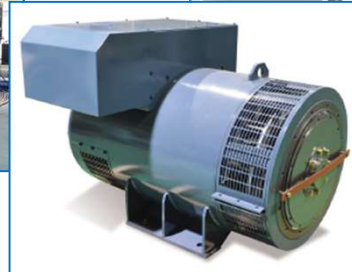


Company Profile



Power Solution!

BOKUK ELECTRIC IND. CO.,LTD.
(www.bokuk.co.kr)

SINCE 1961
Bokuk

Contents

- 1) Location
- 2) History
- 3) Main Products
 - Alternator
 - Engine Generator set
 - Power Package System
 - Gas CHP System
 - Gas Turbine Generator set
 - Energy Storage System
 - Solar Power System
- 4) Production Plant
- 5) Organization Chart
- 6) Quality Control
- 7) Project Management

* Head Office & Plant

#90, Gukgasandandong-Ro,
42 Gil, Guji-Myun, Dalsung-Gun,
Daegu, Republic of Korea.



* Sales Office

◉ Seoul Office

Megaventure Tower 4F
60, Munrae-Ro 20 Gil,
Youngdeungpo-Gu,
Seoul, Korea.

Phone : +82-2-2278-0880

Fax : +82-2-2273-8210

◉ Daegu Office

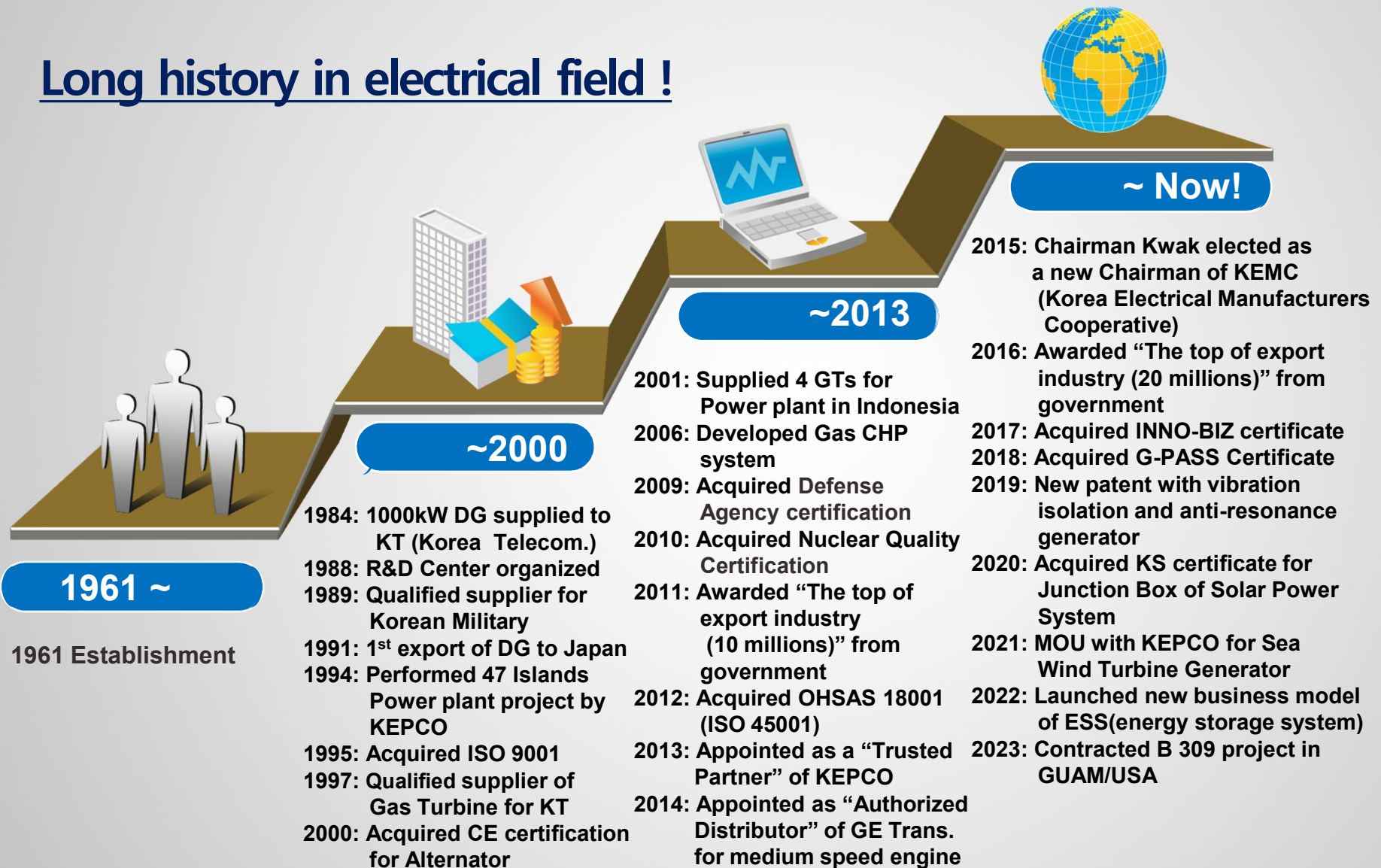
Phone : +82-53-610-4168

Fax : +82-53-614-3552

Web site :

www.bokuk.co.kr

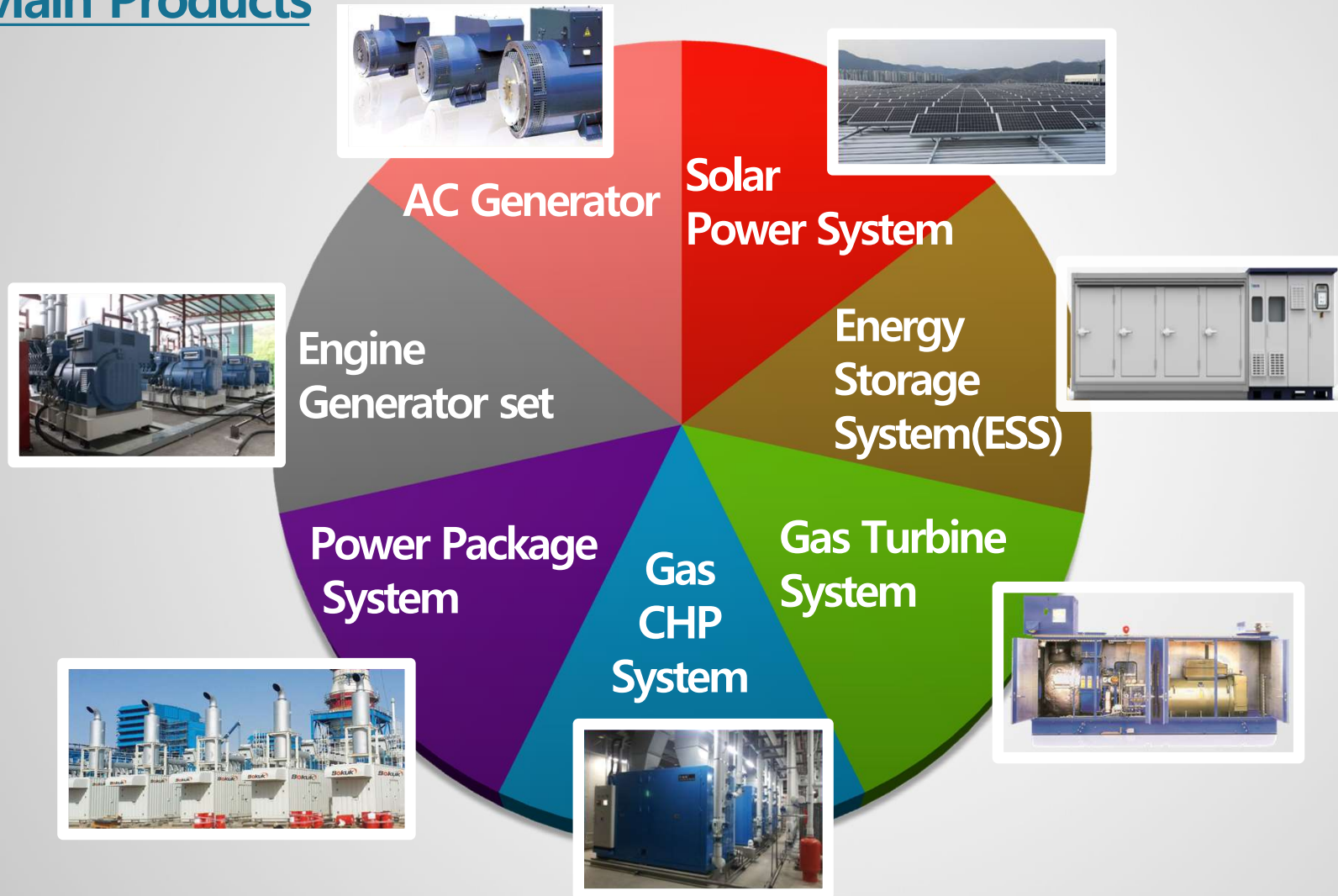
Long history in electrical field !



Main Products



Main Products

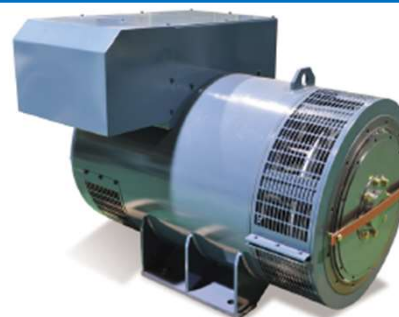


1-1 AC Generator

Description	Power Ratings(kVA)					
	Standby		Continuous			
	Class H/150°C		Class H/125°C		Class F/105°C	
	50Hz/1500rpm	60Hz/1800rpm	50Hz/1500rpm	60Hz/1800rpm	50Hz/1500rpm	60Hz/1800rpm
Low Voltage	22 ~ 4180	25 ~ 4250	20 ~ 3800	23 ~ 3891	18 ~ 3450	20 ~ 3538
Medium Voltage (3.3kV/6.6kV)	286 ~ 6325	350 ~ 7125	260 ~ 5750	318 ~ 6477	236 ~ 5227	289 ~ 5888
Medium Voltage (11kV)	500 ~ 4800	563 ~ 5750	450 ~ 4450	513 ~ 5300	400 ~ 4000	463 ~ 4800

*** Note ***

1. Medium speed is also available (900/1000rpm or 720/750rpm)
2. Protection degree
 - Standard : IP 21 ~ 23
 - Option : ~ IP55



1-2 AC Generator – Main experiences

Market	Field	Main customers
Domestic market	KEPCO & Power Company	KEPCO, KHNP, KOENERGY, EWP, IWEST, KOMIPO & etc
	Telecom company	KT, SK telecom, LGU+
	Public office building	Court, Central-Local Government, Education & etc
	Airport	Incheon, Kimpo, Kimhae, Chungju & etc
	IDC Center	NH nonghyup, Industrial Bank, Supreme Court & etc
	Others	University, Research Center, Water treatment, Hospital,
		Business center, Apartment, Sports complex & etc
International market	Asia	Japan, Vietnam, Nepal, Indonesia, Philippines, Malaysia
		Bangladesh, Cambodia, Mongolia, Myanmar & etc
	Middle East	Saudi Arabia, Yemen, Oman, UAE, Jordan, Iraq & etc
	Africa	Algeria, Nigeria, Guinea, Ethiopia, Sudan, Angola & etc
	Russia & CIS	Russia, Uzbekistan, Turkmenistan, Kazakhstan
	South America	Colombia, Uruguay, Panama, Venezuela, Chile & etc
	Others	Antarctic, Saipan & etc

2-1 Engine Generator set – Engine application

Description	Speed(rpm)	Brand	Power Capacity(Prime, kVA)	
			50Hz	60Hz
High speed	1500rpm(50Hz) 1800rpm(60Hz)	Fiat	56 ~ 592	58 ~ 625
		Scania	252 ~ 700	278 ~ 750
		Volvo	80 ~ 631	85 ~ 681
		Hyundai	60 ~ 908	68 ~ 1017
		VMAN	60 ~ 986	68 ~ 1021
		Perkins	18 ~ 2250	22 ~ 1705
		Baudouin	817 ~ 2545	921 ~ 2806
		Cummins	50 ~ 3381	56 ~ 3758
		MTU	275 ~ 3000	312 ~ 3500
Medium speed	(1000rpm/900rpm) or (750rpm/720rpm)	STX or Hyundai or MAN Diesel & Turbo	3000 ~ 10912	3000 ~ 10912

2-1 Engine Generator set – Engine application



Algeria/8 x 5MVA Diesel Generator
- 6.6kV, 50Hz, 1000rpm
- with indoor enclosure

Japan/2 x 2MVA Diesel Generator
- 6.6kV, 50Hz, 1500rpm
- with containerized enclosure



Jordan/4 x 2MVA Diesel Generator
- 6.6kV, 50Hz, 1500rpm

2-2 Engine Generator set – Main experiences

Market	Field	Main customers
Domestic market	KEPCO & Power Company	KEPCO, KHNP, KOENERGY, EWP, IWEST, KOMIPO & etc
	Telecom company	KT, SK telecom, LGU+
	Public office building	Court, Central-Local Government, Education & etc
	Airport	Incheon, Kimpo, Kimhae, Chungju & etc
	IDC Center	NH nonghyup, Industrial Bank, Supreme Court & etc
	Others	University, Research Center, Water treatment, Hospital,
		Business center, Apartment, Sports complex & etc
International market	Asia	Japan, Vietnam, Nepal, Indonesia, Philippines, Malaysia
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	Middle East	Saudi Arabia, Yemen, Oman, UAE, Jordan, Iraq & etc
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	Russia & CIS	Russia, Uzbekistan, Turkmenistan, Kazakhstan
	South America	Colombia, Uruguay, Panama, Venezuela, Chile & etc
	Others	Antarctic, Saipan & etc

3-1 Power Package System

Overview and Features

- Diesel or Gas engine generator set based on containerized power system
- Customized system design according to project requirement
- Various system configuration and engine application for better operation
- Power Capacity : 10MVA ~ 100MVA

Application

- Commercial power for IPP(Independent Power Producer) business
- Emergency power for Power Plant or Industrial plant
- Rental or commercial power for construction site
- Temporary power for isolated village

Main Products



3-2 Reference Photoes



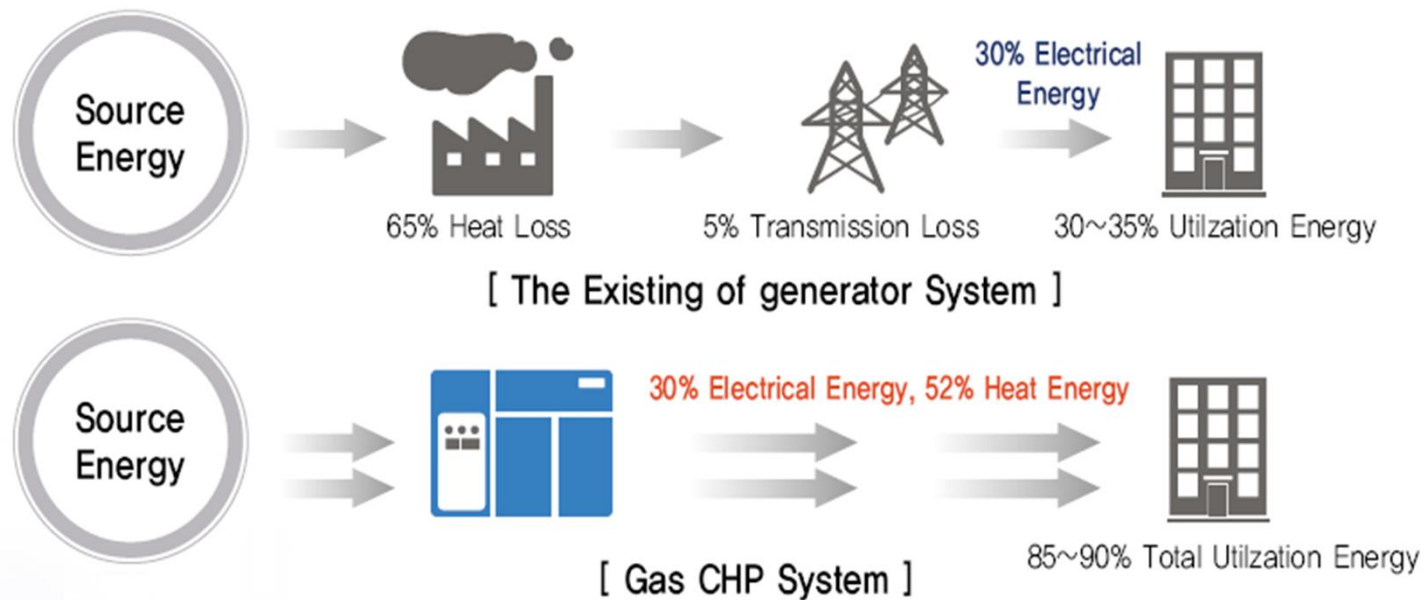
Algeria/6 x 2.5MVA Diesel Generator
- 6.6kV, 50Hz, 1500rpm
- with containerized enclosure

CIS/10 x 0.5MVA Diesel Generator
- 6.6kV, 50Hz, 1500rpm
- with Weatherproof enclosure



4-1 Gas CHP System (100kW ~ 2000kW)

Comparison of energy efficiency

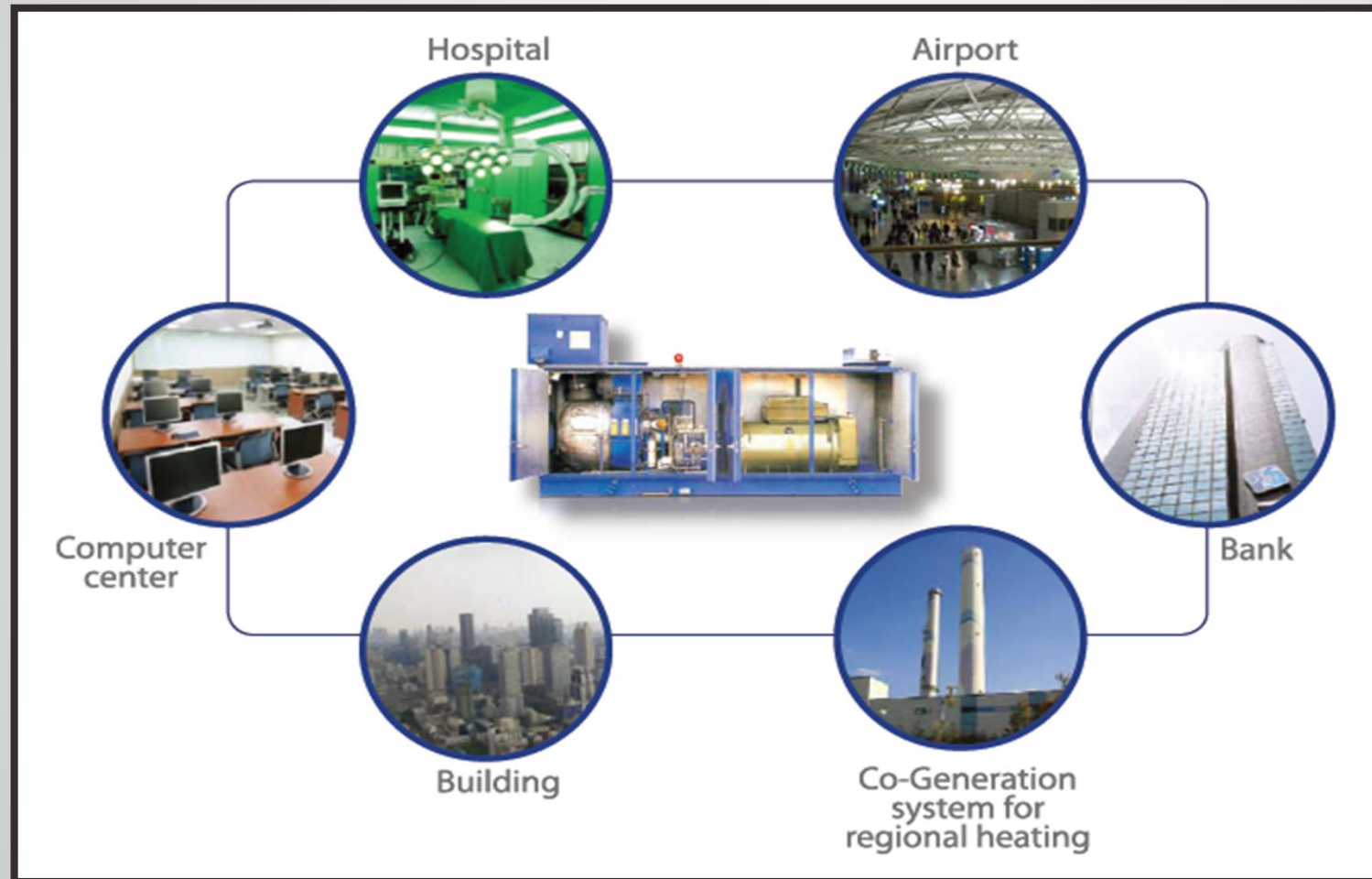


4-2 Gas CHP Systems – Supply lists

Customer	Nation	Site	Capacity	Q'ty	Type	Year	Remarks
Bucheon Office of Education	Korea	Bucheon Primary school	182kW	1	Gas Gen	2006	
Kyungdong City Gas	Korea	Ulsan Bali Building	128kW	1	CHP	2007	
Korea Gas Technology Corporation	Korea	Gwangju Ssangcheon Apartment	170kW	1	CHP	2007	
Hansol Paper Corp.	Korea	Pyungtaek Paper Plant	300kW	1	CHP	2008	
Korea Veterans Association	Korea	Euijungbu Shinsung Apartment	230kW	1	CHP	2008	
SK Energy Corp.	Korea	Jinju Hanbo Apartment	354kW	1	CHP	2009	
Korea Gas Technology Corporation	Korea	Seoul Daelim Apartment	230kW	2	CHP	2010	Parallel operation
Kyungsang University	Korea	Busan Kyungsang University	354kW	1	Gas Gen	2011	
Samchully Corporation	Korea	Bucheon Doosan Apartment-1	230kW	1	CHP	2012	
Samchully Corporation	Korea	Bucheon Doosan Apartment-2	354kW	1	CHP	2012	
Chungnam City Corp.	Korea	Daejeon Hakha power plant	1000kW	1	CHP	2012	
Hyundai Engineering Co.	Malaysia	Malaysia PGB PRR2	750kVA	1	Gas Gen	2013	
Samchully Corporation	Korea	Busan Haeundae Apartment	354kW	4	CHP	2013	Parallel operation
GS Engineering & Construction	Korea	Pyungtaek Xai Apartment	354kW	1	CHP	2013	

Main Products

5-1 Gas Turbine Generator set – 1000kW ~ 2000kW



5-2 Gas Turbine Generator set

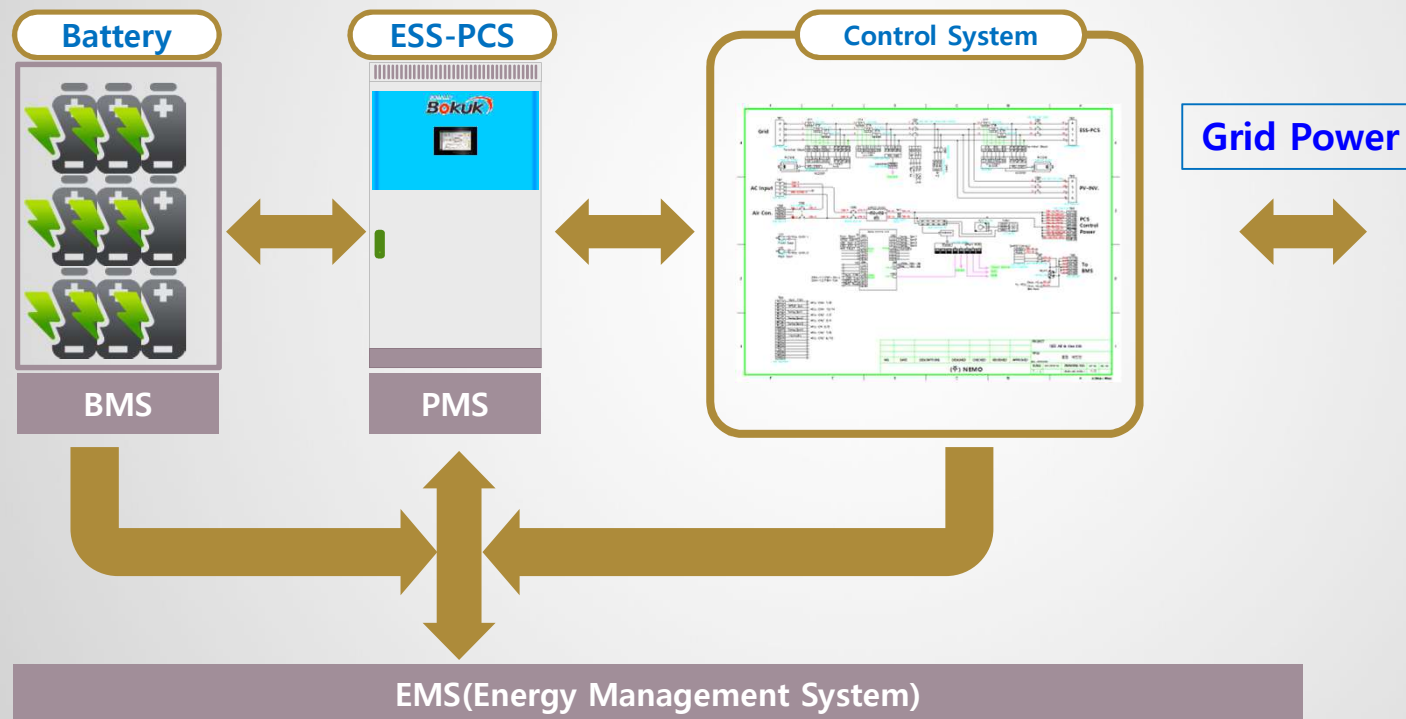


Client	Site	Turbine	Power	Quantity	Voltage
Korea Telecommunication (KT)	Mokdong Telecom	Dress-Rand	2MW	2	6600V
	Bundang Telecom	Dress-Rand	2MW	2	380V
	Kwangju Information Center	Dress-Rand	2MW	1	3300V
	Yoido Telecom	Dress-Rand	2MW	1	3300V
Korea Horse Association	Head Office	Dress-Rand	2MW	2	3300V
Busan City	Worldcup Stadium	Dress-Rand	2MW	1	3300V
Daegu City	Worldcup Stadium	Nigatta	800kW	2	6600V
Daewoo Eng. & Construction	Indonesia	Dress-Rand	1750kVA	3	3300V
			1450kVA	3	3300V

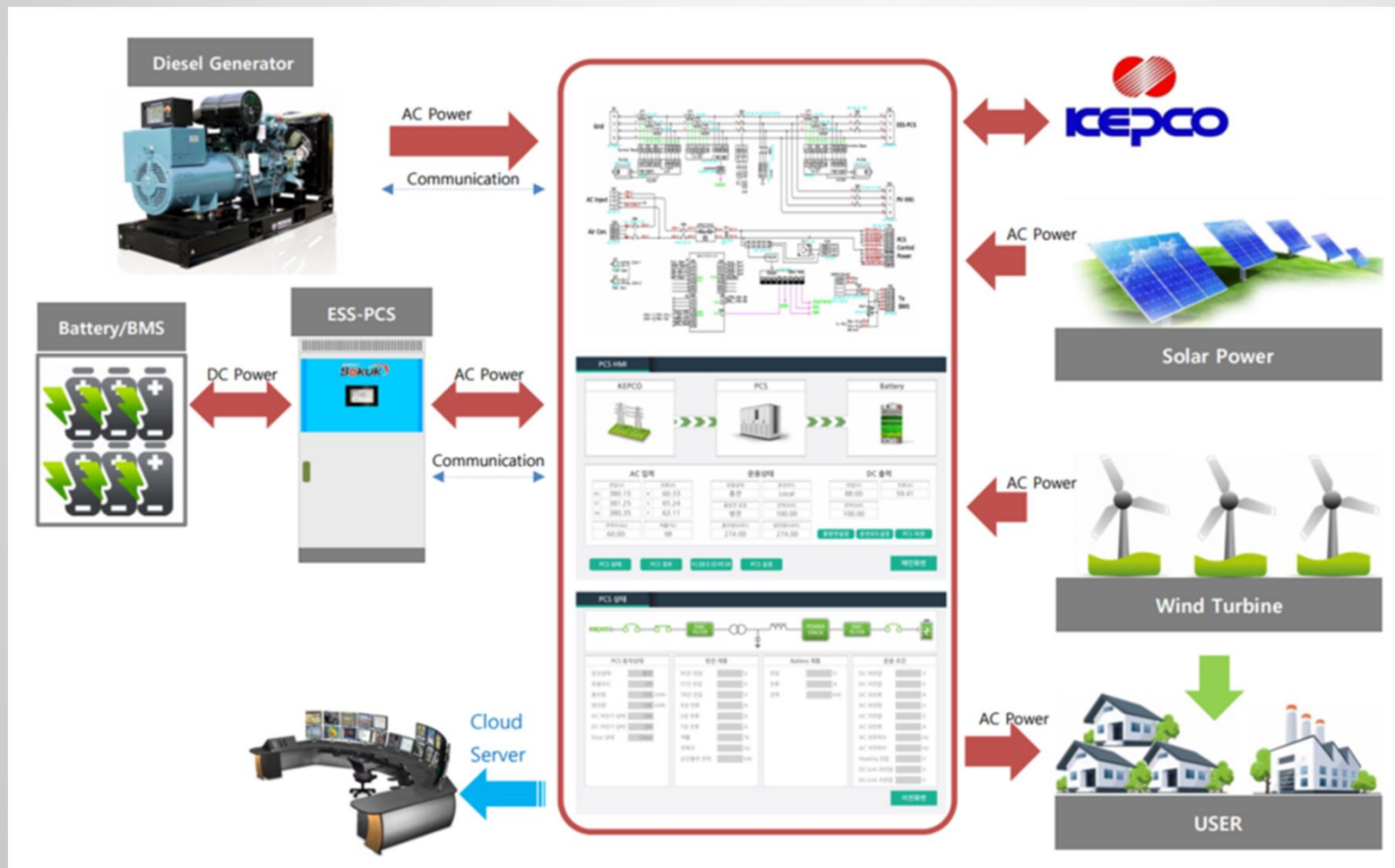
Main Products

6-1 Energy Storage System

- Basic system configuration



- Micro-Grid system configuration



7-1 Solar Power System



SPECIFICATION

ITEM	TYPE	
	Grid Connected(On-Grid) Type	Stand-Alone(Off-Grid) Type
Main equipment	Solar module Module structure (if need) Inverter Junction box Cable	Solar module Module structure(if need) Inverter & related item Battery Charge controller Junction box Cable Others
Application	House, building, plant & other places with grid power	Area at no grid power

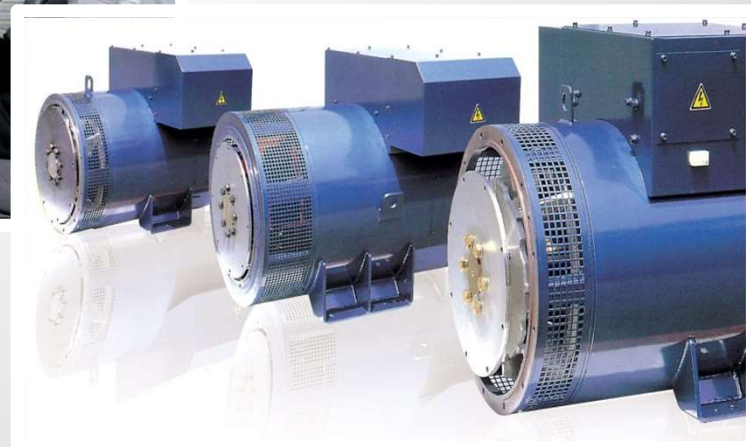
7-2 Solar Power System – Main experiences

Market	Field	Customer/Project	Main specification	
			Solar	Diesel
Domestic market	Diesel & Solar	Haman Horticultural Institution	327kW	2 x 300kW, 1 x 500kW
		The Military Manpower Administration	75kW	250kW
		Pyungtak Tax Office	59kW	200kW
		Daegu City Railway Head Office	20kW	300kW
		Industrial Technology Valuation Institution	115kW	250kW
		Gasa Island	288kW	500kW
	Solar	Central-Local Government	Office, Public library, Welfare center	
			Business Center, Rehabilitation Center	
		City construction	Water treatment, Ozon center, Kinder Garden	
			Art center, Communication center, Sports complex	
			Public industrial complex & etc	
		Education	Primary, Middle & High School, University	
		Others	Coast Guard, Tax office, Purification Center	
			Tourism Center, Senior town, Park, Apartment	
			119 safety Center & etc	
International market	Solar	Off grid type solar power system	Haiti Red Cross	

Production Plant



Production of Alternator (20kVA ~ 7500kVA)



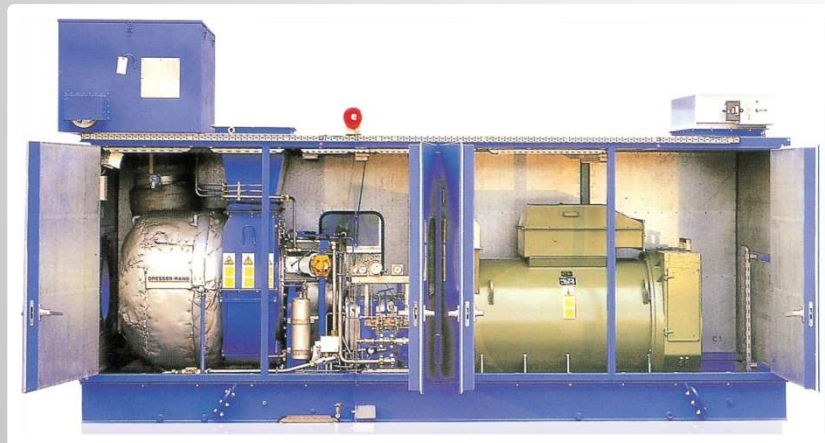
Assembly of Engine generator Set (20kVA~7500kVA)



Production Plant

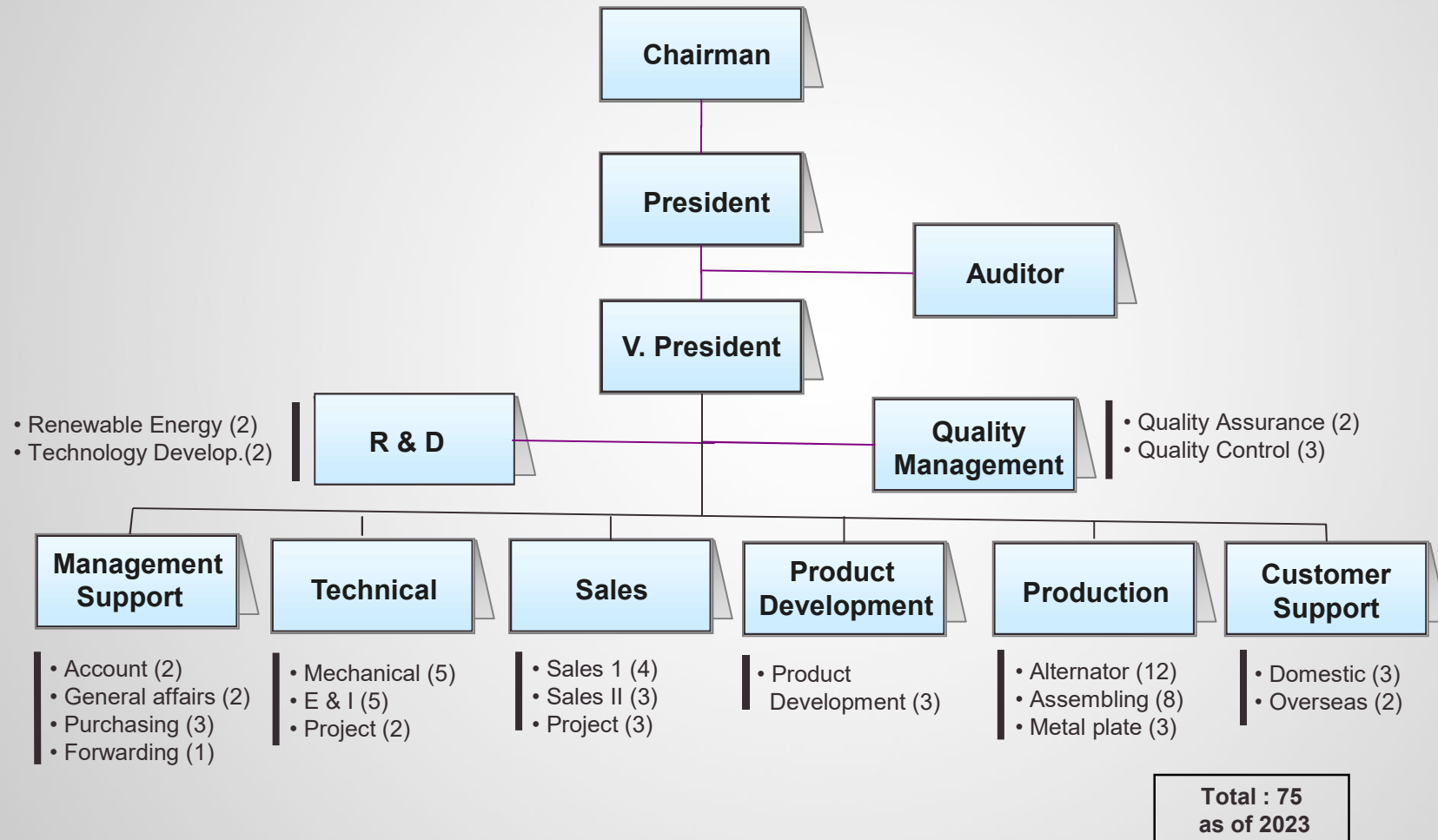


CHP, GTG, Solar Power & ESS



Organization Chart

Organization Chart

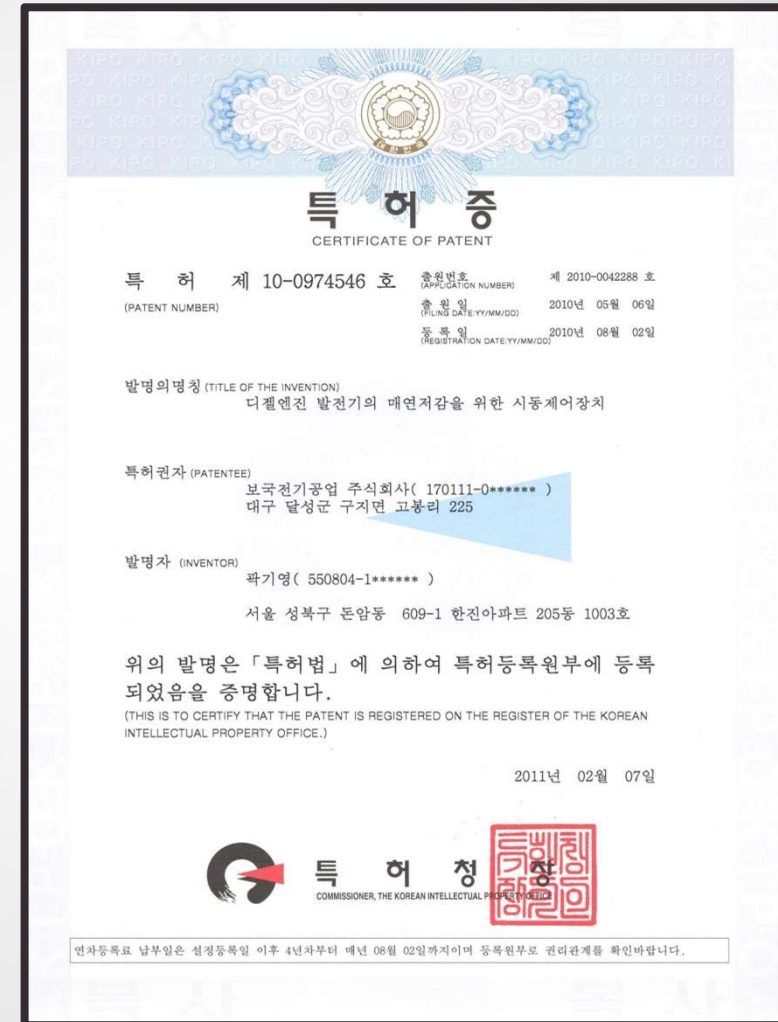


Intellectual Property

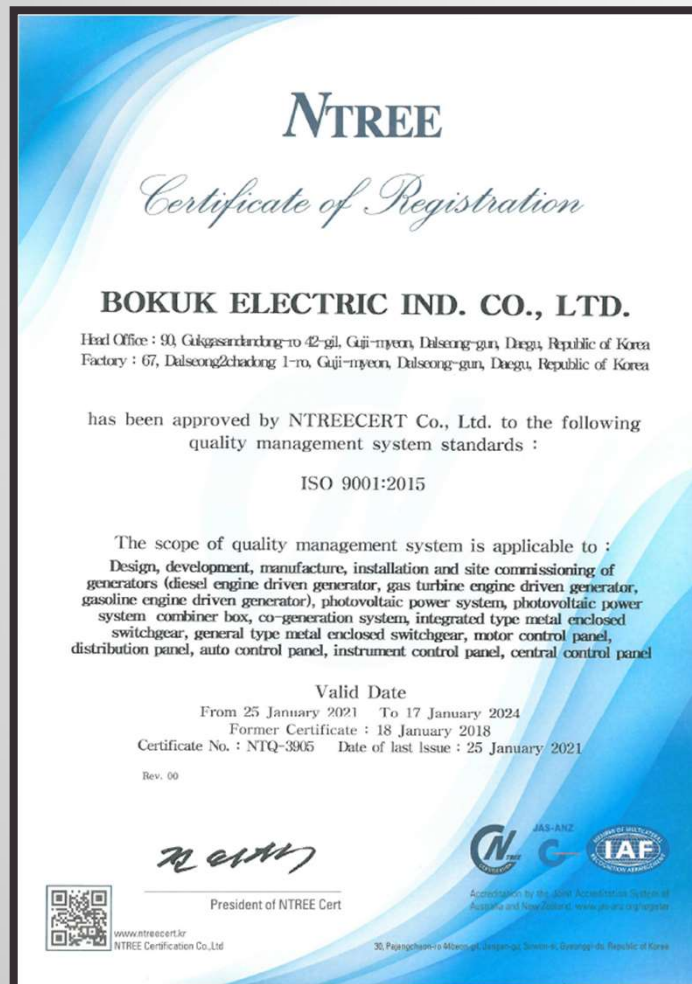
Various intellectual property
right for power generation
(as of Dec. 2023)

1) Patent : 24

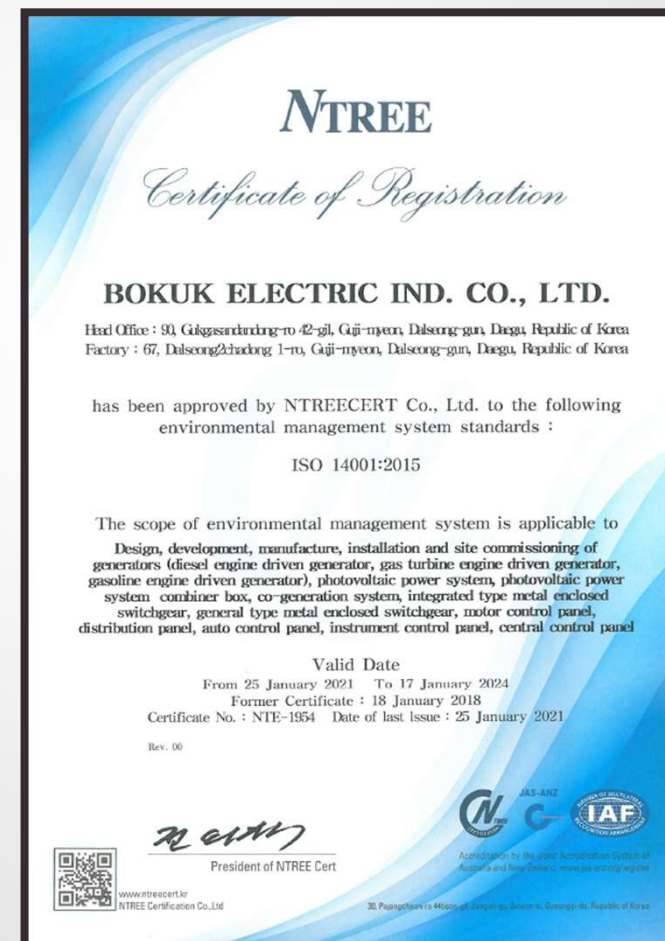
2) Utility model patent : 1



ISO Certificate



ISO 9001 / 14001



Other Certificate



Certificate of Registration

This certifies that the Occupational Health and Safety Management System of

BOKUK ELECTRIC INDUSTRIAL CO., LTD
90, Gukgasandandong-Ro 42-Gil, Guji-Myeon
Dalseong-Gun
Daegu, 43008, Korea, Republic Of

has been assessed by NSF-ISR and found to be in conformance to the following standard(s):

ISO 45001:2018

Scope of Registration:
Design, development, manufacture, installation and site commissioning of generators (diesel engine driven generator, gas turbine engine driven generator, gasoline engine driven generator), photovoltaic power system, photovoltaic power system combiner box, co-generation system, integrated type metal enclosed switchgear, general type metal enclosed switchgear, motor control panel, distribution panel, auto control panel, instrument control panel, central control panel



Certificate Number:	C0265719-OH4
Certificate Issue Date:	28-SEP-2020
Registration Date:	21-SEP-2020
Expiration Date *:	20-SEP-2023


Tom Chestnut,
Sr Vice President - ISR,
NSF-ISR, Ltd.

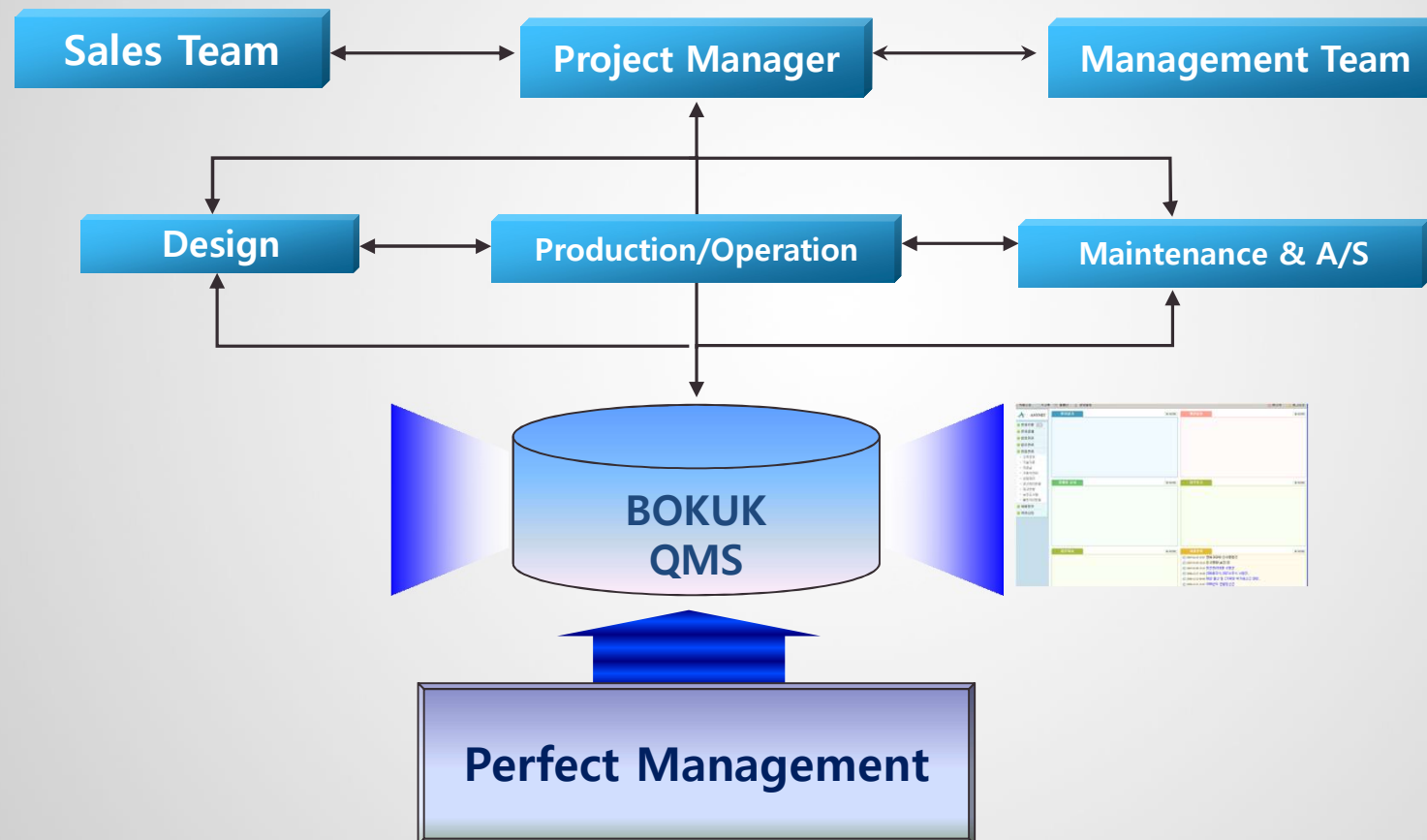
Page 1 of 2

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*Company is audited for conformance at regular intervals. To verify registrations call (888) NSF-9000 or visit our web site at www.nsf-isr.org

ISO 45001 (OHSAS 18001)

Project Management



Thank You !

BOKUK ELECTRIC IND. CO.,LTD.
(www.bokuk.co.kr)