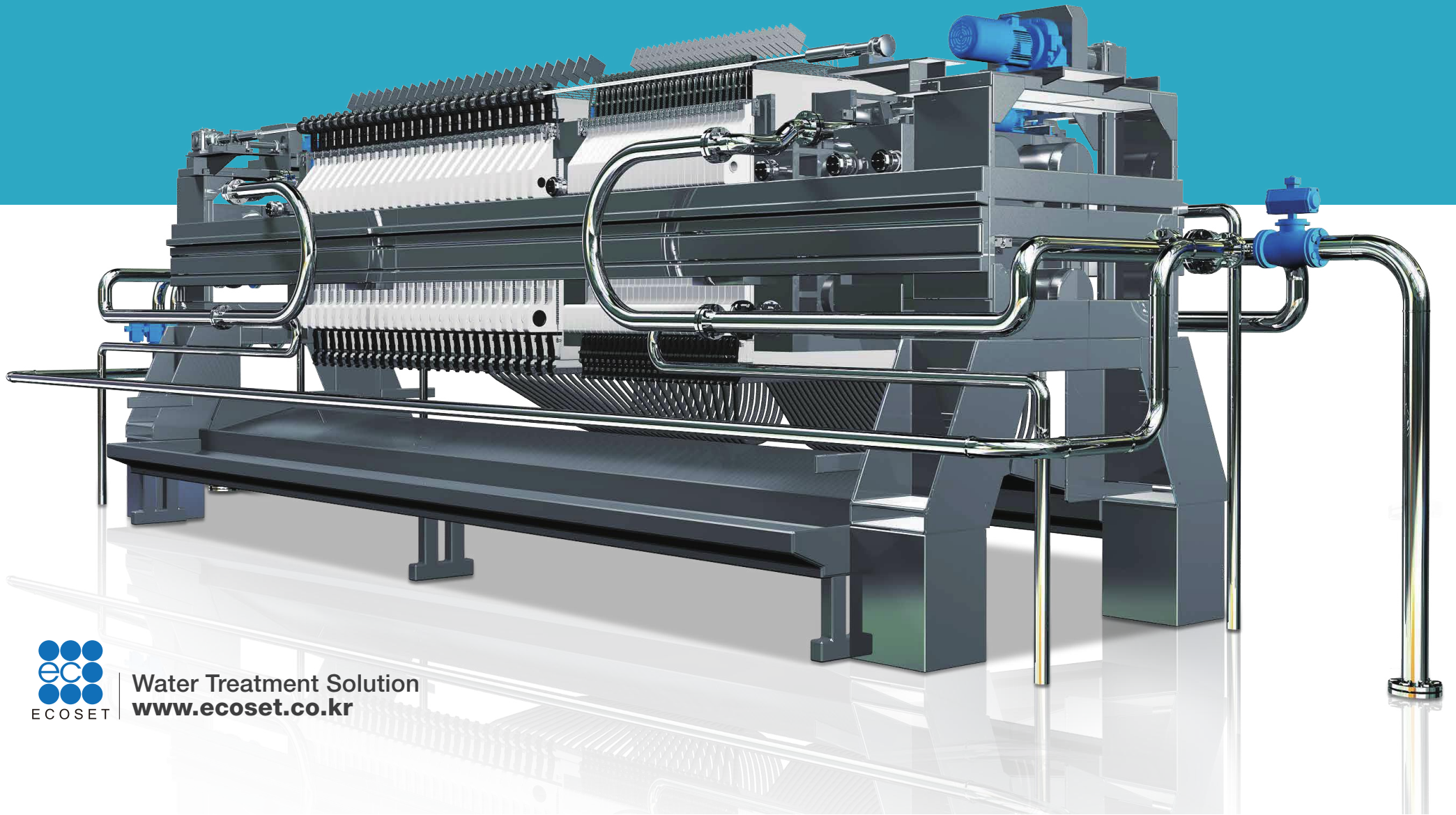


# MUNICIPAL FILTER PRESS FOR ORGANIC SLUDGE



Water Treatment Solution  
[www.ecoset.co.kr](http://www.ecoset.co.kr)

# FILTER PRESS



**Ecoset provides fully automated dehydrators distinguished from conventional ones. Hyper dehydrating capability is achieved by advanced technology**

## GLOBAL TECHNOLOGY ECOSET

ECOSET is building up its own technology in the filter press that is optimized for various industrial fields to treat the organic sludge which is highly viscous and difficult in cake discharge as in water treatment without aid of chemicals, magnesium and calcium process sludge treatment, etc. and so supplying efficient and unattended filter presses that require less space for installation for the public treatment facilities such as purification waterworks and sewage treatment plants in addition to private sectors.

Wherever the effective dehydration performance with complete discharging filter cake is needed in less footprint, please apply the ECOSET filter press unique filter cloths moving technology for the filter cake discharge.



## FEATURES OF FILTER PRESS

**1MIN**

Increasing cleaning efficiency and maximizing the life of filter cloth by cleaning inside & outside of filter cloth within a minute

**1MIN**

Cake remaining less than 2% in a minute(actual test water sludge removal efficiency 99.1%) - Perfect unattended automatic cake discharge

**1TIME**

The entire filter plate can be opened and closed at one time or divided into two parts to install more filter plates

# COMPARISON TABLE

(※Chemical-Free Potable water sludge)

- 01 Perfect cake discharging**  
Even thin filter cake of viscous organic sludge removed 99% within a minute by moving the filter cloth upside down
- 02 Effective filter cloth cleaning**  
Maintaining the performance and extending the life of filter cloth by simultaneously cleaning cloths inside and outside with high pressure water within a minute
- 03 High dehydration capacity**  
Reduction of water content and sludge volume using high pressure of 15kg / cm<sup>2</sup> or more
- 04 Easy maintenance**  
Optimized for operator convenience like in automatic operation of all processes and easy replacement of the filter cloth

- 05 Short CYCLE TIME**  
Simultaneous opening and closing filter plates, completely discharging filter cake by filter cloth moving upside down and cleaning all the cloths at once significantly shorten the operating time (1/3 to 1/5 of the other types)
- 06 Fully automatic operation**  
Automatic operation established even for thin cake operation by solving the incomplete cake discharge of existing dehydrators
- 07 Miniaturization & maximization of processing capacity**  
Special filter plate opening and closing mechanism of ECOSET increases the filtration area with miniaturization

Item	ECOSET	Existing Dehydrator
Treatment Speed	1.5~2.7kg.ds/m <sup>2</sup> .hr	0.3~0.7kg.ds/m <sup>2</sup> .hr
Cake Discharge Time	1 min or less / cycle ※ Irrespective of filter plates	More than 10 min ※ Irrespective of filter plates
Discharge Rate	over 99%	30~70%
Discharge Aid	No need	Need (vibrator etc.)
Cleaning Time	1 min or less / cycle ※ Irrespective of filter plates	More than 10 min ※ Irrespective of filter plates
Cloth Life	5,000 ~ 8,000 cycle	3,000 ~ 5,000 cycle
Plate Open	Simultaneous all open / close	Open one by one
Cycle Time	1 hr or less	3~5 hr
Plates	100%	Over 200%

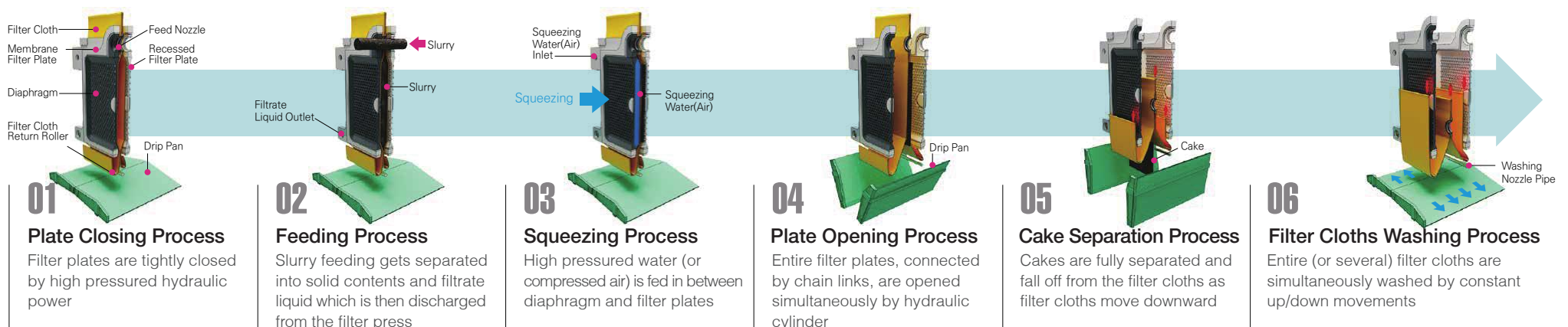
## APPLICATION

Organic sludge dehydration with low cake discharge rate like animal husbandry, manure, sewage, wastewater, etc.

Dehydration without chemical aid like Iron oxide, magnesium hydroxide, ceramics, etc.

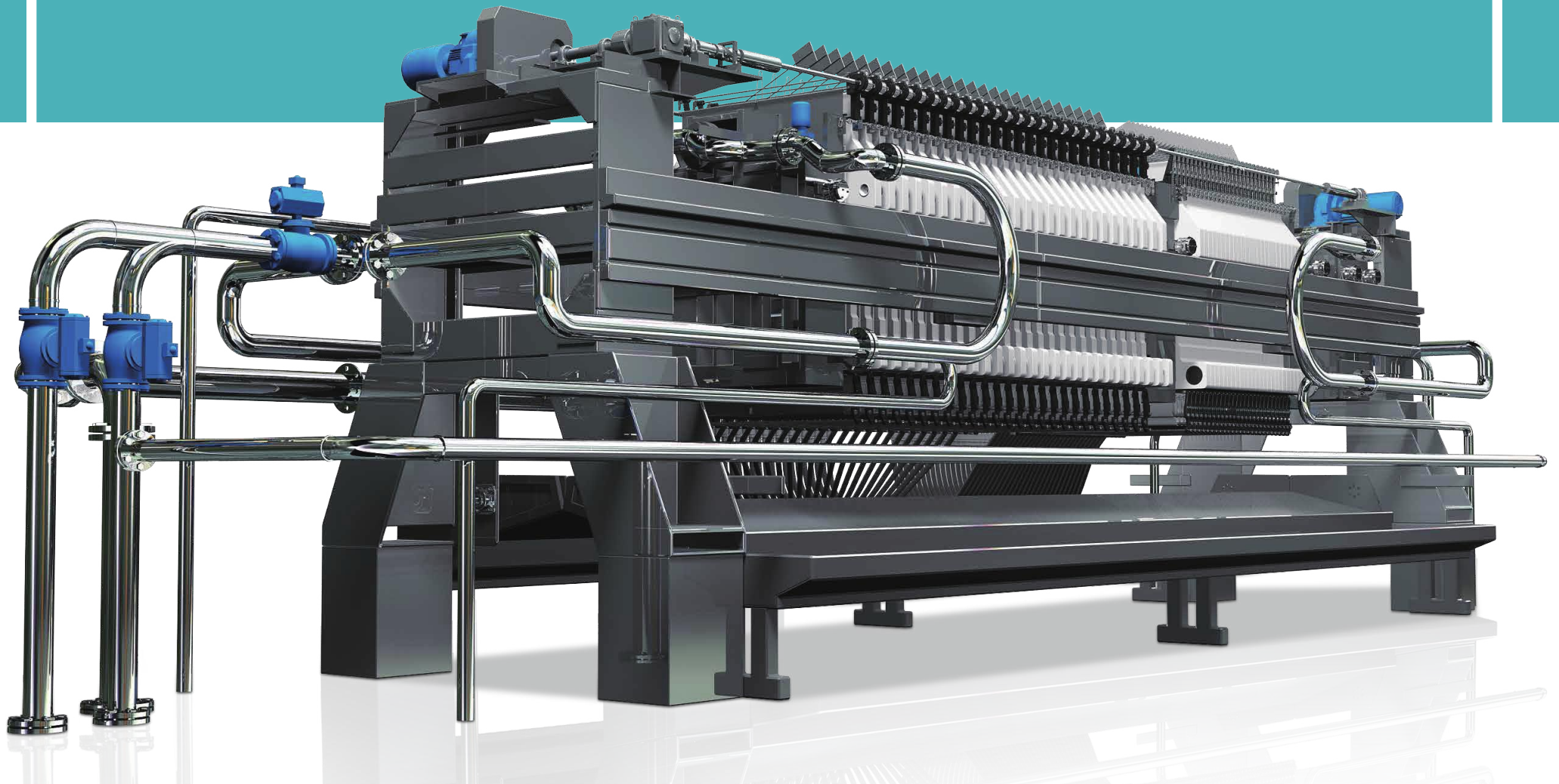
Other various chemical industry dehydration like food industry, mining industry, dye & pigment process, fermentation process, etc.

## PRINCIPLE OF FILTER PRESS



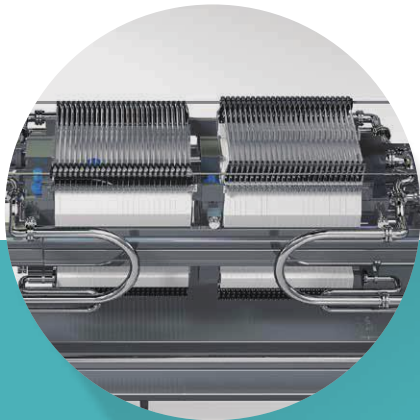
# ECFP-NDH SERIES

Ecoset provides fully automated dehydrators distinguished from conventional ones.



# FEATURES OF ECFP-NDH SERIES

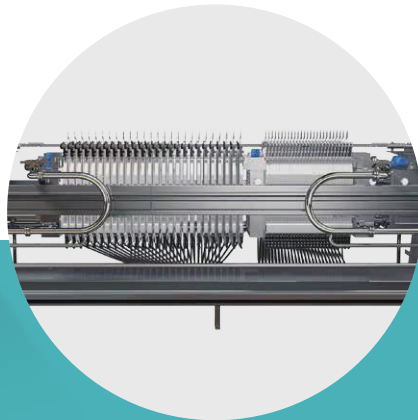
01



## SPACE ECONOMY

Less space by separate dehydration and cake discharge of the front part and the rear

02



## SEPARATE OPERATION

On the amount of sludge, separate operation of the front and the rear is possible

03



## FACILITY SIMPLIFICATION

Simplifying equipment by adopting one stage filter shaft alignment

04

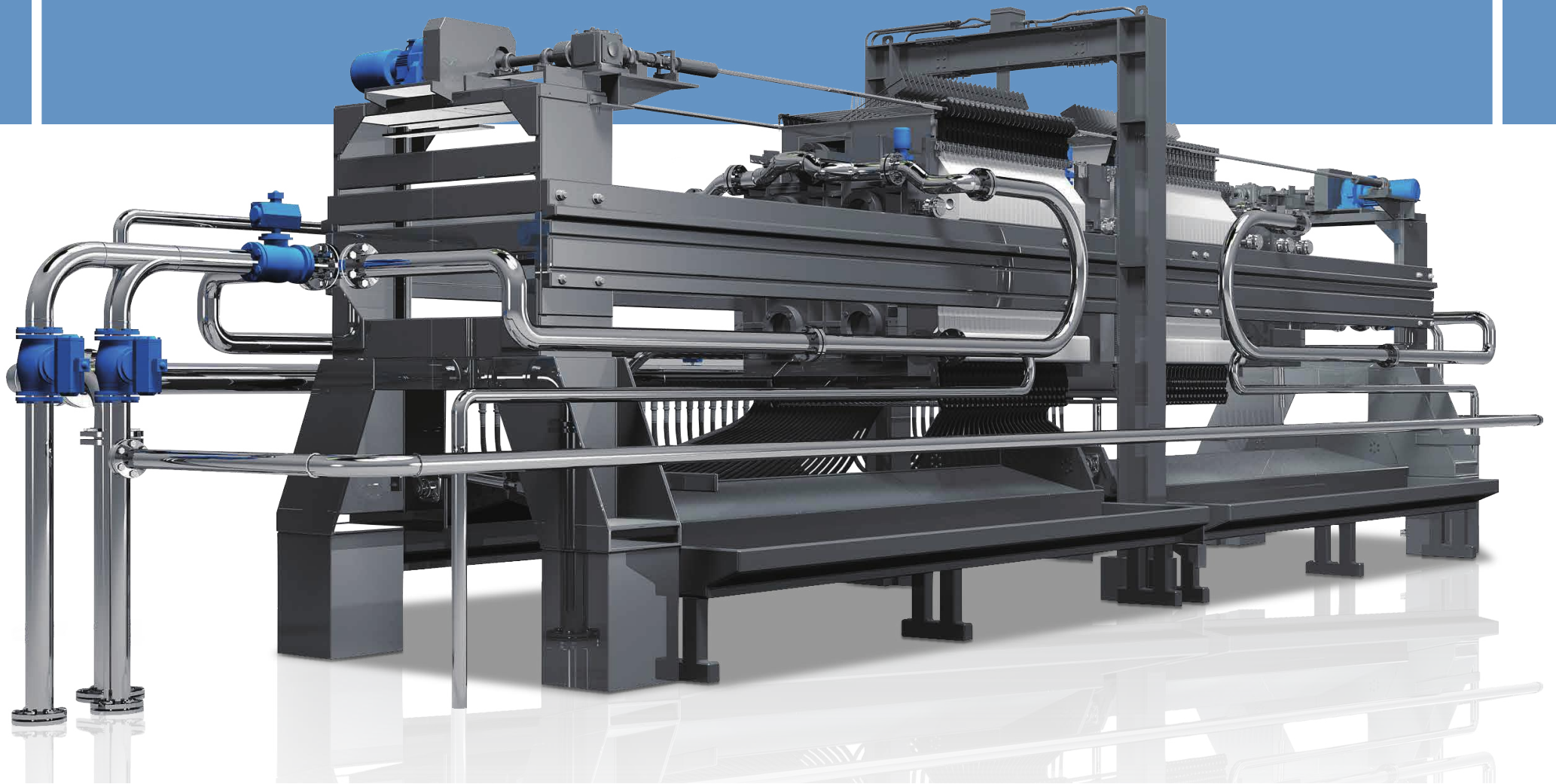


## REDUCTION IN NOISE

Reduction of operating noise & vibration by adopting screw gear to move filter cloth

# ECFP-DH SERIES

Ecoset provides fully automated dehydrators distinguished from conventional ones.



# INSTALLATION SITES & FEATURES OF ECFP-DH SERIES

01



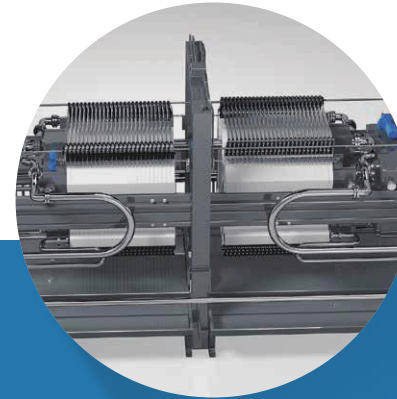
**GwangJu City  
OOWTP**

02



**K-water  
OOWTP**

03



## **LARGE FORMATION**

Realization of large size by moving the filter plate to the center

04



## **TIGHTENING PLATE**

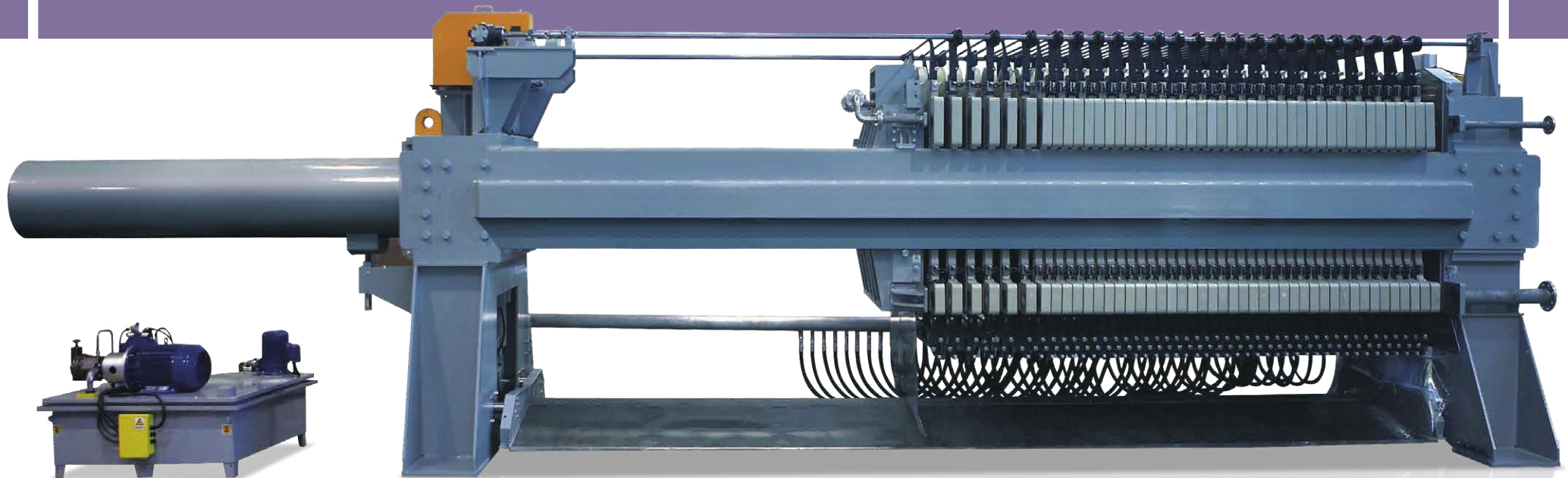
Filter plates brought to the center by motor and then pressed by hydraulic cylinder

**MAIN INSTALLATION SITES**

**MAIN FEATURES**

# ECFP-SH SERIES

Ecoset provides fully automated dehydrators distinguished from conventional ones.





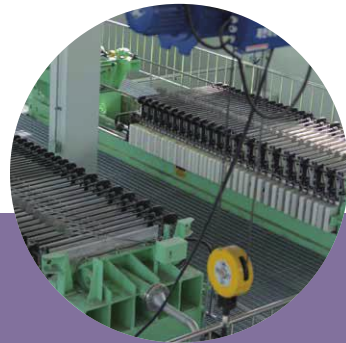
# INSTALLATION SITES & FEATURES OF ECFP-SH SERIES

01



**Seoul City  
OOWTP**

02



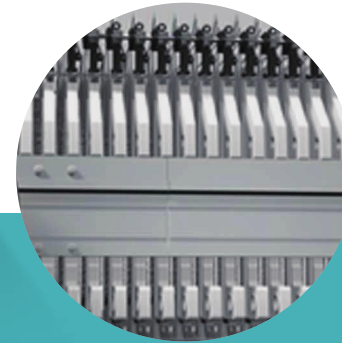
**K-water  
OOWTP**

03



**Kyunggi Province  
OOWTP**

04



## **SIMULTANEITY**

Maximizing dehydrator performance by simultaneous opening & closing filter plates and discharging filter cake all at once

05



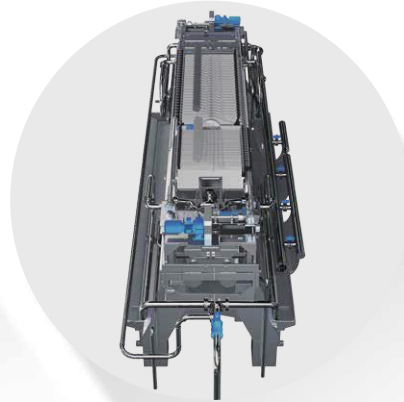
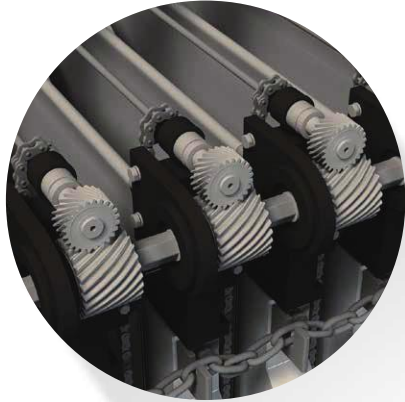
## **MOVE UP & DOWN**

Perfect cake discharge by applying filter cloth moving upside down and inside out

**MAIN INSTALLATION SITES**

**MAIN FEATURES**

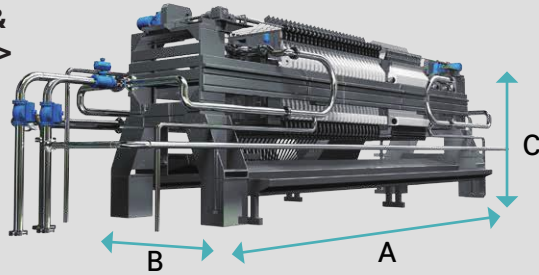
# FILTER PRESS PERFORMANCE (standard)



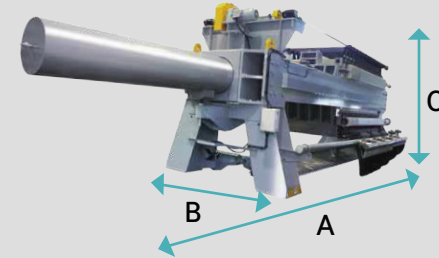
Sludge Type	Slurry (W/W)%	Chemicals	Pressure (kg/cm <sup>2</sup> )	Water Content	Filtration Speed	
					SH, DH, NDH Series	Existing Dehydrator
Potable Water Sludge	3.0	Non	15	60	1.5~2.7 kg.ds/m <sup>2</sup> .hr	0.5~1.3kg.ds/m <sup>2</sup> .hr
Sewage Sludge	2.5	Ca(OH) <sub>2</sub> 25% FeCl <sub>3</sub> 60%	15	62	2.2 kg.ds/m <sup>2</sup> .hr	0.7 kg.ds/m <sup>2</sup> .hr
Night Soil Excess Sludge	1.6	Ca(OH) <sub>2</sub> 30% FeCl <sub>3</sub> 80%	15	65	2.0 kg.ds/m <sup>2</sup> .hr	0.7 kg.ds/m <sup>2</sup> .hr
Activated Excess Sludge	2.1	Ca(OH) <sub>2</sub> 30% FeCl <sub>3</sub> 80%	15	65	2.0 kg.ds/m <sup>2</sup> .hr	0.7 kg.ds/m <sup>2</sup> .hr
Iron Oxide	49.0	Non	15	19	45 kg.ds/m <sup>2</sup> .hr	25 kg.ds/m <sup>2</sup> .hr
Magnesium Hydroxide	80.0	Non	15	25	27 kg.ds/m <sup>2</sup> .hr	15 kg.ds/m <sup>2</sup> .hr
Ceramic Sludge	53.0	Non	15	21	54 kg.ds/m <sup>2</sup> .hr	28 kg.ds/m <sup>2</sup> .hr

# FILTER PRESS SPECIFICATIONS

< ECFP - DH Series & ECFP - NDH Series >



< ECFP - SH Series >



**ECFP – DH Series & NDH Series Filter Press Standard Size**

Filter Plate Size	No. Plate	Power(kW)	Weight(ton)	Filter Area (m <sup>2</sup> )	DH Series			NDH Series		
					A	B	C	A	B	C
1500x1500	60	12.9	69.0	216	13,800	4,520	5,120	11,550	4,520	5,120
	72		73.2	259	15,510			12,810		
	80		76.0	288	16,650			13,650		
	92		80.2	331	18,360			14,910		
	100		83.0	360	19,500			15,750		

**ECFP – SH Series Filter Press Standard Size**

Filter Plate Size	No. Plate	Power(kW)	Weight(ton)	Filter Area (m <sup>2</sup> )	Dimension(mm)		
					A	B	C
1000x1000	10	2.2	8.0	15	4,160	2,480	2,495
	18		9.5	27	5,215		
	26		11.6	39	6,715		
	34		13.5	51	8,215		
	40		14.9	60	9,340		
1500x1500	14	3.7	26.6	51	5,950	3,250	3,260
	20		28.4	72	6,860		
	30		33.0	108	8,870		
	40		39.0	144	10,990		
	50		44.0	180	13,120		



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**3<sup>rd</sup> Factory** | 1282-9, Eung-am-ri, Guji-myeon, Dalseong-gun, Daegu, Republic of Korea (Korea Water Cluster)



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