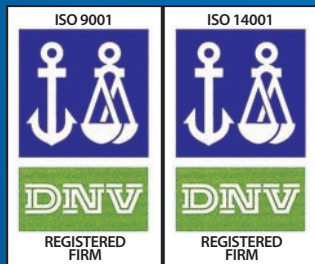


HEADQUARTER CONTACT POINT

19-1, Okamura 8-chome, Isogo-ku,
Yokohama, Japan 235-0021
TEL : +81-45-761-0351 (Main)
TEL : +81-45-753-3800 (Sales)



KANAGAWA KIKI KOGYO CO., LTD.

19-1, Okamura 8-chome, Isogo-ku, Yokohama, Japan 235-0021
TEL : 045-753-3800 FAX : 045-755-0089

URL <http://www.kanagawa-kiki.co.jp>
E-mail sales@kanagawa-kiki.co.jp



KANAGAWA KIKI KOGYO CO., LTD.

가나가와 기기 공업 주식회사 SINCE 1951

■ NOTCH WIRE ELEMENT

Auto / Manual Backwashing Type
Lubricating Oil Strainer
Fuel Oil Strainer
Manual Blow Off and Change over Cleaning Type
Duplex Lubricating Oil Strainer
Duplex Fuel Oil Strainer

■ CARTRIDGE TYPE FINE FILTER

Lubricating Oil Fine Filter JGP Filter
Fuel Oil Fine Filter UNI/FV Filter

■ SANITARY FILTER

■ MAGNET FILTER

SALES & SERVICE AGENT



HEAD OFFICE

22, NAMHANGNAM-RO, YEONGDO-GU, BUSAN, KOREA
TEL : +82-51-413-7701-5 FAX : +82-51-412-8555
E-MAIL : jmis@jonghap.co.kr



KANAGAWA KIKI KOGYO CO., LTD.

GREETINGS

KANAGAWA KIKI KOGYO CO., LTD.

KANAGAWA KIKI FILTER HEADQUARTER IN YOKOHAMA, JAPAN



저희 가나가와 기기는 1951년 2월에 설립하여 지금까지 오직 해상용 및 육상용 필터를 전문적으로 연구개발 및 생산하여 온 기업입니다. 최근에는 글로벌 세계시장에서 좀더 친환경적인 제품개발을 통한 차별화를 꾀하고 있습니다. 또한 고객의 다양한 요구에 발 빠르게 대응하기 위하여 새로운 단계의 제품과 서비스를 제공하고 있습니다. 초심을 잃지 않고 미래를 향해 나아가겠습니다.

Since its foundation in February 1951, KANAGAWA KIKI KOGYO has been engaged in the development, manufacturing and sales of notch wire type filter. In recent years, as we enter the new age of globalization we have been differentiating our products by developing environment-friendly products. Moreover we are committed to providing a new level of products and services by responding to various proposals and requests from the customers. Always remembering our foundation spirit and the spirit of challenge, we will step towards the future.



HISTORY

- 1951** Established Kanagawa Kiki Kogyo Co., Ltd. at Yokohama.
Delivered a Lub. Oil Filter for patrol boats of the Maritime Safety Agency.
- 1953** Delivered filters to Japan Maritime Defense Force ships through Mitsubishi Heavy Ind.
- 1954** Delivered various filters to all vessels of Nippon Suisan Kaisya.
- 1957** Advanced into the fields of chemical fiver, iron/steel and machinery industries.
- 1960** Delivered L.O/F.O filters to JR's Uko and Seikan ferry boats.
- 1965** Moved to new factory at Okamura, Isogo-ku, Yokohama.
Granted a subsidy for development of "JGP FILTER" from Minister of Transportation.
- 1971** Put L.O and F.O automatic strainer "K-1 STRAINER" on sale and patented 8 foreign countries.
Increased the capital ¥60,000,000. -50 percent investment from Tokyo Small and Medium Business Investment consultation company.
- 1972** Put the automatic water strainer "K-3 STRAINER" on sale.
- 1973** Put the fuel oil purifier "K-7 STRAINER" on sale. Delivered LNG gas filters to Osaka Gas Co., Ltd.
- 1977** Put the Lub. Oil automatic strainer "K-8 STRAINER" for medium speed engine on sale.
- 1979** Put the Fuel Oil automatic strainer "K-8F STRAINER" for low fuel oil on sale.
Delivered to automatic water strainer for continuous casting equipment.
- 1981** Put the Lub. Oil automatic strainer "K-8L STRAINER" for low speed engine on sale.
- 1984** Gave our Technical Agreement to Yoowon Industries in Korea.
Put the new Lub. Oil automatic strainer "K8E STRAINER" on sale.
- 1985** Put the F.O fine filter (for FCC oil) "UNI/FV FILTER" on sale.
- 1986** Put the new Fuel Oil automatic strainer "K8FE STRAINER" on sale.
- 1988** Put the coalescer and mist separator on sale. Put the portable type L.O fine filter "PK FILTER" on sale.
- 1989** Increased of new factory building.
- 1990** Gave our Technical Agreement to Vokes Ltd. in U.K.
- 1993** Put the L.O/F.O purifying system "L-PUX/F-PUX" on sale.
- 1994** Certified ISO 9001 as quality management systems.
- 1996** Delivered the new Magnet Filter to 2CGL of Kawasaki Steel Corp. Chiba Works.
Delivered the new Magnet Filter to Korea Heavy Ind. In Korea.
- 1997** Delivered L.O automatic strainer for engine test bench of Hitachi Zosen Ariake Works.
- 1998** Delivered "Soap separation system" to Kawasaki Steel corp. Chiba Works.
- 1999** Certified ISO 14001 as environmental management systems.
- 2000** Delivered roll coolant oil automatic strainer to Union Steel Ltd. In Korea.
- 2001** Delivered the magnet filter to Shanghai Boasteel and Benxi Iron & steel in China.
- 2002** Put "Plate heat exchanger" on sale in cooperation with API Schmidt in Germany.
Put L.O purifying system "L-PUX II" on sale.
- 2003** Put "Oil Mist Eliminator" on sale. Delivered a L.O Filter for first Eco. Engine (Electrically Controlled Engine)
- 2005** Reijiro Urabe was inaugurated as president.
- 2006** Applied for the patent of Ballast Water Management System with JFE.
- 2008** "UNI/FV Fine Filter," a fine filter designed for FCC fuel oil for power generation diesel engine, was delivered to Okinawa Electric Power Company.
- 2009** "Automated Warehouse" was completed in Torihama-cho, Kanazawa-ku, Yokohama, for the purpose of expanding the business scale.
- 2013** Gave our Sales & Service Agent Agreement to JONGHAP MARITIME INC. in Korea through ROKA TECH CORP.
Certified oil filter for ME engine types by MAN Diesel & Turbo.

Notch Wire Element

Features and structure



■ 견고한 엘리먼트 Robust Element

노치와이어 엘리먼트는 원주형의 프레임에 홀겹으로 노치와이어가 감겨있는 구조이기 때문에 높은 강도를 가지고 있습니다.

Notch wire element is very robust because a single notch wire is wound around a cylindrical filter frame. Notch wire element achieves strength with a single-layer structure.

■ 정확한 필터 사이즈 Precise Filtration Size

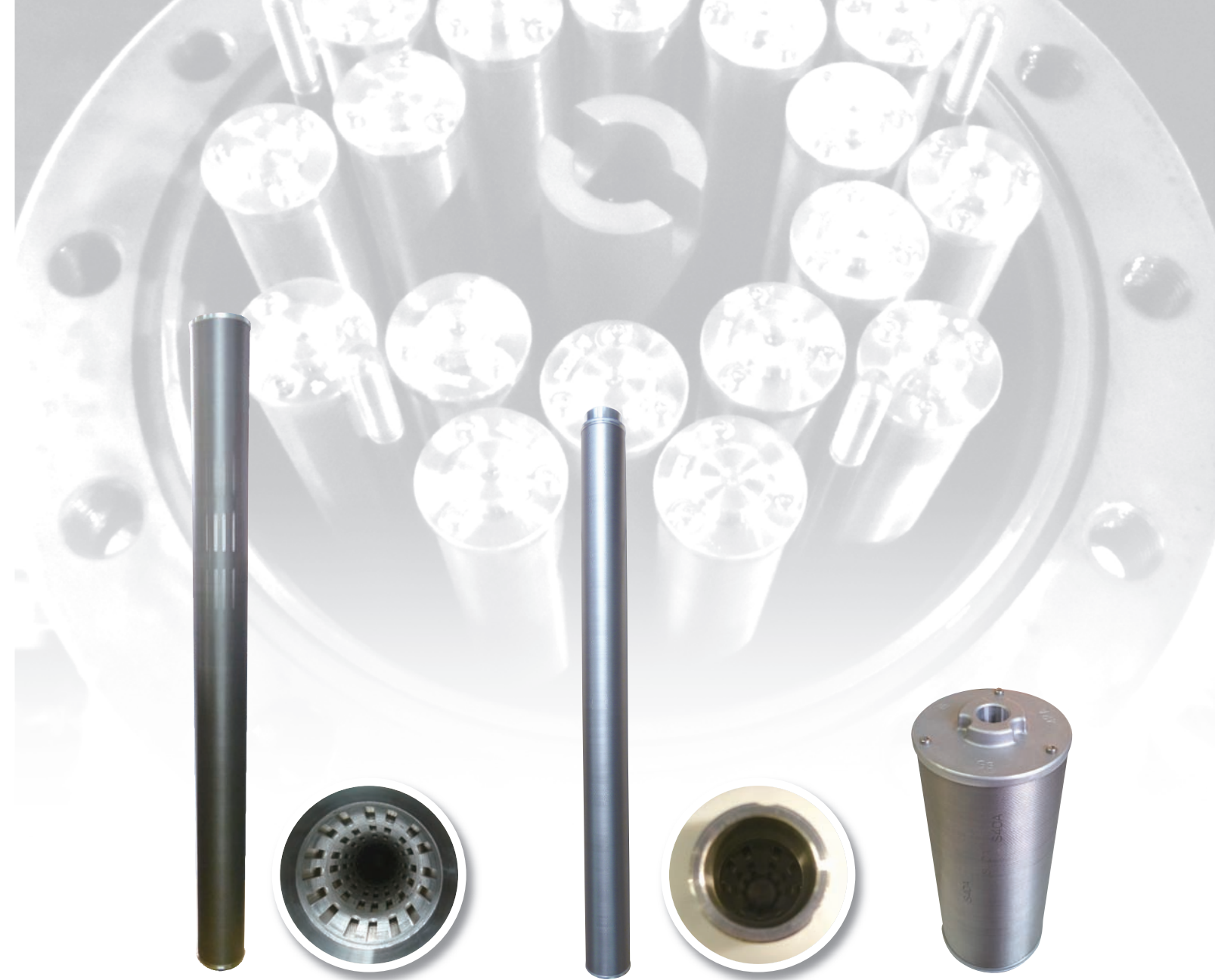
노치와이어 엘리먼트는 정교한 필터 사이즈로 다양하게 제작되며, 소제 후에도 전혀 변함이 없이 아주 견고합니다.

Notch wire element is capable of achieving a precise filtration size. Which does not change even after the element is washed.

■ 간단한 소제 Ease of Washing

싱글 레이어 구조이기 때문에 엘리먼트에 불순물이 붙어도 압축공기로 쉽게 제거되며, 소제 결과가 육안상 쉽게 판독되는 장점이 있습니다.

Due to the single-layer structure, impurities that have stuck to the element can be easily removed by air blow, and the cleaning effect can be checked visually.



■ 넓은 통유면적 Large Passing Area

싱글레이어 노치와이어 구조는 넓은 통유 면적을 가지고 있습니다.

The single-layer structure of notch wire element ensures a large passing area.

■ 다양한 사용범위 Diverse Usage

노치와이어 엘리먼트는 넓은 범위의 사양을 만족하는 장점이 있습니다. 예를 들어 높은 점도의 유체나, 높은 온도 및 압력의 조건에서도 활용범위가 넓습니다.

Notch wire element can meet a wide range of specifications, such as for high-viscosity fluids and high-temperature, high-pressure conditions.

윤활유 필터 주력 상품

MAJOR PRODUCTS FOR LUB. OIL



K8E Continuous Auto Backwashing Type

K8E 시리즈는 주기관의 윤활유 필터로 사용되고 있으며, 역세정 기능의 개선을 통한 선박 운항비용 절감효과가 있습니다.

K8E series filter are used for lubricating oil for main engine and the power generator. K8E allows reduction of running costs through improvement of back washing efficiency.

K8LE Continuous Auto Backwashing Type

K8LE는 터보차저용 오일 필터입니다.

K8LE is an oil strainer series developed for lubricating oil for supercharger.



K-OL Manual Backwashing Duplex Type

K-OF는 상대적으로 적은 용량의 듀얼 스트레이너로 간단한 구조와 작은 사이즈이기 때문에 주기관에 쉽게 설치할 수 있는 장점을 가지고 있습니다.

K-OF is a duplex type oil strainer with a relatively small capacity, which can be easily installed on the main engine side as well due to its simple structure and small installation area.

K8HS Oil cleaning system for ME engine

K8HS는 노치와이어타입의 메인필터와 카트리지 타입의 바이패스 필터로 구성된 하이브리드 타입의 필터이며, ME엔진의 전체 L.O 시스템을 세정하는 역할을 합니다.

This filter is combined notch wire type filter for main and cartridge type for by-pass, it is used to clean whole L.O system on ME engine.



JGP Lubricating Oil Fine Filter / Cartridge Type

JGP는 컴팩트한 디자인과 탁월한 성능으로 윤활유를 1 μ m까지 걸러낼 수 있는 제품입니다.

JGP features a compact design and excellent operability, which cleans lubricating oil with filtration accuracy 1 μ m.

연료유 필터 주력 상품

MAJOR PRODUCTS FOR FUEL OIL

K8FE Auto Backwashing Type

K8FE 시리즈는 주기관 및 발전기의 연료유 필터로 사용되고 있으며, 저질유 필터링에 적합하게 디자인되어 있습니다.

K8FE series filter are used for fuel oil for main engine and the power generator. Designed for filtering poor-quality oil.



K-OF Manual Backwashing Duplex Type

K-OF는 상대적으로 적은 용량의 듀얼 스트레이너로 간단한 구조와 작은 사이즈이기 때문에 주기관에 쉽게 설치할 수 있는 장점을 가지고 있습니다.

K-OF is a duplex type oil strainer with a relatively small capacity, which can be easily installed on the main engine side as well due to its simple structure and small installation area.

UNI/FV FCC Oil Filter / Cartridge Type

연료유에 잔존하는 FCC촉매입자가 엔진각부(Cyl'Liner, Piston Rings, F.O Pump 등)에서 마모를 촉진시키고 있는 실정입니다. 저희 UNI/FV 필터는 이러한 촉매입자의 필터링에 아주 효과적입니다.

FCC residues in Fuel Oil have been effecting on abrasion of Cyl'Liner, Piston Rings, F.O Pump etc. The UNI/FV Fuel Fine Filter has been developed as a countermeasure against such abrasion.



F-PUX Fuel Oil Filter / Cartridge Type

F-PUX는 고정밀의 연료유 필터링 시스템으로서 마이크로 분리기와 UNI/FV와의 조합으로 구성되어집니다.

F-PUX is a high-precision fuel oil cleaning system that combines a micro separator and UNI/FV Filters.

NOTCH WIRE ELEMENT TYPE K8E

AUTO/MANUAL BACKWASHING TYPE
LUBRICATING OIL STRAINER



I K8E 장점 K8E FEATURES

- 1. 노치 와이어 엘리먼트** Notch Wire Element
와이어는 SUS 304의 재질로 만들어 지며 정밀도와 높은 내구성을 가지고 있습니다.
Strainer with a frame tied with Stainless Steel(SUS 304) it has precise filtration ability and amazing durability.
- 2. 슬러지 체커** Sludge Checker
필터에서 역세정된 기름이 슬러지 체커를 통해서 섬프탱크로 들어갑니다.
Backwashed oil goes through the sludge checker then back to the Sump Tank.
- 3. 유압 액추에이터** Hydraulic Actuator
고성능의 유압 액추에이터는 필터내 유압으로 작동되며 별도의 전기장치가 필요 없습니다.
It is operated by filtered oil and No electric power is needed for operation.
- 4. 지속적인 역세정 기능** Continuous Auto-Backwashing
필터가 작동 중에는 지속적으로 24시간 역세정을 시행합니다.
Continuously performs backwash during the operation.

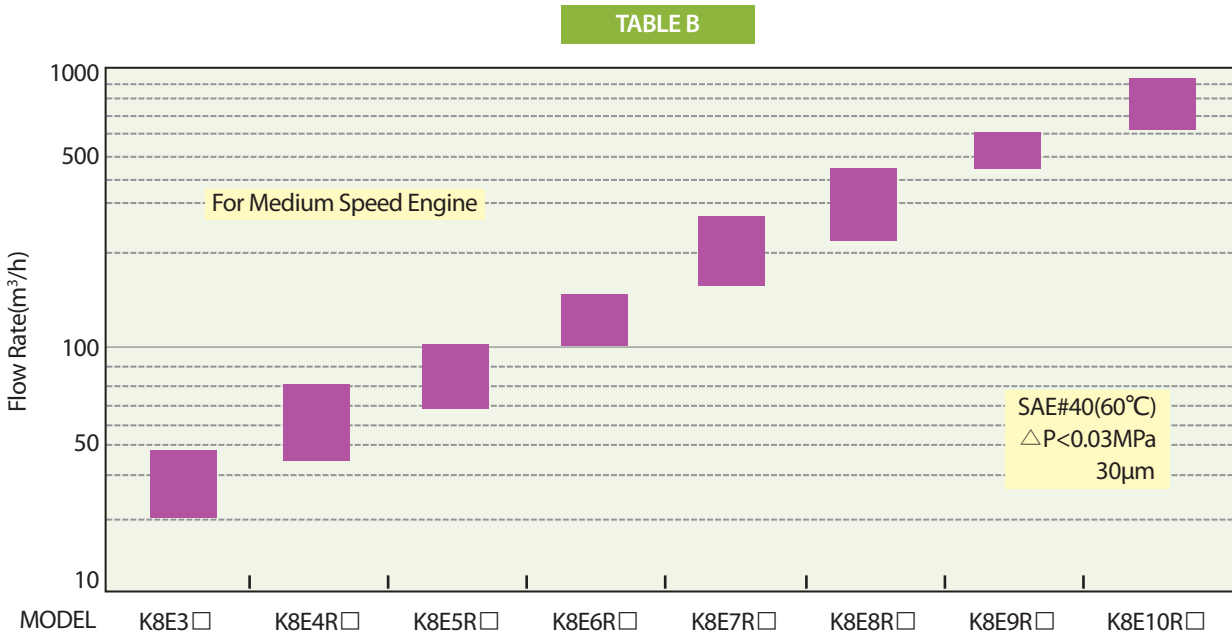
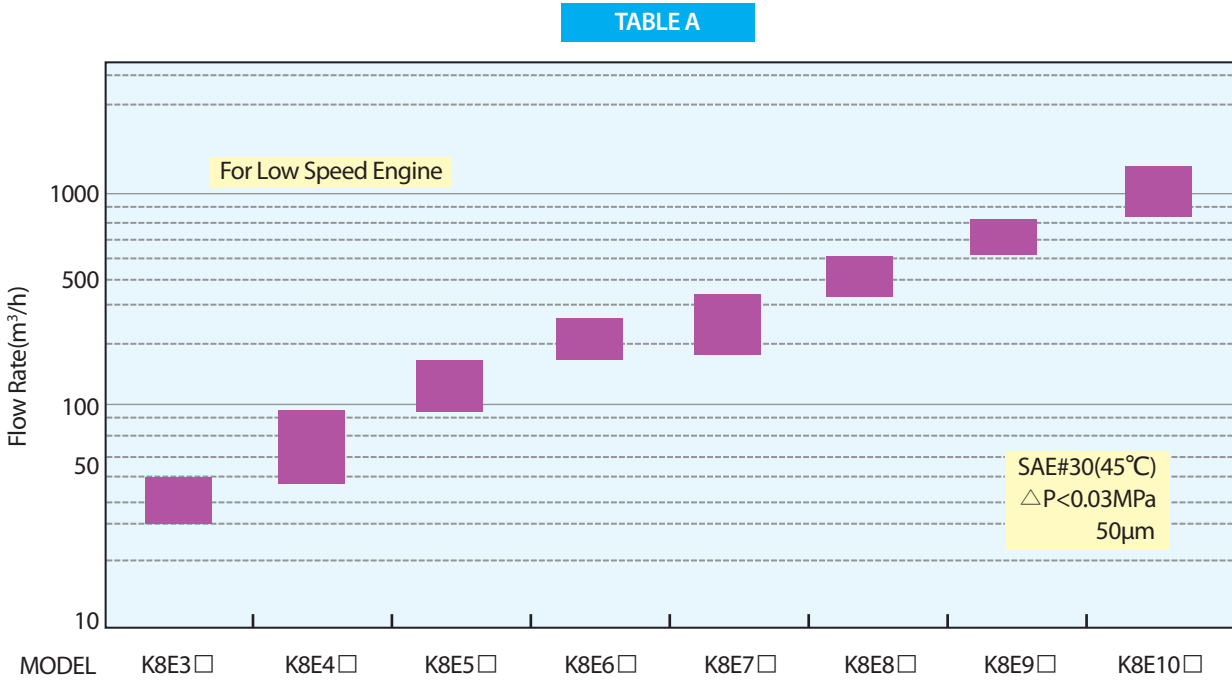
환경보호 노동력 감소 효율 증가
PROTECTING ENVIRONMENT SAVING LABOUR PURSUING EFFICIENCY

NOTCH WIRE ELEMENT TYPE AUTO / MANUAL BACKWASHING LUBRICATING OIL STRAINER

윤활유 필터는 엔진을 보호할 뿐만 아니라 엔진효율을 증가시키고 엔진수명을 연장시키는 중요한 기기입니다. 이것이 확고한 제품의 신뢰성이 중요한 이유입니다.

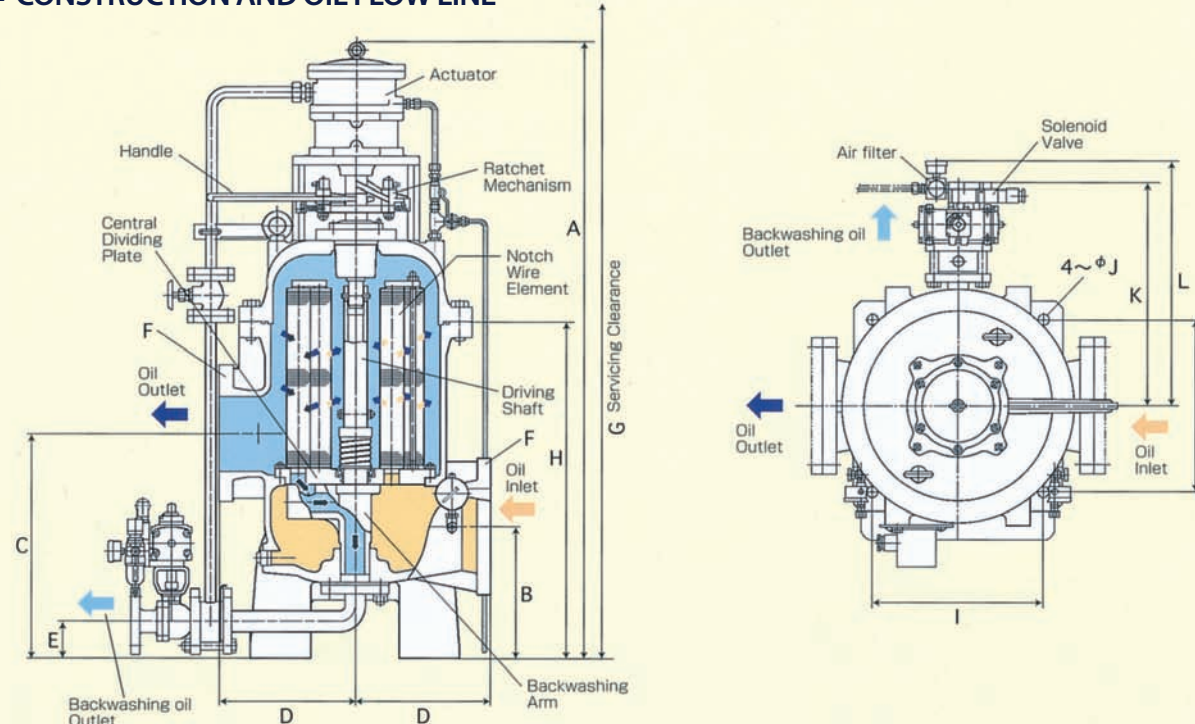
The lube filtrations are regarded as the most critical parts for not only engine protection but defining engine's efficiency and life span. This is why the concrete reliability is crucial.

■ STANDARD FLOW RATE CHART FOR SELECTING MODEL



LUBRICATING OIL STRAINER K8E Series

CONSTRUCTION AND OIL FLOW LINE



MAIN DIMENSIONS

MODEL	DIMENSIONS (m/m)											
	A	B	C	D	E	F	G	H	I	J	K	L
K8E3 H	700	130	190	275	80	JIS10K 100A	1000	430	430x160	19	319	-
// O,Z	870	↑	↑	↑	↑	↑	1200	↑	↑	↑	404	450
K8E4 H	955	270	460	280	75	JIS10K 150A	1100	690	354	23	419	-
// O,Z	1270	↑	↑	↑	↑	↑	1400	↑	↑	↑	460	500
K8E5 H	980	290	485	310	75	JIS10K 150A	1140	675	396	23	443	-
// O,Z	1295	↑	↑	↑	↑	↑	1450	↑	↑	↑	485	530
K8E6 H	1120	320	565	350	75	JIS10K 200A	1300	785	438	23	506	-
// O,Z	1450	↑	↑	↑	↑	↑	1600	↑	↑	↑	548	590
K8E7 H	1225	345	640	400	75	JIS10K 250A	1400	900	509	25	554	-
// O,Z	1540	↑	↑	↑	↑	↑	1720	↑	↑	↑	595	640
K8E8 H	1310	310	760	500	170	JIS10K 300A	1700	1150	594	28	659	-
// O,Z	1610	↑	↑	↑	↑	↑	2100	↑	↑	↑	745	790
K8E9 H	1450	350	880	625	170	JIS10K 350A	1800	1250	742	34	719	-
// O,Z	1700	↑	↑	↑	↑	↑	2100	↑	↑	↑	808	850
K8E10 H	1600	400	950	750	190	JIS10K 400A	2100	1360	934	34	797	-
// O,Z	1850	↑	↑	↑	↑	↑	2400	↑	↑	↑	950	1000

STANDARD SPECIFICATION

MODEL	K8E3~7					K8E8~10		
PRESSURE	MAX. 1.0MPa							
CONTROL SOURCE	100/200V 50/60Hz1Ø							
MATERIAL	FC250					SS400		
WEIGHT (kg)	200	330	380	460	600	850	1200	2000
BACK WASHING RATE	About 5~7% of MAIN FLOW RATE							

STANDARD EQUIPMENT

BACK WASHING METHOD	Manual	Continuous	Automatic
ACTUATOR		●	●
PRESSURE GAUGE	●	●	●
SLUDGE CHECKER	●	●	●
DFF.PRESS.SENSOR			●
CONTROL PANEL			●
SPARE PARTS	●	●	●

NOTCH WIRE & CARTRIDGE TYPE

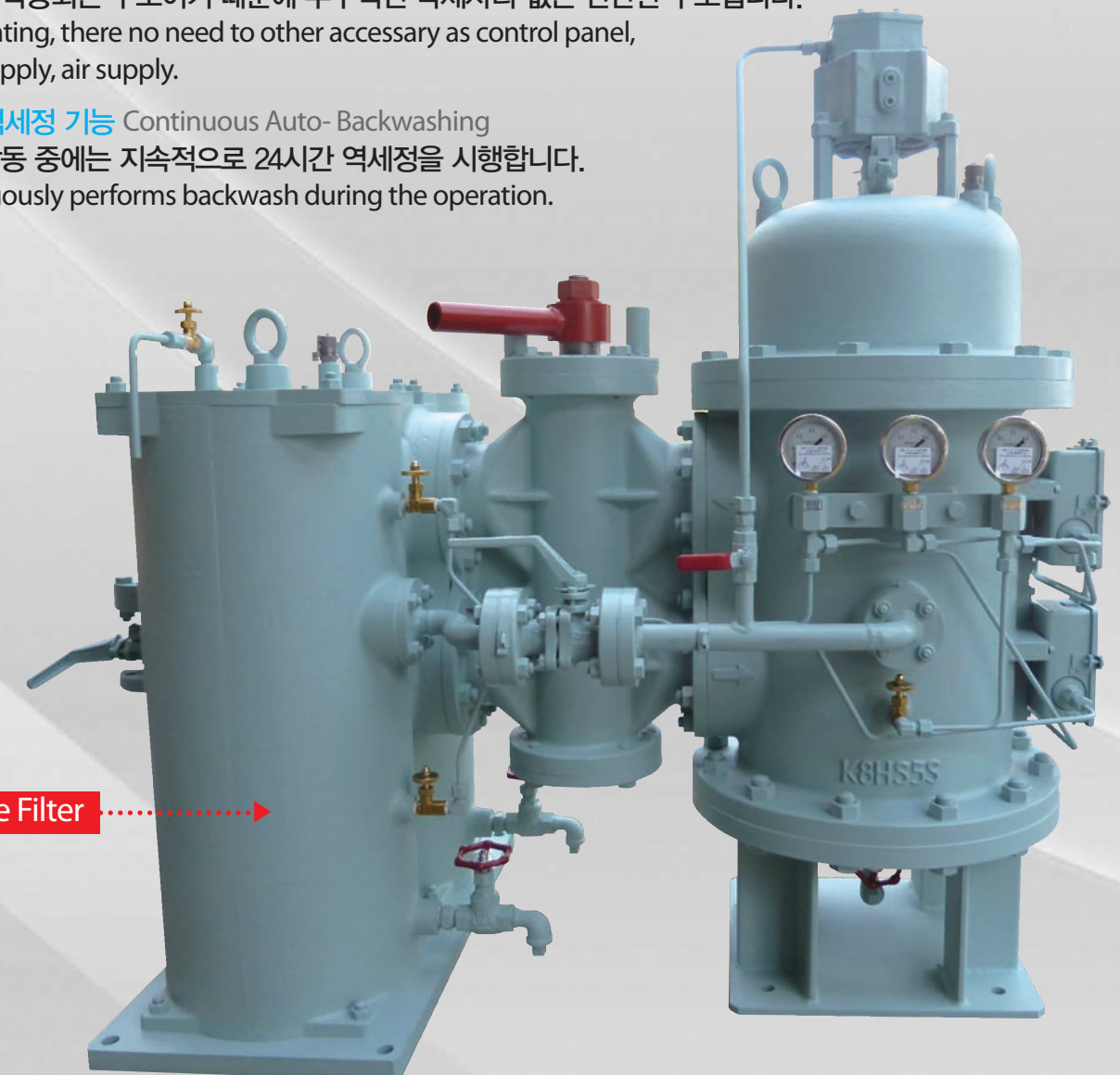
K8HS

AUTO BACKWASHING AND SUPER FINE FILTER TYPE LUBRICATING OIL STRAINER FOR ME ENGINE

I K8HS 장점 K8HS FEATURES

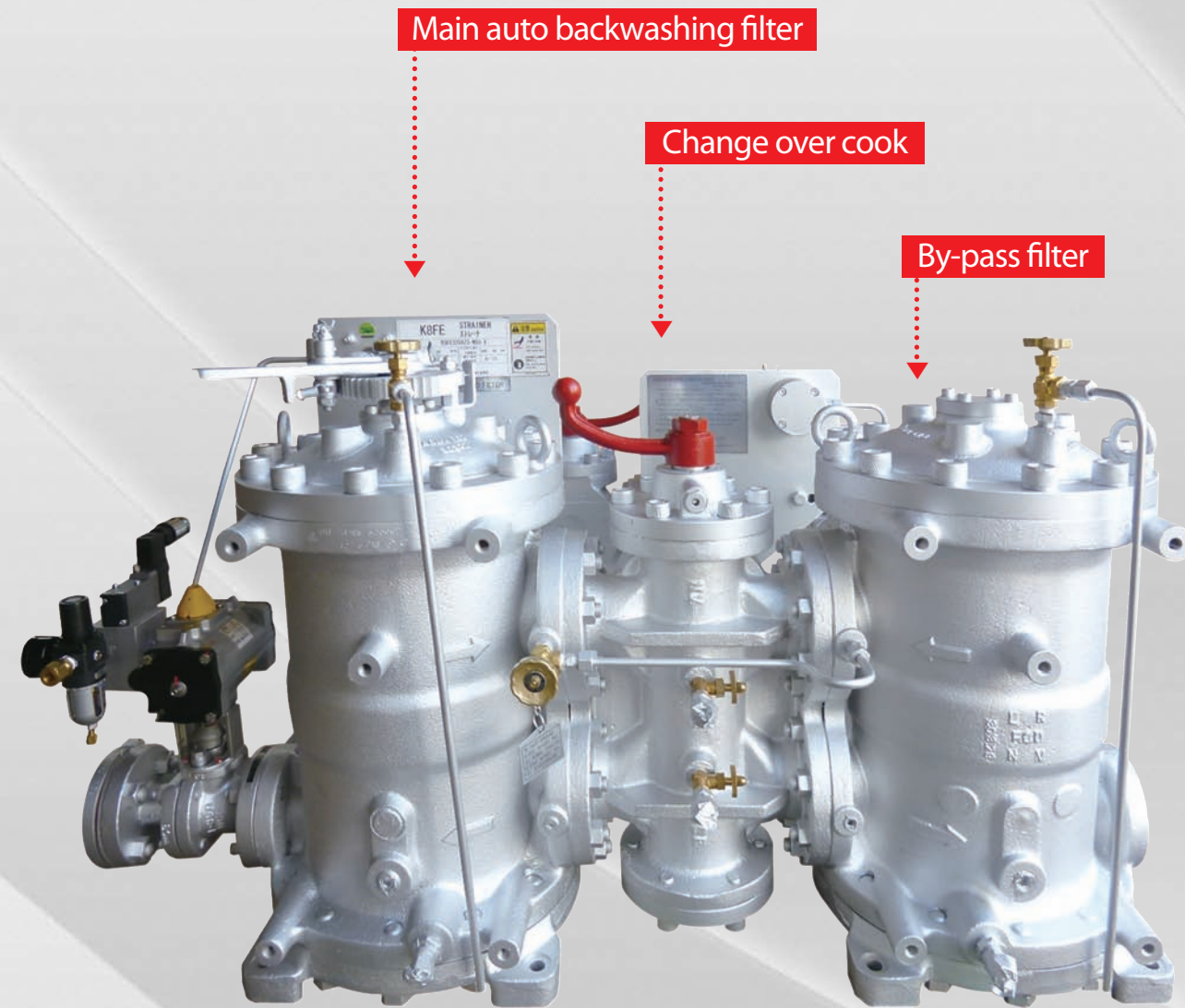
- 고청정력** High cleanness
MAN의 요구사항인 ISO4406 Cleanness code를 만족하는 성능을 가지고 있습니다.
This filter satisfy as MAN's requirement ISO4406 cleanness code for ME engine.
- L.O 품질 개선** L.O in sump tank
ME 엔진 L.O Sump tank의 청정도를 고효율로 유지 개선할 수 있습니다.
Lub. Oil in Sump tank can be removed the contaminant efficiently.
- 경제적 디자인** Economical design
유압으로 작동되는 구조이기 때문에 부수적인 악세사리 없는 간단한 구조입니다.
For operating, there no need to other accessory as control panel, power supply, air supply.
- 지속적 역세정 기능** Continuous Auto- Backwashing
필터가 작동 중에는 지속적으로 24시간 역세정을 시행합니다.
Continuously performs backwash during the operation.

Super Fine Filter



NOTCH WIRE ELEMENT TYPE K8FE

AUTO/MANUAL BACKWASHING TYPE
FUEL OIL STRAINER



환경보호
KEEP CLEAN

노동력 감소
SAVE LABOUR

고효율
HIGH EFFICIENCY

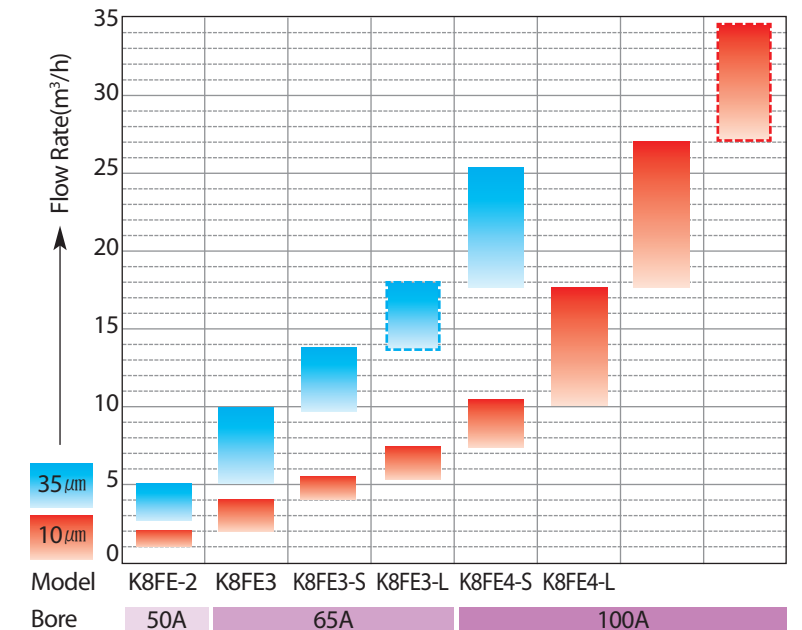
FUEL OIL STRAINER K8FE Series

STANDARD SPECIFICATION

A kind of fuel oil		H.F.O.
Operating pressure		0.25~1.57MPa.
Operating temperature		150°C (Max.)
Power source		AC100~265V
Steam pressure		0.5~0.7 Mpa.
Supplied air		0.3~1.0 Mpa.
Flange rating		JIS 16K
Oil quantity reserved	FE2	Approx. 8 ℓ
	FE3	Approx. 11 ℓ
	FE3-S	Approx. 11 ℓ
	FE3-L	Approx. 13 ℓ
	FE4-S	Approx. 60 ℓ
	FE4-L	Approx. 73 ℓ
	FE4-SL	Approx. 120ℓ
	FE4-LL	Approx. 120ℓ
Dry Weight	FE2	Approx. 105kg
	FE3	Approx. 150kg
	FE3-S	Approx. 155kg
	FE3-L	Approx. 170kg
	FE4-S	Approx. 400kg
	FE4-L	Approx. 410kg
	FE4-SL	Approx. 430kg
	FE4-LL	Approx. 450kg

• Steam jacket with lagging is provided as standard accessory.

STANDARD FLOW RATE CHART FOR SELECTING MODEL



Applied oil : Heavy Fuel Oil (380mm²/s 50°C)
Flow rate for backwashing is designed at less than 10% of main flow rate.
Please contact us when the viscosity of oil is different from mentioned above.
(The velocity of flowing oil tends to be higher when you chose the models indicated above with a dotted line (---))

K8FE 장점 K8FE FEATURES

1. 노치와이어(SUS 316L) 사용으로 인한 강력한 역세정 성능을 발휘합니다.

Powerful backwashing made possible by the Notch Wire Element.

2. 필터 정확도가 10μm까지 모듈화 되어 있습니다.

The Notch Wire Element can be modulated up to 10μm of filtration accuracy.

3. 타이머와 차압 콘트롤 시스템에 의해 작동되어 유지보수 기간이 늘어납니다.

Long-term closed operation made possible by the timer and differential pressure control.

4. 중유 사용시 최대 700mm²/s 와 150도에서도 작동이 가능하게 설계되었습니다.

Heavy fuel oil 700mm²/s. max. 150°C operation temperature.

5. 차압 지시창에는 0.01Mpa 단위로 확인 할 수 있습니다.

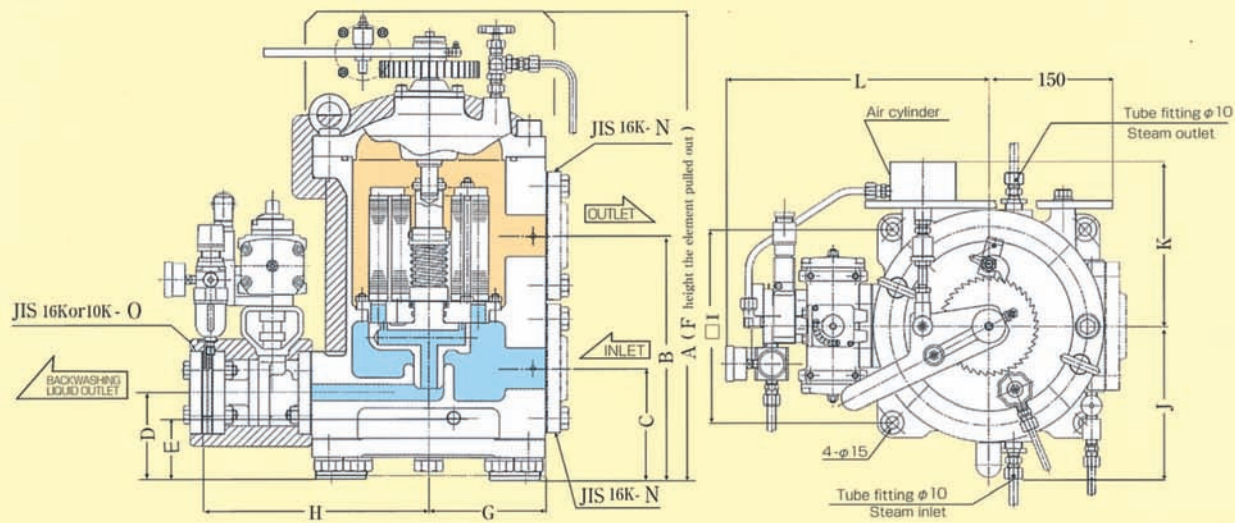
The indicator shows the differential pressure of 0.01Mpa.

6. 선급 적합 제품입니다. (KR, ABS, DNV, BV, NK, CR, LRS, CCS etc.)

Applicable for classification society : (KR, ABS, DNV, BV, NK, CR, LRS, CCS etc.)

FUEL OIL STRAINER K8FE Series

CONSTRUCTION AND OIL FLOW LINE



K8FE AUTOMATIC FILTER



K8FE CUT AWAY VERSION

MAIN DIMENSIONS

Model	Dimensions													Flange size	
	A	B	C	D	E	F	G	*H	I	J	K	L	N	O	
FE2	570	290	130	100	70	670	141	307	233	185	200	330	50A	20A	
FE3	655	330	150	115	75	755	166	338	269	210	225	365	65A	25A	
FE3 -S	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	
FE3 -L	750	↑	↑	↑	↑	850	↑	↑	↑	↑	↑	↑	↑	↑	
FE4 -S	810	415	185	120	80	900	270	423	389	245	280	450	100A	25A	
FE4 -L	915	↑	↑	↑	↑	1050	↑	↑	↑	↑	↑	↑	↑	↑	
FE4 -SL	1315	↑	↑	↑	↑	1580	↑	↑	↑	↑	↑	↑	↑	↑	
FE4 -LL	↑	↑	↑	↑	↑	1680	↑	↑	↑	↑	↑	↑	↑	↑	

The backwashing control is carried out by pneumatically driven based on the timer & differential pressure.
The control air consumption is about 120ℓ/min(ANR) at 0.4MPa.

* H=in case of 16K drain valve

COMPANY OUTLINE

OUTLINE OF COMPANY	Company Name	KANAGAWA KIKI KOGYO CO., LTD.
	Head Office and Factory	19-1, Okamura 8-chome, Isogo-ku, Yokohama, Japan 235-0021 Tel. +81-45-761-0351 Tel. +81-45-753-3800 Sales Dept. (Direct) Fax. +81-45-755-0089
	Kobe Office	Meikai Building, Room 809, 32 Akashi-cho, Chuo-ku, Kobe, 650-0037 Japan Tel. +81-78-321-6400 Fax. +81-78-321-6403 Capital ¥60,000,000 Reijiro Urabe
	President	80
	Employees	10,345m²
	Factory Site Area	4,560m²
	Building Site Area	Feb. 1951
	Established	
PATENT HELD	Domestic patent:12 items (Utility model, Registration of design) Overseas patent:1 item (Registered in 6 countries, including U.K., U.S.A., France, Germany)	
BANK REFERENCE	Sumitomo Mitsui Banking corporation Yokohama Branch The Bank of Yokohama Bandobashi Branch The Bank of Kanagawa Okamura Branch	
SUBSIDIARY FIRM	ROKATECH Co.,Ltd. KANAGAWA ALUMI KAKO Co.,Ltd.	

MAIN CUSTOMERS

Government Offices	Maritime Self-Defense Force	Machinery Manufacturers	Kobe Steel ltd.	Plant Engineering	Toyo Engineering corp.
	The Maritime Safety Agency		Hitachi ltd.		Chiyoda corp.
Shipping Circles	Japan Atomic Energy Research Institute		Toshiba corp.		JGC corp.
			IHI corp.		JFE Engineering corp.
Shipbuilding Companies and Engine Manufacturers	Nippon Yusen K.K.	Petrochemical Industries		Electric Power Companies	Hokkaido, Tohoku, Hokuriku, Tokyo,
	Nippon Suisan Kaisha, Ltd.		Idemitsu Kosan co., ltd.		Chubu, Kansai, Chugoku, Shikoku, Kyushu,
	Mitsui O.S.K. Lines. Ltd.		Nippon Oil corp.		Okinawa, Electric Power companies.
	Kawasaki Kisen Kaisha, Ltd.	Textile Companies	Mitsui Chemicals, incorp.	Food Industries	
	Kuribayashi Steamship co., Ltd.		Mitsubishi Chemical corp.		Yakult Honsha co., ltd.
		Iron and Steel Industries	Showa Shell Sekiyu k.k.		Meiji Dairies corp.
			Sumitomo Chemical co., ltd.		Morinaga Milk Industry co., ltd.
		Trading Companies		Overseas	Hyundai Heavy Industries co., ltd.
					Daewoo Shipbuilding & Marine Engineering co., ltd.
					Samsung Heavy Industry co., ltd.
					Dalian Shipbuilding Industry Company
					Nantong Cosco KHI ship Engineering co., ltd.
					Hanjin Heavy Indutries & Construction co., ltd.
					Union steel Mfg.co., ltd.
					China Shipbuilding corp.
					Shanghai Boasteel Yichang Steel Strip co., ltd.
					Boasteel Iron & Steel co., ltd.
					Benxi Iron & Steel (Group) co., ltd.