

SlurryKat[®]

DODA[®]

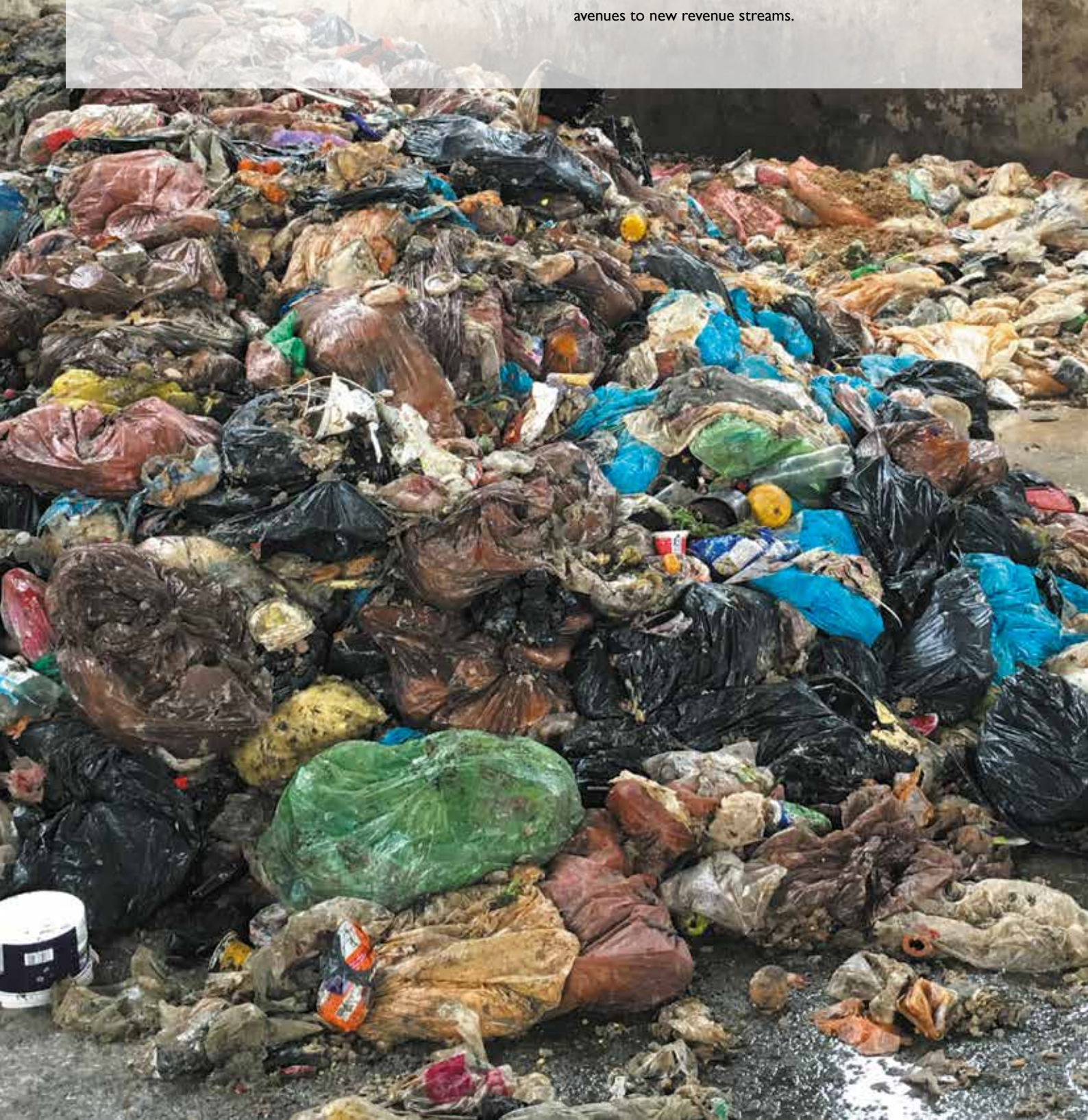


Innovative Solutions for AD & Waste Processing

The Big Environmental Problem

The UK and Ireland is estimated to generate in excess of 200 million tonnes of municipal waste per year. This is clearly an unsustainable use of resources costing millions of pounds and impacting greatly on the environment with the build-up of the powerful greenhouse gas methane. With Governments and local authorities striving for a “zero waste economy” we cannot ignore the collective responsibility to reduce, reuse and recycle at every opportunity.

A key challenge with the UK & Ireland is the management of contaminated food waste packaging with an estimated seven million tonnes of food waste being sent to landfill annually. It is with this in mind that SlurryKat, in association with DODA, are pleased to offer a solution that would allow this food and its packaging to be recycled. We believe that the unrivalled technology shown in this brochure will aid the fight against the unsustainable reliance on landfill within the UK & Ireland and provide savings on Landfill Taxes, running costs while opening avenues to new revenue streams.





Contents

| | |
|--------------------------------------|----|
| Proven Manufacturing Experience | 5 |
| The Waste Separation Solution | 7 |
| AD Mixing Solutions | 8 |
| AD Loading & Transfer Box Pumps | 9 |
| Screw Press Separation Systems | 10 |
| Green Bedding Systems | 11 |
| Roller Separation Systems | 12 |
| Rotary Separation & Dewatering Units | 13 |
| Mixing Solutions | 14 |
| Land Spreading Systems for AD plants | 15 |





Proven Manufacturing Experience

At SlurryKat we offer off the shelf and bespoke engineering solutions for handling and processing organic and non-organic material for industry, municipal, renewable energy and agricultural applications.

We offer a broad range of machines to suit your application, these include: -

- Bio-Separators
- Anaerobic Digester Mixers
- Centrifugal Chopper Pumps
- Screw & Roller Solids Separators

SlurryKat & DODA have an extensive long term working relationship intertwining their years of engineering expertise to successfully deliver hundreds of bespoke turnkey projects. This enables us to offer customised solutions in the organic waste & aerobic digestion industry with proven efficiencies of energy and capital investment savings.

Our dedicated team of expert engineers combine their dedication to compliance to the strictest anti-pollution rules with the most advanced computer generated 3D CAD software to design and build this highly specialised equipment. We believe this clearly positions us as the technical market leaders in the Bio Separation and organic pumping industry.







Mini & Hand Feed Bioseparator Units

The Waste Separation Solution

Turnkey De-Packaging Systems

SlurryKat can provide a varied range of Bio-Separators which will remove food, food packaging and other unwanted materials from various waste sources with up to 99% success rates. These Bio-Separators not only reduce methane emissions from landfill, but also empower councils to help the government reach its targets of landfill reduction.

Organic and Non-Organic Bio Separators features.

Reinforced AISI304 stainless steel construction

Castolin coated Hardox hammer mill

Hot galvanised screens with 6mm, 8mm or 15mm screens

Various models with through put ranging from 2-20 tonnes per hour of comingled organic and non-organic waste

Dry systems with hopper sizes of 1m³ – 10m³

Wet system bag openers and specially designed chopper pumps for mixing and feeding

In-store hand-fed compact units for de-packaging, separation and volume reduction

Bio Separator Advantages

A very high energy liquid is produced that can be added straight to the AD plant that can boost gas production by up to 60%

Very robust construction – 20 tonnes/hr capacity in comingled non-organics and good waste

Up to 99% removal of non-organics from food waste depending on product and screen size

Reducing GHG (methane) emissions from landfills and waste combustion

Improved sanitation, public safety and health for both your facility and community

Bio Separator Applications

Volume reduction for transport and tipping fee savings

Recycled food waste can be used as compost for fertiliser replacement

Creation of an anaerobic digester feed stream with high methane production potential

Low maintenance

Turnkey projects, from design to startup



BG80 Roof Mounted



BG80 Wall Panel Mounted



Fast and easy installation takes less than one hour to complete

AD Mixing Solutions

SlurryKat mixers have a proven record of reliability and unmatched performance with the longest maintenance intervals on the market.

Effective mixing of the anaerobic digester contents is important for process stability. Our bespoke mixing systems maximise gas production, prevent solids depositing in the digester, and reduce foam formation while also minimising scum. All of this provides extensive cost savings by increasing the active volume of the digester and reducing expensive removal costs.

Features

Entirely manufactured in 100% stainless steel

Adjustable angle driveline with options of roof or side mounting available

High efficiency three-blade slow-turning
80rpm/1500mm, 500rpm/500mm or
200rpm/840mm diameter propellers

Reinforced oil bath driveline with tungsten carbide mechanical seal system

5-22KW C-Face explosion-proof high efficiency motors

Up to 40,000 hours maintenance schedule intervals

Removable under full load roof and side mounted mixers are available

Advantages

Customisable and can be retrofitted to any existing or new digesters

Mix a large volume of product quickly and efficiently

Minimise scum and foam formation

Minimise the deposition of grit and solids on the digester floor

Uniformed distribution of solids throughout the digester

Prevents thermally stratified sludge layers

More stable digestion process

Higher gas production

AD Loading & Transfer Box Pumps

The unique application of these special pumps provides a performance that cannot be achieved with Lobe or Cavity pumps.

The compact box enclosure allows for ease of installation in a wide variety of plant rooms. When run in comparison with Lobe pumps our equipment give a flow rate three times greater at a higher efficiency.

All pump components are manufactured in 100% INOX stainless steel including the impellers, volute housing and drivelines. Pumps are also available with double suction inlets to the impeller to facilitate pumping of very thick heavy products.

Our pumps have a bespoke oil bathed driveline which allows them to be continuously run dry without causing any damage to the pump.





Screw Press Separation Systems

With its compact design, easy installation and simple to maintain features, the Doda screw press separator is an excellent machine for the separation of suspended solids from liquids and sludges.

| Features |
|--|
| Completely manufactured in INOX stainless steel with removable access covers for inspection and cleaning |
| Heavy duty planetary gearbox powered by local 4KW or 9KW high efficiency motors |
| 390mm HD stainless steel screens allow for rotation between front and back screen |
| HD stainless steel casted augers with highly abrasion-resistant hardface coating |
| Seven vanadium blade internal chopping system |
| Versatile intake design to be loaded from top or side |
| Adjustable discharge door for moisture content up to 40% dry product |
| Dual seals with automatic greasers to protect gearbox |
| Product detector sensor for automatic start and shutdown |
| Plug Protection System |

| Advantages |
|--|
| Separates into dry drip-free manageable solids for easy stacking and transport |
| Reduce odour in solids and increases storage capacity |
| Less sedimentation for improved aerobic progress in lagoon |
| Less maintenance and longer lagoon operation before cleaning |
| Suitable for compost or green bedding for dairy industry |

| Applications |
|--|
| Biogas industry |
| Agriculture |
| Food processing industry |
| Pulp and paper industry |
| Abattoirs and meat processing industry |
| Brewery/Distillery Waste |





Green Bedding Systems

Interest in Green Bedding had been rapidly increasing following on from its popularity in the USA and mainland Europe over the last few years. Over 500 farms have converted to Green Bedding systems in Holland alone with 80% of all new cubicles moving to deep bedding.

The DODA green bedding system is designed to produce recycled bedding material from separated cattle slurry or anaerobic digestate. The benefits of this system gives cows enhanced comfort and cleanliness in the cubicles, a reduction in mastitis levels in the herd whilst also reducing bedding costs. Due to its uniquely designed screen and screw, typical output from the system with the additional blower and dryer will produce bedding with a dry matter content of 25-50%*. We are so confident that our heavy duty screw press separator produces dry matter output volumes totally unrivalled to any other manufacturer on the market that we offer a satisfaction guarantee or your money back.

The system, including the feeding pump, is controlled by a specially designed PLC, inverter and pressure monitoring control panel.

All green bedding systems are 100% INOX stainless steel for long life operations in aggressive corrosive materials.

**depending on equipment used*

Benefits associated with the Doda Green Bedding System include:-

No requirement to buy straw or sawdust for bedding

Mastitis is reduced in milk production with increased production

Increased cow comfort and cleanliness

30% more increase in slurry storage capacity

Less requirement for mixing of slurry after storage

Phosphorous reduction on the farm

Reduction in carbon footprint of the farm

Short fibres produced means the bedding has a greater absorption than straw or sawdust (sponge effect), allowing for cleaner animals, less smell and better general conditions



Roller Separation Systems

The roller separator provides a highly efficient and reliable system for the separation of the slurry liquid fraction from the solid one by using a combination of a rotating drum with adjustable compression rollers.

Features

Completely 304 stainless steel with hydraulic adjustable high-resistance pressure rollers

Large surface screen for up to 60m³/h throughput

Self-cleaning wire brush and washing system

Low power consumption 1.5hp electric motor

Over pressure regulator tower and stone trap

Product detector sense for automatic start

Advantages

Fast reliable separator to separate a high volume of fibrous product with up to 60m³/h

Separates into dry drip-free manageable solids for easy stacking and transport

Applications

Composting

Biogas industry

Agriculture

Food processing industry

The Doda rotary separator is ideal for industrial applications where a high volume of slurry with relatively low solid content needs to be screened. The rotary screen allows the liquid fraction to pass through the screen by gravitational forces initially before being further pressed by a rubber roller against the screen; leaving solids that can be up to 28% dry matter.



Rotary Separation & Dewatering Units

Features

- Completely AISI 304 stainless steel
- Low Power consumption (less than 1KW)
- Customisable screen starting from 1.5mm to 3mm
- Two roller wire brushed for screen cleaning
- High-pressure water nozzles for cleaning
- Top mounted heavy duty poly star gear drive

Advantages

- High volume throughout of up to 120m³/hour
- 100% stainless steel corrosion and rust proof
- Unique double cleaning system to prevent clogging of screens

Applications

- Sludge thickner/dewatering
- Biogas industry to thicken the waste stream before feeding into the digester
- De-packaging and cleaning of non-organic waste before landfill or recycling
- Flushing and sand bedding dairies





Mixing Solutions

Doda & SlurryKat, together offer the widest and most advanced range of mixing solutions on the market today .

We offer 'off the shelf' or 'customised' solutions for any digester, storage tank or lagoon.

Large or small, we have the solution.

Our range includes:

Electric mixing systems

Tractor PTO horizontal or vertical agitators

Long-shaft or short-shaft applications

Flushing systems

It is our ethos that with all our products we offer a satisfaction guarantee or your money back.

**MONEY BACK
GUARANTEE**



Land Spreading Systems for AD plants

SlurryKat has over 25 years' experience in umbilical slurry handling, pumping systems for land spreading digestate, slurry for Biogas and Agriculture.

Having pioneered dribble bar systems in the last decade we have been able to provide our users with substantial reductions in environmental pollution allied to considerable costs savings through our technologically advanced SlurryKat Equipment.

In addition, SlurryKat design and manufacture an exquisite range of tankers from 7.5-30m³ encompassing various filling and spreading options to suit your requirements.

Our unique range of SlurryKat equipment has positioned us as the technical market leaders and innovators in the industry leading to numerous awards in the last decade for manufacturing and design excellence.



SlurryKat®



For more information, or a no obligation free consultation to see how SlurryKat can benefit you, please contact us today.

~ Head Office & Manufacturing ~

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