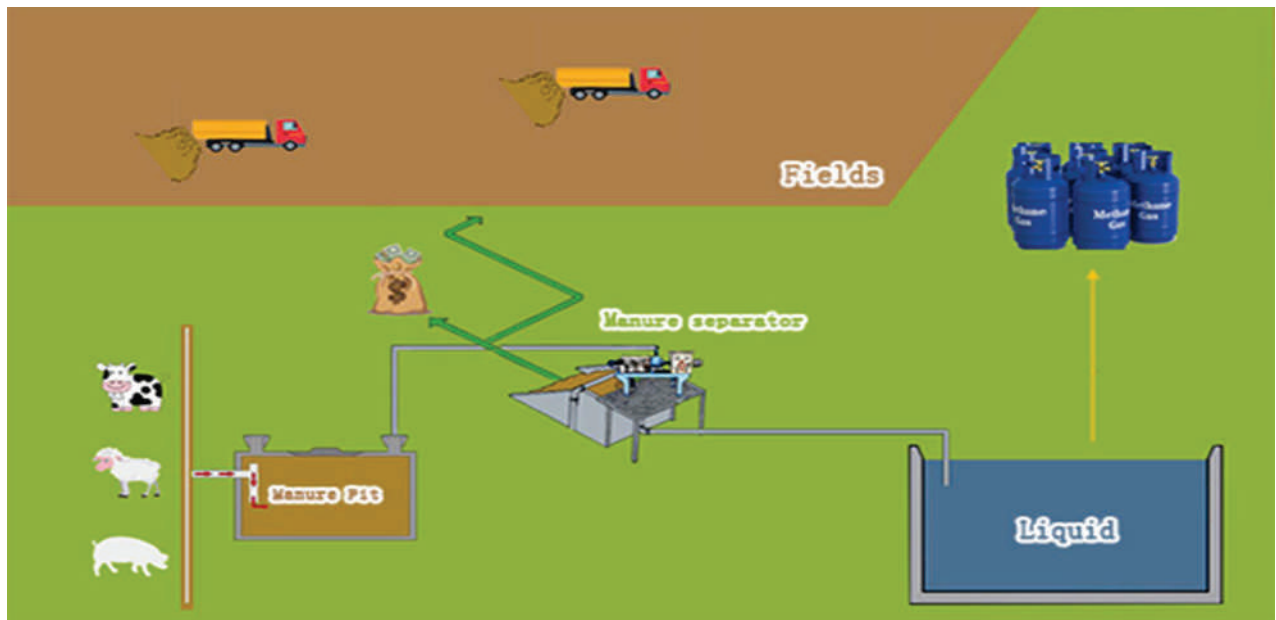




CARE OF  
**SUNNY**  
ENGINEERING WORKS



Focused on **Animal Manure Dewatering** for more than **40** Years

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ADVANCED EQUIPMENTS | POWERFUL TECHNOLOGY | PROFESSIONAL WORKERS  
STRICT QUALITY INSPECTION | FAST SHIPMENT  
RELIABLE AFTER -SALES SERVICES

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## ABOUT US

Great Virtue carries all things, credibility is eternal! We **Gurdev Shakti** is a professional manufacturer of stainless steel filter element, produce filter elements for more than **40 years**, and has accumulated rich experiences. We have advanced equipment, standardized management system. The main products : stainless steel wedge wire filter element, stainless steel sintered filter core, types of filter cartridge, Stainless steel pleated filter element, filter basket, filter disc, Mechanical filter cartridge and other stainless steel products. The products widely use in petroleum, chemical fiber, mining, metallurgy, industry machinery, water treatment, food process, etc. We provide professional and timely after-sales service to every customers.

**Our Enterprise faith :** Faithfulness and Mutual Benefit Our Enterprise purpose: provide high quality products and excellent service We sincerely invite you to visit our factory.



With the continuous development of large-scale farming, the farmers get greater economic benefits, also produce large amounts of dung water, the dung water is not easy to now and transport, has caused more serious environmental pollution.



In many solutions to the waste water pollution. it is a better choice to use the spiral extruded solid-liquid separator: low input and obvious economic benefit. This series of solid-liquid separator is a new product of our company which has been repeatedly tested and continuously improved.

The characteristics of spiral extrusion solid-liquid separator: high automation level, low operating speed, simple operation, easy maintenance, high daily capacity, low power consumption and suitable for continuous operation.



Most of its parts are made of stainless steel, and the size of the machine is small, it is the ideal fecal treatment equipment for large-scale farms, and improve the treatment and benefit of livestock and poultry waste greatly. It can also be customized according to different industries and customers.

# APPLICATION

The scope of application is the livestock manure dewatering treatment, including pigs, chickens, cattle and so on. Also widely used in distiller's grains, cassava residue, sludge treatment, etc.



goose manure



chicken manure



duck manure



pig dung



cow dung



quail manure



Chinese medicine residue



bagasse



sludge



sweet potato residue



biogas residue



manioc waste



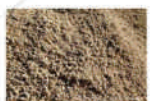
vinasse



pericarp



coffee grounds



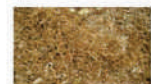
paper pulp



tea leaves



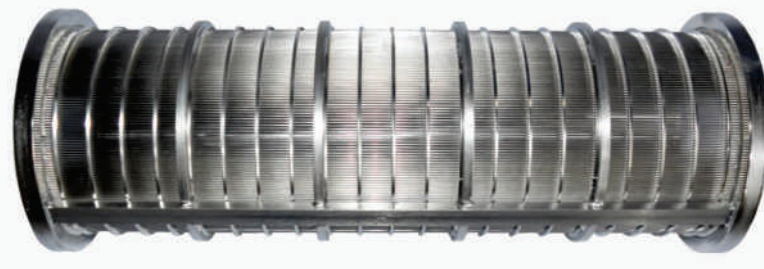
corn bran



saw dust



slaughter wastewater



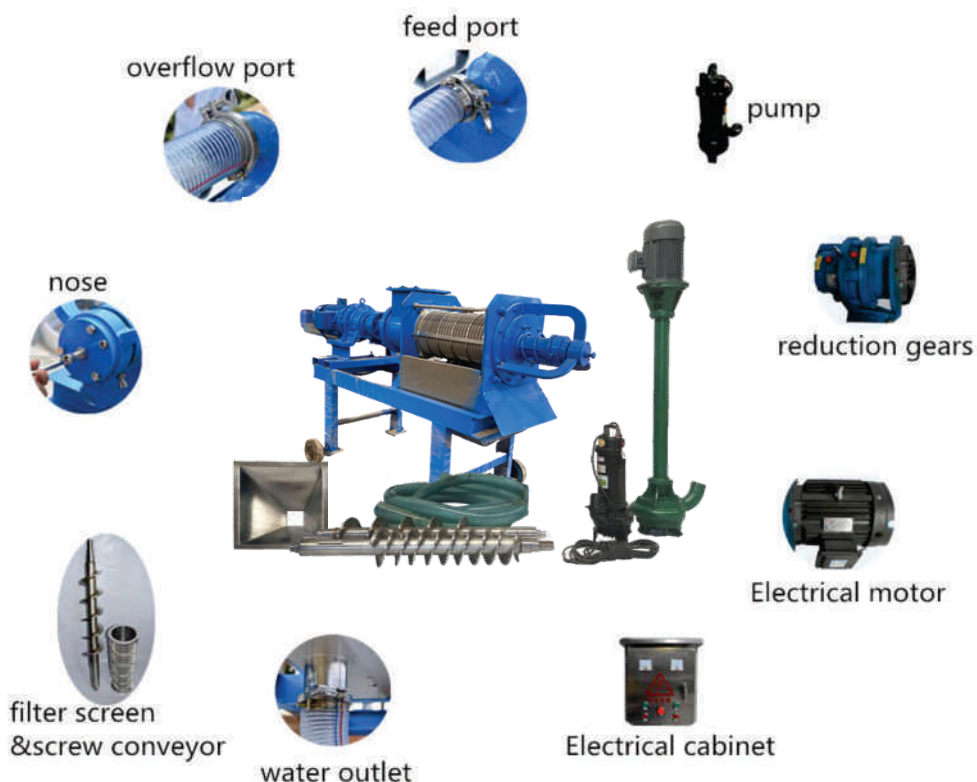
## ECONOMIC BENEFIT

1. Solid excrement after separation is conducive to transportation and higher price for sale.
2. After the separation, the excrement is mixed into the grass bran to stir well, it can be made into compound organic fertilizer after granulation.
3. The separated excrement can be directly used to improve soil quality, and it can also be used to breed earthworms, grow mushrooms and feed fish.
4. The separated liquid can directly enter the biogas pool, the biogas production efficiency is higher, and the biogas pool will not be blocked to prolong the service life.



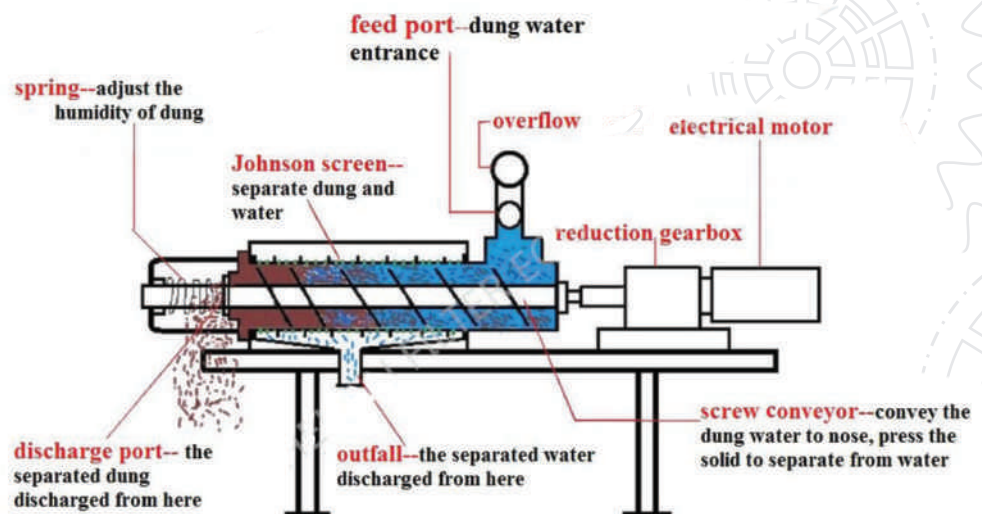
# THE STRUCTURE

Special non-blocking submerged cutting pumps or rod cutting pump deliver feces and other sewage to the spiral separator. Through the spiral conveyor's thrust squeezing action, the screen dehydrates and the manure is discharged from the discharge port, and the liquid flows out of the liquid outlet through the screen. The parts including pump with cutting knife, main electrical motor, pump motor, gearbox, screw conveyor, feed port, overflow port, Johnson screen, out fall, spring, discharge port, etc.



# WORKING PRINCIPLE

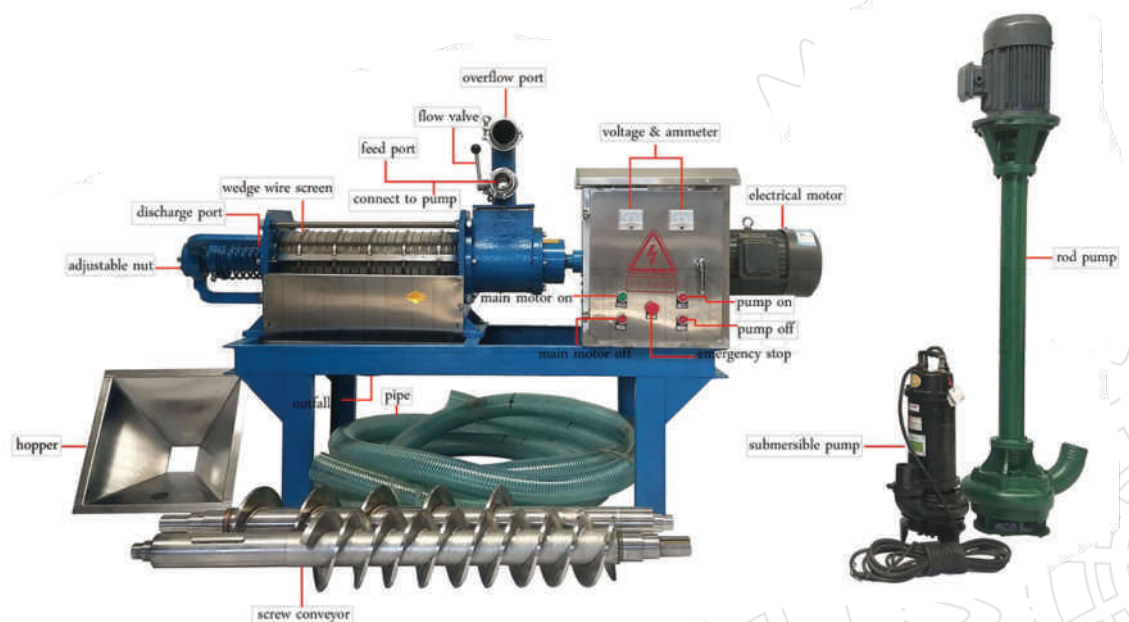
The solid-liquid separator use pump conveying the dung water to the host, the host spiral squeezing dung water under dynamic drive, pushed the dung water into the screen body, constantly push discharge port, the more material, the pressure is higher of the front end. With the increasing pressure of screen body, fibrous solid by screening out and push to discharge port, when the extrusion pressure is big enough, the liquid will be squeezed and separation from the solid and out of the machine through the outfall. The separated solid material would be squeezed and out from the discharge port. The solid liquid separator is continuous, dung water into the screen body unceasingly, host front filter layer piled up, mounting pressure, when pressure is big enough, the discharge port open baffle, solid is out machine.



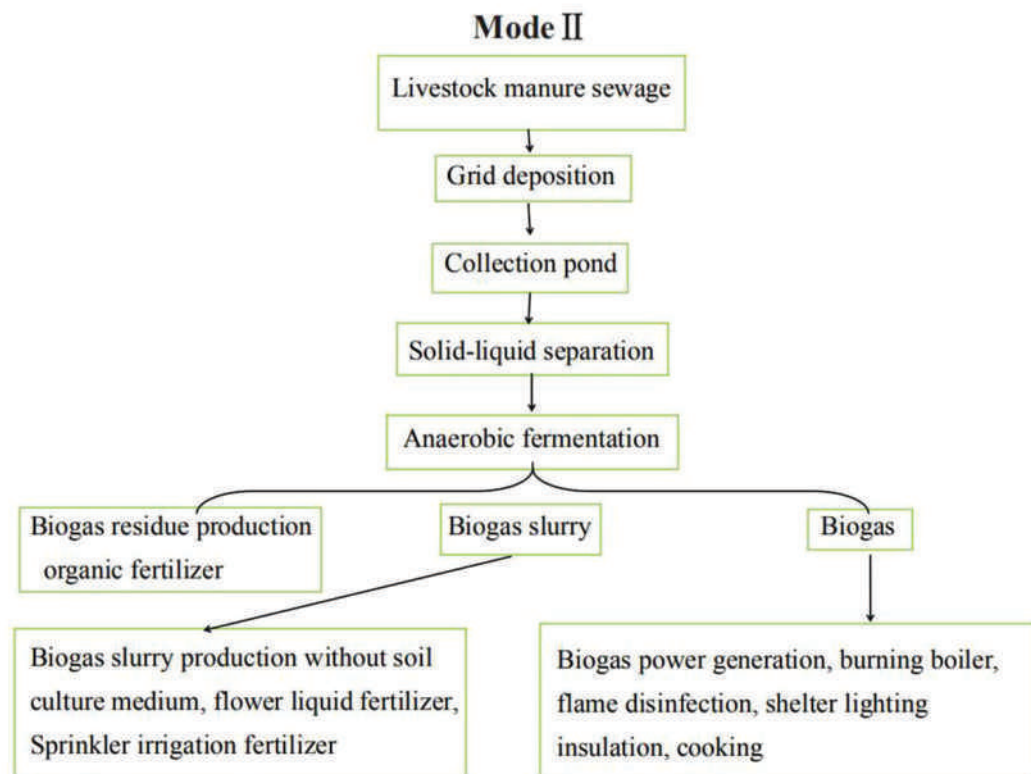
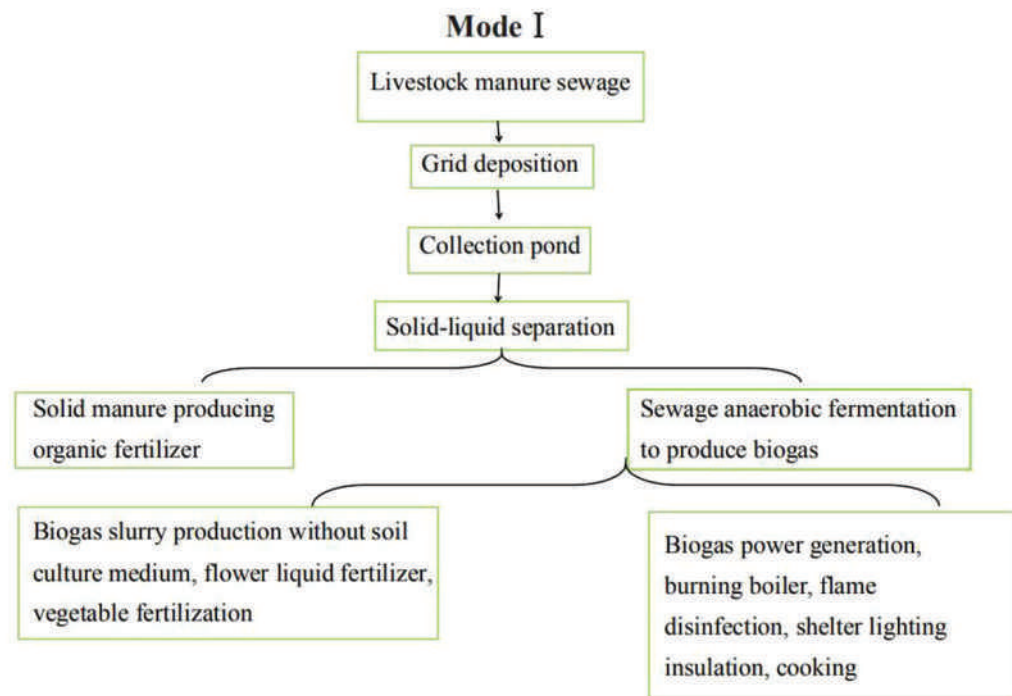


# MACHINE PLACEMENT

Spiral extruded solid-liquid separator has no special requirement for installation location. The farm can choose a relatively flat terrain according to its actual situation where is good for transporting the fecal fluid and discharging the fecal water of separator (It is best to build a platform that is 3m long and 2m wide and 1.5m high to store the fecal material.) The discharge pipe should avoid be winding and reduce the discharge resistance. If you install it outside, you can build a simple shelter. The machine is equipped with a power supply of 380V. The host motor and the special fecal sewage pump of speed reducer connect to the main control distribution box.



# LIVESTOCK MANURE TREATMENT MODE



## WHY CHOOSE US?

1. More than 20 years' experience in producing stainless steel wedge wire screen ensures the precision and durability of the filter.
2. We have kinds of advanced lathes and welding equipment. Besides motors, reducer gearbox and pumps, other parts are produced independently, which ensures the quality of the machine
3. The adjustable nut of the machine head can control the water content of the separated solid waste
4. Two type of feeding ports: pipeline feeding and funnel feeding can be replaced as required.
5. The conveying pipe is connected with each component by quick card, which is convenient and easy to use.
6. Our pump is specially customized, and there is a cutting knife at the bottom, which can cut large things in the fecal water into small pieces for subsequent treatment and prevent the filter from blocking.
7. Special design and part, can control the feed flow, make the machine in a stable working condition
8. Simple operation, high dehydration efficiency, low power consumption, large daily processing capacity, high automation level, and continuous operation.

# SHAKTI DEWATERING MACHINE SPECIFICATIONS

Sr No.	Description	Daimension	Material
1.	Main base	1620 x 650 mm	Maidl steel channal 75 x 40 x 5 mm IS 2062 kamdhenu
2.	Hieght	615	Maidl steel channal 75 x 40 x 5 mm IS 2062 kamdhenu
3.	Hieght with rubber tyers	685	Maidl steel channal 75 x 35 x 5 mm IS 2062 kamdhenu
4.	Cover of filter assembly		Stainless steel 1.25 grade 304
5.	Flang for filter assembly		Maidl steel sheet 18 mm
6.	Stud for filter assembly		18 mm x 685 mm grade 304
7.	Spring for outlet		Wire size 10, OD 685 mm
8.	Warm for filter assembly	Sheet thickness 8 mm x 690 mm	Saintless steel grade 304
9.	Nut / blot		Saintless steel grade 304
10.	Bearing for filter assembly	6308 and NJ 213.	SKE, NBC or equilent to
11.	Head of filter assembly		Cast iron
12.	Motor	10 H.P / 1440 RPM three phase	Shakti
13.	Bucket for raw material.	405 x 510 x 340	Maidl steel Thikness 3 mm As per IS 2062
14.	Gear box	30 ration	Shakti
15.	Filter screening		Stainless steel graude 304 and 319 (detail od filter screening given below.)
16	Attachment	Inlet and outlet 3" pipe	M.S Sheet of 4mm

## Details of Filter Screening:

Screen ID-260mm

Slot Size: 0.50mm / 500m Micron

Length: 600mm

Flow : In to Out

FLANGES: ss304 on both sides

Flange: OD220mm, ID175mm & 16mm thick

Supporting flat: ss304 = 4pcs (16 x 16 x 568mm)

Supporting reel: ss304 = 5pcs (8mm x 8mm)

Profile wise: TP25(2.25 x 3.80)

Supporting rod pitch: 15mm

MOC : ss304



manure pollutes environment



dewater by the separator



Comfortable living environment



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**0175-2232128**

**Redg. Off & works : C-55-56,**  
**Focal Point, Patiala- 147001-(Pb.)**



AN ISO 9001-2015 CERTIFIED COMPANY

