

A detailed image of a globe representing Earth, partially submerged in water. The globe is tilted, showing continents and oceans. Water is splashing upwards and outwards from the globe, creating a dynamic and energetic scene. The background is a light blue gradient.

SHINSHIN MACHINERY COMPANY PROFILE

We Plant Water Everywhere on Earth

Brief History



1969 Established in 1969

1977 Technical Alliance with **TAIKO Japan**

1979 Appointed as a localized manufacturer for Korea Electric Power Plant

1981 Technical Alliance with THUNE UREKA in Norway

1981 Agency Agreement with ALLWEILER AG in Germany

1986 Technical Alliance with PCM MOINEAU in France

1987 Technical Alliance with **SULZER** in Switzerland (API 610)

1992 Technical Alliance with **HAMWORTHY** in UK (Marine)

1995 Acquired **ISO 9001** by Lloyd

1997 Obtained **Q Class** license for Nuclear power plant

1997 Acquired a license of **KEPIC**

1999 Acquired a license of **CE Mark**

2003 Completion of large capacity pump test facilities

2011 Acquired **ASME Stamp (N, NPT)**

2014 Acquired **ISO 14001, OHSAS 180001**

2020 Registered as Certified Nuclear Pump Performance Test
Organization by KOFONS

Overview



Brief Company Profile

Established in 1969



Number of Employee

160



Location of Head Office and Factory

Busan, Korea



Sale Volume

USD50 Million



Typical Products

Centrifugal pump, Boiler Feed Water Pump, Main Lubricating Oil Pump
Gear and Screw Pump, Mono



Busan, Korea (Headquarter)



Seoul (Sales Division)

Application



Marine : Over 10,000 pumps per year



Nuclear : Q-class, Seismic, KEPIC Holder



Power Plant : CWP, COP, BFP, GSP, Sump



Petrochemical : API610, ASME 73.1, ISO 2858

Factory Facilities



3200mm Axial Flow Pump Assembly

Power test Facility **50/60 Hz**

6.6KV 4000KVA / 4.0KV 4000KVA

3.3KV 4000KVA / (13.2KV 4000KVA)

6.6KV 2000KVA / 3.3KV 2000KVA

690KV 600KVA / 380KV 600KVA

440KV 1000KVA / 220KV 1000KVA

Water Pump test Facility

5M Square Weir (Up to 430m³/min)

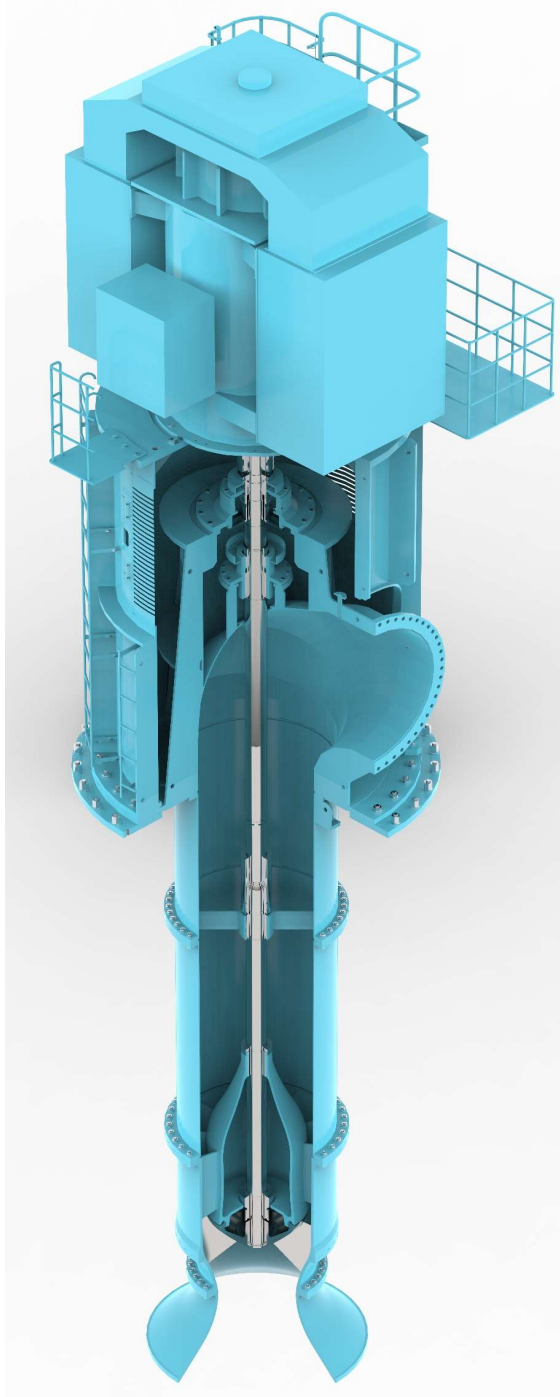
0.9M Square Weir (Up to 11.4m³/min)

3rd Angle Weir (Up to 30m³/min)

5M Square Weir (Up to 430m³/min)

**15M Square Weir (Up to 1100m³/min)
- 60,000 m³/hr (Max.)**

Vertical CWP



SDF-P

VERTICAL PULL OUT / MIXED FLOW PUMPS (SDF-P)

Key Features

Total Head : 10 - 50m

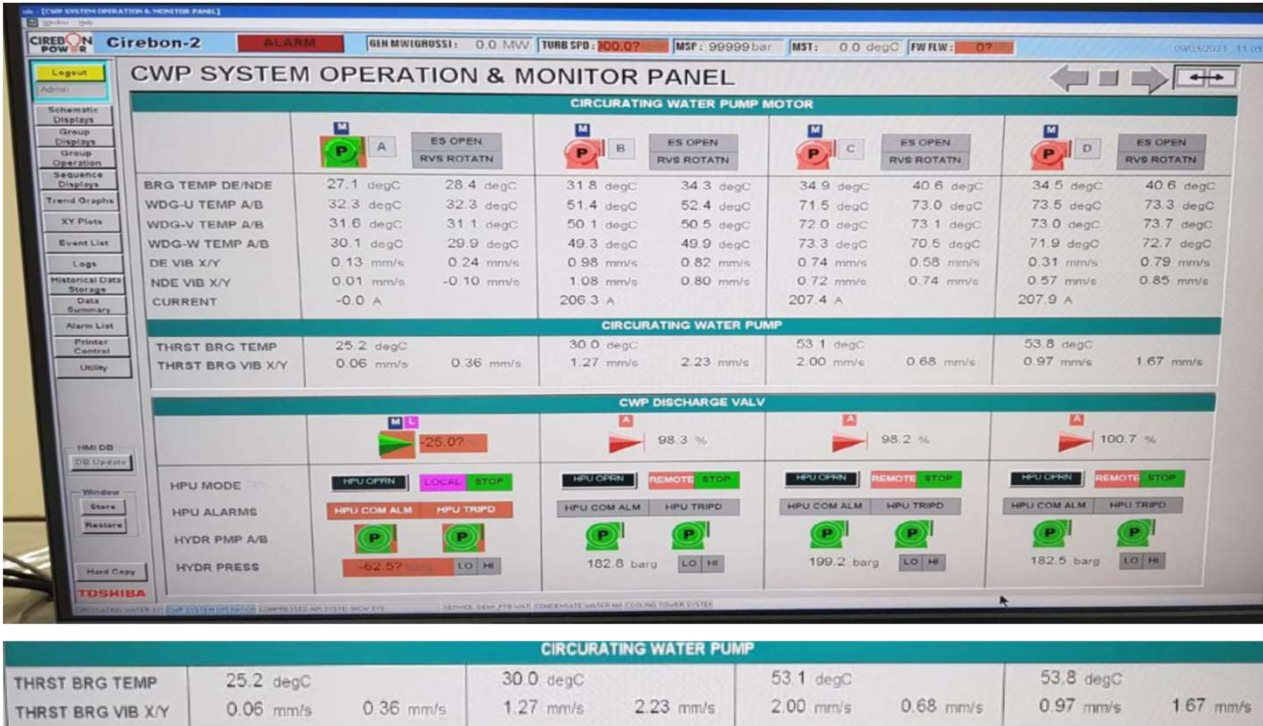
Discharge flow : 50 - 1200m³/min

Bore : 500 - 3000mm

Major References

Country	Project	Model	Flow (m ³ /hr)	Head (m)	kW	P
Indonesia	Riau Project	SDF-V 1500F	19,380	26.0	1,760	12
Indonesia	Indonesia Cirebon II Project (1000MW)	SDF-V 1650B	30,550	31.0	3,400	14
Uzbekistan	UTCC Project (255MW)	SDF-V 1000	7,500	21.5	570	8
Indonesia	KALSEL Project (100MW)	SDF-V 1000	8,030	21.0	650	10
Korea	Hwasung Dongtan 2 (400MW)	SDF-P 1350	12,250	27.0	1,250	14
Korea	Shin-gori Nuclear Power 1,2 (1000MW)	SDF-P 2200	44,280	14.2	2,395	24
Korea	Samcheok Green Power 1,2 (1022MW)	SDF-P 2100 A	39,500	22.1	3,200	22
Korea	PyeokTaek Combined Power 2nd Stage (868MW)	SDF-P 2000 B	34,100	15.0	2,000	22
Korea	Shin-gori Nuclear Power 1,2 (1000MW)	SDF-P 2200	44,280	14.2	2,395	24
Korea	Handong Power (500MW)	SDF-V 1500	21,600	15.6	1,200	18

Vertical CWP (Cirebon CWP)



Site Acceptance Test Result : Vibration (Under 2 mm/sec, 0 to Peak)

HDEC Indonesia Cirebon CWP
1650mm Vertical Pump Performance Testing

Physical Sump Model Study
Clemson Engineering Hydraulics

Sump Model Test

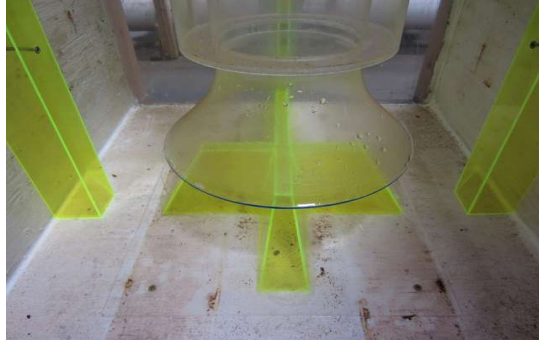
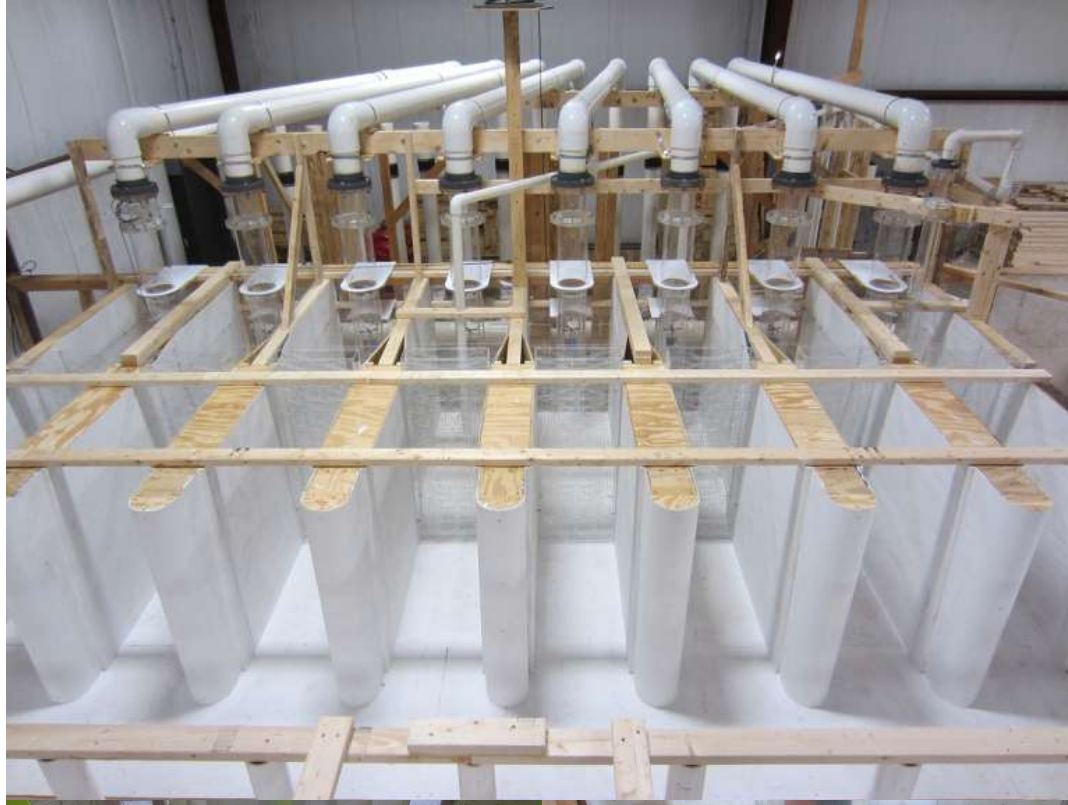


Clemson Engineering Hydraulics (US)

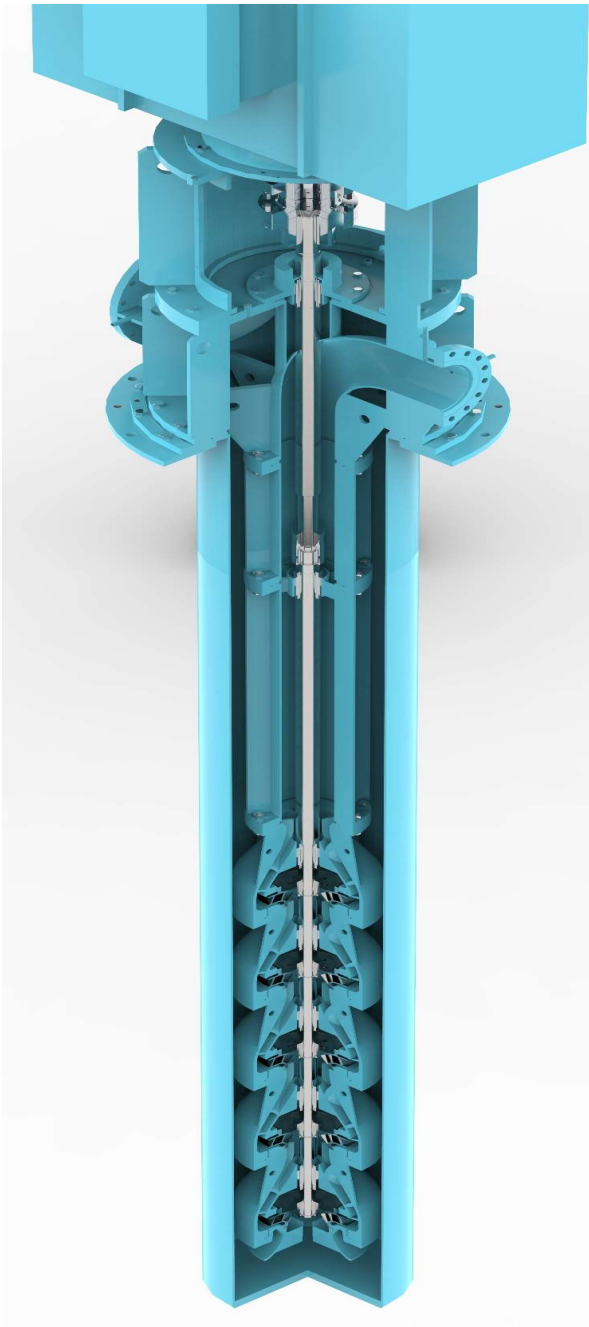
- Over 800 experiences
- Over 20 experiences with Shinshin Machinery
- Total 3 months after PO



Sump Model Test (Intake Design)



Condensate Pump



MLC VERTICAL BARREL MULTI STAGE PUMPS

Key Features

Total Head : 100 - 400m

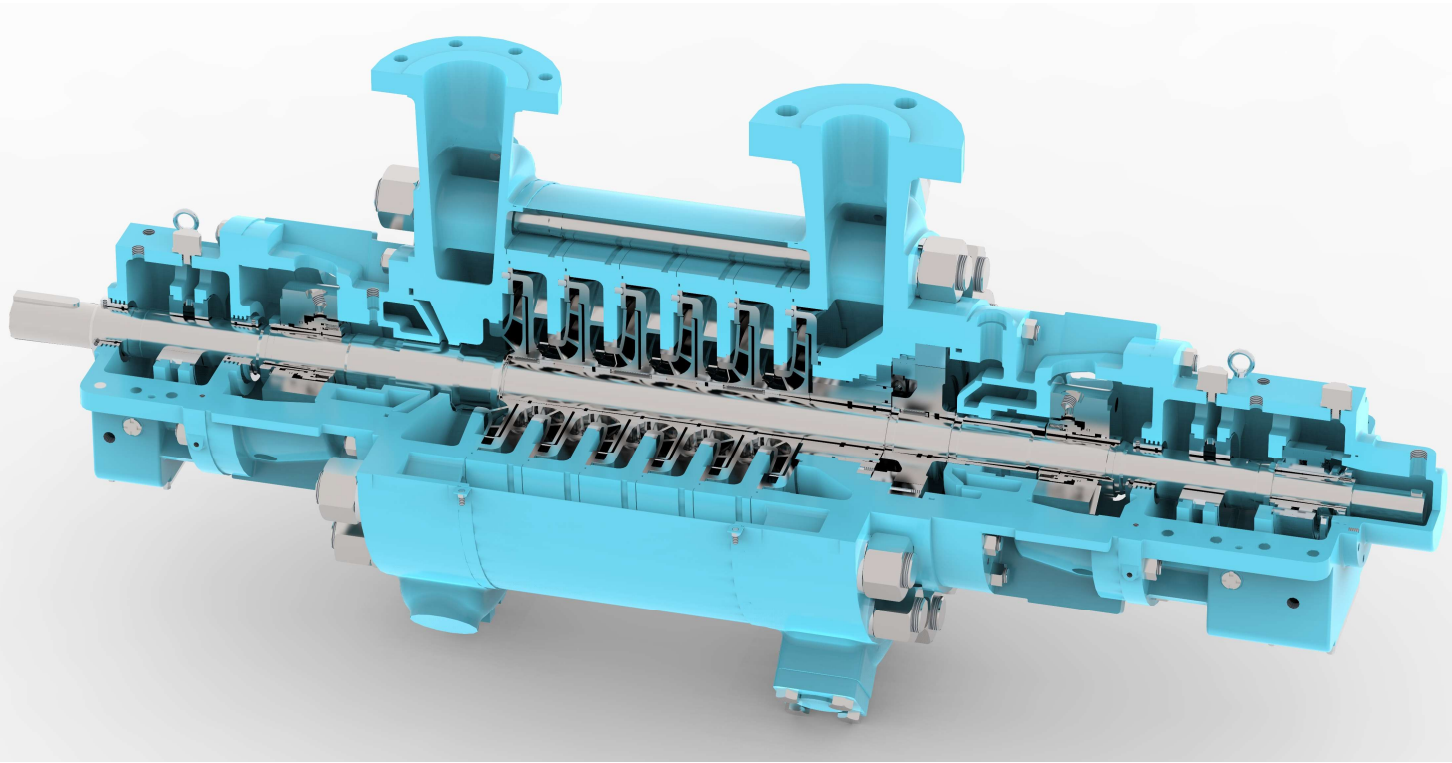
Discharge flow : 50 - 1800m3/hr

Bore : 100 - 800mm

Major References

Country	Project	Pump Type	Flow (m ³ /hr)	Head (m)	Kw	P
Iran	MAZANDARAN II 450 MW SINGLE SHAFT CCPP PJT	MLC 300A x 06S	654	307	830kW	4
Korea	SHIN-SEOCHEON (1000MW)	MLC 400 x 2A	1,151	121	560kW	4
Korea	DAESAN BIOMASS POWER	MLC 250 x 04S	430	235	420	4
Indonesia	MUARA TAWAR (250MW x 2)	MLC 300B x 05S	390	220	400kW	4
Indonesia	KALSELTENG2	MLC 250B x 05S	305	220	290kW	4
Korea	SHIN-PEONGTAEK	MLC 250C x 04S	461	211	420kW	4
Korea	YEONGDONG COAL FIRE POWER PLANT (325MW)	MLC 200C x 08S	335	195	260kW	6

Boiler Feedwater Pump

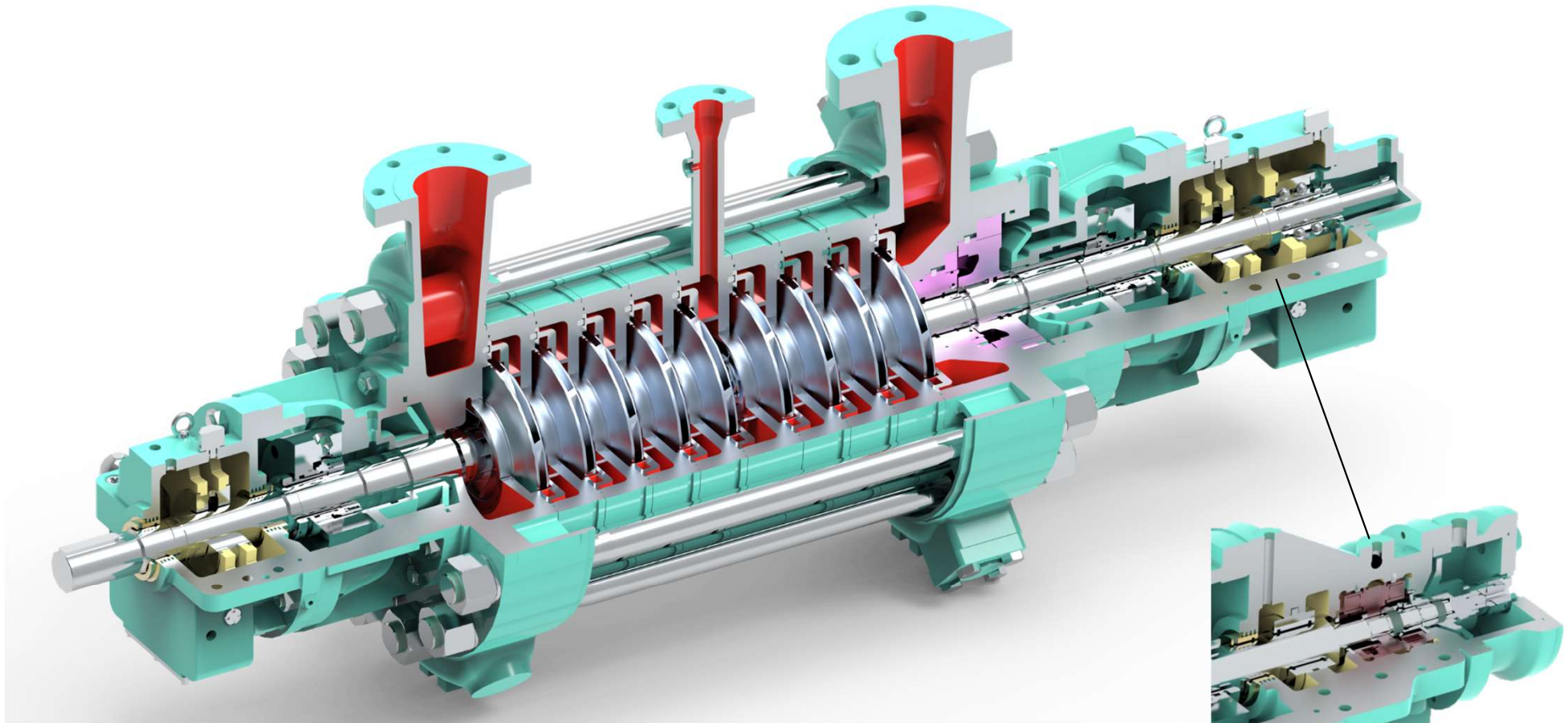


MZ
HORIZONTAL MULTI STAGE (BB4, BB5)

Major References

Owner	Country	Project	Service Name	Pump Type		Flow (m ³ /hr)	Head (m)	Kw	P	Temp(°C)
KEPCO(IWEST)	Korea	Gunsan CCPP HP/IP HRSG	HRSG HP BFP	MZ 100 11S	BB4	184.4	1460.5	1200	2	130
Korea Hydro Nuclear Power	Korea	Shin-Kori Nuclear Power UNIT 3,4	Start-Up Feedwater Pump	GSG 200-400	BB5	545.1	883.9	2000	2	109
POSCO E&C	Korea	Pohang SRF Power Plant	Bolier Feed Water Pump	MX 65 10S	BB4	80.2	780.7	300	2	130
WELCRON	Korea	Daesan SRF Power Plant	Boiler Feed Water Pump for Motor Driven	MZ 100 06S	BB4	190	763	530	2	150
WELCRON	Korea	Daesan SRF Power Plant	Boiler Feed Water Pump for Engine Driven (For Emergency)	MX 100 06S	BB4	107	763	402	2	150
GS E&C	Korea	Environmental Energy in North Gyeongsang Province (SRF)	Boiler Feed Water Pump	MXC 65 07S	BB4	48.6	626.4	185	2	140
GS E&C	Korea	Daegu SRF Power Plant	Bolier Feed Water Pump	MX 100 6S	BB4	164.6	699.3	470	2	140

Boiler Feedwater Pump

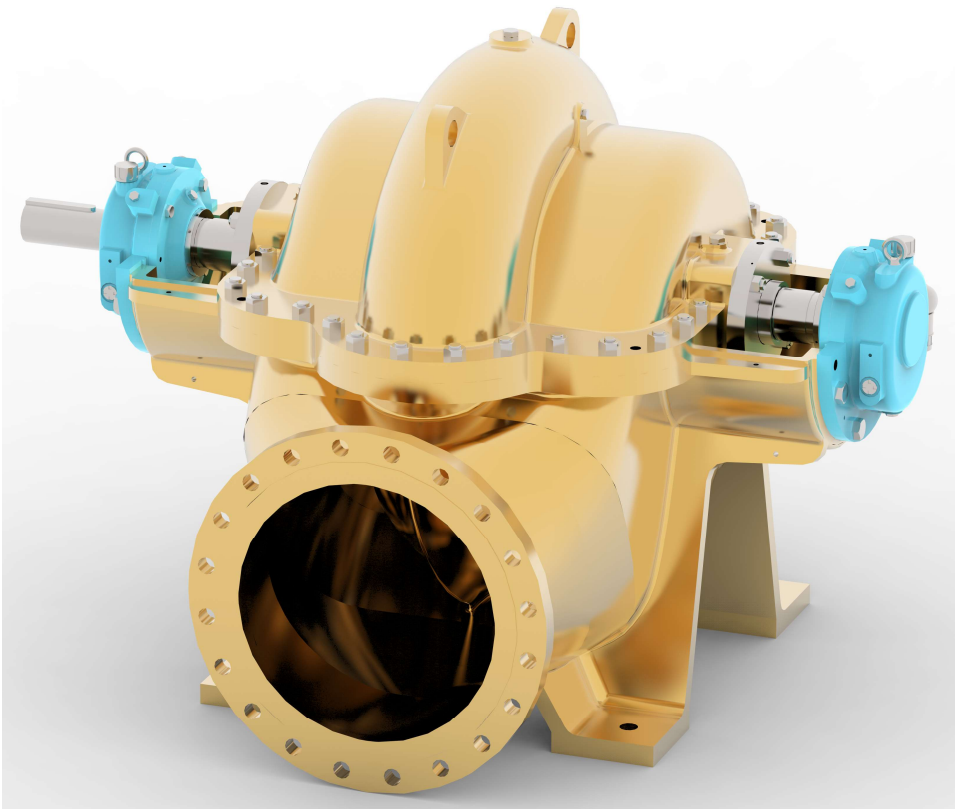


Operating Data

Capacity :	To 8.8 m ³ /min
Head :	To 2200 m
Discharge Pressure :	To 23.5 MpaG
Hydraulic test Pressure :	To 35.3 MpaG
Allowable Temperature :	~ 250 °C

Option
Thrust bearing
Tilting Pad Bearings
& Forced Lubrication

Horizontal CWP / GSP



NDV

HORIZONTAL DOUBLE SUCTION CENTRIFUGAL PUMP

Key Features

Total Head : 10 - 300m

Discharge flow : 3 - 400m³/min

Bore : 150 - 1500mm

Major References

Country	Project	Model	Flow (m ³ /hr)	Head (m)	kW	P
Korea	Gosung Hi Power	NDV 950 A	7,500	9.5	260	16
Korea	Daesan Biomass Power	NDV 700 C1	5,800	25.0	500	8
Korea	Pocheon Combined Heat & Power Cooling Water Pump	NDV 1000 C2	8,500	27.0	850	12
Korea	Samcheok Green Power 1,2 (1022MW)	NDV 1000 B1	8,800	11.0	360	16
Korea	YeongHeung Power (800MW)	NDV 900 C1	5,600	10.0	220	14
Korea	Paju Combined Power	NDV 1200 CX	13,878	29.0	1,400	12
Korea	Yeongwol Combined Power (183MW)	NDV 1200 C	14,200	26.0	1,350	14
Korea	Yeongwol Combined Power (183MW)	NDV 700 CX	4,100	26.0	400	8
Korea	Handong Power (500MW)	NDV 900 A	4,000	7.5	150	14
Korea	Chuncheon District	NDV 900C1	7,250	25.0	630	10

Sump Pump



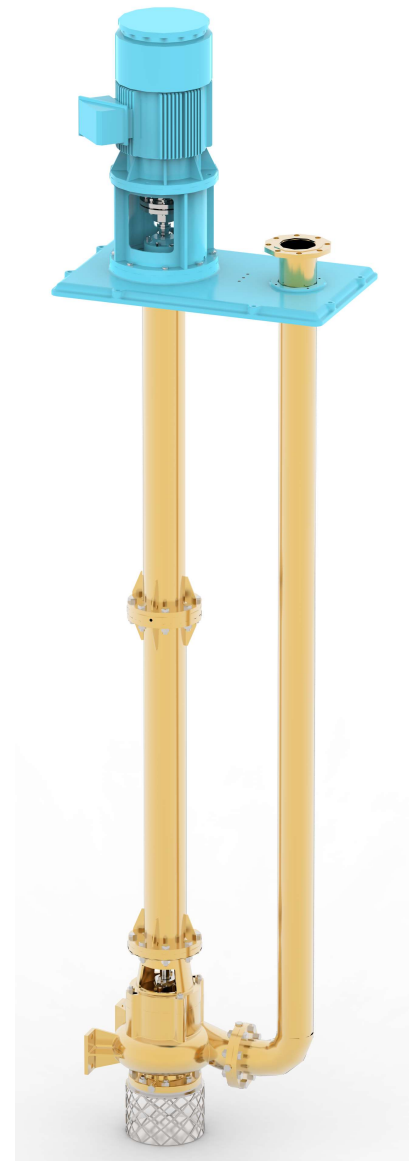
EVP-W

Non clogged, Vertical Vortex Sump

Key Features

Total Head : Up to 80m

Discharge flow : Up to 300 m³/hr



NUCLEAR SERVICE (Q Class)

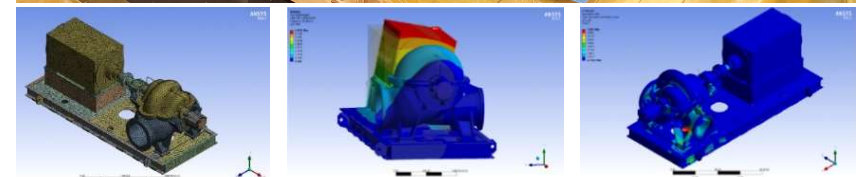
Essential Service Water Pump (Q Class)



Design Feature

- Vertical Pull-out
- Seismic & Environmental Analysis (Q class)
- Robust Design, Super Duplex Material

Safety Related Centrifugal Pump (Q Class)



Design Feature

- Horizontal Double Suction
- Seismic & Environmental Analysis (Q class)
- API 610 for Special Services
- Mild / Harsh Environment

ASME PUMP (Chemical Process)

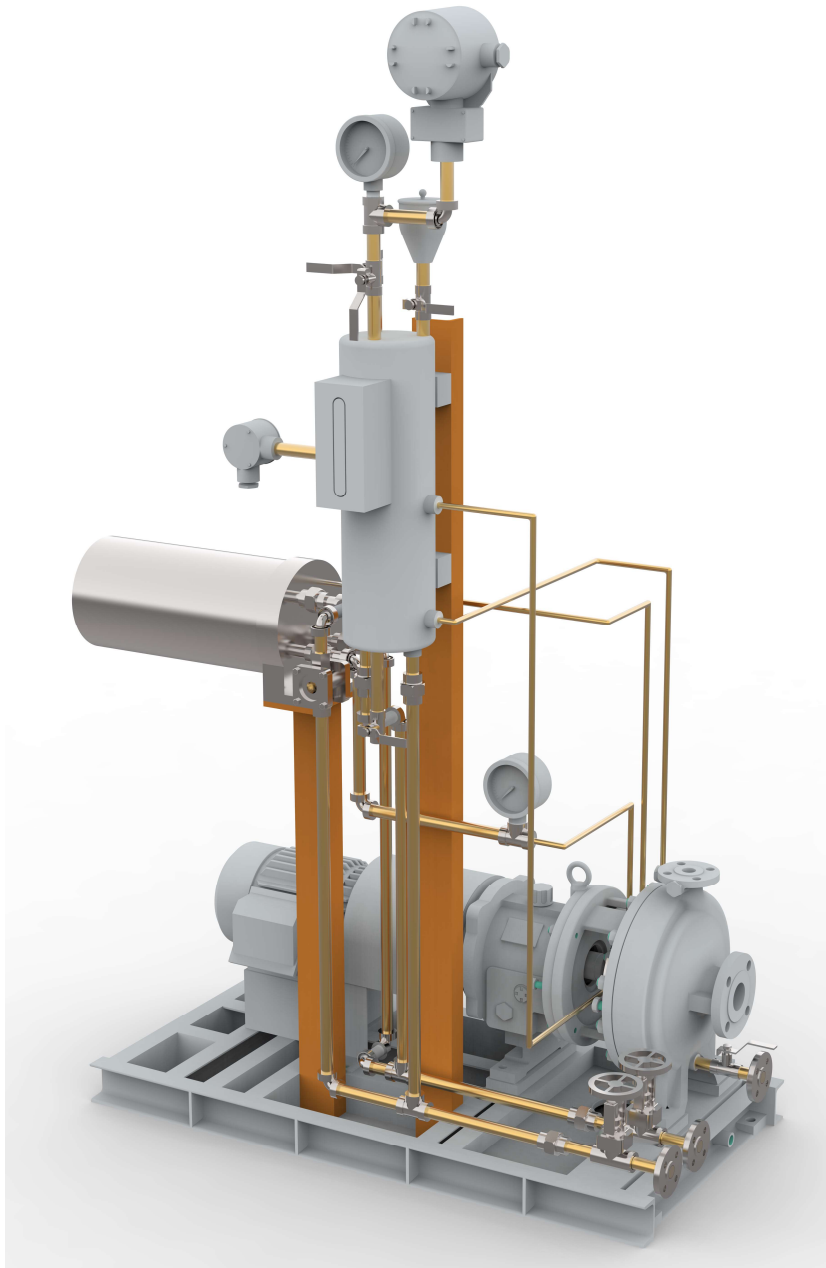
ACP (ASME B73.1)

HORIZONTAL SINGLE SUCTION CENTRIFUGAL PUMP

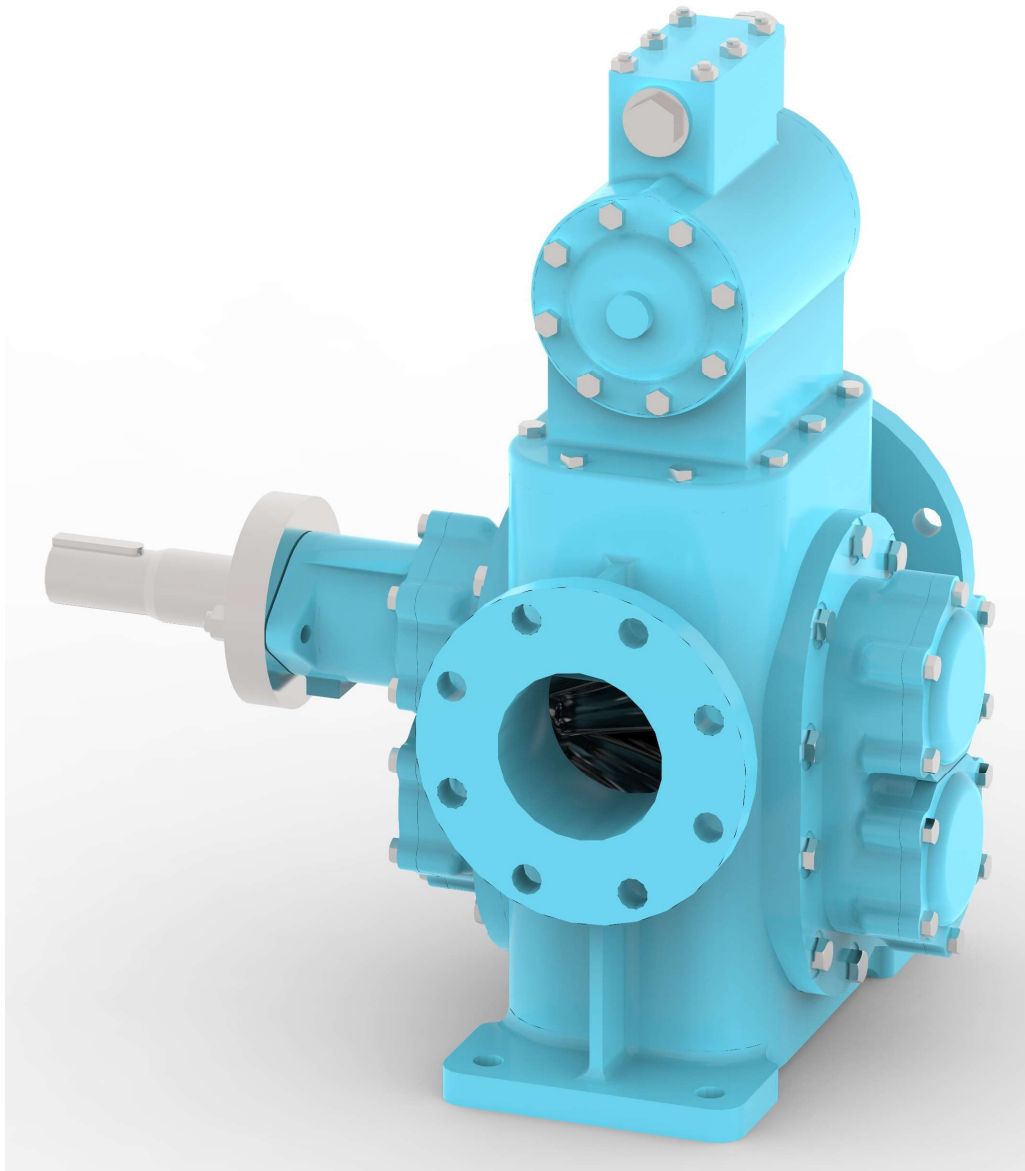
Key Features

ASME B73.1 DESIGN

API 682 SEAL APPLICATION



GEAR PUMP



NLG / NHGH HORIZONTAL GEAR PUMP

Key Features

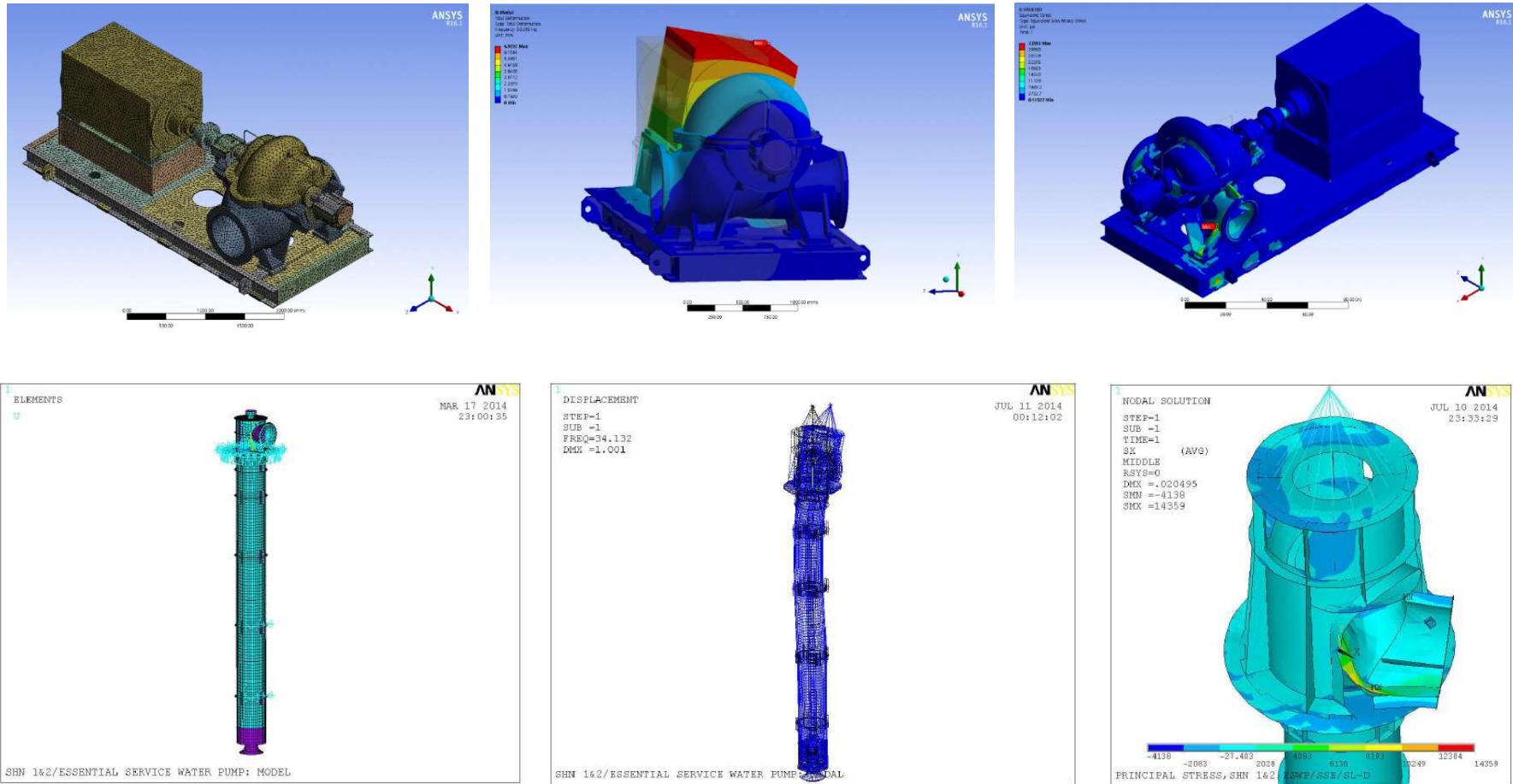
Application in Medium, High Viscous Oil

For Marine, Nuclear Services



Research & Development

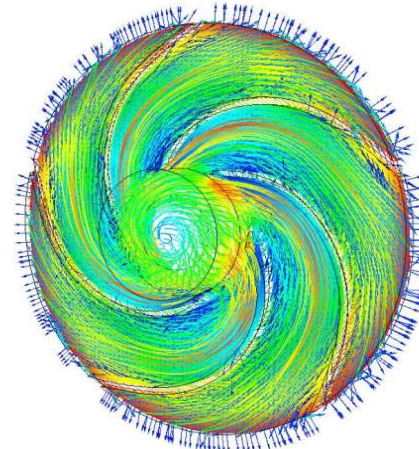
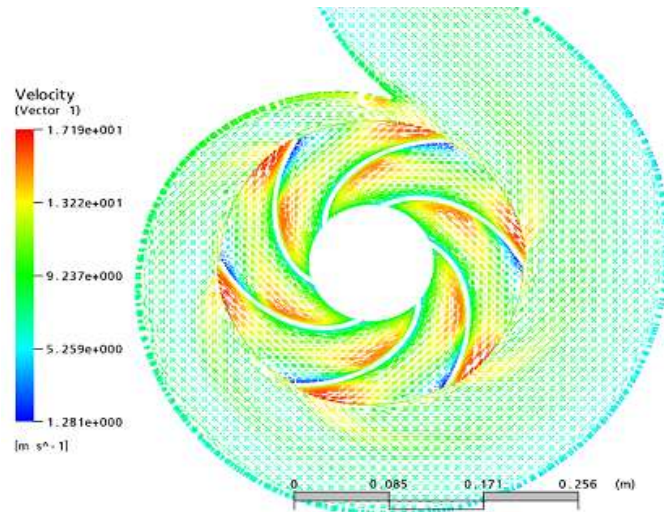
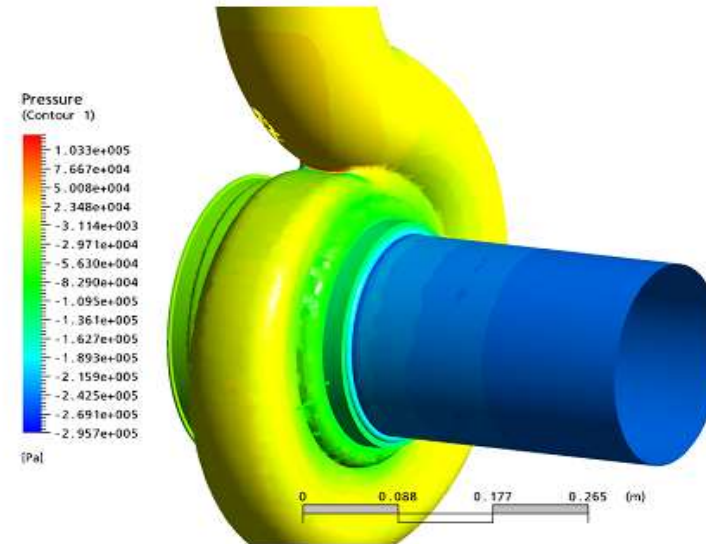
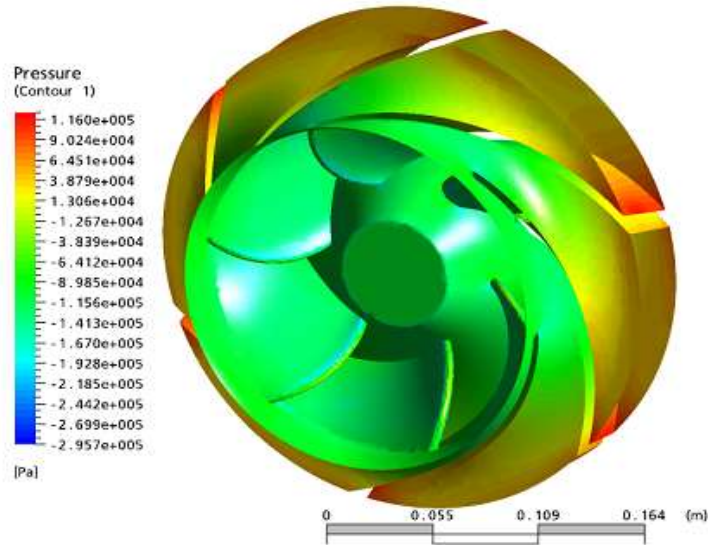
Modal and Structural Analysis



Nuclear Q-class Safety Related Centrifugal Pump (Shin Gori 5,6)

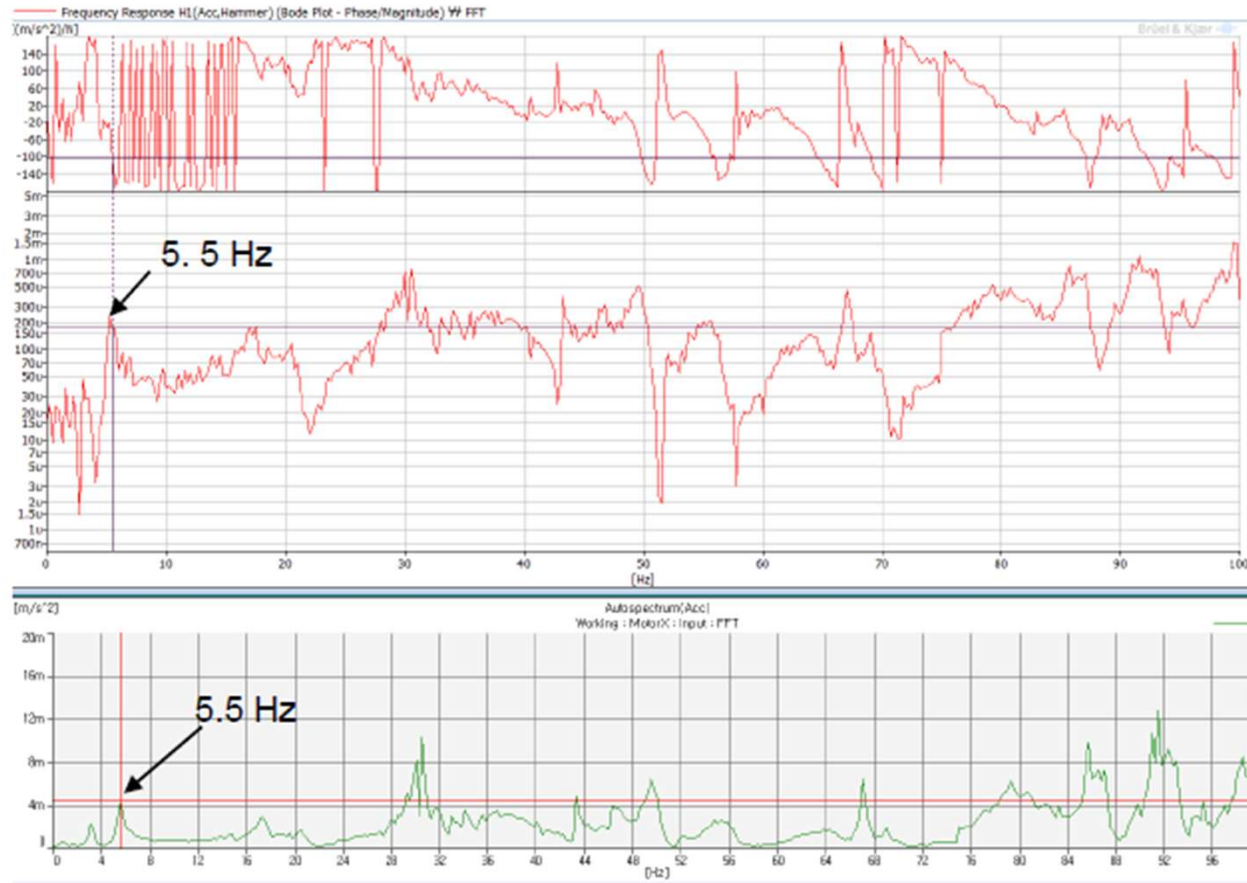
Research & Development

Hydraulic Parts (CFD)



Research & Development

Vibration Impact Test (Fast Fourier Transform) – Reed Frequency



Certificate



Materials Sector
Purchasing Department
Vendors Affairs Division



Vendor Name: SHIN SHIN MACHINERY CO
P.O. Box : 55789
C. R. NO: 1801110028331
E-mail : zainnmalik013@gmail.com

SUBJECT: VENDOR'S REGISTRATION NOTIFICATION

Dear Sir,

We are pleased to inform that your commercial documents have been evaluated and your company is now registered with Saudi Electricity Company under Vendor No (2006945)

You must fill up the prequalification form/ requirements whenever it is applicable, which available on SEC website ([Click Here](#)) in order to deliver materials based on your activity in your Commercial Registration.

To Login E-Bidding System: ([Click Here](#))

When you log on the system as a first time please change your password immediately through e-bidding link which available on SEC webpage.

Notice:

1. This approval should not be construed as commitment by SEC to purchase from you but when needed SEC will invite you to bid and will be evaluated based on the established policies & procedures.
2. If the Bid is considered as a LOW VALUE you must quote through the e-bidding system. However, if the bid is a HIGH VALUE you must submit the quotation in a closed envelope and submit to reception of purchasing sections in operating area's requested the materials.

We would suggest that you maintain a continuous contact with Purchasing Sections in SEC operating areas.
We thank you for your interest to deal with Saudi Electricity Company.

Best Regard,

Localization and Technical Qualification Department
Headquarters ♦ Grnatah Tower (A6) - Gth floor
Riyadh - Saudi Arabia
prc-vendor@se.com.sa

1. Main Seawater Circulating Water Pump
2. Condensate Pump
3. Boiler Feed Pump for CAPP
4. Closed Circuit Cooling Water Pump
5. Fuel Oil Pump
6. Miscellaneous Auxiliary Centrifugal Vertical/Horizontal Pump
7. Positive Displacement Pump



Aramco Asia Korea Limited
아람코 아시아 코리아 유한회사
18F, Seoul Finance Center, 136 Sejong-daero,
Jung-gu, Seoul, 04520, Korea

Tel.: (82 2) 6270-5555
Fax: (82 2) 6270-5592



January 05, 2016
Letter Ctrl # SRK-002-16 / L002-16

SHIN SHIN MACHINERY CO LTD_GIJANG SHOP

85, NONGGONG-GIL, JEONGGWAN-MYEON
GIJANG-GUN, BUSAN, 46020
SOUTH KOREA

Subject: Material Approval; Sales ID: 10057383; Manufacturer ID: 10057305

Dear Mr. Moon-Soo Jung

Aramco Asia Korea is pleased to advise you that your company has been approved to supply the following commodity (9COM):

9COM	DESCRIPTION
6000002295	PUMP; HYDRAULIC TYPE, MFR STANDARD
6000002376	PUMP CENTRIFUGAL; VERTICAL, IN-LINE TYPE, MULTISTAGE STAGE(S), MFR STANDARD

This approval, however, should not be construed as a commitment by Saudi Aramco to purchase from you. However, your company will have the opportunity along with other approved suppliers to respond to requests for submitting proposals in accordance with established policies and procedures.

Aramco Asia Korea would like to take this opportunity to thank you for your interest in doing business with Saudi Aramco. Please use the above referenced Sales ID and Manufacturer ID on all future written correspondence.

Regards,

Hassan R. Al-Dhafiri
Deputy Managing Director
Strategic Sourcing & Suppliers Relationship Management
Aramco Asia Korea Ltd

KEPCO (Korea) – CWP / CEP (Up to 1000MW)



발급번호 : CE92-B56F-4F07-A6ED-5E87

기자재 공급 유자격 등록증

등록번호 : EASYU2019-05553
업체명 : (주)신신기계
공장주소 : 부산광역시 기장군 정관면 농공길 85
품명 : 해수취수펌프(고정익)
운영구분 : 건설(기계)
유효기간 : 2019-01-11 ~ 2022-01-10

비고 :

2019. 01. 11

※ 인터넷으로 발급된 인증서이며, <https://easyu.kospo.co.kr> 에서 원본 확인이 가능합니다.

발급번호 : A3BE-D536-4422-8653-98B3

기자재 공급 유자격 등록증

등록번호 : EASYU2018-05405
업체명 : (주)신신기계
공장주소 : 부산광역시 기장군 정관면 농공길 85
품명 : 복수펌프(1000MW급)
운영구분 : 건설(기계)
유효기간 : 2018-11-19 ~ 2021-11-18

비고 :

2018. 11. 19

※ 인터넷으로 발급된 인증서이며, <https://easyu.kospo.co.kr> 에서 원본 확인이 가능합니다.

Korea Hydro Nuclear Power (Korea) – Q Class



					
유자력공급자 등록증 Certificate of Registration					
등록번호 (Certificate No.) : 201600758 상 호 (Company Name) : (주)신신기계 공장주소 (Factory Location) : 부산광역시 기장군 농공길 85 (정관면, (주)신신기계) 대 표 자 (Chief Executive officer) : 김동수					
[상기 업체는 우리 회사의 공급자관리지침에 따라 심사한 결과 보조기기 [기자재 공급업체로 등록되었음을 증명합니다. This is to certify that according to KHNP's qualification procedure, this company has been registered on KHNP's Approved BOP Vendor List for the below Items.					
NO	품목 코드 Item Code	품 명 Item Description	품질 등급 Quality Class	운용 분야 Field	유효기간 Authorized Period
1	M212	Centrifugal Pump	A	원자력	2016.11.25~2019.11.24
2	M204B	Start-up Feedwater Pump	S	원자력	2016.11.25~2019.11.24
3	M217	Vertical Sump Pump (원자력)	A	원자력	2016.11.25~2019.11.24
4	M218	Submersible Pump	S	원자력	2016.11.25~2019.11.24
5	M258	Fire Pump & Driver	A	원자력	2016.11.25~2019.11.24
2016.11.25					
한국수력원자력(주) KOREA HYDRO & NUCLEAR POWER CO., LTD.					

						
유자력공급자 등록증 Certificate of Registration						
등록번호 (Certificate No.) : 201701528 상 호 (Company Name) : (주)신신기계 공장주소 (Factory Location) : 부산광역시 기장군 농공길 85 (정관면, (주)신신기계) 대 표 자 (Chief Executive officer) : 김종혁						
[상기 업체는 우리 회사의 공급자관리지침에 따라 심사한 결과 보조기기 [기자재 공급업체로 등록되었음을 증명합니다. This is to certify that according to KHNP's qualification procedure, this company has been registered on KHNP's Approved BOP Vendor List for the below Items.						
NO	품목 코드 Item Code	품 명 Item Description	품질 등급 Quality Class	운용 분야 Field	유효기간 Authorized Period	with CGID
1	N202	Safety Related Centrifugal Pumps	Q	원자력	2018.04.09~2022.04.08	
2	M214	D/G Fuel Oil & Lube Oil Transfer Pumps	Q	원자력	2018.04.05~2018.12.18	
3	N203	Containment Spray Pump	Q	원자력	2018.04.09~2022.04.08	
4	N201	Essential Service Water Pump & Screen Wash Pump	Q	원자력	2018.04.09~2022.04.08	
2018.04.18						
한국수력원자력(주) KOREA HYDRO & NUCLEAR POWER CO., LTD.						

					
유자력공급자 등록증 Certificate of Registration					
등록번호 (Certificate No.) : 201600758 상 호 (Company Name) : (주)신신기계 공장주소 (Factory Location) : 부산광역시 기장군 농공길 85 (정관면, (주)신신기계) 대 표 자 (Chief Executive officer) : 김동수					
[상기 업체는 우리 회사의 공급자관리지침에 따라 심사한 결과 보조기기 [기자재 공급업체로 등록되었음을 증명합니다. This is to certify that according to KHNP's qualification procedure, this company has been registered on KHNP's Approved BOP Vendor List for the below Items.					
NO	품목 코드 Item Code	품 명 Item Description	품질 등급 Quality Class	운용 분야 Field	유효기간 Authorized Period
6	M220	해수취수펌프	A	원자력	2016.11.25~2019.11.24
7	M210	CI Sea Water Supply Pump & Circulating Water Screen Wash P/P	S	원자력	2016.11.25~2019.11.24
2016.11.25					
한국수력원자력(주) KOREA HYDRO & NUCLEAR POWER CO., LTD.					

Certificate (ISO, CE Mark)

ISO 9001



OHSAS 18001



ISO 14001



D&B D-U-N-S® Registered™ Listing



Major Customers



Major References

Nuclear Power

OWNER	PROJECT NAME	SERVICE NAME	PUMP MODEL	FLOW(Hr)	TOTAL HEAD	kW	P	Q`TY	DEL. IN
한수원(주) 서울원자력본부	신고리 5&6호기 1차 기기냉각해수펌프 외(N201)	ESSENTIAL SERVICE WATER PUMP	SDF-V 750	4088.4 m³/hr	48.5m	780kW	8P	8	2020.12
한수원(주) 서울원자력본부	신고리 5&6호기 1차 기기냉각해수펌프 외(N201)	ESW SCREEN WASH PUMP	MB-V 65 06S	21.36 m³/hr	70.1m	11kW	4P	8	2020.11
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	Component Cooling Water Pump	NDV 600 E2	4769.4 m³/hr	73.15m	1250kW	6P	4	2020.10
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	Component Cooling Water Pumps	NDV 600 E2	4769.4 m³/hr	73.15m	1250kW	6P	3	2021.02
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	Component Cooling Water Pumps	NDV 600 E2	4769.4 m³/hr	73.15m	1250kW	6P	1	2021.02
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	Spent Fuel Pool A Cooling Pumps	EHC 300 C1	908.4 m³/hr	18.29m	75kW	4P	4	2021.02
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	Essential Chilled Water Pumps	ZAF 200 D	249.6 m³/hr	27.43m	30kW	4P	7	2020.10
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	Spent Fuel Pool B Cooling Pumps	ICP 200-150-250	454.2 m³/hr	17.07m	30kW	4P	4	2021.02
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	CCW Makeup Pumps	ZAF 80 A1	63.6 m³/hr	37.19m	15kW	2P	4	2020.10
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	ECW Makeup Pumps	ZAF 25 B	4.56 m³/hr	45.72m	3.7kW	2P	4	2020.10
한수원(주) 서울원자력본부	신고리 5&6호기 안전등급원심펌프 (N202)	Essential Chilled Water (ECW) Pumps	ZAF 200 D	249.6 m³/hr	27.43m	30kW	4P	1	2021.01

OWNER	PROJECT NAME	SERVICE NAME	PUMP MODEL	FLOW(Hr)	TOTAL HEAD	kW	P	Q`TY	DEL. IN
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Turbine Generator Building Closed Cooling Water Pumps	NDV 600 D1	3180 m³/hr	44.2m	501kW	6P	4	2020.01
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Central Chilled Water Pumps	NDV 400 E1A	1600.2 m³/hr	54.9m	350kW	4P	4	2019.04
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Demineralized Water Transfer Pumps	ZAH 80 C	100.2 m³/hr	105.5m	55kW	2P	4	2020.08
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Wet Lay-up Recirculation Pumps	ZAH 80 C	97.8 m³/hr	106.7m	55kW	2P	4	2019.06
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Spent Fuel Pool B Cleanup Pumps	ZAH 80 C	113.4 m³/hr	103.6m	75kW	2P	4	2019.04
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Condenser Overboard Pump	MTA 150 04S	132 m³/hr	48.8m	30kW	10P	2	2019.05
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Spent Fuel Pool A Cleanup Pumps	ZAH 50 C	79.2 m³/hr	114m	55kW	2P	4	2019.04
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Monitor Tank Pumps	EHC 100 E	63.6 m³/hr	71.6m	37kW	4P	2	2019.05
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Condensate Return Pumps	MB 65 08S	26.4 m³/hr	83.5m	11kW	4P	4	2019.04

OWNER	PROJECT NAME	SERVICE NAME	PUMP MODEL	FLOW(Hr)	TOTAL HEAD	kW	P	Q`TY	DEL. IN
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Reactor Makeup Water Pumps	MB 65 02S	43.14 m³/hr	80.8m	22kW	2P	4	2019.04
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Compound Building Chilled Water Pumps	EHC 200 D	317.94 m³/hr	40.2m	55kW	4P	2	2019.10
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	LRS Seal Water Pumps	MB 32 05S	13.62 m³/hr	105.2m	11kW	2P	2	2019.05
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Floor Drain Pumps	ZAH 50 A	34.2 m³/hr	42.7m	11kW	2P	2	2019.05
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Equipment Waste Pumps	ZAH 50 A	34.2 m³/hr	42.7m	11kW	2P	2	2019.05
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	RLS Drain Tank Pumps	ZAH 40 B	34.08 m³/hr	48.8m	15kW	2P	2	2019.05
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Chemical Waste Pumps	ZAH 40 A	25.2 m³/hr	39.6m	7.5kW	2P	2	2019.05
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Service Water Pumps	ZAH 50 C	63.6 m³/hr	79.2m	30kW	2P	2	2019.10
한수원(주) 서울원자력본부	신고리 5.6 원심펌프(M212)	Decon. Waste Drain Tank Pumps	ZAH 25 B	13.62 m³/hr	39.6m	7.5kW	2P	2	2020.05

OWNER	PROJECT NAME	SERVICE NAME	PUMP MODEL	FLOW(Hr)	TOTAL HEAD	kW	P Q` TY	DEL. IN
한수원(주) 서울원자력본부	신고리 5.6호기 디젤유 및 윤활유 이송펌프 (M214)	EDG Diesel Fuel Oil Transfer Pump	ZAF 40 B1	4.08 m³/hr	21.33m	2.2kW	4P 8	2020.09
한수원(주) 서울원자력본부	신고리 5.6호기 디젤유 및 윤활유 이송펌프 (M214)	Main Turbine Dirty Lube Oil Transfer Pump	HG 40	31.8 m³/hr	2.67kgf/cm²	11kW	8P 2	2019.06
한수원(주) 서울원자력본부	신고리 5.6호기 디젤유 및 윤활유 이송펌프 (M214)	Clean Lube Oil Transfer Pump	HG 40	31.8 m³/hr	5.77kgf/cm²	15kW	8P 1	2020.09
한수원(주) 서울원자력본부	신고리 5.6호기 디젤유 및 윤활유 이송펌프 (M214)	Feedwater Pump Turbine Dirty Lube Oil Transfer Pump	NLG 12	11.36 m³/hr	2.11kgf/cm²	3.7kW	6P 2	2019.06
한울원자력본부	신한울 #1.2 소화펌프 및 구동기기(M258)	DIESEL DRIVEN FIRE PUMP WITH CONTROLLER	NDV 250 E	331.8 m³/hr	112.78m	kW	P 2	2014.07
한울원자력본부	신한울 #1.2 소화펌프 및 구동기기(M258)	SEISMIC CATEGORY FIRE I FIRE PUMP	NDV 80 F	34.2 m³/hr	102.12m	30kW	2P 4	2014.07
한울원자력본부	신한울 #1.2 소화펌프 및 구동기기(M258)	MOTOR DRIVEN FIRE PUMP WITH CONTROLLER	NDV 250 E	323.4 m³/hr	112.78m	185kW	4P 1	2014.07
한울원자력본부	신한울 #1.2 소화펌프 및 구동기기(M258)	MOTOR DRIVEN JOCKEY PUMP	MT 32 04S	11.4 m³/hr	112.78m	11kW	2P 1	2014.07
한울원자력본부	신한울 1&2 디젤연료유 및 윤활유 이송펌프 (M214)	DIESEL FUEL OIL TRANSFER PUMP	ZAF 40 B	4.08 m³/hr	19.81m	2.2kW	4P 8	2013.05
한울원자력본부	신한울 1&2 디젤연료유 및 윤활유 이송펌프 (M214)	MAIN TURBINE DIRTY LUBE OIL TRANSFER PUMP	NLG 30	29.52 m³/hr	2.462kgf/cm²	7.5kW	6P 2	2014.02
한울원자력본부	신한울 1&2 디젤연료유 및 윤활유 이송펌프 (M214)	FEEDWATER PUMP TURBINE DIRTY LUBE OIL TRANSFER PUMP	NLG 10	9.08 m³/hr	2.392kgf/cm²	3.7kW	6P 2	2014.06

Major References

Vertical CWP

Major Reference (Vertical CWP)



No.	Project Name	Owner	Item	Year
1	Samchok 1,2	KOSPO	CWP	2014
2	Pyeongtaek 2nd	CWP	CWP	2014
3	Shin kori (nuclear)	KHNP	CWP	2008
4	Indonesia Cirebon	HDEC	CWP	2019
5	Indonesia Riau	Lotte E&C	CWP	2020

Major Reference (Vertical CWP)

Samcheok CWP

Contractor : KOSPO (Korea)

39,500m³/hr x 22.1m (2100A)



Major Reference (Vertical CWP)

Pyeoktaek CWP

Contractor : CWP (Korea)

34,300m³/hr x 16m (2000A)

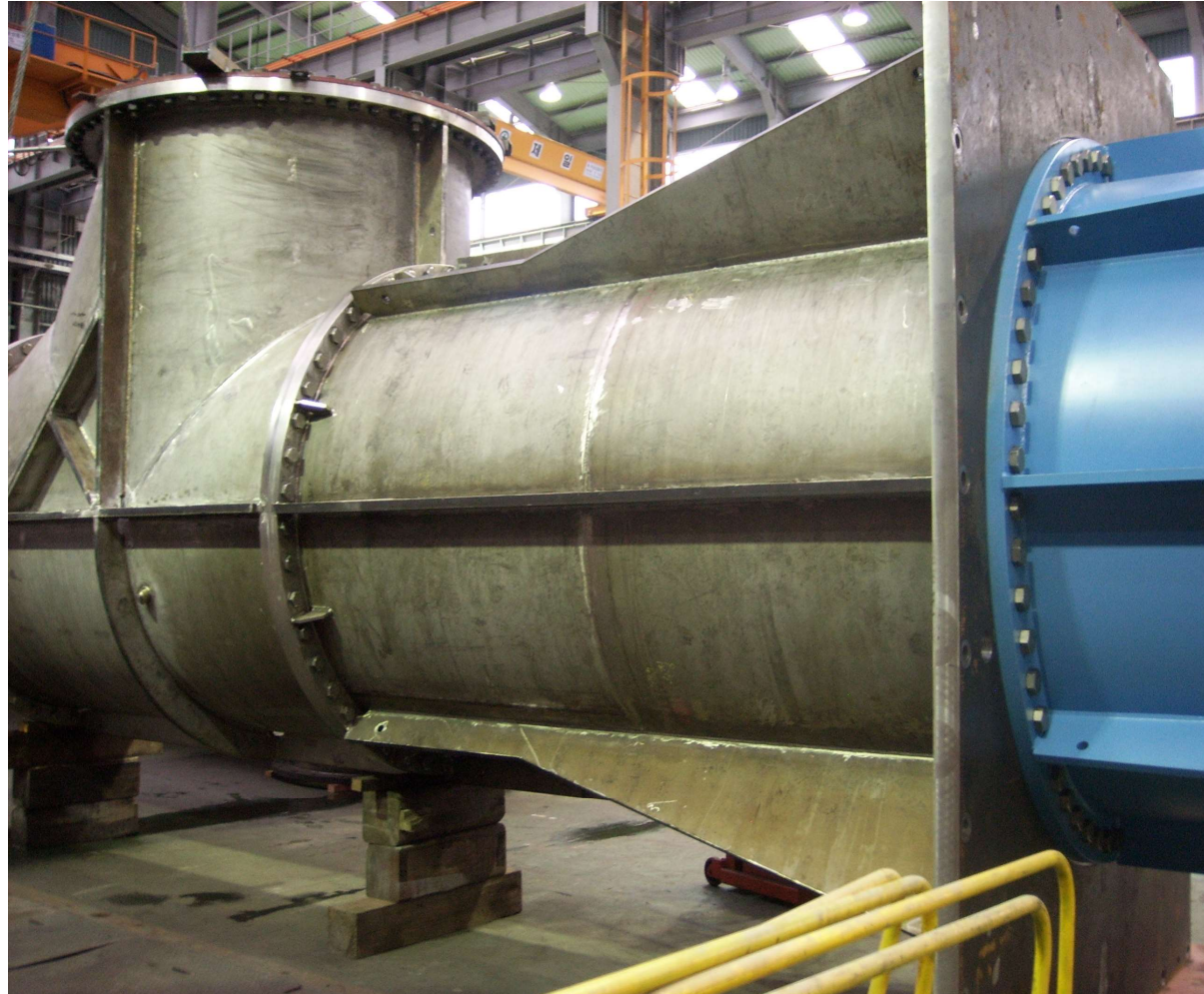


Major Reference (Vertical CWP)

Shin-kori 1,2 Nuclear CWP

Contractor : KHNP (Korea)

44,280m³/hr x 14.17m (2200A)



Major Reference (Vertical CWP)

E-Tech Seagull CWP

Contractor : E-Tech E&C (Korea)

17,500m³/hr x 33.5m (1500A)



Country	Project	Service Name	Model	Flow (m³/hr)	Head (m)	kW	P	Q'TY	Delivery	Physical Model Study	Material (Casing)	PUMP TYPE
Indonesia	Riau Project	CIRCULATING WATER PUMP	SDF-V 1500F	19,380	26.0	1,760	12	2	2020.02	O	A48 CL40	Vertical Wet Pit , Non Pull out
Indonesia	Indonesia Cirebon II Project (1000MW)	CIRCULATING WATER PUMP	SDF-V 1650B	30,550	31.0	3,400	14	4	2019.10	O	A743 CF3MN	Vertical Wet Pit , Non Pull out
Uzbekistan	UTCC Project (255MW)	CIRCULATING WATER PUMP	SDF-V 1000	7,500	21.5	570	8	4	2018.11	O	A743 CF3MN	Vertical Wet Pit , Non Pull out
Indonesia	KALSEL Project (100MW)	CIRCULATING WATER PUMP	SDF-V 1000	8,030	21.0	650	10	4	2017.10	O	A48 CL30	Vertical Wet Pit , Non Pull out
Korea	Hwasung Dongtan 2 (400MW)	MAIN CIRCULATING WATER PUMP	SDF-P 1350	12,250	27.0	1,250	14	5	2016.10	O	A216 WCB	Vertical Wet Pit , Pull out
Korea	Yongnam Power	CIRCULATING WATER PUMP	SDF-P 1350A	18,200	19.4	1,250	14	2	2016.10	O	A743 CF3MN	Vertical Wet Pit , Pull out
Korea	Anyang Combined Power	MAIN CIRCULATING WATER PUMP	SDF-P 1100	10,450	27.0	1,050	12	4	2017.02	O	A216 WCB	Vertical Wet Pit , Pull out
Korea	LP Steam Renewal Project (Gunjang Energy)	COOLING WATER PUMP	SDF-V 800C	5,000	40.0	750	8	3	2017.11	O	A216 WCB	Vertical Wet Pit , Non Pull out
Korea	Seagull Project (250MW)	COOLING WATER PUMP	SDF-V 1500E	17,500	33.5	2,200	14	3	2014.06	O	A216 WCB	Vertical Wet Pit , Non Pull out
Korea	Shin-gori Nuclear Power 1,2 (1000MW)	CIRCULATING WATER PUMP	SDF-P 2200	44,280	14.2	2,395	24	1	2015.12	O		Vertical Wet Pit , Pull out
Korea	Samcheok Green Power 1,2 (1022MW)	CIRCULATING WATER PUMP	SDF-P 2100 A	39,500	22.1	3,200	22	8	2014.08	O	A743 CF3MN	Vertical Wet Pit , Pull out
Korea	Samcheok Green Power 1,2 (1022MW)	SEAWATER COOLING WATER PUMP	SDF-V 750 A	4,900	20.0	400	8	2	2014.08	O	B148 C95500	Vertical Wet Pit , Non Pull out
Korea	PyeokTaek Combined Power 2nd Stage (868MW)	SEA WATER LIFT PUMPS	SDF-P 2000 B	34,300	16.0	2,100	22	2	2014.03	O	A743 CF3MN	Vertical Wet Pit , Pull out
Korea	PyeokTaek Combined Power 2nd Stage (868MW)	CIRCULATING WATER PUMP	SDF-P 2000 B	34,100	15.0	2,000	22	2	2014.03	O	A743 CF3MN	Vertical Wet Pit , Pull out
Korea	Yangju Distribution	AUX. COOLING WATER PUMP	SDF-P 700 A	3,200	36.0	450	6	2	2012.12	O	A216 WCB	Vertical Wet Pit , Pull out
Korea	Yangju Distribution	MAIN COOLING WATER PUMP	SDF-P 1600 A	17,500	38.0	2,400	14	3	2012.12	O	A216 WCB	Vertical Wet Pit , Pull out
Korea	Incheon Combined Power SLP & CWP	CIRCULATING WATER PUMP	SDF-V 1500	21,402	8.3	850	20	4	2008.10		A743 CF3MN	Vertical Wet Pit , Non Pull out
Korea	Incheon Combined Power SLP & CWP	SEA WATER LIFT PUMPS	SDF-V 1500	22,340	12.4	950	18	4	2008.09		A743 CF3MN	Vertical Wet Pit , Non Pull out
Korea	Shin-gori Nuclear Power 1,2 (1000MW)	CIRCULATING WATER PUMP	SDF-P 2200	44,280	14.2	2,395	24	8	2008. 04	O		Vertical Wet Pit , Pull out
Korea	Handong Power (500MW)	CIRCULATING WATER PUMPS	SDF-V 1500	21,600	15.6	1,200	18	8	2007.11	O	A743 CF3MN	Vertical Wet Pit , Pull out
Korea	Southern Jeju Power	SEAWATER CIRCULATING WATER PUM P	SDF-V 1000	15,900	18.6	871	16	2	2006.03	O		Vertical Wet Pit , Non Pull out

Major References

Horizontal CWP

Country	Project	Service Name	Model	Flow (m³/hr)	Head (m)	kW	P	Q'TY	Delivery	Physical Model Study	Material (Casing)	PUMP TYPE
Korea	Gosung Hi Power	SEA WATER BOOSTER PUMP	NDV 950 A	7,500	9.5	260	16	2	2019.05		A743 CF3M	Horizontal, Centrifugal
Korea	Daesan Biomass Power	CIRCULATING WATER PUMP	NDV 700 C1	5,800	25.0	500	8	3	2019.08	O	A351 CF8	Horizontal, Centrifugal
Korea	H-PE1 CWP Project	CIRCULATING WATER PUMP	NDV 600 D	2,800	53.0	520	6	3	2018.09	O	A216 WCB	Horizontal, Centrifugal
Korea	HC2 Project	CIRCULATING WATER PUMP	NDV 600 E	3,000	55.0	580	6	2	2019.01	O	A48 CL30	Horizontal, Centrifugal
Korea	Pocheon Combined Heat & Power Cooling Water Pump	COOLING WATER PUMP	NDV 1000 C2	8,500	27.0	850	12	2	2017.03	O	A48 CL30	Horizontal, Centrifugal
Korea	Samcheok Green Power 1,2 (1022MW)	SEA WATER BOOSTER PUMP	NDV 1000 B1	8,800	11.0	360	16	2	2014.02		A743 CF3M	Horizontal, Centrifugal
Korea	YeongHeung Power (800MW)	SEA WATER BOOSTER PUMP	NDV 900 C1	5,600	10.0	220	14	2	2012.10		A743 CF3M	Horizontal, Centrifugal
Korea	Paju Combined Power	MAIN COOLING WATER PUMP	NDV 1200 CX	13,878	29.0	1,400	12	3	2009.10	O	A216 WCB	Horizontal, Centrifugal
Korea	Yeongwol Combined Power (183MW)	MAIN CIRCULATING WATER PUMP	NDV 1200 C	14,200	26.0	1,350	14	3	2009.06	O	A48 CL30	Horizontal, Centrifugal
Korea	Yeongwol Combined Power (183MW)	AUX. COOLING WATER PUMP	NDV 700 CX	4,100	26.0	400	8	2	2009.06	O	A48 CL30	Horizontal, Centrifugal
Korea	Handong Power (500MW)	SEA WATER BOOSTER PUMP	NDV 900 A	4,000	7.5	150	14	2	2007.05		A743 CF3M	Horizontal, Centrifugal
Korea	Chuncheon District	MAIN CIRCULATING WATER PUMP	NDV 900C1	7,250	25.0	630	10	3	2016.03	O	A216 WCB	Horizontal, Centrifugal

Major References

BFP

Owner	Country	Project	Service Name	Pump Type		Flow (m³/hr)	Head (m)	Kw	P	Q'ty	Temp(°C)	Delivery
WELCRON	Korea	Daesan SRF Power Plant	Boiler Feed Water Pump for Motor Driven	MZ 100 06S	BB4	190	763	530	2	2	150	2019.10
WELCRON	Korea	Daesan SRF Power Plant	Boiler Feed Water Pump for Engine Driven (For Emergency)	MX 100 06S	BB4	107	763	402	2	1	150	2019.08
GS E&C	Korea	Environmental Energy in North Gyeongsang Province (SRF)	Boiler Feed Water Pump	MXC 65 07S	BB4	48.6	626.4	185	2	4	140	2018. 07
WELCRON	Iran	Pasargad Qeshm CHP & DESALINATION IN IRAN HRSG	HRSG(GE5001A/B) LP FEED WATER PUMP	MB 65 05S	BB4	37	153.7	30	2	6	85	2018. 04
WELCRON	Iran	Pasargad Qeshm CHP & DESALINATION IN IRAN HRSG	HRSG(GE5001A/B) MP FEED WATER PUMP	MXC 40 11S	BB4	28	367.8	75	2	6	200	2018. 04
WELCRON	Iran	Pasargad Qeshm CHP & DESALINATION IN IRAN HRSG	HRSG(GE6541) LP FEED WATER PUMP	MB 80 04S	BB4	49.8	154	45	2	3	85	2018. 04
WELCRON	Iran	Pasargad Qeshm CHP & DESALINATION IN IRAN HRSG	HRSG(GE6541) MP FEED WATER PUMP	MXC 65 06S	BB4	42.2	368.3	90	2	3	200	2018. 04
POSCO E&C	Korea	Pohang SRF Power Plant	Bolier Feed Water Pump	MX 65 10S	BB4	80.2	780.7	300	2	2	130	2017. 06
POSCO E&C	Korea	Pohang SRF Power Plant	Emergency Feed Water Pump	MX 40 12S	BB4	13.5	716.6	110	2	1	130	2017. 06
GS E&C	Korea	Daejeon SRF Power Plant	Bolier Feed Water Pump	MXC 65 11S	BB4	65	920.9	290	2	2	143	2017. 03
GS E&C	Korea	Daejeon SRF Power Plant	Bolier Circulation Pump	ZF 200 D	BB4	265.2	34.5	37	4	2	287	2017. 03
Korin Industry	Indonesia	Balikpapan BFP	Boiler Feedwater Pump	MXA 65 07S	BB4	72	360	-	-	1	150	2016.06
WELCRON	Morocco	SAFI IPP IN MOROCCO (Daewoo E&C)	Bolier Feed Water Pump	MZ 100 04S	BB4	163.23	344.2	240	2	2	130	2016. 04
GS E&C	Korea	Daegu SRF Power Plant	Bolier Feed Water Pump	MX 100 6S	BB4	164.6	699.3	470	2	2	140	2015. 06
TAE-YOUNG E&C	Korea	Gyungsan Resource Recovery Facilities	Bolier Feedwater Pump	MX 40 08S	BB4	22.1	428	75	2	2	130	2014. 11
Cheonan City Hall	Korea	Cheonan SRF Power Plant	Bolier Feedwater Pump	MX 40 05S	BB4	37.58	239.1	55	2	2	143	2014. 07
HK B&TEC	Korea	Nexen Tires Expansion Project	Bolier Feedwater Pump	MX 40 07S	BB4	36	320	75	2	3	150	2014. 04
KEPCO(IWEST)	Korea	Gunsan CCPP HP/IP HRSG	HRSG HP BFP	MZ 100 11S	BB4	184.4	1460.5	1200	2	1	130	2013. 11

Major References

COP

Owner	Country	Project	Service Name	Pump Type	Flow (m³/hr)	Head (m)	Kw	P	Q'ty	Delivery
MAHTAAB CASPIAM Power generation Co. United Energy Developers	Iran	MAZANDARAN II 450 MW SINGLE SHAFT CCPP PJT	CONDENSATE PUMP	MLC 300A x 06S	654	307	830kW	4	2	2019.10
KOREA MID EAST POWER	Korea	SHIN-SEOCHEON (1000MW)	CONDENSATE PUMP	MLC 400 x 2A	1,151	121	560kW	4	3	2019.03
HYUNDAI E&C	Korea	DAESAN BIOMASS POWER	CONDENSATE PUMP	MLC 250 x 04S	430	235	420	4	2	2020.01
DOOSAN HEAVY INDUSTRIES	Indonesia	MUARA TAWAR (250MW x 2)	CONDENSATE PUMP	MLC 300B x 05S	390	220	400kW	4	9	2018.12
HYUNDAI ENGINEERING	Indonesia	KALSELTENG2	CONDENSATE PUMP	MLC 250B x 05S	305	220	290kW	4	4	2018.08
POSCO E&C	Korea	SHIN-PEONGTAEK	CONDENSATE PUMP	MLC 250C x 04S	461	211	420kW	4	3	2018.05
KOREA SOUTH-EAST POWER	Korea	YEONGDONG COAL FIRE POWER PLANT (325MW)	CONDENSATE PUMP	MLC 200C x 08S	335	195	260kW	6	2	2016.04
SK E&C	Korea	GE3 PROJECT	Condensate Pump	MLC 200B x 02S	231	65.5	90kW	4	2	2014.03
HANJIN HEAVY INDUSTRIES	Korea	BYOLAE HEAT DISTRIBUTION	Peak DH Heater Condensate Pump	MT-C 100 x 04S	110	140	75kW	4	3	2012.1
HANJIN HEAVY INDUSTRIES	Korea	BYOLAE HEAT DISTRIBUTION	D/H Heater Condensate Pump	MT-C 100 x 04S	110	150	90kW	4	3	2012.1
HYUNDAI E&C	Korea	GOYANG SAMSUNG HEAT DISTRIBUTION	MAIN CONDENSATE PUMP	MT-C 100 x 05S	130	180	110kW	4	3	2010.12
HYUNDAI E&C	Korea	GOYANG SAMSUNG HEAT DISTRIBUTION	DH #3 CONDENSATE PUMP	MLC 200A x 4S	160	180	132kW	4	3	2010.12
HYUNDAI E&C	Korea	GOYANG SAMSUNG HEAT DISTRIBUTION	DH #1 CONDENSATE PUMP	MLC 200A x 4S	220	180	185kW	4	2	2010.12
HYUNDAI E&C	Korea	DAEJEON HEAT DISTRIBUTION	TURBINE BYPASS CONDENATE PUMP	MLC 200B x 01S	203	55	55kW	4	2	2009.1
HYUNDAI E&C	Korea	DAEJEON HEAT DISTRIBUTION	MAIN CONDENATE PUMP	MLC 200B x 02S	218	96	110kW	4	2	2009.1
HANHWA E&C	Korea	GUNJANG HEAT DISTRIBUTION	CONDENSATE PUMP	MLC 250B x 01S	380	57.5	110kW	4	2	2009.1
DAEWOO E&C	Korea	PAJU CCPP	DH CONDENSATE PUMP	MLC250A x 03S	380	160	270kW	4	3	2009.08
DAEWOO E&C	Korea	PAJU CCPP	MAIN CONDENSATE PUMP	MLC250A x 03S	295	170	240kW	4	3	2009.08
POSCO E&C	Korea	DONGHAE BIOMASS	CONDENSATE PUMP	MT-C 100 x 03S	111	111	75kW	4	2	2012.06

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