

# KDS Separator

Multi-disc Roller Separator



Multi-disc Roller Separator

# KDS Separator

## **Clog-free**

Self-cleaning structure of KDS Separator can handle oily and fibrous material at ease.

## **Trouble-free**

Trouble free operation of KDS Separator allows automatic, continuous operation.

## **Small-footprint**

Smallest model of KDS Separator takes up less than 2.2ft.

## **Low Operating Costs**

KDS Separator consumes as low as 0.06kW and "ZERO" rinsing water is required.



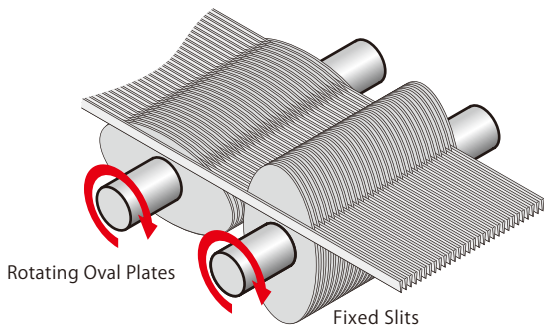
## **Highly Efficient Self-cleaning Separator**

It is a simple, compact, efficient, and unprecedented solid liquid separator with so many advantages.

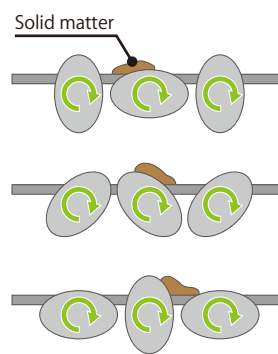
## **Various Applications**

KDS Separator can be used for wastewater, sludge, livestock manure, food waste, algae, grease trap waste and more!

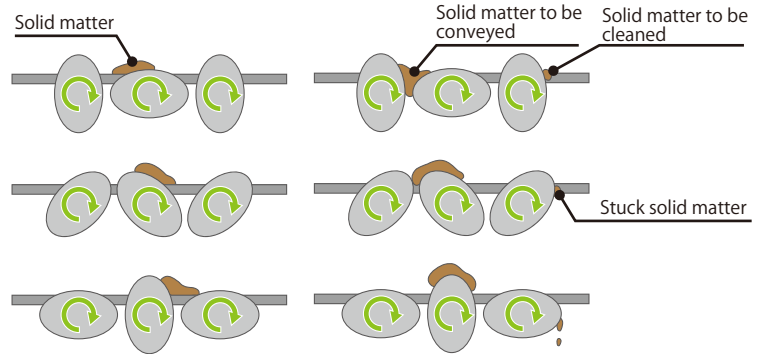
# Structure



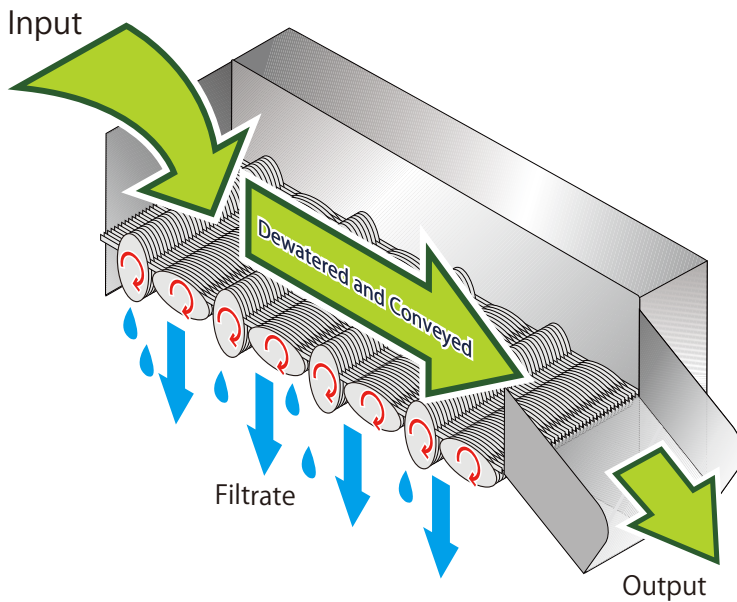
## Dewatering and Conveying



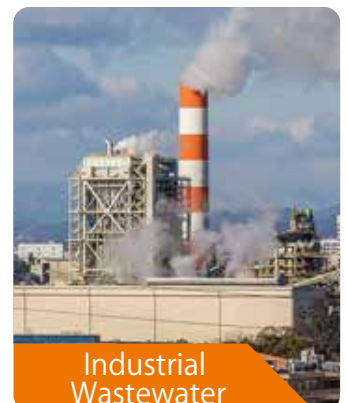
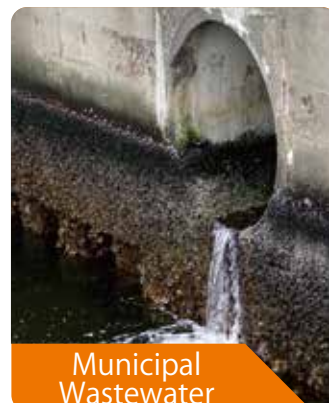
## Secret of Self-cleaning Mechanism



Oval plates push down the stuck solid matter to keep the filtering zone clean.



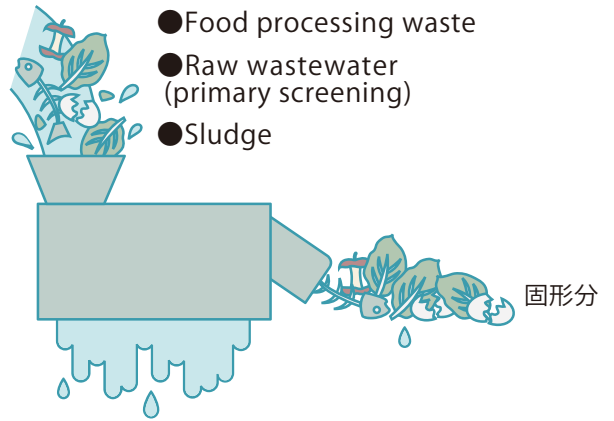
# Applications



# KDS Separator Applications

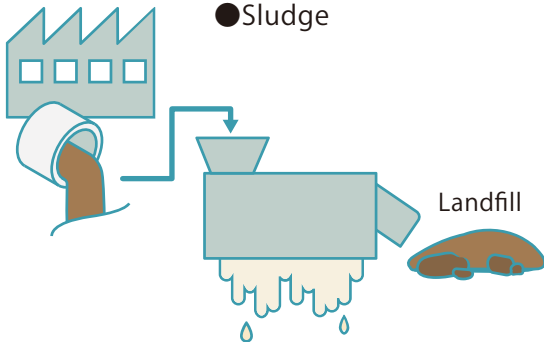
## Food industry

- Kitchen and restaurant waste
- Food processing waste
- Raw wastewater (primary screening)
- Sludge



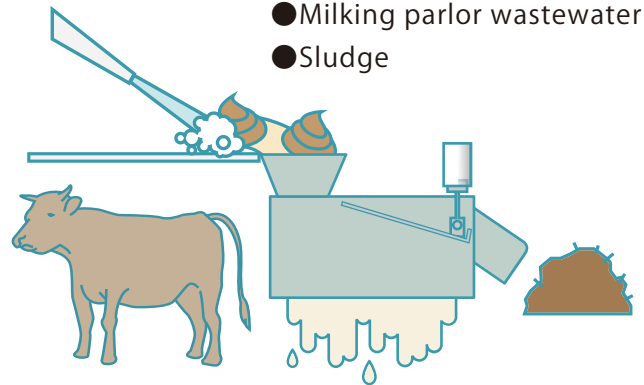
## Sewage Treatment

- Raw wastewater (primary screening)
- Sludge



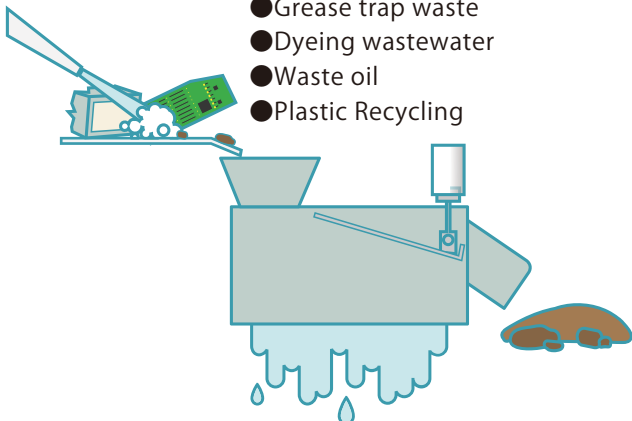
## Cattle Farm

- Raw manure
- Milking parlor wastewater
- Sludge



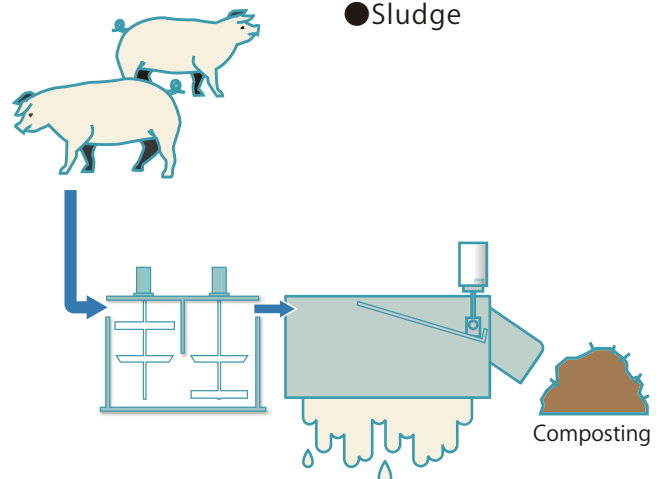
## Others

- Barrel polishing water
- Water-based paint wastewater
- Grease trap waste
- Dyeing wastewater
- Waste oil
- Plastic Recycling



## Pig Farm

- Raw manure
- Sludge





# KDS Separator References



## Digested Sludge

Dewatering of digested sludge from a biogas plant.

Solids capture rate: 99.3%

Cake dryness: 21.7%



## Seafood Processing Waste

Oily fish waste captured by grease trap in wastewater treatment.

Flow rate: 10,560gal

Dry solids throughput: 330lb-DS/day



## Livestock Manure

Dewatering of livestock manure without polymer usage

Solids capture rate 64% (no polymer used)

Cake dryness 24.2%



## Dissolved-air Flotation Sludge

Thickening of DAF sludge

Solids capture rate: 97%

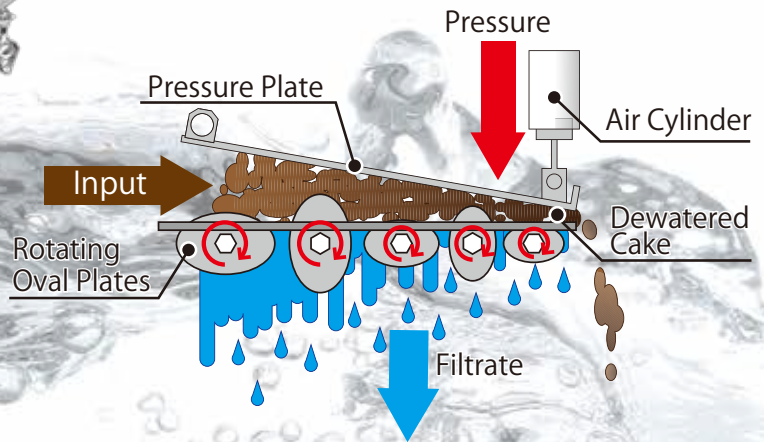
Thickened sludge dryness: 17%

# Specification



## Standard Performance

Input	Cake Dryness
Cattle Manure	25-35%
Pig Manure	20-30%
Waste Activated Sludge	15-25%



## Dewatering Model

Filtering Gap 0.039[in]

Model	Roller Width [in]	Number of Rollers	DS Throughput [lb-DS/h]	Power Consumption [kw]	Hydraulic Capacity (input solids content: 2%) [gal/h]	Dimensions [in]
SS-311D	11	11	44.1~66.2	0.2	264~396	W24.1-L46.1-H15.8
SS-411D	15	11	66.2~88.2	0.4	396~528	W28-L46.1-H15.7
SS-511D	18.9	11	88.2~110.3	0.4	528~660	W32-L46.1-H15.7
SS-611D	22.8	11	110.3~132.3	0.4	660~792	W35.9-L46.1-H15.7
SS-811D	30.7	11	132.3~165.4	0.4	792~990	W45.7-L53.3-H18.3
SS-1011D	38.6	11	154.4~187.4	0.75	924~1122	W53.5-L67.5-H18.3
SS-1211D	46.5	11	176.4~209.5	0.75	1056~1254	W61.4-L67.5-H18.3

Note: Capacity above is solely estimate and it may vary depending on the element and concentration of the input. Above capacity is for the standard model with 0.039[in] filtering gap.

# Thickening Model

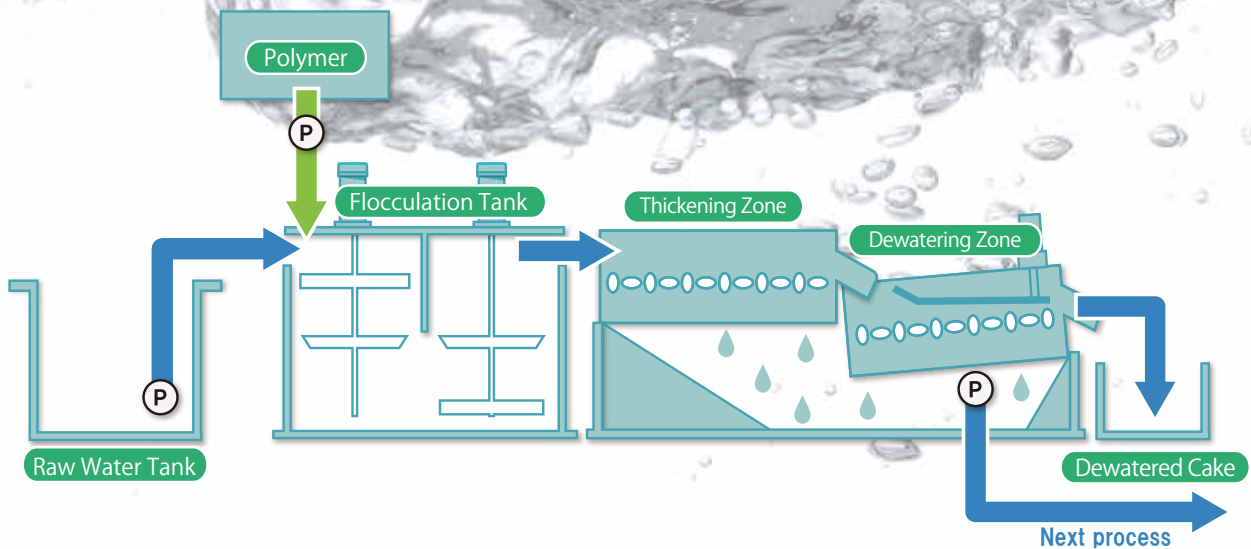
Filtering Gap 0.039[in]

Model	Roller Width [in]	Number of Rollers	DS Throughput [lb-DS/h]	Power Consumption [kw]	Hydraulic Capacity (input solids content: 2%) [gal/h]	Dimensions [in]
SS-2.56	9.3	6	44.1	0.06	264	W14.1-L21.1-H6.9
SS-312	11	12	108	0.2	647	W24.1-L45.3-H15.7
SS-412	15	12	130.1	0.2	779	W28-L45.3-H15.7
SS-512	18.9	12	183	0.2	1096	W32-L45.3-H15.7
SS-612	22.8	12	220.5	0.4	1320	W35.9-L45.3-H15.7
SS-616	22.8	16	286.6	0.4	1716	W35.9-L58.3-H15.7
SS-812	30.7	12	463	0.75	2772	W45.7-L57.1-H18.3
SS-912	34.6	12	507.2	0.75	3036	W49.6-L57.1-H18.3
SS-1212	46.5	12	683.6	0.75	4092	W61.5-L57.1-H18.3

Note: Capacity above is solely estimate and it may vary depending on the element and concentration of the input. Above capacity is for the standard model with 0.039[in] filtering gap.

## Process Diagram

### KDS Separator Flocculation Model



● Specification can be changed upon request.

Manufacturer **Kendensha Co., Ltd.**

Headquarters 1372-15 Nagahamacho, Izumo-shi, Shimane, 693-0043, JAPAN

**TEL: 0853-28-1818 FAX:0835-28-2858**

e-mail [info@kendensha.co.jp](mailto:info@kendensha.co.jp)

URL <http://kendensha.com>

Tokyo Office BIC Asahi Office 208, 7-1 Hanedaasahicho, Ota-ku, Tokyo, 144-0042, JAPAN

**For Your Safety** ●Be sure to read the instruction manual thoroughly before using the equipment.

●Please note that specification, dimensions or design of the equipment may change without advance notice.  
●Please note that the actual color of the equipment may differ from the one in brochure due to printing quality.