



# BLUEWIN Co., Ltd.

*a Family Group, EPC Turnkey company for  
Sludge Dewatering, Reduction, Recycling,  
Water, Wastewater, Algae Treatment,  
Utility, Devices, Equipment, System.*

***“Advanced Technology for Better tomorrow”***

***Advanced Green Solution  
for Water, Wastewater and Sludge Treatment  
35 years Field Know-how***

*Version 2021/Jan*

## ► Introduction,

**BLUEWIN is EPC Turnkey Family group for Water, Wastewater and Sludge Treatment. Based on 35 years field experiences in worldwide work-sites, we focus on sharing our advanced technologies and moving forward to clean earth environment for global society.**

## ► Main Equipment,

- 1. ELODE : Advanced Solution for Sludge dewatering by Electro-osmosis**
- 2. KOWATS : Mechanical Sludge dewatering with 1,000 operating, 3,000 work-sites**
- 3. Nano Micro-bubble Technology: for Water, Wastewater, Algae purification.**
- 4. 3P Separation : Separating Oil, Water, Solid at once for achieving renewable energy**

*Find More  
on Website*

· Refer to last page for detailed information.



# Contents Index



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## **1<sup>st</sup> CHAPTER :**

**FINE-ELODE: Electro Osmosis Dewatering Equipment**

## **2<sup>nd</sup> CHAPTER :**

**MECHANICAL DEWATERING: Decanter-Centrifuge, Screwpress, etc**

## **3<sup>rd</sup> CHAPTER :**

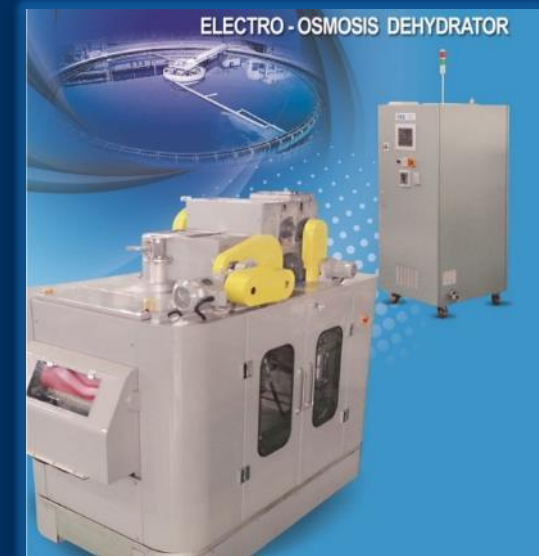
**NANO MICRO BUBBLE: Water, Wastewater Algae Purification**

## **4<sup>th</sup> CHAPTER :**

**2·3P-SEPARATOR: Achieving Sludge renewable by Oil Separation**

## 1<sup>st</sup> CHAPTER :

# FINE-ELODE: Electro Osmosis Dewatering Equipment





# ELODE : 5 Key Point



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## ELODE

**Remarkable Sludge Dehydrator**

- **NO Competitor in the World!**
- ***10%wt (90%ds) Guarantee*** (For most of WWTP Sludge)
- ***0.45kWh/liter water removed*** (Lowest Energy Consumption)
- ***12months Recovery of Investment (Faster ROI)***
- ***World Lowest Operating Expenditure***
- ***World Lowest Capital Expenditure***



# Operating Video



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**Click to watch ►**  
**“2021 ELODE Promotion Video”**



**◀ Click to watch**  
**“Full Operation of BELTPRESS + FINE-ELODE”**  
**(Old version)**



# What is FINE-ELODE ?



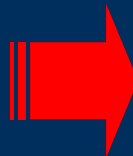
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Remarkable Dewatering system  
90% Volume Cut-Down  
Reborn to Renewable Energy

## <1<sup>st</sup> Stage Dewatering>

Belt press, Centrifuge, Filter press,  
Screw press, Volute press,  
Other mechanical dewatering M/C



## <2<sup>nd</sup> Stage Dewatering>

**FINE-ELODE**







# What is FINE-ELODE ?



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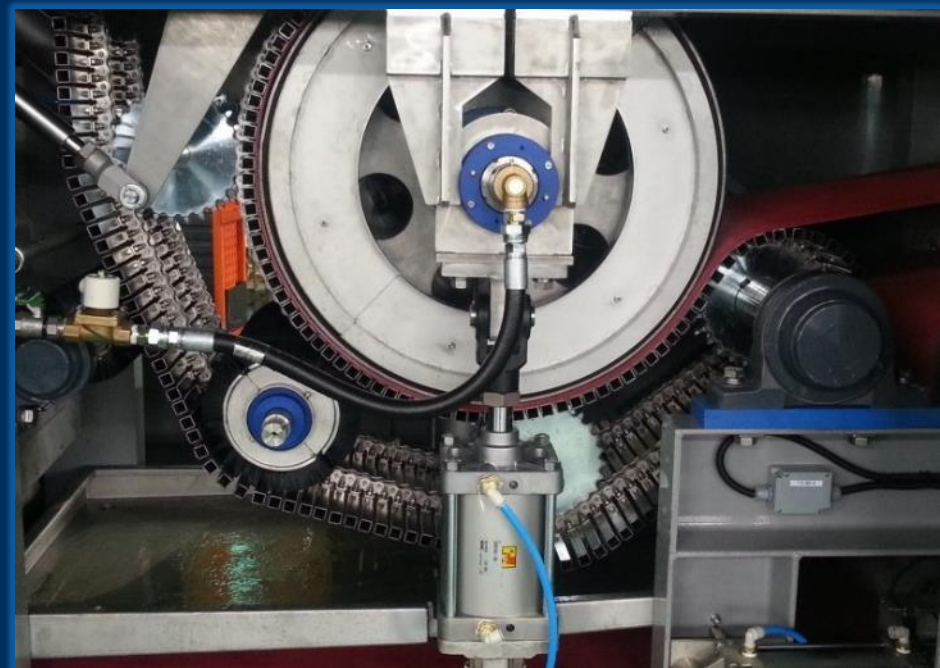
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## ▶ **FINE-ELODE = Electro Osmosis Dewatering Equipment**

: The world first “Field Proven” commercialized electro-osmosis dewatering machine which treat almost all types of Organic wastewater.

## ▶ **Sludge Types** **All kinds of Organic Sludge**

- Municipal Sewage
- Food & beverage
- Livestock
- Dyeing & painting
- Chemical
- Fishery
- Etc.







# Why ELODE ?



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- ▶ **ELODE provides Total solution for the deficiency of current treatment.**

## 1. Mechanical Dewatering machine

- ▶ Only extract the free water contained in the sludge.
- ▶ Dehydration limited to Avg. 25%DS of sludge.
- ▶ Cannot extract the remaining of absorbed water.

## 2. Thermal Dryers

- ▶ High capital
- ▶ High energy consumption
- ▶ Lots of Utilities

## ELODE

### 1. Extract Both Free & Absorbed water

- **90%DS** Guarantee
- Reduce Sludge weight in half

### 2. Low Footprint & Energy consumption

- Small Space for Full Operating Process
- **0.45kWh** removing 1L water
- Simplification of Utilities

-> **12months** ROI recovery (South Korea)



# FLOW SHEET :How to get 90%ds



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Input 1-5%ds

1st Dewatered by  
Mechanical Machine as  
Belt press, Decanter,  
Filterpress, Screwpress

Input 15~20%ds 2nd  
Dewatered by  
ELODE

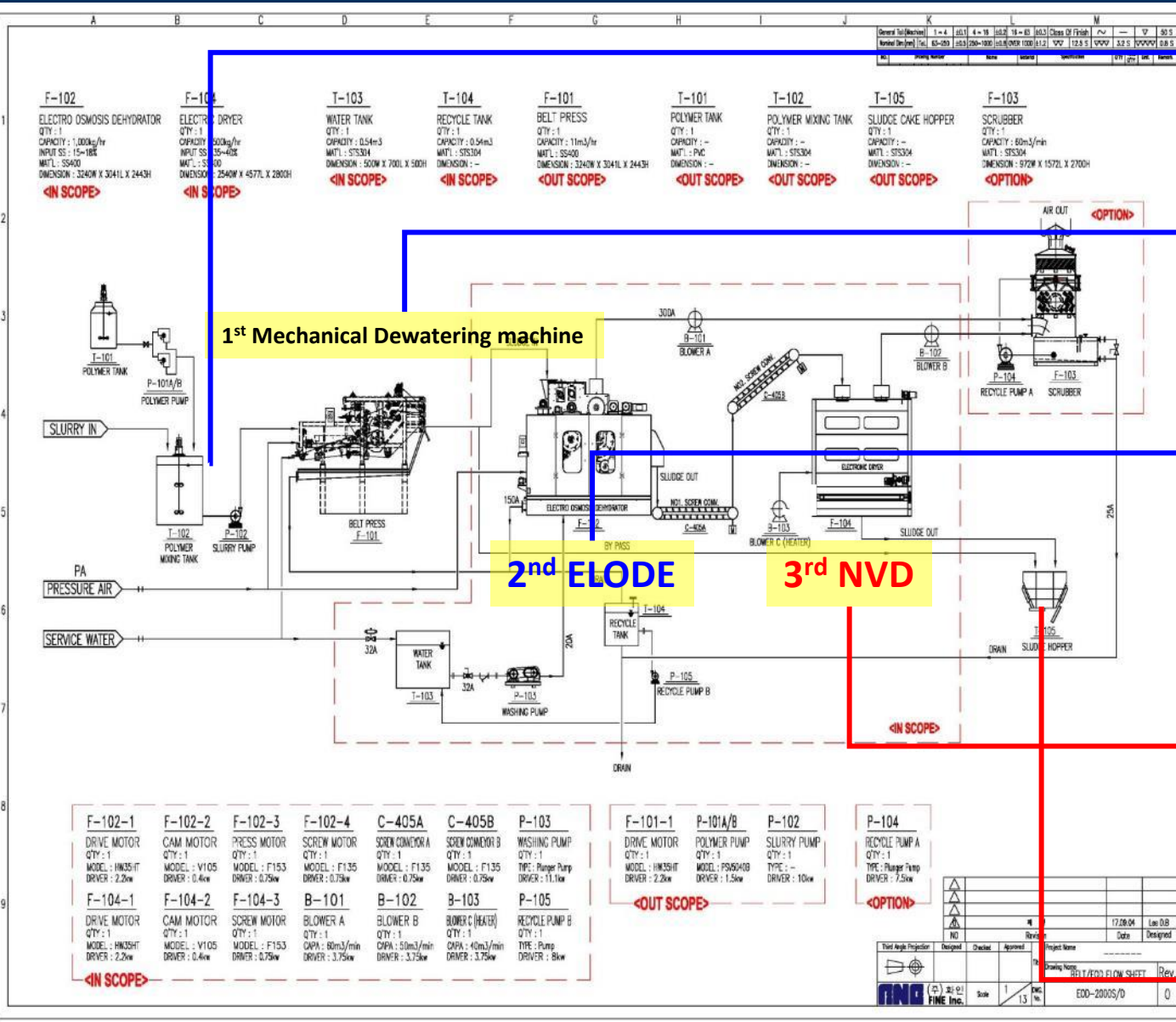
Input 40~50%ds 3rd  
by NVD (Natural  
Ventilation Dryer)

Final Output  
90%ds

1st Mechanical Dewatering machine

2nd ELODE

3rd NVD





# How ELODE works?



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▶ **Combined dehydration of ELODE + NVD achieves 20% ▶ 90%ds with only 0.45kWh.**

**2<sup>nd</sup> Stage : ELODE : 20%ds ▶ 40%ds**

- **Electro-phoresis, osmosis and dialysis are applied to inlet sludge.**
- **By Electric potential difference, Cell membrane is destructed.**
  - ▶ **In the process, 60~80°C heat is generated inside sludge.**
- **Absorbed water is discharged.**

**\* Details on the next page**

**3<sup>rd</sup> Stage : NVD : 40%ds ▶ 90%ds**

- **NVD uses heat from ELODE by ventilating the sludge with natural air.**
- **Blower takes outside air and Electronic dryer can assist with low-energy.**
- **Moisture evaporates to the maximum and 90%ds Cake is achieved.**

**\* Details after ELODE process**



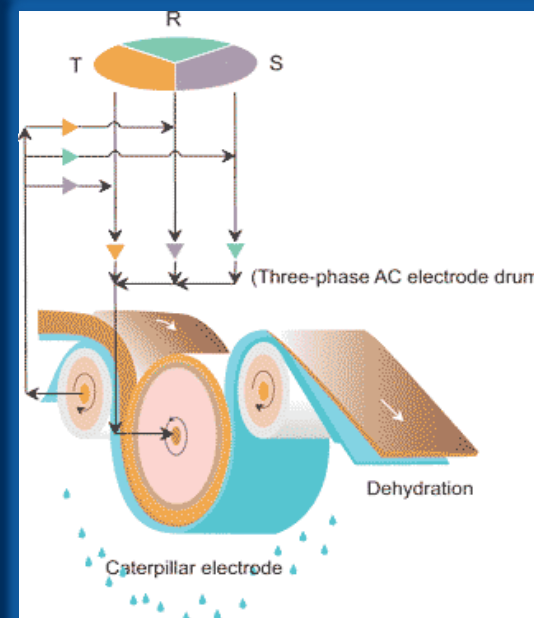
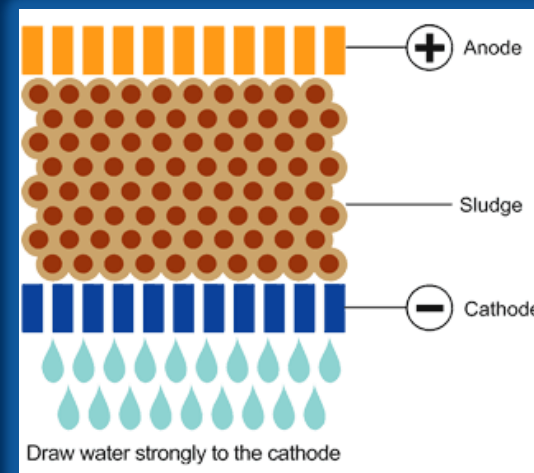
# How ELODE works?



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## Dewatering Method

- ▶ Combined actions of **electrophoresis** and **electro-osmosis**
- ▶ The sludge cake first goes through between the **anode Drum** and the **cathode Carbon**.
- ▶ Apply 3-phase DC voltage between the two electrodes, strongly push the sludge particles (-) toward the anode and water (+) toward cathode.





# How ELODE works?



**BLUEWIN Co., Ltd.**

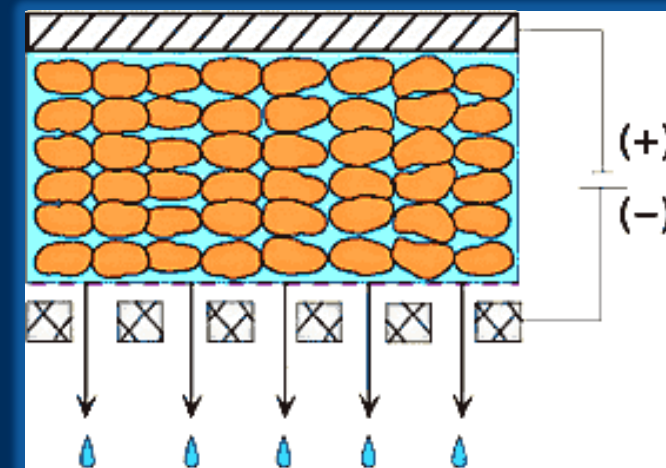
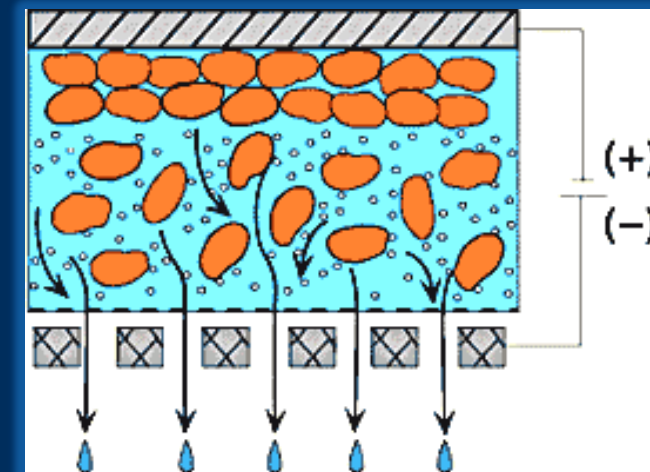
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## Electro-Osmosis Process FINE-ELODE

1. **Early Electro-Osmosis, Electrophoresis**
  - Strongly push sludge particles (-) to anode (+) by an electrical potential difference



2. **Intermediate Electro-Osmosis**
  - Dehydration through movement of water (+) to cathode (-)





# How ELODE works?

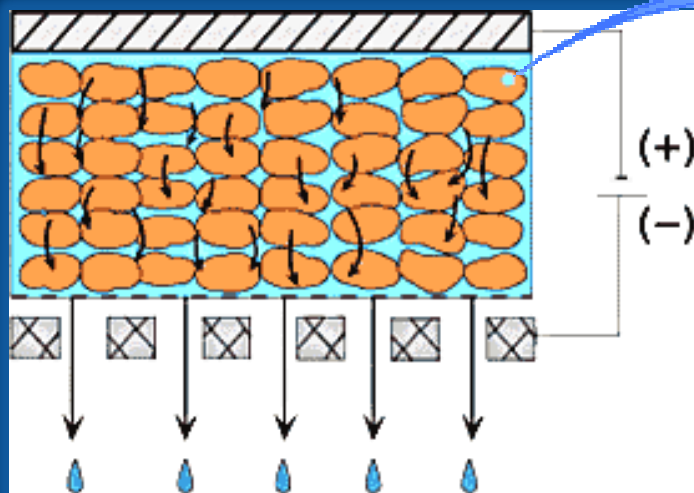


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## Electro-Osmosis Process FINE-ELODE

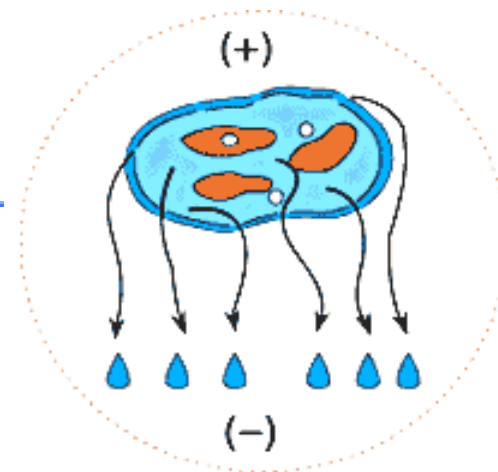
### 3. Final Electro-Osmosis Capillary Pressure

- Force the absorbed water flow through porous solid to cathode (-)



### **Destruction of Cell Membrane**

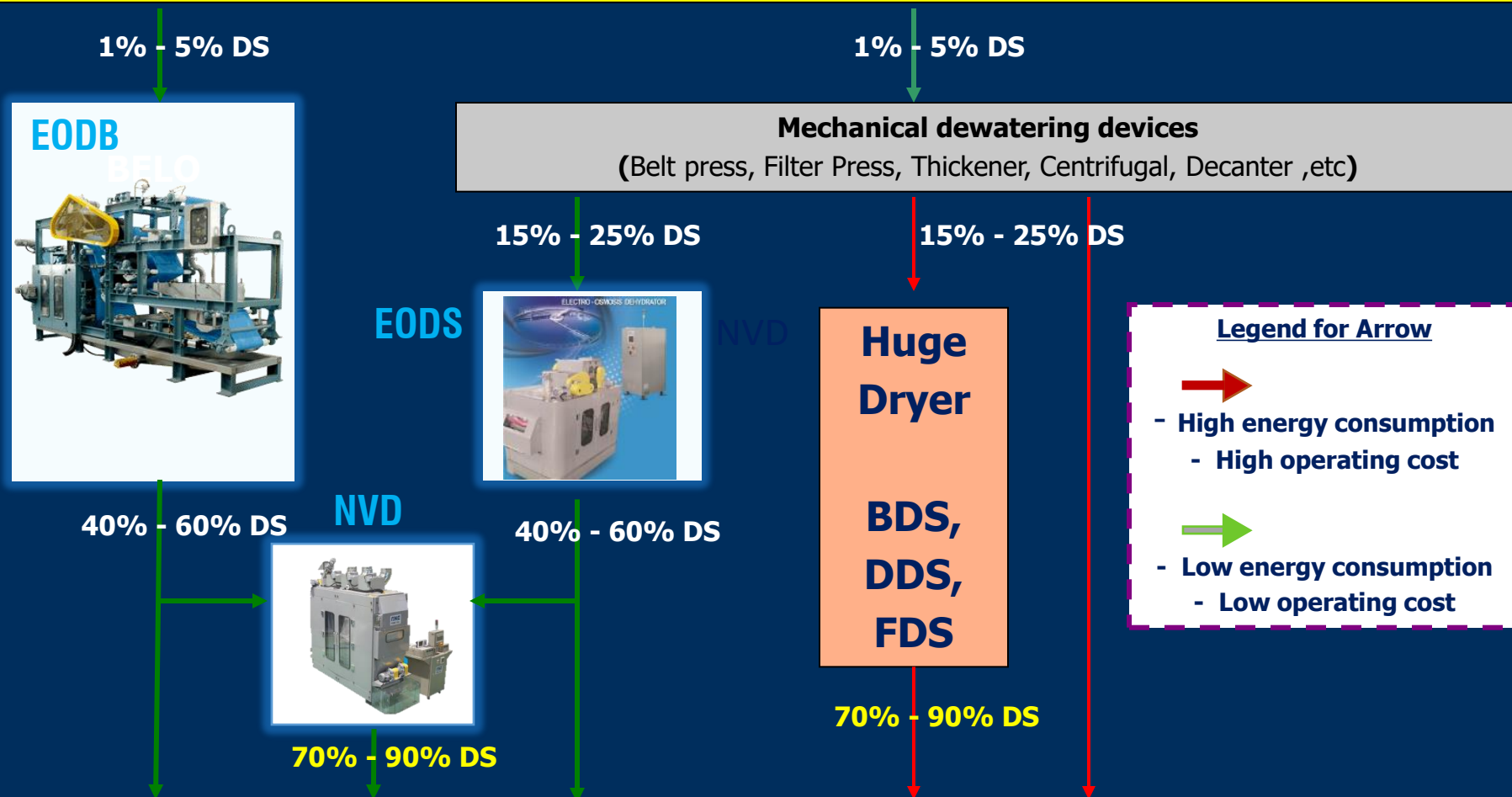
- Destruction of cell membrane discharge the absorbed water of sludge







## Sludge mixed with Polymer (Influent)



**For final disposal-Incineration, Agriculture, Landfill, Renewable Energy etc.,**





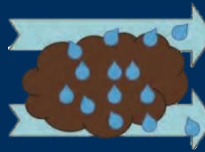
# What is NVD?



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## ► NVD = Natural Ventilation Dryer

: NVD is a compact dryer for ELODE that can maximize sludge dryness.  
It spends low energy using natural air and electronic heating system.

		
The water molecules in the sludge consist of polar molecules.	The water molecules by the electric field are rearranged.	Moisture evaporates by natural convection.
[Hydrogen] – [atom-positron] [Oxygen atom] - [negative electron]	Heat is generated by collision between rotating water molecules.	Water evaporation is maximized without additional energy.

## Specification

**Capacity** : 355liter/hr evaporated at 155kW only.

**Dimension** (m) : 5.4 x 3.6 x 2.6 (L x W x H of Largest Model)

Small supplementary Equipment for Odor & Dust required

If needed, **Scrubber** for Deodorization can be provided.



# Typical Concept of Full-Process





## • Case 1

Sludge Weight : 3200m<sup>3</sup>/day @ 1.1% TS (=99% WT) ▶▶▶ **150m<sup>3</sup>/hr @ 1.1%TS 22h/day**

Sludge Characteristic : Activated Sludge of Municipal Sewage **Total Sludge Weight Reduction : 98.76%**

Operating Time : 22hr/day 365day per year

**Total Energy Consumption : 2,515kWh**

Pre-Stage	1 <sup>st</sup> Stage	2 <sup>nd</sup> Stage	3 <sup>rd</sup> Stage
 <b>2 SET</b>	 <b>2 SET</b>	 <b>6 SET</b>	 <b>6 SET</b>
<b>TWIN DRUM THICKENER (KOWATS-1000SDT)</b>	<b>DECANTER CENTRIFUGE (KOWATS-610D)</b>	<b>Electro Osmosis Dewatering Equipment (EODS-3000)</b>	<b>Natural Ventilation Dryer (NVD-3000)</b>
<b>150m<sup>3</sup>/hr @1.1%TS</b> ▶ <b>42m<sup>3</sup>/hr @4%DS</b>	<b>42m<sup>3</sup>/hr @4%DS</b> ▶ <b>7.63m<sup>3</sup>/hr @22%DS</b>	<b>7.63m<sup>3</sup>/hr @22%DS</b> ▶ <b>4.20m<sup>3</sup>/hr @40%DS</b>	<b>4.20m<sup>3</sup>/hr @40%DS</b> ▶ <b>1.86m<sup>3</sup>/hr @90%DS</b>

- 150m<sup>3</sup>/hr – 1.86m<sup>3</sup>/hr = **148.14tons** of water removed (98% Weight Reduction)
- Electricity Consumption for Main Equipment & Utilities = **2,515kWh**
- Energy / Evaporated water = 2,515kWh / 148,140L = 0.017kWh/1Liter removed
- ▶ **17kWh / 1m<sup>3</sup> Water removed**



# Typical Concept of Full-Process

*For Details of MODEL  
Specification & References*

## • Breakdown for Energy Consumption

APPLICATION	MODEL	ENERGY CONSUMPTI ON	Q'ty	TOTAL CONSUM PTION	REMARK
MAIN EQUIPMENT	TWIN DRUM THICKENER KOWATS-1000SDT	6	2	12	4%TS Guarantee
	DECANTER-CENTRIFUGE KOWATS-610D	73.5	2	147	22% DS Guarantee
	ELODE EODS-3000	200	6	1200	40% DS Guarantee
	NATURAL VENTILATION DRYER NVD-3000	155	6	930	90% DS Guarantee
	DEODORIZATION SYSTEM SCRUBBER DDSE-3000 for ELODE	15	2	30	<Option>
	DEODORIZATION SYSTEM SCRUBBER DDSN-3000 for NVD	37.5	2	75	<Option>
UTILITIES	POLY DOSING, SLUDGE TRANSFER, etc.			226	
GRAND TOTAL ENERGY CONSUMPTION INCLUDING OPTION				2,620kWh	

### <Notes>

Energy consumption is Maximum Value including Safety Factor.

▶ Actual Operating energy is less than 2,620kWh.



# Performance Photo only by ELODE



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## ► Result of Final Cake Out from different sludge.



Municipal Sludge 57%wt

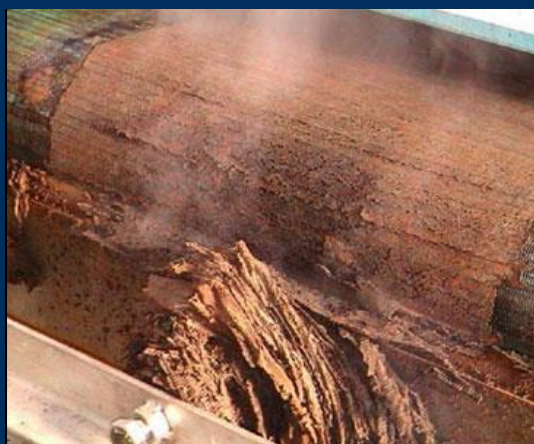


Chemical Sludge 53%wt

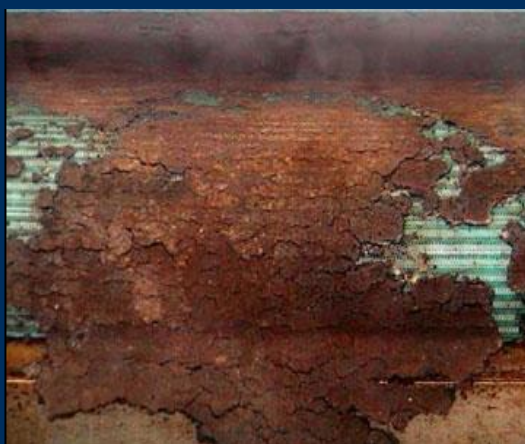


City Bio Sludge 55%wt

Livestock Sludge 52%wt



High Organic Dyeing 48%wt



Municipal + Excreta 51%wt







# Performance Photo only by ELODE

## ► Result of Final Cake Out from different sludge.



Industrial Oil Sludge 52%wt



Soy Bean Sludge 53%wt



Organic Mineral 55%wt

Pharmaceutical Sludge 48%wt



Milk Sludge 58%wt



Human Excreta 43%wt





## 2<sup>nd</sup> CHAPTER :

# MECHANICAL DEWATERING: Decanter-Centrifuge, Screwpress, etc





# KOWATS : Decanter Centrifuge



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## ► **Over 70% WWTP Market Share in South Korea**

1. 35 years Accumulated know-how for Performance & Safety
2. Over 3,000 units, 1,000 work-sites References
3. Top quality A/S for Professional Engineer departure within 24hours from emergency call





# STRUCTURE

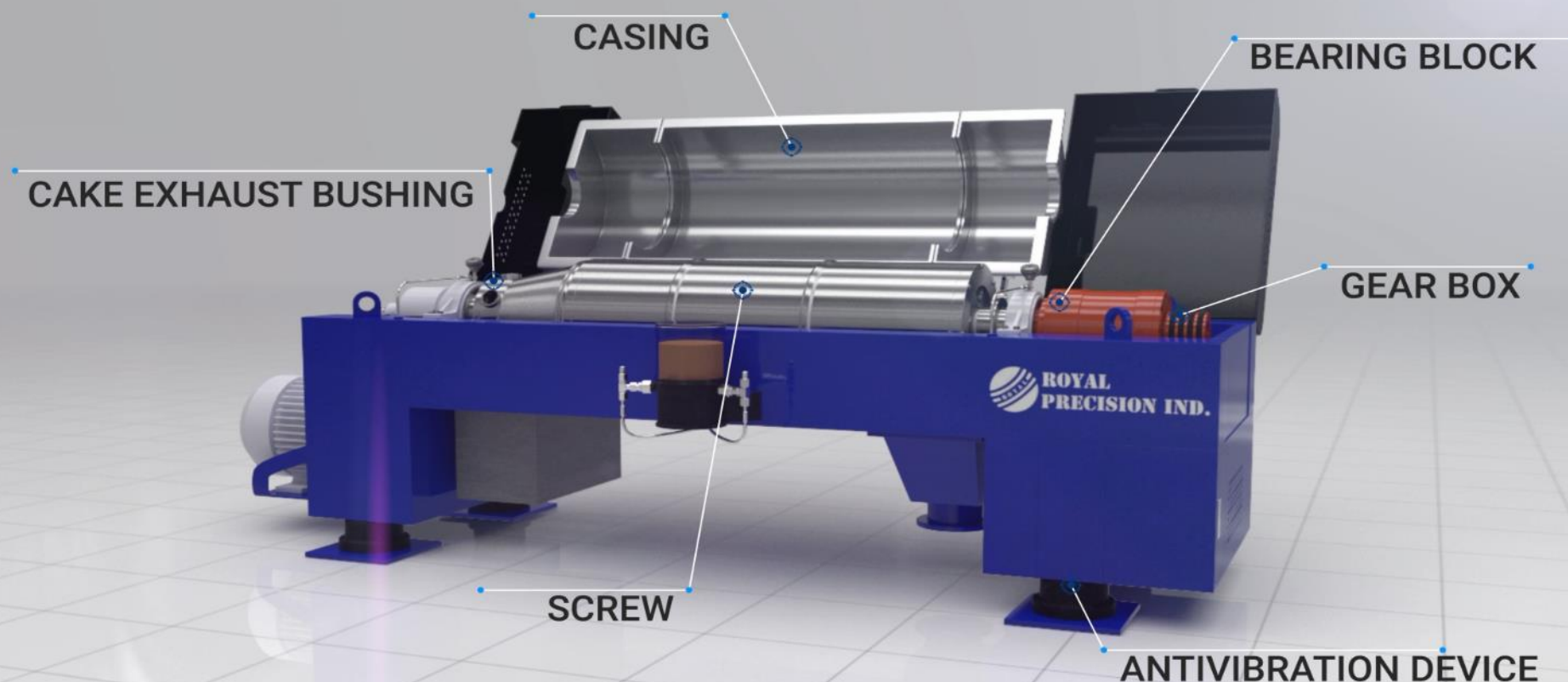


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[Click](#)

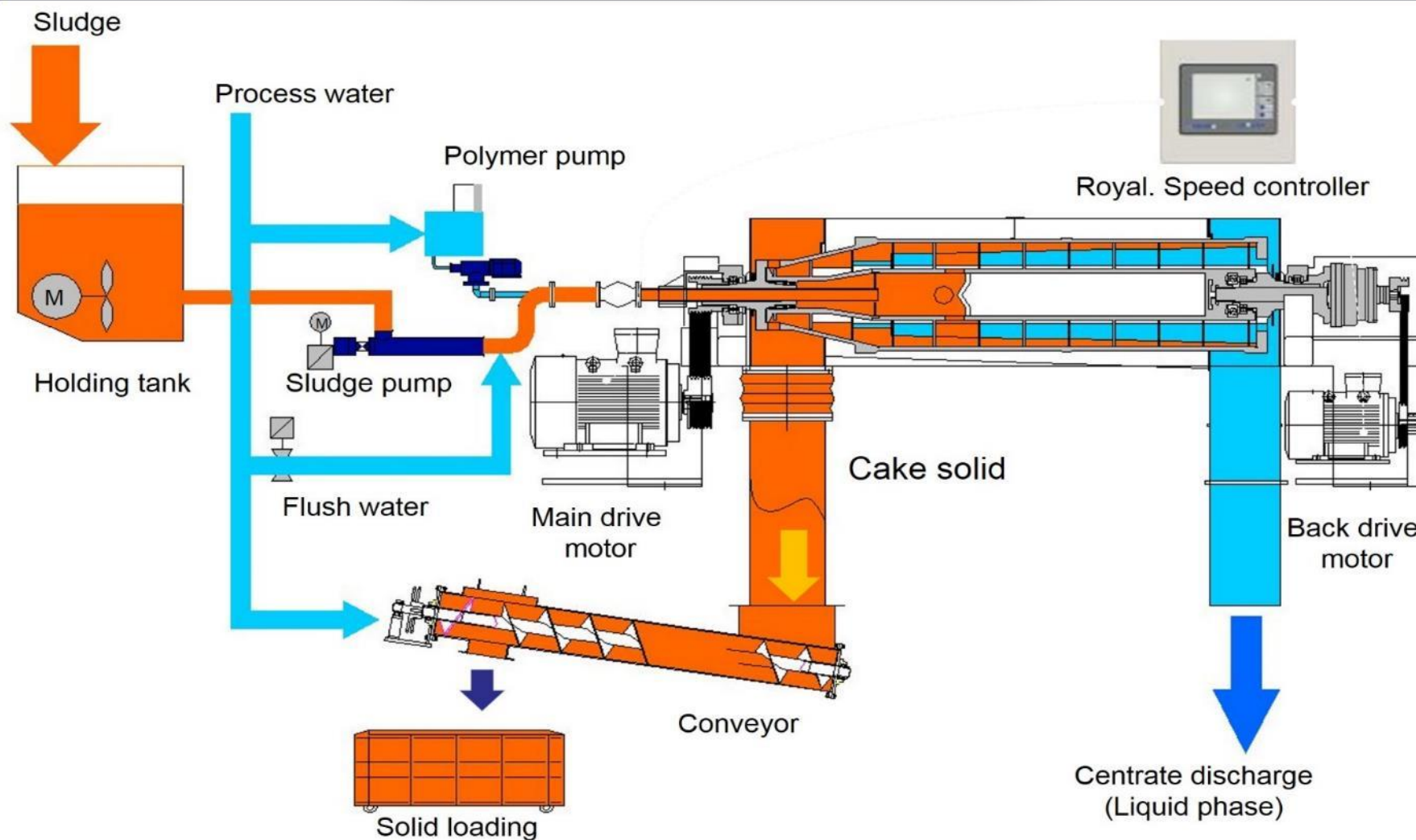
- For detailed Specification, please refer to [KOWATS\\_CENTRIFUGE](#)  
Centrifuge, Screwpress, Filterpress, Thickener, etc. are introduced.





## Centrifuge installation for dewatering of sewage sludge

### PROCESS MAP







# Certification



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INNOBIZ  
기술혁신형중소기업





# Patent



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SORT	NAME OF PATENT	REGISTERED NO.
TECHNICAL PATENTS	Screw conveyor for screw decanter type centrifuge with detachable screw wings	#10-1081751
	Centrifuge with multistage controller dam plate	#10-1068577
	With a two-stage accelerated discharge cover formed in a screw conveyor Screw Decanter Type Centrifuge	#10-0977196
	A concentrate having a rotation angle or a cake outlet Screw Decanter Type Centrifuge	#10-0953671
	A screw decanter type centrifugal separator equipped with a plate for noise prevention on the rotating body of the outer shell bolt	#10-0920493
	Centrifuges for industrial, sewage and wastewater treatment Wing end surface hardening method of screw conveyor	#10-0857057
	Horizontal centrifuge for sludge concentration and dehydration	#0407896
	Acceleration / deceleration gearbox unit for two-stage accelerating centrifuge	#0340190
	Automobile decelerators for centrifugal concentrators and dehydrators	#0302832
UTILITY PATENTS	Mechanical concentration and dehydrator by centrifugal force	#0251596
	Screw conveyor of decanter type centrifuge consisting of injection nozzle with directional spray angle	#20-0459173





# High-Volume Screwpress



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## ► Main Feature

- High-efficiency
- Auto-Washing system
- Semi-permanent durability
- Option : Combined type with thickener

## ► Specification

Main Motor: 5.5kWh  
Sub Motor; 2.2kWh  
Throughput: 30m<sup>3</sup>/h  
SS: 2.5~3%  
Municipal Sludge  
Bowl Diameter: 900mm  
Dry Solid: 22~25%  
Operating in Korea



## 3<sup>rd</sup> CHAPTER :

# Nano Micro Bubble: Water, Wastewater, Algae Purification



Portable Mobile Skid type 100m<sup>3</sup>/day



# Key Technology

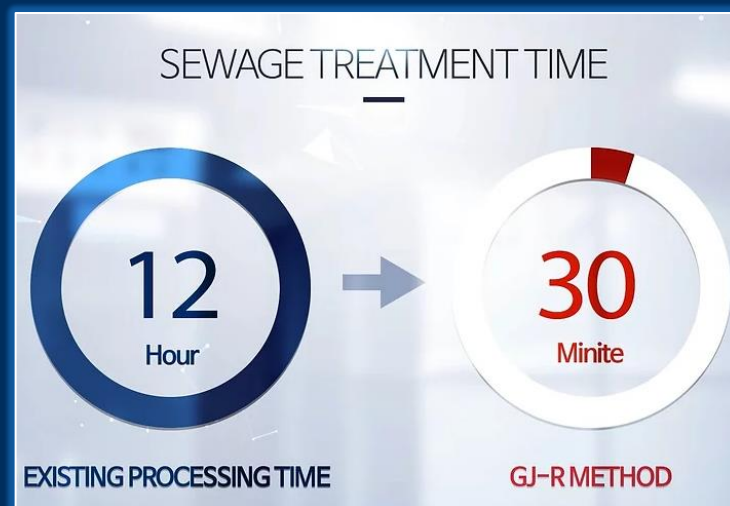


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## ► **Top-rank Nano Micro-Bubble System in South Korea** **For Water, Wastewater, Sewage, Algae Purification**

1. Non-powered Flocculation : Minimize energy cost
2. 2-Stage Coagulation & Flocculation with High capacity
3. Reduce 20% of Chemical input than Conventional Micro Bubble
4. Generate No Odor with In-line Type
5. Treat 96m<sup>3</sup>/hr of Municipal Sewage

[Click to  
watch Videos](#)



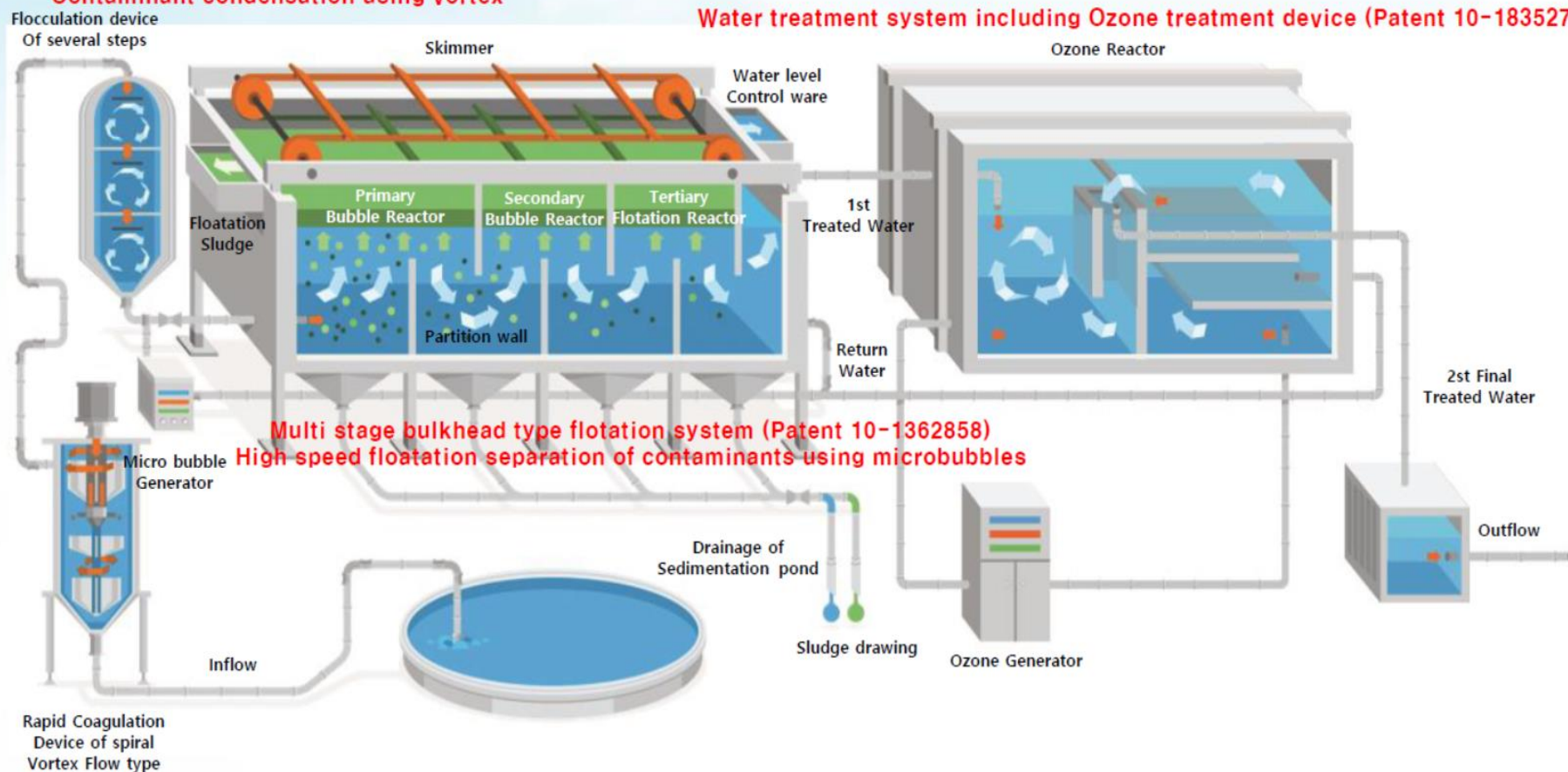


## Diagram of technology

**Non-powered floc coagulation device (Patent 10-1369975)**

**Contaminant condensation using vortex**

**Water treatment system including Ozone treatment device (Patent 10-1835271)**



**Swirling vortex type fast condensation device(Patent 10-1369979)**

**High speed condensation of pollutants**



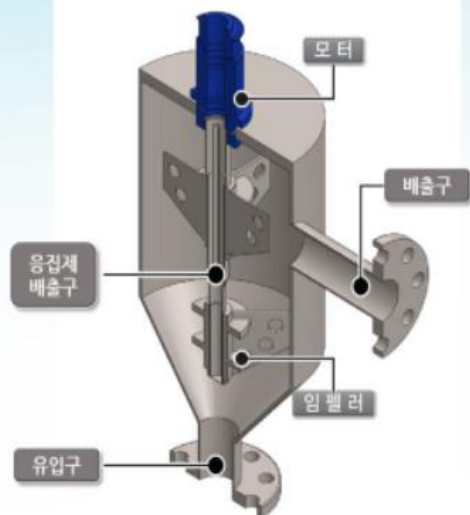


# Coagulation & Flocculation



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## <Rapid Coagulation device>

The top and bottom impeller are crossed,  
so have different fluid flow at the top and  
bottom.

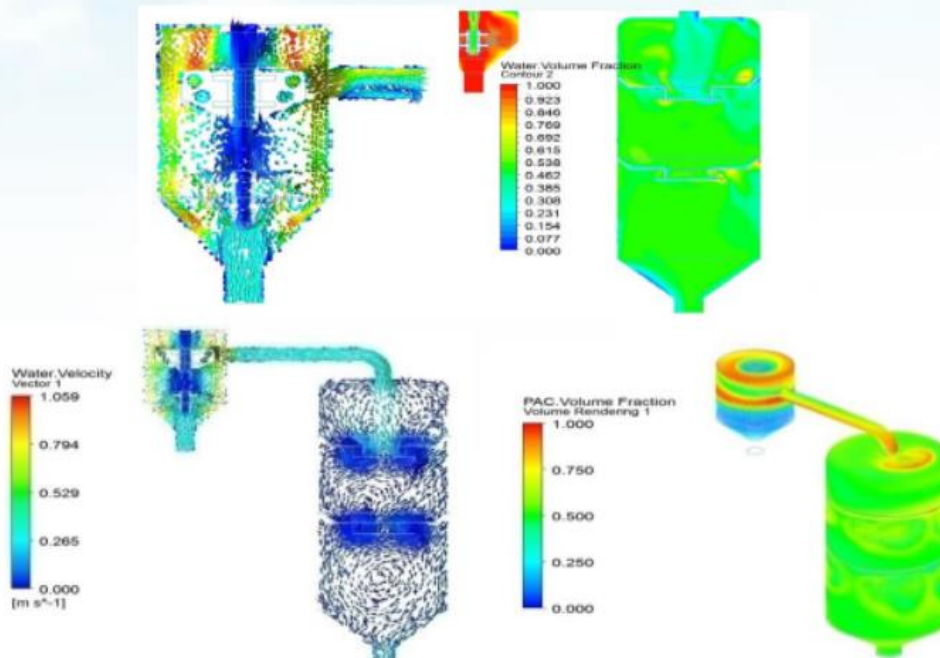
And each wing has 4 holes.

+

Coagulant is injected into the impeller shaft



**Vigorous turbulence formation and rapid  
mixing 10 second coagulation and chemical  
reduction technology**



## Computational Fluid Dynamics(CFD) of Rapid Coagulation device and Flocculation device

Rapid Coagulation device **Volume Ratio of**

**Raw water and Chemical 0.56 : 0.44**

Flocculation device **0.5 : 0.5(green)**



**Admixture Efficiency Nearly 100%**  
(General mixing efficiency less than 70%)



< Coagulation >



< Micro-bubble Floatation >



< Out flow >



< Ozone Treatment >





## International joint localization project(Indonesia)

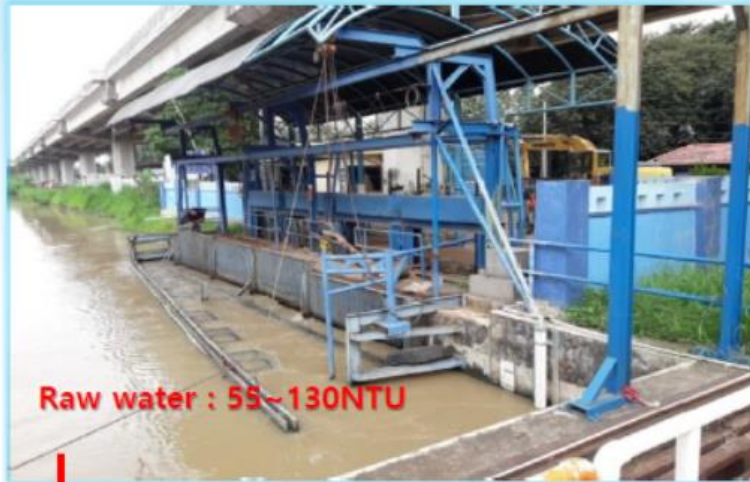
- Purpose : Movable drinking water supply to the world's Largest market
- Capacity : 100Ton/Day(Maximum 600 people drinking water supply )
- Period : 2016. 12 ~ 2018. Currently
- Budget required : U\$ 600,000  
(Environmental industrial technology institute 70% and Enterprise 30%)
- Place of installation : Indonesia Jakarta PDAM







## International joint localization project (Indonesia)



Raw water : 55~130NTU

< Contaminated River (Jakarta) >



Treatment water : 0.2~0.9NTU  
(Indonesia Water Standards : 5NTU)

< Raw water, Treated water >



Rapidity water  
Treatment



< GJ-R Process >

aetra

**HASIL ANALISA AIR**

JENIS SAMPLE : FLUSHING / COMPLAINT / INVESTIGASI / SAMPEL BARU \*

NO. : 01WQUJ010017

TANGGAL PENERIMAAN SAMPLE : 18 Juli 2017

TANGGAL PENGULAN SAMPLE : 18 Juli 2017

RETERANGAN : 1

No.	PARAMETER	SATUAN	HASIL ANALISA		STANDAR AIR REKAM 4930040	METODE
			J1	J2		
1	Turbidity	NTU	0.954	0.226	5	SN 06-0909-25 : 2005
2	T Coliform	no/100ml	0	0	0	ISO15006
3	E coli	no/100ml	0	0	0	ISO15006
4	Conductivity	mg/L	372	366		SN 06-0909-1 : 2004
5	Chloride	mg/L	55.28	51.78	250	SN 09-0909-18 : 2009
6	Colour	TCU	1.098	1.497	15	SN 0909-00 : 2011
7	TSS	mg/L	229	225	500	ISO15079
8	Organic Matter	mg/L	3.25	<2.32	10	SN 09-0909-22 : 2004
9	Total Hardness	mg/L	97.40	102.53	500	SN 09-0909-12 : 2004
10	Calcium	mg/L	0.073	<0.010	0.3	SN 0909-16 : 2009
11	Magnesium	mg/L	0.045	0.019	0.4	SN 0909-10 : 2009
12	Iron	mg/L	42	41	250	ISO15006
13	Nitrate-NO <sub>3</sub>	mg/L	0.035	0.030	3	ISO15002
14	Temperature	°C	27.4	27.3	Sub: 1000 x 370	ISO15006
15	pH #		6.87	7.36	6.5 - 8.5	ISO15079
16	Free Chlorine #	mg/L	0.00	0.00		ISO15006

Keterangan :  
\* Koreksi di lapangan dilakukan

ALAMAT :  
J1 : Air yang diambil dari tangki setelah proses aera  
J2 : Pasokan water / purifier water

< Satisfy of Indonesia drinking water standards >



## On-site facility operation

- **Capacity** : 1,000Ton/Day
- **Start Operation** : 2017. 7. 1 ~
- **Site** : In Daehyun sewage treatment plant
- **Purpose** : Post-treatment due to excess capacity  
and Sewage treatment during rainfall
- **Water Quality** : Operation average



(Unit : mg/L)

Target	SS	BOD	COD	T-N	T-P	E-Coli
Inflow	20.4	24.0	15.5	8.24	0.75	174,400
Outflow	2.0	2.1	4.2	5.013	0.12	500
Efficiency	90.2	91.3	72.9	39.2	84.0	99.7







Business	Application Field	Processing capacity	Progress Situation
Daehyeon-ri sewage treatment plant	Sewage	150Ton/day	Operation
Daehyeon-ri sewage treatment plant	CSOs and Filtration	1,000Ton/day	Operation
Imdang Station`s Sphere of influence wastewater reusing plant	Wastewater Reusing	120Ton/day	Operation
HallaSan 1100 hill resting place	Sewage	50Ton/day	Operation
Halla Yeongsil resting place	Sewage	100Ton/day	Operation
Daebon-3ri sewage treatment plant	Sewage	100Ton/day	Operation
Dongsan sewage treatment plant	Sewage	100Ton/day	Operation
Namyangju-si Jingun sewage treatment plant	Recycle Water	14,000Ton/day	18.05(Test Run)
J Industrial estate wastewater reusing plant	Wastewater Reusing	50Ton/day	18.04
Y-si sewage treatment plant	Sewage	100Ton/day	18.02
J-si resort treatment plant	Sewage	1,800Ton/day	18.07
Y-si waste leachate	Wastewater	200Ton/day	18.06
G-do Urban development corporation	Wastewater	50, 150Ton/day	19.07

## 4<sup>th</sup> CHAPTER :

### 2·3P-SEPARATOR: Achieving Sludge renewable by Oil Separation

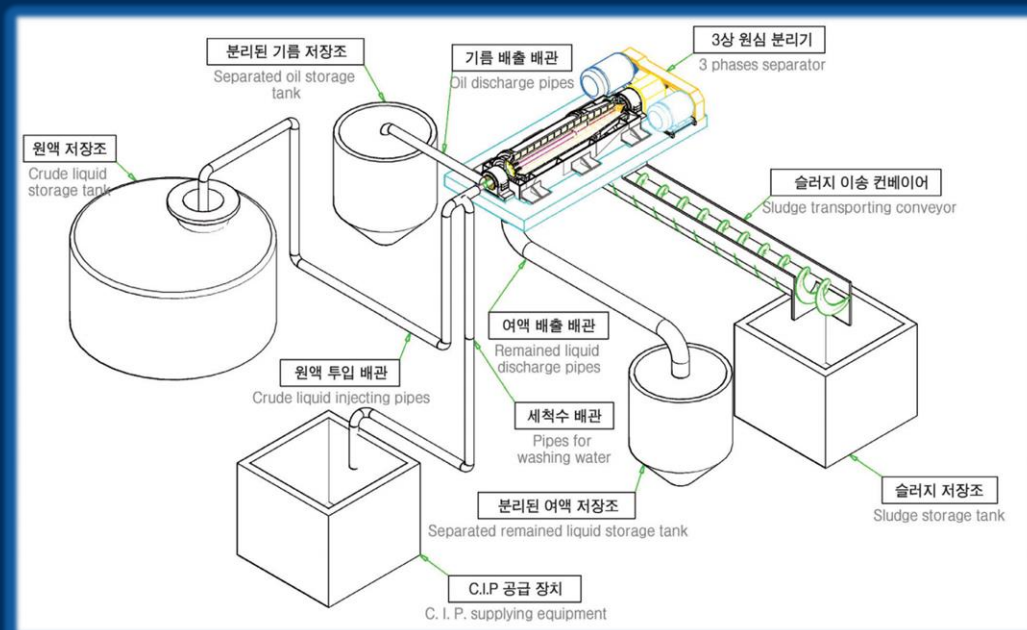




## ▶ **80% Market share for Oil Separation in South Korea**

1. Developed the first commercialized 3P Separator in Korea.
2. Optimized machine design for Heavy oil, Food, Palm oil Sludge, etc.
3. Top quality A/S for Professional Engineer departure within 24hours from emergency call

[Click to  
Watch Video](#)





## ► The Concept of Centrifugal Separation

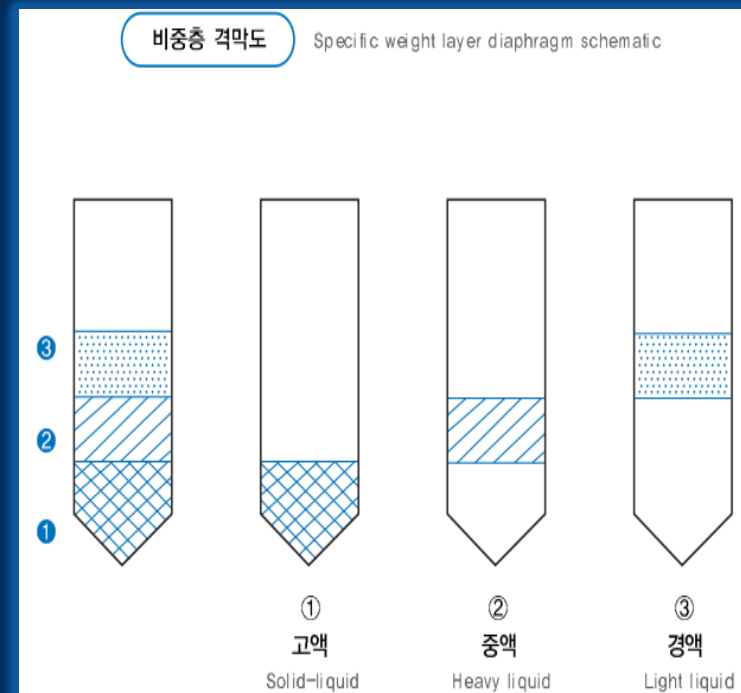
If the floating particles included suspension is left and observed in the air for the time being, bigger mass particles will move to downward and the lighter mass particles will move to upward slowly, and this upward & downward movement is called as precipitation.

If the centrifugal force is applied intentionally on this natural state suspension, precipitation phenomenon of the particles can be accelerated and the centrifuge can be defined as the machine that can separate, refine, enrich and dehydrate the property of matters using this centrifugal force and precipitation phenomenon.

## ► The Concept of 3 Phase Centrifugal Separation

2 phase centrifugation is normally recognized as the typical centrifugation and it mainly separates solid and liquid using centrifugal force.

However, our 3 phase can separate and discharge the matters in 3 different phases such as Solid, Light Liquid and Heavy Liquid.





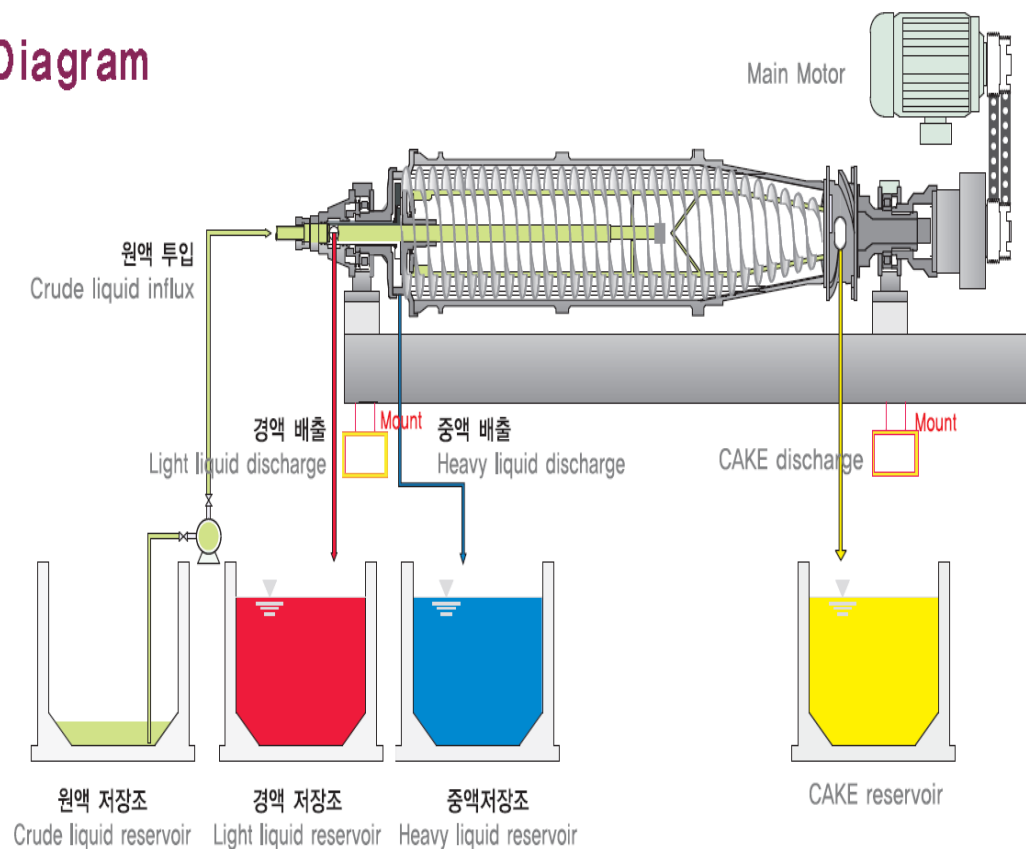
# 3Phase Technology



**BLUEWIN Co., Ltd.**

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Sludge Dewatering, Reduction, Recycling,  
Water, Wastewater, Algae Treatment,  
Utility, Devices, Equipment, System.

## Diagram



## ► Property of Matters Distribution Before & After 3 Phases Separation



► Property ratio of matters before and after the separation is different depending on the properties of the mixtures.



# References



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3 Phase Centrifuge Separator



3 Phase Centrifuge Separator



2 Phase Centrifuge



2 Phase Centrifuge



Disk Type Centrifuge Separator



Peeler Centrifuge Separator





# References



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**Peeler Centrifuge Separator**



**Peeler Centrifuge Separator**



**Low speed Solid-Liquid Separator**



**Low speed Solid-Liquid Separator**



**Oil Heating System**



**Oil Heating System**





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# **COMPANY SUMMARY**

## **PROFILE, REFERENCES, CONTACT LIST**



# Summary



**BLUEWIN Co., Ltd.**  
a Family Group, EPC Turnkey company for  
Sludge Dewatering, Reduction, Recycling,  
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<b>Group Company Name</b>	<b>BLUEWIN, FINE INC, ROYAL PRECISION IND. CO., LTD.</b>		
<b>BOM</b>	Mr. LEE SANG JUN(Korean)/CEO & President Mr. PARK JAE DUCK(Korean)/CEO & President Mr. ANTONIO KIM (Korean)/CMO, CEO		
<b>Established</b>	SEPT, 15, 1989		
<b>Main Item &amp; Business Fields</b>	<p>- ELODE &amp; KOWATS : World Unique Sludge Treatment system for Dewatering, Reducing, Recycling, Renewable from 1% to 90%DS.</p> <p>- Nano Micro-bubble : Advanced System for Water &amp; Wastewater purification with the shortest time, lowest cost and highest efficiency.</p> <p>- 3-phase separation : Achieves Renewable energy by separating Water, Solid, Oil of "Palm oil, Heavy oil, Food Sludge, etc" with precision and efficiency.</p>		
<b>Marketing Headquarters</b>	4F, Baeksan Bldg, #157, Jungnung-ro, Seongbuk-Gu, Seoul, KOREA		
<b>Capital Fund</b>	US\$3.2mil	<b>Turnover</b>	US\$75.6mil/ Ave for 3years
<b>Employee</b>	181 staffs / 2021' present		
<b>Official line</b>	Tel: +82.70.7868.8920 / Fax: +82.2.912.4438 E-mail: <a href="mailto:info.bluewinkorea@gmail.com">info.bluewinkorea@gmail.com</a> / <a href="http://www.BLUEWIN.kr">www.BLUEWIN.kr</a> & <a href="http://www.ELODE.co">www.ELODE.co</a>		



# Financial Status



**BLUEWIN Co., Ltd.**  
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*Setting day-Validity Period :Jan/01/2018~Dec/31/2020*

## Financial standing for past 3years

- Int'l Credit standing: BBB-
- Cash Flow : CF2(B)
- Turnover: U\$75.6mil/year ave.

## Bank Information

- Industrial Bank of Korea
- KOREA.

**Credit Rating Authorized Agency :**

**NICE평가정보 주식회사**  
NICE Information Service Co., Ltd.





# International Certification



**BLUEWIN Co., Ltd.**  
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Water, Wastewater, Algae Treatment,  
Utility, Devices, Equipment, System.

<b>ARTICLES</b>	<b>AUTHORIZED BY</b>	<b>REGISTERED NO.</b>
R&D CENTER	KOREA INDUSTRIAL TECHNOLOGY ASSOCIATION	#20084189
WORLD CLASS PRODUCTS	MINISTRY OF KNOWLEDGE ECONOMY	#2008-310
GREEN TECHNOLOGY	MINISTRY OF ENVIRONMENT	#GT-12-00173
INNOVATIVE S.M.E (INNO-BIZ)	SMBA	#R2021-524
ISO9001 QUALITY MANAGEMENT SYSTEM	SMBA CENTER	D 152-211
ISO14001 ENVIRONMENT MANAGEMENT	CRS	EMS-0080
LEADING COMPANY FOR MACHINERY PARTS & MATERIALS PARTS	MINISTRY OF KNOWLEDGE ECONOMY	#6801
BUSAN-LEADER FOR MACHINERY PARTS & MATERIALS PARTS	BUSAN METROPOLITAN CITY	#2006-2-89
FINANIAL A+ MEMBER CLUB	TECHNICAL ASSURANCE FUND (KOREA GOVERNMENT)	#836
CE	TUV	KPA 58161
DESIGNATED AS A DEFENSE COMPANY	MINISTRY OF KNOWLEDGE ECONOMY	#196
DEFENSE QUALITY MARK	DEFENSE TECHNOLOGY and QUALITY AGENCY	DTaQ-CDQ-13



# Office Head Factory



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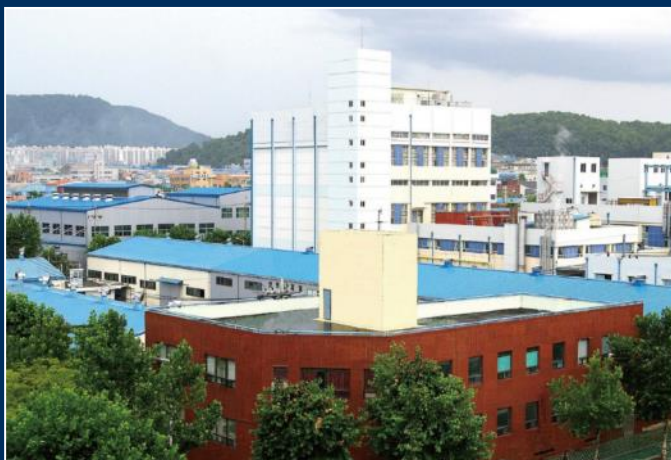
①



②



③



④



① SEOUL-CITY MARKETING HEAD OFFICE / ② BUSAN-CITY FACTORY  
③ DAEGU-CITY FACTORY / ④ ULSAN-CITY R&D CENTER





# New 2<sup>nd</sup> Factory 2020



**BLUEWIN Co., Ltd.**

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Utility, Devices, Equipment, System.*

## ⑤ Exclusive Production Factory For ELODE+NVD in BUSAN-CITY



## ⑥ Exclusive Production Factory For Decanter-Centrifuge, Screwpress In DAEGU-CITY





## BLUEWIN CO., LTD

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Person in charge	Antonio KIM/Managing Director	Office: <b>+82.70.7868.8920</b>

**We're ready to reply within 24 hours for Serving you.**

### CONTACT ID

**WhatsApp & Mobile Phone: +82 10 5231 8920**