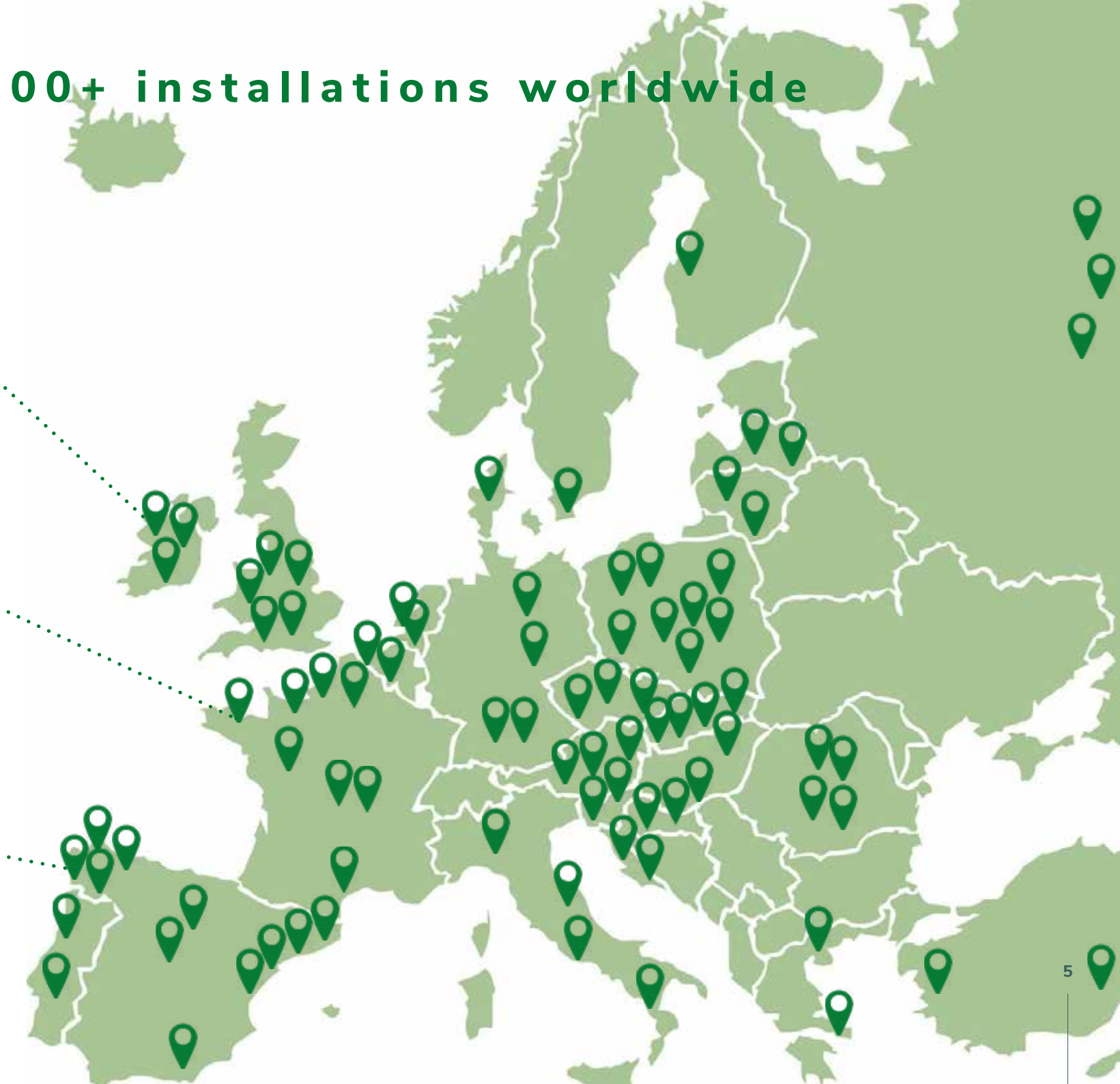
A selection of valued customers



David Lourme
Regional Director Suez

We chose Mavitec Green Energy for their commitment to delivering high-quality organic output as well as the cleanest packaging output.

200+ installations worldwide

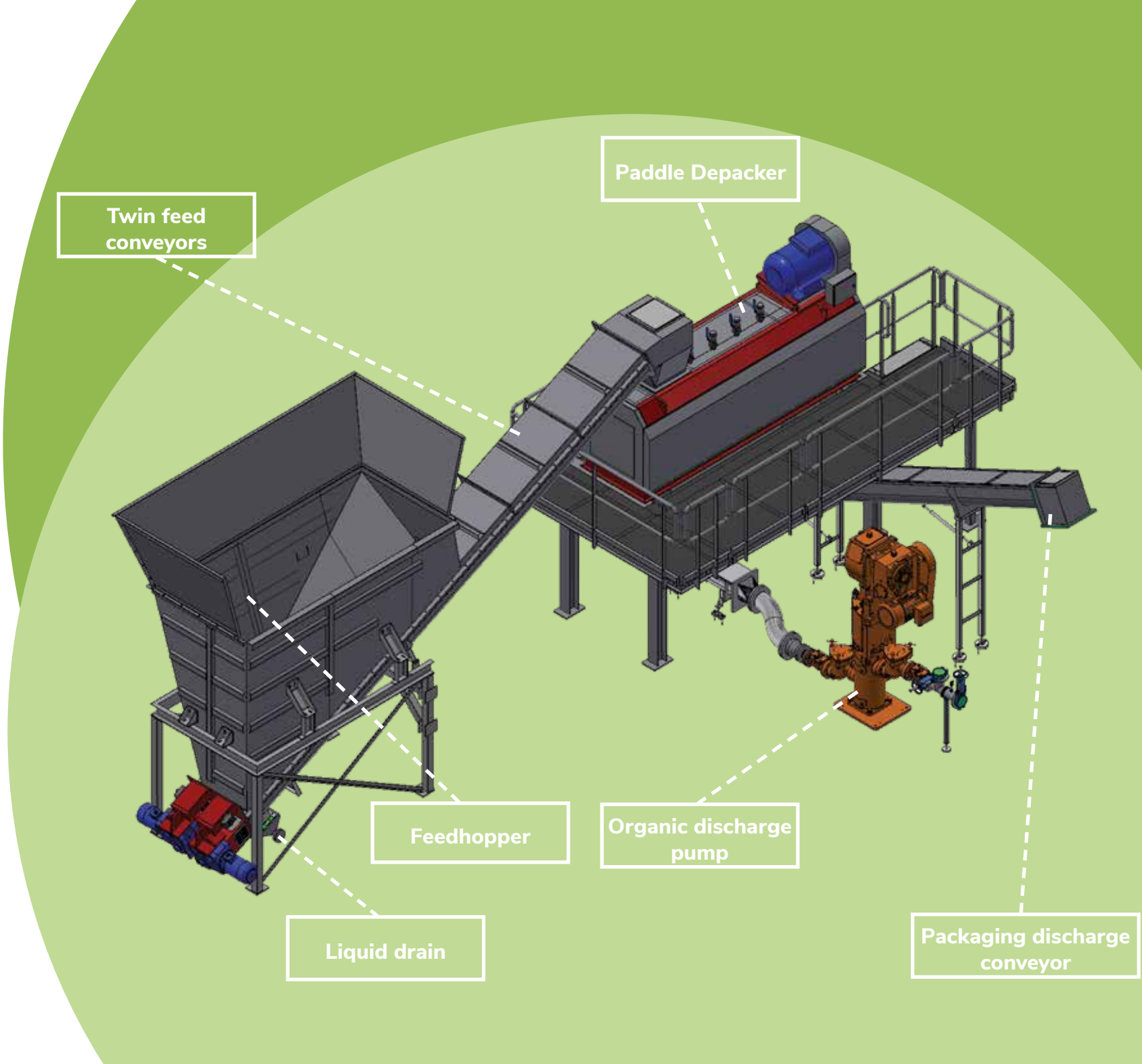


Input materials

Suitable for various types of input material: supermarket waste, kerbside, restaurant waste, factory rejects and much more



Video
Paddle Depacker



Output: organic fraction

Clean organic soup with characteristics that comply with all local legislation. Dry matter content can vary from as low as 1% to as high as 100%.



Output: packaging

The cleanest packaging output in the industry, suitable for recycling.



How do we do it? The cleanest organic soup

1 Add liquid

To guarantee your specific organic soup standard. Also improve the quality of the packaging output and make the soup pumpable.

2 Adjust angle of the paddles

To reach the optimal retention time of the material inside the machine.

3 Change screen size

Depending on the material and the requirements of the end-product, the following screens are available: 50mm-30mm-25mm-20mm-15mm-10mm-8mm

4 Change rotation speed of the axle

VFD-controlled shaft speed for optimal separation results.

5 Change distance paddle to screen

To guarantee clean screens and optimal separation results, our unique spacer system can be set to any specification desired.

Proven lab test results

Many countries have strict regulations and guidelines in terms of organic waste outputs for anaerobic digestion, composting, and/or animal feed applications. Mavitec has installed equipment in countries with the most strictest regulations.

The Paddle Depacker guarantees compliance with the latest standards and regulations of your country and any future legislative modifications* concerning residual impurities in the organic fraction.


The organic fraction output is >99,7% clean on dry matter.

How clean is it?

By finetuning the numerous settings on the machine, the Paddle Depacker is capable of producing the cleanest organic soups in the industry. Ask for references.



 eurofins

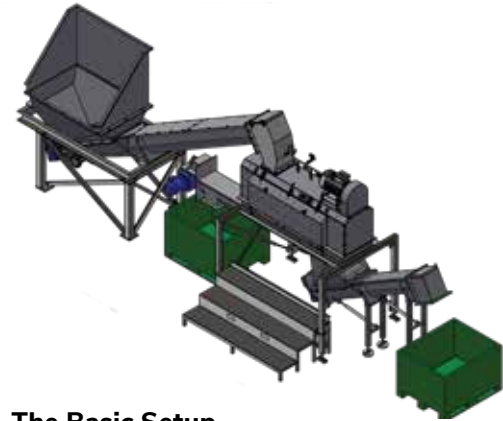
 LABORATORIUM
ECCA

 ANALYTECH

* regulations are subject to change, consult for the latest standards/results.

one solution many options

Model S - up to 5m³/hr



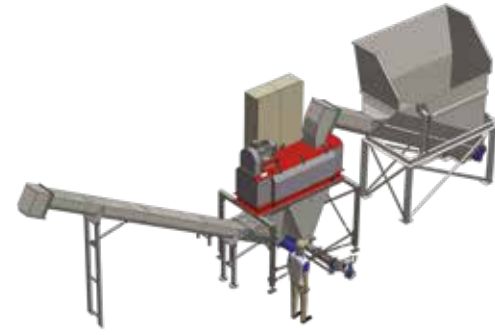
The Basic Setup

This configuration represents our entry-level solution featuring a 1m³ hopper and dual conveyors for discharging materials into boxes. It is designed to process both wet and dry materials with ease.



The Dry & Wet S

This configuration employs an organic discharge conveyor to effectively process both wet & dry materials. Additionally, a pump is included to facilitate a seamless transition between wet & dry materials ensuring optimal processing efficiency.



The Classic S

This solution comes equipped with a 2.2m³ hopper, and discharge pump designed for organic materials. It is ideal for smaller quantities while maintaining consistent high-quality output.



Multiple liquid connections

Paddle exchange under 5 minutes

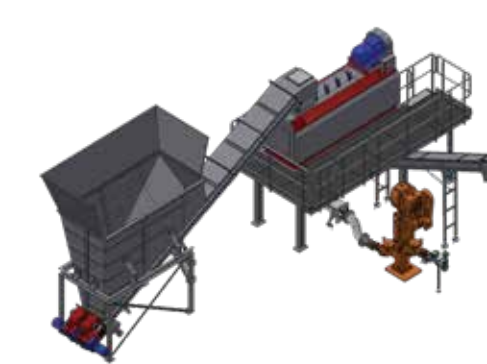


Variable speed shaft to meet each specific material

Insulated doors opens hydraulically

Screen exchange under 3 minutes

Paddle Depacker - up to 30m³/hr



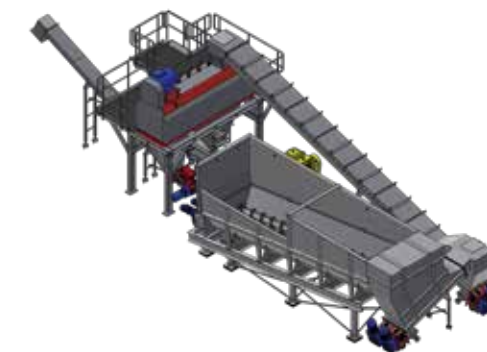
The Classic

Our most successful solution features a twin feed hopper and a robust piston pump, delivering reliable and uninterrupted processing capabilities, ensuring many efficient depacking days to come.



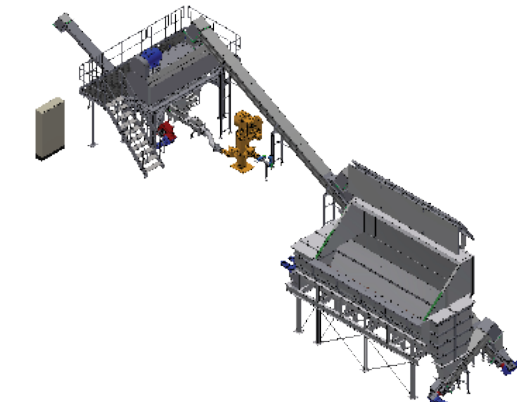
The Dry & Wet

This setup uses an organic discharge conveyor, providing the ability to process both wet & dry materials, including crisps, cookies, and many other products.



The Bin

This solution provides a 15-150m³ bin which enables increased storage capacity, with its multiple conveyors and twin feeding capabilities it prevents material from bridging and ensures constant feeding towards the depacker.



The Bin (in ground)

This solution provides a 20-150m³ bin which enables increased storage capacity. The bin is placed in a pit for direct discharging from a truck, while its multiple conveyors and capabilities prevent bridging and ensure a constant material stream towards the depacker.

Custom made solutions

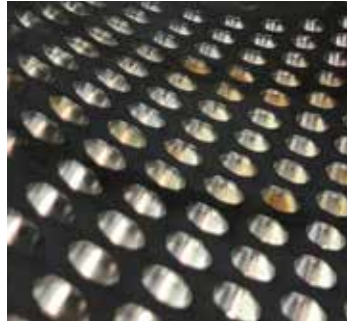
In addition to our standard lines, Mavitec Green Energy is specialized in custom solutions, from a single hopper to multiple bins, Paddle Washers, and turnkey solutions. Mavitec Green Energy is your trusted partner.

Project PORTFOLIO



Custom build solutions

Our team is dedicated to creating tailored solutions that seamlessly integrate with your existing infrastructure.



Skid solution

The skid version of the Paddle Depacker, shown on the right, is designed for easy mobility and convenience at any location.



An organic storage pit offers several advantages, including space-saving, odour control and reduced environmental impact.



In-house control panel building

Mavitec designs and produces control panels with full PLC control in-house, to ensure the highest quality. We are capable of meeting all your standards!



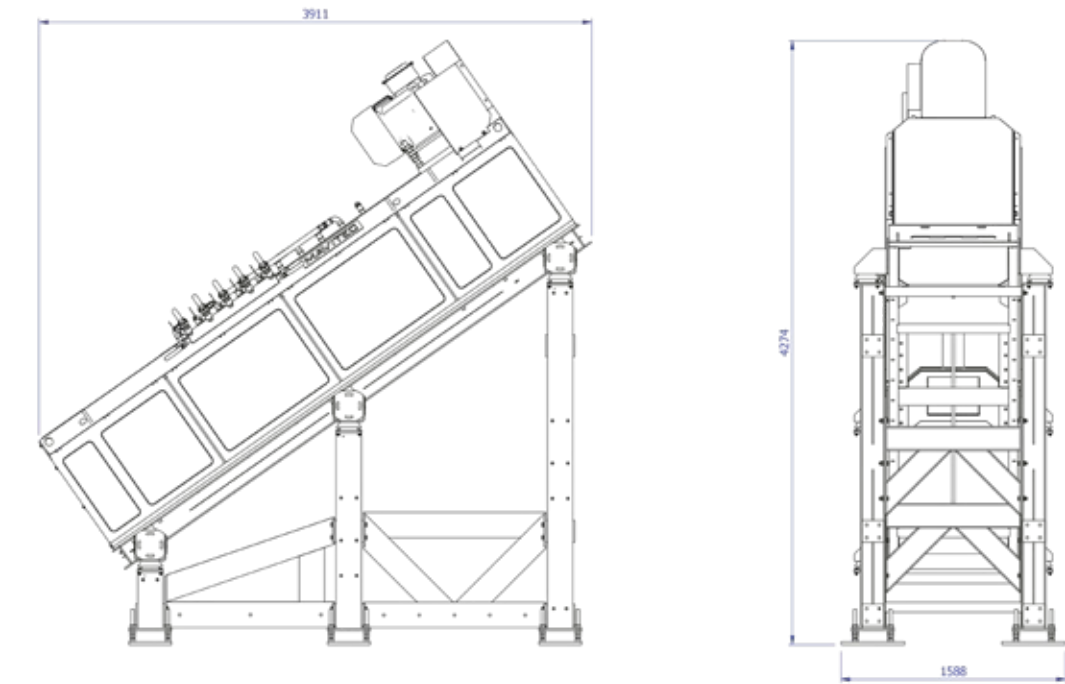
Paddle Washer



The **Paddle Washer** washes and reduces the weight of packaging output, resulting in cleaner packaging and a higher organic fraction yield. As a result disposal costs will be significantly lower. The machine is connected to our unique Paddle Depacker system or any other depackaging system and uses a rotating shaft with paddles to create friction between packaging and organic material, with liquid being injected at several points (optional). The organic fraction is collected at the bottom. The clean, dry packaging is discharged from the front of the Paddle Washer.



Paddle Washer



Model	Power	Weight	Length	Width	Height
PW 650	kW	kg	mm	mm	mm
	37	3500	3899	1460	4191

Features

- Up to 50% reduction packaging weight*
- Save on packaging disposal costs
- Heavy duty execution
- Compact size
- Fast & easy access for easy maintenance, inspection and cleaning
- Fixed shaft execution
- Variable screen sizes available
- Low installed power & low water consumption
- Integration with Paddle Depacker and other depackaging systems possible
- Available in carbon steel and stainless steel
- Plug & play solution

Technical details

Capacity: up to 12m³ per hour

*depending on input material composition and depackaging system



Output Paddle Washer



Video Paddle Washer

Paddle Washer Roadshow



Features

- Test at your site with your product
- Up to 50% reduction packaging weight
- Operational within the hour
- Available for long & short term rental

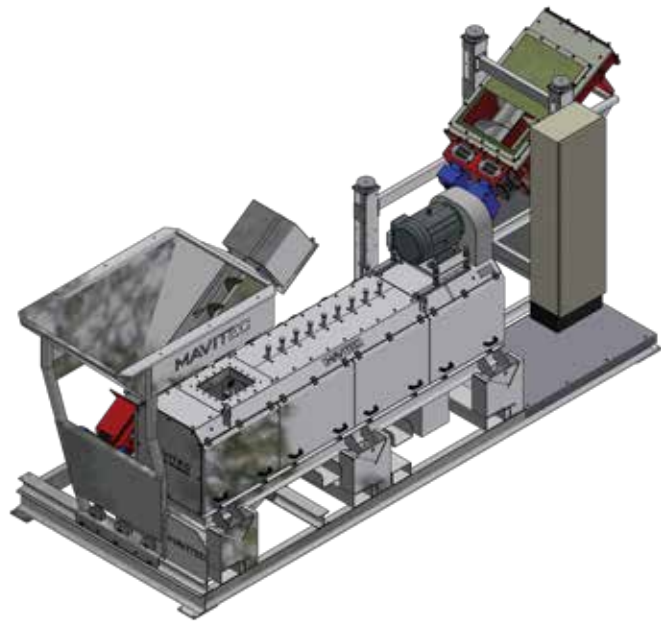
The Paddle Washer Roadshow is designed for flexibility and ease of use, this plug & play solution can be easily transported to various locations, making it ideal for on-the-go packaging washing needs. Whether you need to process organic waste at different sites or handle depackaging tasks in remote areas, our mobile Paddle Washer provides a reliable solution. The clean and dry packaging output is efficiently discharged, all while achieving up to 50% weight reduction in packaging. The organic fraction is collected at the bottom of the machine and can be pumped to any desired location.

Our Mavitec crane has the capability to maneuver the unit into nearly any desired location.

Technical details

Capacity: up to 12m³ per hour
*depending on input material composition and depackaging machine

The Paddle Washer is connected to either our unique high efficient Paddle Depacker or any other depackaging system. The unique result between the packaging and the organic material is created by a fast rotating shaft with paddles. During this process liquid can be injected on several positions on top of the machine (optional). The organic fraction is collected in the bottom of the machine and can be pumped to any desired location. For example the organic liquid fraction can be used in pre-treatment steps or send directly to the storage tank. The clean and dry packaging will be discharged at the end of the machine.



*Video Mavitec
Paddle Washer*

Grit Cyclone Unit

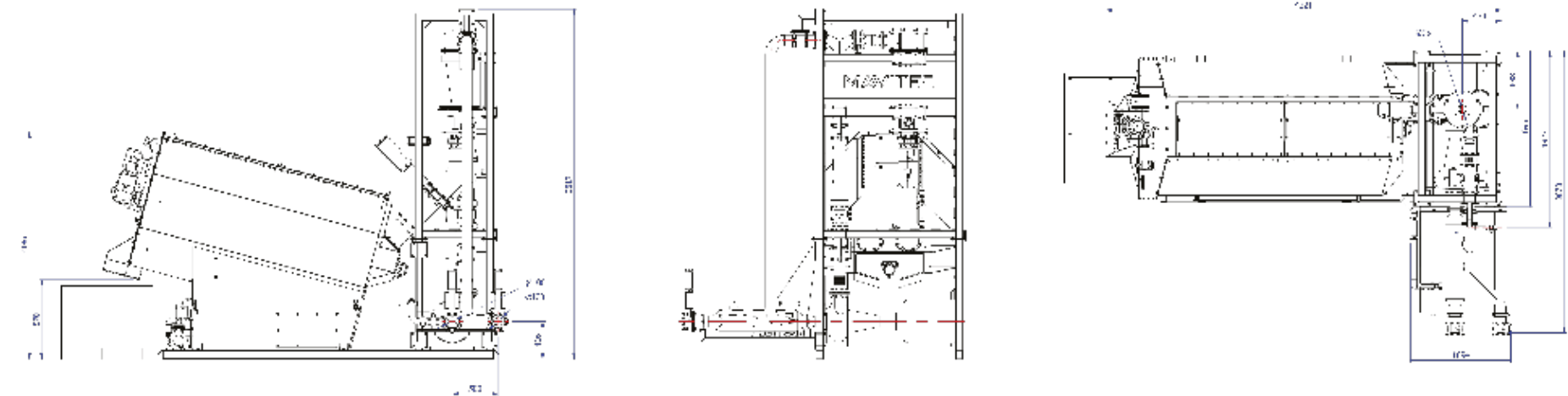


The **Mavitec Grit Separator** is designed to separate solids as glass, stone and other types of grit from organic liquids. The solids are separated by the centrifugal forces in the cyclone. The effect of separation is depending on particle size, viscosity of the liquid and number of passages over the cyclone. The organic liquid is partly arriving from the Depacker line and partly from an agitated buffer tank and is pumped into the system with the recirculation pump over the cyclone. The Grit Separator is available for short and long term rental.



Grit Cyclone Unit

The separation process take place in the cyclone. Solids will be collected below the cyclone in the grit buffer and liquid will flow towards the agitated buffer. In the agitated buffer is the liquid partly pumped over the cyclone again to obtain a multiple cleaning cycle, and excess will be discharged to the organic output. The solids (grit) are accumulated below the cyclone in the grit buffer. This grit buffer is discharged into the grit washing drum at set times. The grit washing drum will also add water to separate grit from remaining organic solids. Grit is conveyed to the grit discharge and liquid is pumped to the inlet of the recirculation pump to be processed again. The system is intended to be used for pumpable, up to 21% dry solid, organic liquids.



Model	Power	Weight	Length	Width	Height
GS	kW	kg	mm	mm	mm
	25	3750	4321	3073	3817

- Features**
- Extremely clean soups
 - Plug & play solution
 - Heavy duty execution
 - Compact size
 - Available for long & short term rental

Technical details
Capacity: Up to 80m³ per hour
*depending on dry matter content

Paddle Depacker Roadshow



Features

- Test at your site with your product
- Operational within the hour
- Power generator on truck
- Available for long & short term rental

The Paddle Depacker Roadshow is a unique opportunity to see the Paddle Depacker running and test your own material. The Paddle Depacker Roadshow is a complete food waste depackaging unit, built on a trailer. The trailer is equipped with complete Paddle Depacker system, handling up to 30m³ material per hour. The mobile system consists of a feeding hopper, Paddle Depacker and discharge options for organic material (wet and dry) and packaging. The unit is operated by a digital control panel with touch screen and is up and running in less than one hour.

Technical details

Capacity: up to 30m³ per hour
*depending on input material composition

The Paddle Depacker Roadshow truck has run tests on over 1000 different types of food waste and other materials, including plasterboard and paper waste. Our processing techniques have created significant improvements in material processing. Before requesting a test, we invite you to have a look at our YouTube channel or provide our sales department with example pictures. In the event that your material has special properties, we offer the opportunity to conduct on-site testing using your specific materials.



*Video Mavitec
Roadshow*

Service & maintenance

Frequent maintenance is crucial to ensure the continuous and optimal functioning of any installation. This is why Mavitec offers a comprehensive range of service packages designed to minimize downtime and maximize operational reliability, ultimately leading to higher returns on investment. Additionally, we have a crane available for our clients' convenience, should they require it. Feel free to inquire about our service packages to learn more about the benefits they can provide.

Advantages of a service package

- Minimal downtime
- Increased operational reliability
- Maximum productivity
- Lower operating costs
- Higher quality end products
- Increased lifetime of the equipment

Subject	Phone Number	E-mail Address
Service	+ 31 (0)72 574 59 88	service@mavitec.com
Spareparts	+ 31 (0)72 574 59 88	spareparts@mavitec.com
Preventive Maintenance	+ 31 (0)72 574 59 88	service@mavitec.com



Valued customers



Justin Martens
Site Manager

At Mavitec, they understand that reliable service and maintenance are crucial for the success of the business. That's why they offer comprehensive support to keep our equipment running smoothly and efficiently.



Julien Wyckaert
Agricultural farmer

I chose Mavitec due to their extensive experience in providing innovative solutions, cutting-edge technology, and outstanding support.



Galileistraat 32 - 1704 SE Heerhugowaard - the Netherlands
Tel.: +31 (0)72 574 59 88 | e-mail: info@mavitec.com
www.mavitecgreenenergy.com

