

Environment-Friendly Corporation

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Always Thinking  
Environment-Friendly Innovation

**ILSEUNG**



 **ILSEUNG**  
[www.ilseung.co.kr](http://www.ilseung.co.kr)



It is started in

# 1988

Jul.

**Founded**

Developed and manufactured and Filter type Fuel and Lubricating oil purifier

Jun.

Developed and manufactured Biological type Sewage Treatment Plant in compliance with IMO rule

Feb.

Developed ISS-N Series

**May.**

Sewage Treatment plant achieved MED CERT' according to MEPC.159 (55)

Jan.

Achieved MED CERTIFICATE According to IMO MEPC. 227(64) for the New Sewage Treatment Plant

1992

Jul.

Developed and manufactured Evaporating type Fresh Water Generator

1999

Jun.

Developed and manufactured Biological type Sewage Treatment Plant in compliance with IMO rule

2001

Jan.

Achieved The Certificate of Utility Model Registration for Sewage Treatment Plant from The Korean government.

**Sept.**

Certified ISO9001 by Korean Register of Shipping

**Dec.**

Sewage Treatment plant achieved MED CERT'

2008

Feb.

Developed ISS-N Series

**May.**

Sewage Treatment plant achieved MED CERT' according to MEPC.159 (55)

2011

Nov.

Awarded as a World Class Product

**Apr.**

Completed the construction of New Factory in the Busan Area

2015

Jan.

Achieved MED CERTIFICATE According to IMO MEPC. 227(64) for the New Sewage Treatment Plant

## CEO Message

IL SEUNG is a company that specializes in the production of Sewage Treatment Plant, Fresh Water Generator and Oil Purifier based on accumulated experience and technical adaptness.

With our world-class technologies, IL SEUNG is producing and providing high-qualified Sewage Treatment Plant, Fresh Water Generator and Oil Purifier to our customers.

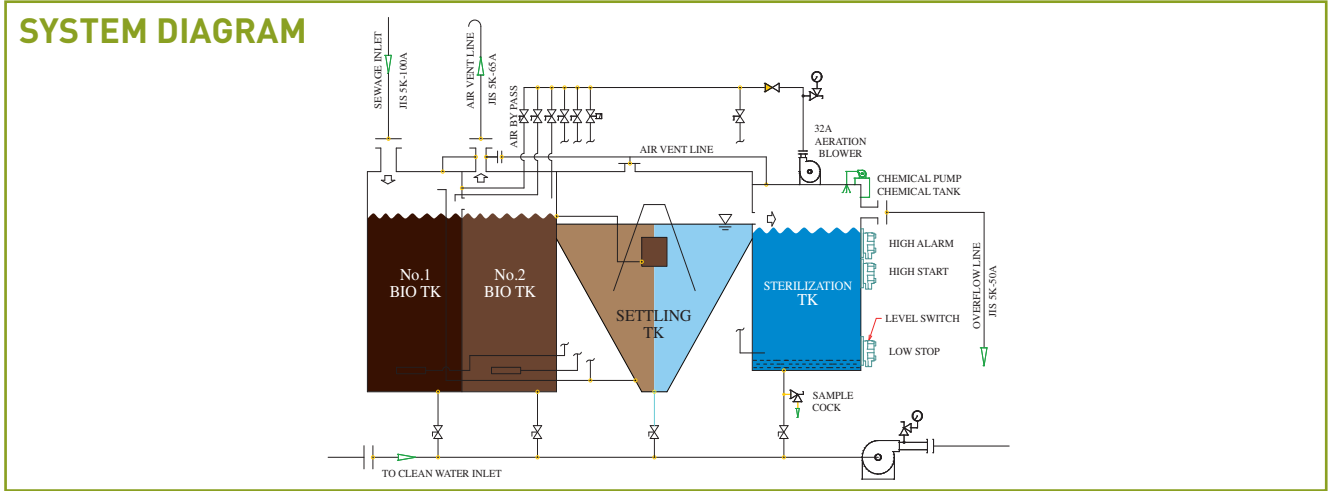
As one of leading company for environmental equipment, IL SEUNG will stably secure necessary supply and promote research and development for marine equipment. We commit to continue to press forward to become a company specializing in advanced materials.

In response to the rapidly changing regulatory environment, IL SEUNG, with its creative and challenging spirit, will always become the WORLD'S BEST enterprise with leading competitiveness and quality. We will achieve this by consistently focusing on research, development and quality management. Also, we commit to fullfill our social responsibilities by implementing a mutually beneficial management system and contributing to making a prosperous society.

We look forward to your continued concern and support.

# Sewage Treatment Plant (ISB Series)

ILSEUNG is the world's leading manufacturer of marine sewage treatment systems. For over 10 years ILSEUNG's sewage treatment plants have been widely regarded as standard specification on all types of vessels.



## PROCESS

### #1 & #2 Tank, Biofilter Reactor

Raw sewage water first enters into the Biofilter tank. The tank is aerated and mixed by air which is supplied via fine bubble aeration elements. Required amount of air is delivered to the aeration elements by the blower. The tanks are filled with MBBR, which are optimized for the activation of the microorganisms, so it can correspond to the irregular sewage supply well.

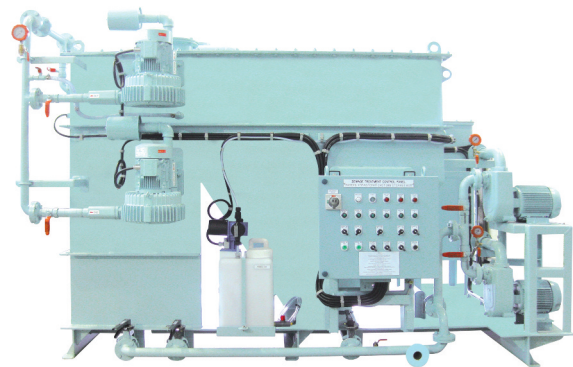
### #3 Tank, Settling Tank

To sludge deposited in the bottom of the settling tank, it returns (Air lift pumping) to the sewage Biofilter Reactor Tank to break up the organic matters by solenoid valve.

### #4 Tank, Sterilization Tank

After inserting small amount of sodium hypochlorite (NaOCl) to remove coliform, sterilized treated water will be discharged automatically by level switch.

## CONFIGURATION



- Expanded surface to live microorganism in
- Microorganisms, increased rapidly
- Maximization of disposal capability
- Semi-permanently used
- Less sludge occurred
- Durability at fluctuation of load

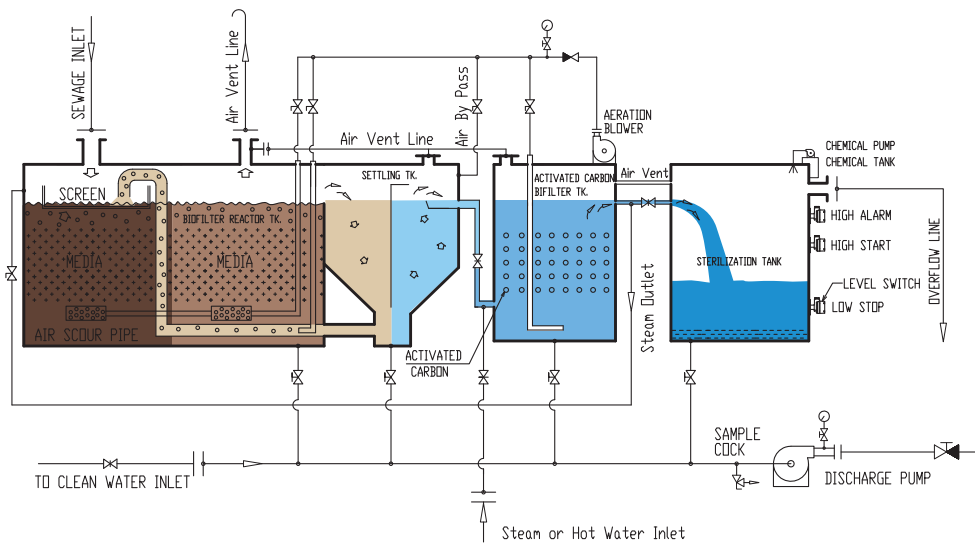
## DIMENSION

MODEL	CAPACITY (L/Day)	PERSON	ORGANIC LOAD (kg/Day)	SIZE (mm)			WEIGHT (kg)
				L	W	H	
ISB-01	1,260	18	0.63	1,862	1,173	1,519	880
ISB-02	2,100	30	1.05	2,192	1,313	1,584	1,050
ISB-03	2,800	40	1.40	2,410	1,599	1,717	1,380
ISB-04	4,200	60	2.10	2,570	1,629	1,817	1,520
ISB-06	5,600	80	2.80	2,716	1,909	1,992	1,800
ISB-07	7,000	100	3.50	2,936	2,029	1,992	2,020
ISB-09	9,100	130	4.55	3,176	1,999	2,067	2,360
ISB-11	11,200	160	5.60	3,276	2,119	2,217	3,000
ISB-15	15,400	220	7.70	4,310	2,690	2,216	4,200
ISB-23	23,100	330	11.55	4,720	2,980	2,616	5,370
ISB-33	32,900	470	16.45	5,340	3,190	2,787	6,760
ISB-41	41,000	586	20.50	5,710	3,660	2,937	7,680
ISB-48	48,000	686	24.00	5,810	3,660	3,137	8,750
ISB-65	65,000	928	32.50	6,630	4,030	3,137	9,620



# Sewage Treatment Plant (ISS Series)

## SYSTEM DIAGRAM



## PROCESS

### #1 Tank, Biofilter Reactor

The MEDIA installed in REACTOR fixes the microorganisms, so it can correspond to the irregular sewage supply well.

### #2 Tank, Sedimentation Tank

The sludge deposited in bottom of the sedimentation tank. It returns (Air lift pumping) to Biofilter Reactor Tank to break up the organic matters.

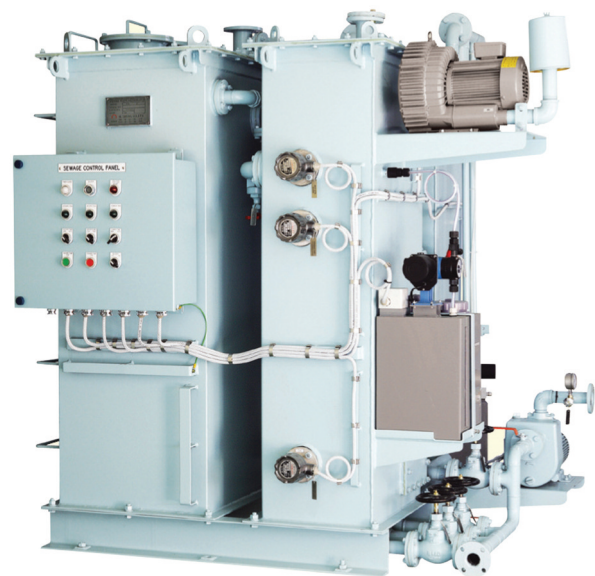
### #3 Tank, Activated Carbon Biofilter Tank

The untreated organic and floating matter will be treated by passing through the Activated Carbon Biofilter.

### #4 Tank, Sterilization Tank

Sterilized treated water will be discharged automatically by level switch.

## CONFIGURATION



## DIMENSION

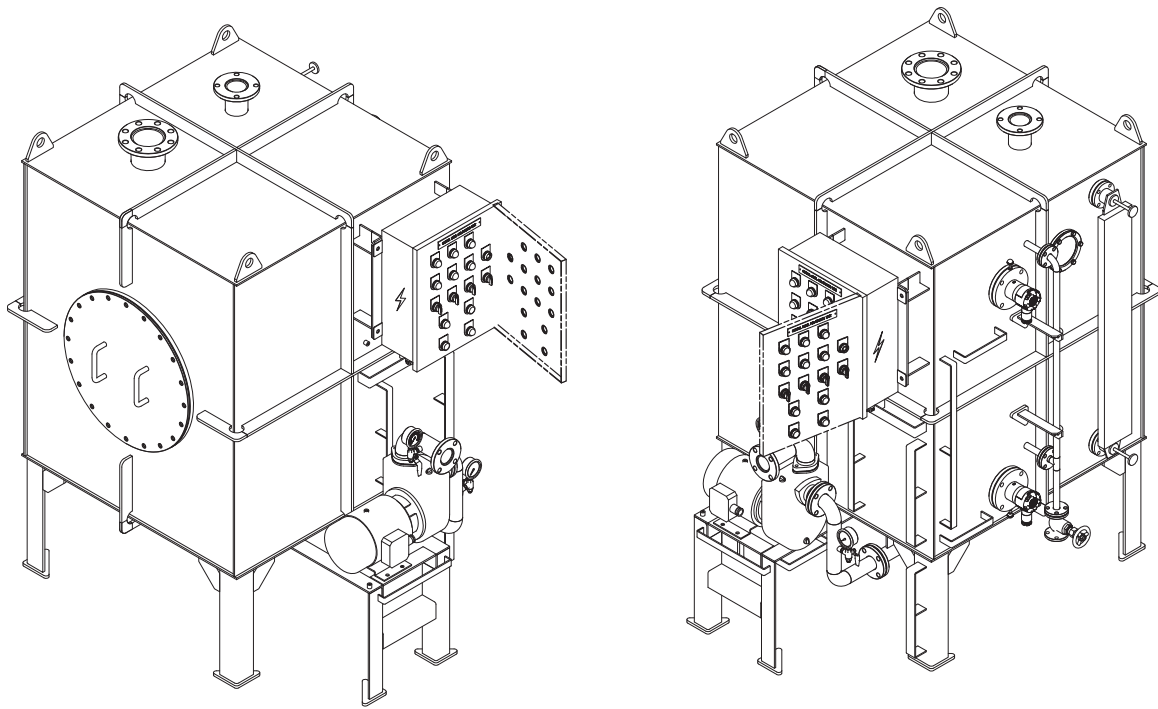
MODEL	CAPACITY (L/Day)	PERSON	ORGANIC LOAD (kg/Day)	SIZE (mm)			WEIGHT (kg)
				L	W	H	
ISS-15N	1,050	15	0.525	1,680	1,622	2,018	1,314
ISS-25N	1,750	25	0.875	1,852	1,735	2,018	1,384
ISS-35N	2,450	35	1.225	2,130	1,851	2,018	1,537
ISS-43N	3,010	43	1.505	2,230	1,905	2,018	1,650
ISS-60N	4,200	60	2.100	2,690	2,105	2,018	1,819
ISS-85N	5,950	85	2.975	3,060	2,343	2,018	2,198
ISS-100N	7,000	100	3.500	3,295	2,250	2,018	2,696
ISS-130N	9,100	130	4.550	3,750	2,723	2,018	2,977
ISS-160N	11,200	160	5.600	4,080	2,923	2,018	3,291
ISS-232N	16,240	232	8.120	2,476	4,595	3,570	7,087



## Sewage Holding Tank Unit (ISH Series)

To proper management of sanitary system, most of vessel would be installed holding tank or collecting tank. With professional technician on welding and paint shop, IL SEUNG holding tank (ISH Series) works at high quality level and can guarantee high quality product.

### SYSTEM DIAGRAM



### PROCESS

#### • Scope of supply

Tank body

Pipe accessories

Transfer pump (10M<sup>3</sup>/H)

Level Guage / switch

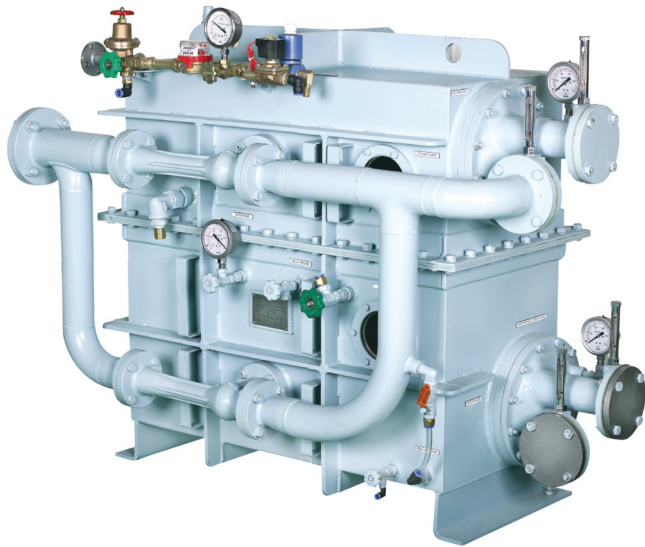
Control Panel for holding tank

\* Option : Control panel for sewage treatment plant and holding tank

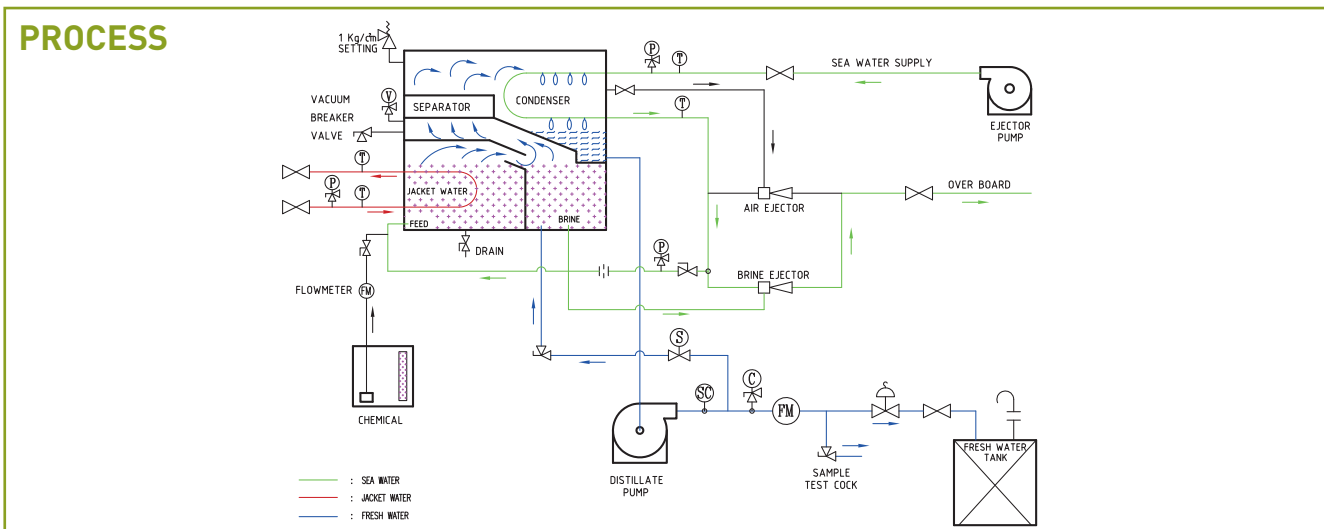
### DIMENSION

MODEL	CAPACITY (m <sup>3</sup> /DAY)	TANK VOLUME (m <sup>3</sup> )
ISH-01	1.0	1.2
ISH-02	2.0	2.4
ISH-03	3.0	3.5
ISH-04	4.0	4.7
ISH-05	5.0	5.9
ISH-06	6.0	7.1
ISH-07	7.0	8.2
ISH-08	8.0	9.4
ISH-09	9.0	10.6
ISH-10	10.0	11.8
ISH-11	11.0	12.9
ISH-12	12.0	14.1
ISH-13	13.0	15.3
ISH-14	14.0	16.5
ISH-15	15.0	17.6
ISH-16	16.0	18.8
ISH-17	17.0	20.0
ISH-18	18.0	21.2
ISH-19	19.0	22.4
ISH-20	20.0	23.5

# Fresh Water Generator (ISF Series)



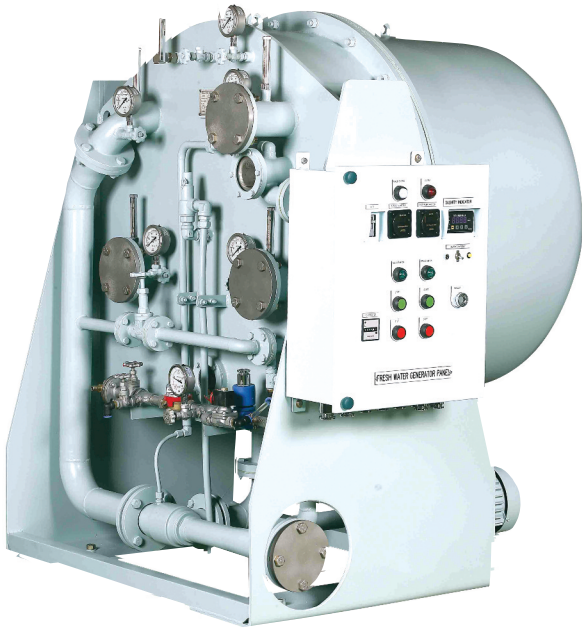
ISF-Type fresh water generator can produce fresh water economically without any additional heat source. While the generator is running, the inner parts will be in vacuum, so the boiling temperature point will be dropped. The vapor become water drops by refrigeration from the cold water. When the water drops are collected in waterspout under the condenser, they are sent to the fresh water tank. If the salinity of the produced water exceed the limitation, solenoid valve will operate to prevent the inflow of the water with high salinity. In conclusion, the produced water's salinity is less than 10 ppm, which is very pure, and also the produced water is soft water which can be used in many purpose.



## DIMENSION

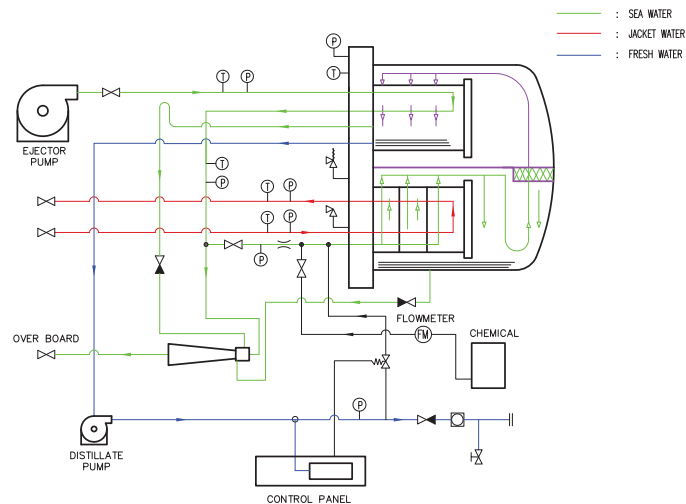
MODEL	CAPACITY (TON/Day)	SIZE(mm)			WEIGHT (kg)
		L	W	H	
ISF-10	1	713	365	819	80
ISF-30	3	758	449	945	110
ISF-40	5	1,075	449	947	170
ISF-50	10	1,328	707	1,065	390
ISF-70	15	1,513	758	1,182	420
ISF-80	20	1,742	940	1,604	1,020
ISF-90	25	2,028	1,250	1,784	1,500
ISF-100	30	2,129	1,250	1,784	1,600
ISF-110	35	2,252	1,300	1,884	1,720
ISF-120	40	2,420	1,300	1,984	1,850

# Fresh Water Generator (ISF-P Series)



ISF-P is based on two titanium plate heat exchange acting as an evaporator and condenser. The evaporation chamber maintains the vacuum condition by an ejector. Part of sea water from evaporation chamber is used as feedwater for the evaporator. The feed water evaporates when entering the evaporating chamber due to vacuum condition. Water particles and droplets are partly removed from water vapor by the built-in demister and the deflector mounted on the top evaporator. Separated droplets are brine, extracted as sump by an ejector pump. The desalted vapor passing through the demister is condensed by the plate condenser with incoming cold sea water. The pure distilled water is taken out by discharge pump. The pure water from condenser is controlled by the pre-installed salinometer not to exceed salinity level of 10ppm. If the salinity exceed the specified level, solenoid valve in discharge line will automatically return the faulty distilled water to the feed line.

## PROCESS



## DIMENSION

MODEL	CAPACITY (TON/Day)	SIZE(mm)			WEIGHT (kg)
		L	W	H	
ISF-10P	10	1,882	1,675	1,674	1,110
ISF-15P	15	1,882	1,675	1,674	1,160
ISF-20P	20	1,882	1,675	1,674	1,210
ISF-25P	25	1,882	1,675	1,674	1,260
ISF-30P	30	2,240	1,920	2,144	1,630
ISF-35P	35	2,240	1,920	2,144	1,710
ISF-40P	40	2,240	2,050	2,144	1,800
ISF-45P	45	2,240	2,300	2,144	1,930
ISF-50P	50	2,240	2,430	2,144	2,060
ISF-60P	60	2,240	2,560	2,144	2,190

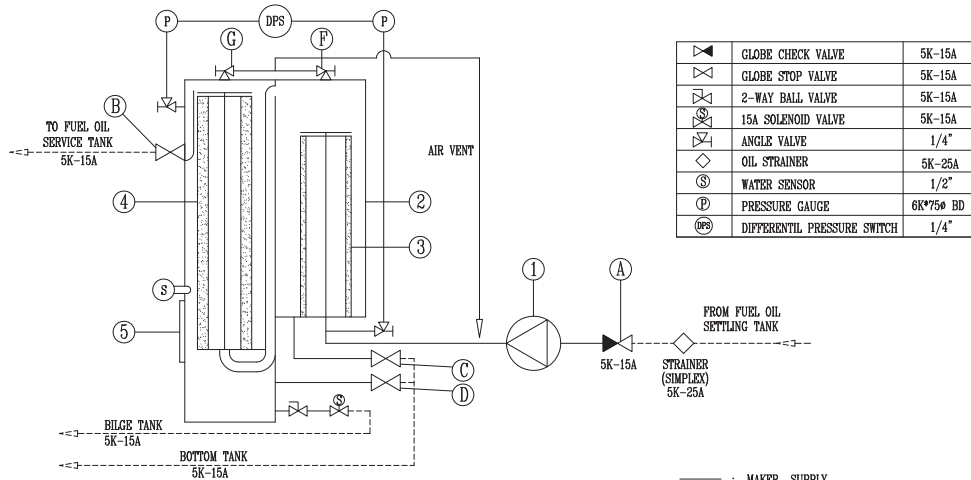


# Oil Purifier (For Fuel Oil)



Purifier remove sludge(by 1st filter) and water(by 2nd filter) out, promoting the efficiency of the engine and not being necessary to frequently exchange its oil, as well as presenting you with a merit of reducing maintenance cost because it's possible to clean and re-use the existing filter with cleaning. In addition, it is completely separated 1st and 2nd filter in case will give you solution to the contamination of 2nd filter, and clear up your inconvenience by traditional hand-operated draining tanks to its auto-discharging of the filtered water by its auto drain system.

## PROCESS



	GLOBE CHECK VALVE	5K-15A
	GLOBE STOP VALVE	5K-15A
	2-WAY BALL VALVE	5K-15A
	15A SOLENOID VALVE	5K-15A
	ANGLE VALVE	1/4"
	OIL STRAINER	5K-25A
	WATER SENSOR	1/2"
	PRESSURE GAUGE	6K*75ø BD
	DIFFERENTIAL PRESSURE SWITCH	1/4"

NO	NAME	REMARKS
A	OIL INLET	5K-15A GLOBE CHECK VALVE
B	OIL OUTLET	5K-15A GLOBE CHECK VALVE
C	1ST DRAIN	5K-15A GLOBE STOP VALVE
D	2ND DRAIN	5K-15A GLOBE STOP VALVE
E	AUTO DRAIN	5K-15A
F	1ST AIR VENT	1/4"
G	2ND AIR VENT	1/4"

NO	NAME OF PART	REMARKS
1	MOTOR & TROCHOID PUMP	0.4 KW
2	FILTER TANK	
3	1ST FILTER	#800
4	2ND FILTER	10μ
5	SIGHT GLASS	

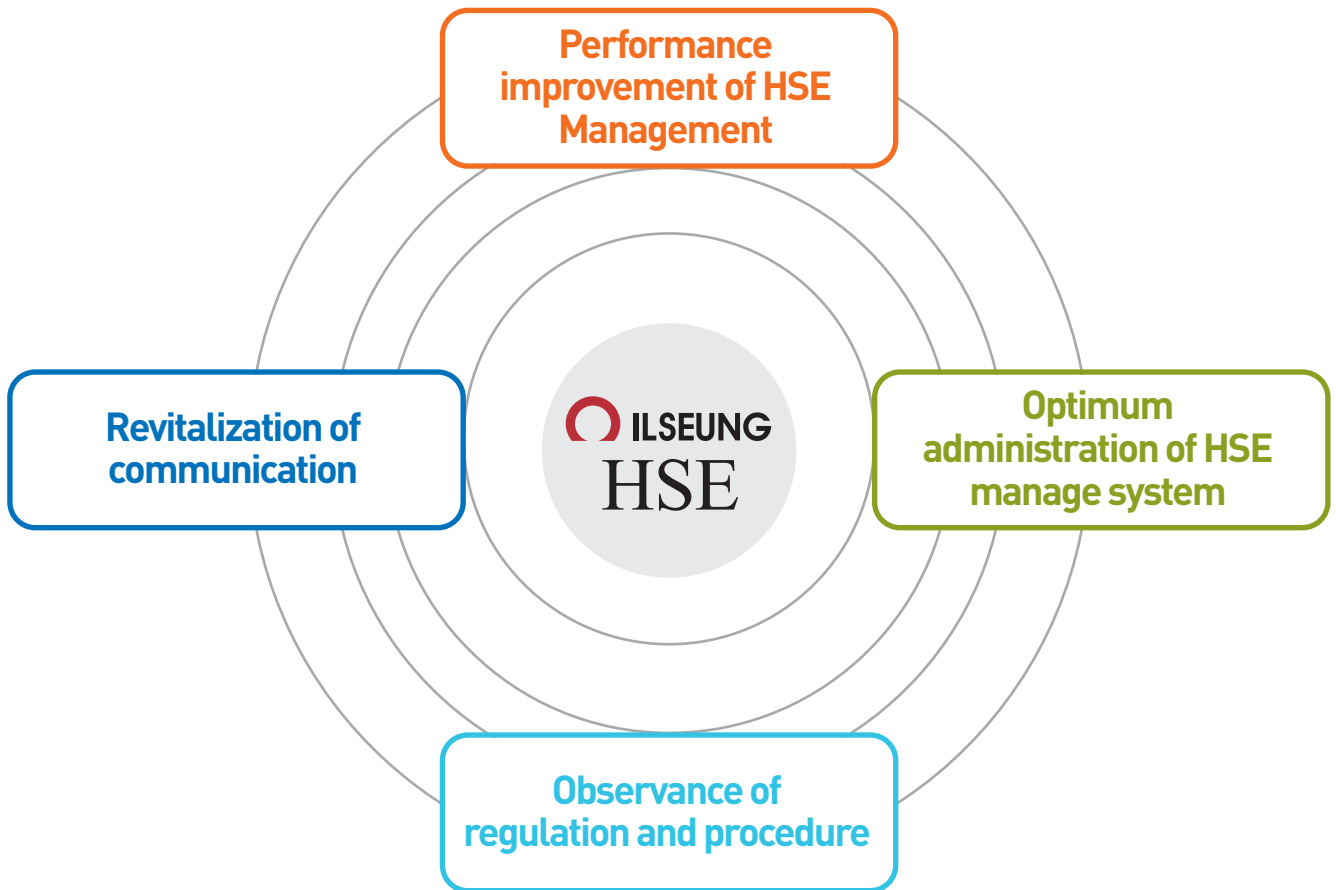
— : MAKER SUPPLY  
 - - - : YARD SUPPLY

## DIMENSION

MODEL	CAPACITY (L/HR)	SIZE(mm)			WEIGHT (kg)
		L	W	H	
ISP-600	600	734	505	1,046	150
ISP-1200	1,200	864	580	1,046	230
ISP-1800	1,800	954	675	1,146	280
ISP-2400	2,400	994	675	1,146	310
ISP-3600	3,600	1,074	713	1,446	330
ISP-4800	4,800	1,074	713	1,446	350

# HSE POLICY

All employee and executives of ILSEUNG recognize that management of safety, health and environment is a core factor of all management activities to become **“Top Excellent Company in the world”**. Thus, we establish and implement the following policies for **No accident, No disease and No pollution**.



## Vision of ILSEUNG

Always Thinking **Environment-Friendly** Innovation

Global Market Extension	Activation of business model
<ul style="list-style-type: none"> <li>• Strengthen Global Marketing</li> <li>• Construct Global Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Differentiate Core Services</li> <li>• Development of niche market</li> </ul>
Happy working Environment	
<ul style="list-style-type: none"> <li>• Work &amp; Life Balance</li> <li>• Strengthen Job Competency Improvement</li> <li>• Extend Corporate Philanthropy</li> </ul>	

## IL SEUNG Sale & Service Network



**We are all connected to each other  
for your satisfaction!**





MEMO

Always Thinking  
**Environment-Friendly**  
Innovation



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