

GEN GEN

ENERGY GENERATE GREEN TECHNOLOGY



지엔씨에너지
www.gncenergy.co.kr

CENGEN

CENGEN is GnCenergy's new brand name.
It offers comprehensive power solutions to you.
GnCenergy has provided an extensive range of
quality on-site electrical power systems and products
for standby, prime power, peak shaving and
interruptible rate applications.

「센젠」은 (주)지엔씨에너지의 새로운 브랜드명입니다.
「센젠」은 여러분에게 포괄적 파워 솔루션을 제공할 것입니다.
지엔씨에너지는 비상용, 상용 전력, 첨두부하저감 및
순간부하 적용에 대한 다양한 고품질 현장전력 시스템과
제품들을 공급하고 있습니다.



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About GnCenergy

회사소개

1989년 3월 창립 이래 꾸준한 기술연구와 고객만족이 최우선이라는 목표 아래 성실한 업무수행으로 발전을 거듭해 왔으며, ISO9001, ISO14001 기준으로 디젤엔진발전기, 가스엔진발전기, 열병합발전설비, CES발전 설비, 신재생에너지인 LFG/BIO GAS 발전설비, 태양광발전사업 등 에너지원의 모든 부문에 진출하여 종합 에너지회사로서 새로운 도약을 하고 있습니다.

또한 기술연구소를 중심으로 국산엔진을 이용한 매립가스발전 실증연구과제와 바이오가스를 이용한 국산 가스터빈개발 실증사업, 스마트그리드사업 등의 연구개발사업에 참여하여 기술향상에 힘쓰고 있으며, 고객과 함께 성장하여 인류 발전에 공헌하는 (주)지엔씨에너지가 되기 위해 최선의 노력을 다하고 있습니다.

Since being founded in March 1989, GnCenergy faithfully progresses to invest in through research, and continues to treat customer satisfaction as the greatest priority of the company. With much of the development following the ISO9001 and ISO14001 standards, we specialize in products including diesel-operated generators, gas-powered generators, cogenerating power plants, CES power plants, renewable-forming energy LFG/BIO gas power plants, and solar panel projects.

Our company continues to leap forward by comprehensively expanding to provide services involving a wide field of energy use.

In addition, with much investment in demonstration and research projects, we have strengthened our knowledge of operating domestic-manufactured engines powered by energy extracted from land-filled waste gas, as well as domestic-manufactured gas turbine engines operated by biogas.

By striving for smart grid business techniques and research, GnCenergy gives its optimum effort to work with customers to contribute for the best of humanity.



Company History

회사연혁

1989	<ul style="list-style-type: none">한국기술서비스 창립(1989년 3월 8일)	<ul style="list-style-type: none">Founded as KTS(Korea Technical Service)
1993	<ul style="list-style-type: none">법인 전환 (주)한국기술서비스조달청 외자입찰 등록, 삼성중공업(주) 협력업체 등록	<ul style="list-style-type: none">Conversion to a corporationRegistration of Foreign Bidding for Public Procurement Service
1999	<ul style="list-style-type: none">ISO9001 인증획득, 한국전력공사 입찰참가 등록중소기업은행 유망중소기업, Family 기업 지정한국전기공업협동조합 수출표창패	<ul style="list-style-type: none">ISO9001 certificationAppointed as a promising small business and family business by the Small and Medium Business Bank
2002	<ul style="list-style-type: none">ISO14001 인증획득	<ul style="list-style-type: none">ISO14001 certification
2004	<ul style="list-style-type: none">기업부설 연구소 설립열병합 발전설비 시공	<ul style="list-style-type: none">Founded the technology research instituteConstruction of cogeneration facilities
2005	<ul style="list-style-type: none">벤처기업등록	<ul style="list-style-type: none">Registered the venture business
2006	<ul style="list-style-type: none">한국기계연구원(KIMM), 신재생 에너지 기술사업 실증분야주관참여기업 안병철 대표이사 자랑스런 중소기업상 수상해외시장개척단 참여(중앙아시아, 중국, 베트남, UAE 등)중앙우체국 가스터빈 열병합 발전설비(4.8MW)설치공사 시행	<ul style="list-style-type: none">Developed Land fill Gas PlantCEO Proud SME AwardInstallation of gas turbine cogeneration plant (4.8MW) in central post office
2007	<ul style="list-style-type: none">당진공장 준공수도권 매립지 바이오가스 발전소(700KW) 발전사업허가	<ul style="list-style-type: none">Moved to the Dang jin new factoryPermission to develop biogas power plant (700kw) in metropolitan area landfill
2009	<ul style="list-style-type: none">“(주)지엔씨에너지”사명 변경우리사주제도, 스타트업제도 시행특허 및 실용신안 (발전기제어 콘트롤 판넬용 연속제습형 제습장치)	<ul style="list-style-type: none">Changed Company's name from KTS to GnCenergyEmployee stock ownership system, stock option system enforcement
2010	<ul style="list-style-type: none">스마트그리드협회 회원가입, OHSAS18001 인증 획득신재생에너지 전문기업 등록, KB-30억원, 산업은행-10억원 투자유치녹색기술(매립가스 가스엔진 적용 발전기술) 인증	<ul style="list-style-type: none">Received “Renewable energy service company recognition”Green Technology Certification (Landfill gas engine power generation technology)
2011	<ul style="list-style-type: none">JOB-WORLD BEST COMPANY 600 기업선정(기업은행)기술보증기금 “우수성공사례 기업” 1위 선정	<ul style="list-style-type: none">Selected “JOB-WORLD BEST TOP 600 Companies (Industrial Bank of Korea)
2012	<ul style="list-style-type: none">수도권매립지 바이오가스발전소 1.9MW로 발전사업 증설해외건설업 신고(전기공사, 기계설비)특허 취득(발전기 절연애자)	<ul style="list-style-type: none">Increased the capacity of the Bio-gas plant on the “Sudokwon land-fill site” to 1.9MWDeclaration of Overseas Construction Business (electric works, machinery)
2013	<ul style="list-style-type: none">코스닥 상장특허 취득(바이오가스 전처리 장치)중소기업인대회 대통령표창 수상	<ul style="list-style-type: none">Listed on KOSDAQ (Korea Securities Dealers Automated Quotations)
2014	<ul style="list-style-type: none">비상디젤발전기 세트(2,880kWx16set) 베트남 삼성에 수출동두천시, 서산시 바이오가스 발전시설 협약체결특허 취득(방폭시설용 이동식 열매체 충전장치)	<ul style="list-style-type: none">Exported the Emergency Diesel Generator set (2,880kWx16set) to SAMSUNG in Vietnam
2015	<ul style="list-style-type: none">가스터빈발전기세트(비상5,200kWx4set) 농협 IT-센터 납품, 설치청주 바이오가스 발전소, 동두천 바이오가스 발전소 가동녹색사업(수도권 매립지 바이오가스 발전사업) 인증매출(110,279백만원) 달성	<ul style="list-style-type: none">Produced the Gas Turbine Generator set(5,200kW x 4set) to NH IT-center in KoreaStart operation of “Dongducheon Bio-gas Power Plant”Start operation of “Cheongju Bio-gas Power Plant”Green Business Certification (Metropolitan Landfill gas Power generation)Sales (₩110,279 million won)
2016	<ul style="list-style-type: none">무역의 날 1000만불 수출의 탑 수상, 납세자의 날 기획재정부 장관상 수상벤처기업 대상 국무총리 표창새로운 발전기 브랜드 “CENGEN” 등록김해시 음폐수 바이오가스 발전사업협약	<ul style="list-style-type: none">Awarded \$ 10 Million Export Tower Award on Trade DayTaxpayer's Day Awarded by Minister of Strategy and FinanceAwarded the prime minister prize for venture businessStarted production of new generator brand “cengen”Signed an agreement on the biogas power generation business of kimhae city.

Application

적용



공공기관
GOVERNMENTS

GNC supplies backup gensets for government departments



인터넷 데이터 센터
INTERNET DATA CENTER

GNC offers backup power for IDC, covered 70% of Internet Data Center in Korea.



아파트단지
APARTMENT COMPLEX

GNC offers backup power for Apartment complex.



오폐수처리장
WASTEWATER TREATMENT PLANT

GNC supplies gensets for Wastewater treatment plant.



제조현장
MANUFACTURING SITES

GNC gensets are widely used in different kind of manufacturing sites.



건설현장
CONSTRUCTION SITES

GNC gensets are widely used in different kind of constructions.



호텔 & 오피스빌딩
HOTEL & OFFICE BUILDING

GNC offers power for hotels and office building, such as LOTTE, HYUNDAI etc.



병원
HOSPITAL

GNC offers backup power for hospitals.



쇼핑몰
SHOPPING MALL

GNC offers backup power for shopping malls.

Main business

주요사업

- 지엔씨에너지는 고객의 선호에 따라 세계 유명 브랜드의 다양한 제품을 공급하고 있습니다.
- 지엔씨에너지는 앞선 기술력으로 비상용뿐만 아니라 상용에 대해서 설계에서 제조, 설치 및 시운전까지 포괄적인 서비스를 제공합니다.
- 발전장비 개발 및 제조에 27여년의 풍부한 경험으로 지엔씨에너지는 다양한 용도에 적합한 발전기로 국내, 외 고객들로부터 그 우수성을 인정받고 있습니다.
- GnCenergy provides diverse engines of globally renowned brands in accordance with customer's preference.
- GnCenergy offers comprehensive service from design to production, installation and commissioning test not only in emergency use but also in prime use through advanced technology.
- With 27 years of experience in development and production of power generation equipments, GnCenergy is recognized by domestic and overseas customers for its excellent generator suitable for various use.

비상 및 상용 발전기 사업

Emergency & Prime Power Generator

- 당사는 국산엔진을 이용한 바이오 가스 발전시설을 상용화 하였습니다.
- 한국기계연구원(KIMM)과 함께 수도권매립지에서 국산엔진을 사용하여 바이오가스발전 실증연구를 진행하였습니다.
- 국내 최초로 순수 국내기술로 400kw급 바이오가스 열병합시스템을 개발하였습니다.
- 수도권매립지의 실증운전을 통해 성능이 검증되어 국내,외의 매립지와 폐수, 하수 처리장 등에 바이오가스발전사업에 적용하고 있습니다.
- We have commercialized bio-gas power generation facilities using domestic engines.
- We conducted research on biogas power generation using domestic engine at the Seoul metropolitan landfill together with KIMM.
- For the first time in Korea, we developed a 400kW class bio-gas Co-generation system with pure domestic technologies.
- We are applying the bio-gas power generation to landfill sites, wastewater and sewatment plants in Korea and overseas, because the performance of it is verified through the demonstration operation of the metropolitan landfill.

친환경발전 사업

Eco-Friendly Generation

- 열병합발전은 난방, 냉방, 가정내 온수 및 산업공정온수 등으로 사용될 수 있는 스팀과 온수와 같은 유용한 에너지를 공급하기위해 발전시 버려지는 열을 회수하는 현상 발전입니다. 열병합발전은 전통적 기술에대한 효율 50%와 비교하여 80% 이상의 효율을 획득할 수 있습니다.
- CES는 단일 중앙발전소 또는 몇개의 분산발전소가 아닌 상호 연계발전소로부터 다중 건물들에 난방, 냉방 및 전력을 공급한다. 전기를 생산하여 전력시장에 판매하지 않고 특정 공급 구역내 사용자에게 직접 판매하는 전기사업입니다.
- CHP(Combined Heat and Power) is on-site electricity generation that captures the heat that would otherwise be wasted to provide useful thermal energy -such as steam or hot water - that can be used for space heating, cooling, domestic hot water and industrial process. In this way, and by avoiding distribution losses, CHP can achieve efficiencies of over 80%, compared to 50% for conventional technologies.
- CES(Community Energy System) supplies heating, cooling and power to multiple buildings from a centralized plant or from several interconnected but distributed plants. CES is electricity generation business for the direct sale to customers in the community.

열병합발전 EPC 사업

Co-Generation EPC

- 다양한 용량의 고효율 PCS(Power Conversion System, 고성능 배터리 및 엔지니어링 기술을 바탕으로한 최적의 EMS(Energy Management System)를 제공하며, 고객의 요구에 맞는 차별화된 ESS(Energy Storage System) 솔루션을 제공합니다.
- GnCenergy offers differentiated ESS(Energy Storage System) solution to meet customer's demand with the high efficiency PCS(Power Conversion System) of various capacities and the optimal EMS(Energy Management System) based on high performance battery and engineering technology.

에너지저장장치 사업

ESS (Energy Storage System)

Emergency & Prime Power Generator

비상 및 상용 발전기



디젤엔진발전기
Diesel Engine Generator
(60 ~ 4,000kW)

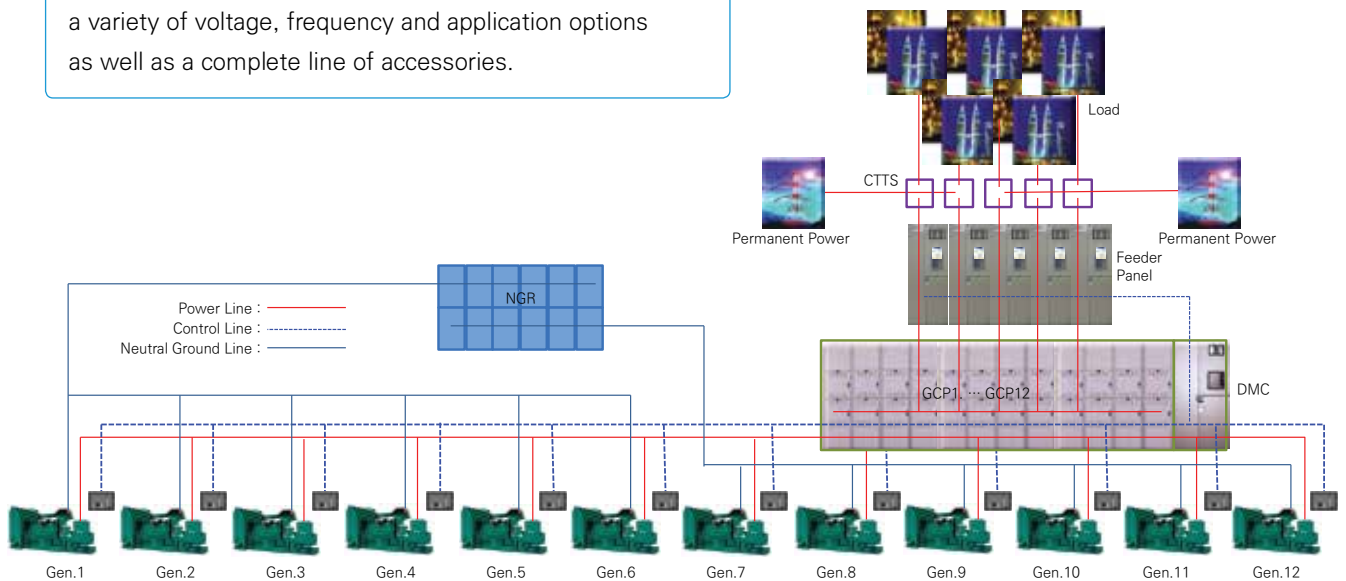


가스엔진발전기
Gas Engine Generator
(100 ~ 6,520kW)



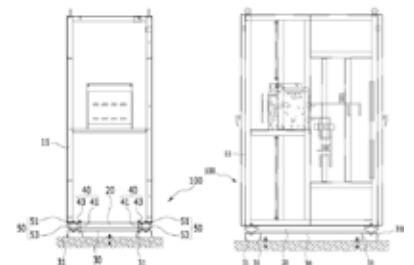
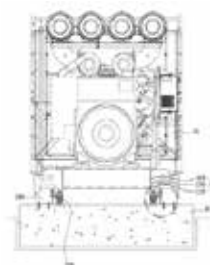
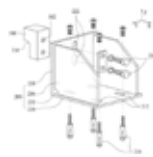
가스터빈발전기
Gas Turbine Generator
(200 ~ 21,750kW)

CENGEN Emergency and Prime Power Generators feature a variety of voltage, frequency and application options as well as a complete line of accessories.



We offer aseismic measure for the earthquake problems.
지진에 대한 내진대책을 제공합니다.

- PATENT NUMBER : 10-1455292
특허 번호 : 제 10-1455292호
TITLE OF THE INVENTION : ANTI-VIBRATION STOPPER
발명의 명칭 : 내진 스톱퍼
- APPLICATION NUMBER : 10-2016-0088892
출원 번호 : 10-2016-0088892
TITLE OF THE INVENTION :
ELECTRIC PANEL HAVING ASEISMATIC AND ANTI-VIBRATION ARRARATUS.
발명의 명칭 : 방진 및 내진 장치가 설치된 전기판넬





MAN Diesel & Turbo

SET MODEL		DG400-MA	DG500-MA	DG595-MA	DG650-MA	DG700-MA	DG1000-MA	
Generator	Standby Power (60/50)	kW	405/375	525/500	595/555	650/580	730/640	1,000/800
		kVA	510/470	660/630	750/700	820/730	920/810	1,250/1,000
	Prime Power (60/50)	kW	340/330	460/410	505/450	560/495	625/540	702/630
		kVA	420/410	580/520	640/570	710/630	790/680	900/800
	Frequency	Hz	60 / 50					
	RPM	RPM	1,800 / 1,500					
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire					
	Insulation Class		F,H CLASS					
	Power Factor		0.8					
	Excitation System		Brushless Self Exciting					
Bearing System		Single Ball Bearing						
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600						
Manufacturer		MAN Diesel & Turbo						
Model		D2676LE1/3	D2840LE201/3	D2840LE211/3	D2842LE201/3	D2842LE211/3	D2862LE221/3	
Standby Power(60/50)	HP	600/565	795/740	900/830	975/860	1,085/955	1,520/1,195	
Prime power(60/50)	HP	510/490	700/610	765/670	840/735	945/800	1,090/950	
RPM	RPM	1800 / 1500						
No. of Cylinder	EA	6	10	10	12	12	12	
Bore x Stroke	mm	126x166	128x142	128x142	128x142	128x142	128x157	
Displacement	cc	12,420	18,270	18,270	21,920	21,920	24,240	
Compression Ratio		15.5 : 1	15.5 : 1	15.5 : 1	15.5 : 1	15.5 : 1	17.0 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)						
Aspiration		Turbocharged & Aftercooled						
Starting system		Electric motor by DC24 battery						
Governor		Electronic type						
Coolant Cap.(ENGINE)	L	58	86	101	98	98	102	
Lube Oil Capacity	L	40	30	30	32	32	102	
Fuel Consumption(60/50)	L/Hr	85/89	124/116	139/129	151/134	169/148	219/173	
DIM	Length	mm	3,250	3,150	3,150	3,620	3,620	3,940
	Width	mm	1,080	1,600	1,600	1,600	1,600	1,561
	Height	mm	1,606	1,990	1,990	1,990	1,990	2,030
	Weight	kg	2,790	2,850	3,410	3,870	3,980	5,100
PAD	Length	mm	3,700	3,700	3,700	4,100	4,100	4,500
	Width	mm	1,400	2,000	2,000	2,000	2,000	2,200
	Height	mm	300	300	300	300	300	300
D.A	Radiator air flow	m ³ /min	333.5	783	775	850	767	1,283
	Combustion air flow	m ³ /min	31	43	51	48.3	57	77
	E.A (OUT - LET)	m ²	0.7	1.6	1.6	1.8	1.6	2.7
	O.A (IN-LET)	m ²	0.9	2.0	2.0	2.1	2.0	3.2

※ All parameters are for reference only, final technical data should refer to approval specification for each model.

Diesel Engine Generator

디젤 엔진 발전기

DOOSAN

SET MODEL		DG90-DS	DG130-DS	DG175-DS	DG200-DS	DG250-DS	DG275-DS	DG300-DS	DG330-DS	DG360-DS	
Generator	Stand-by Power (60/50)	kW	90/75	130/104	175/148	200/178	250/227	275/249	300/266	330/290	360/329
		kVA	112/94	162/130	218/185	250/223	312/284	343/311	375/333	412/362	450/411
	Prime Power (60/50)	kW	82/64	118/94	159/134	182/158	227/201	250/211	273/241	300/260	327/297
		kVA	103/85	148/118	199/168	228/198	284/251	312/263	341/301	362/325	409/371
	Frequency	Hz	60 / 50								
	RPM	RPM	1,800 / 1,500								
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire								
	Insulation Class		F,H CLASS								
	Power Factor		0.8								
	Exciting System		Brushless Self Exciting								
Bearing		Single Ball Bearing									
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600									
Manufacturer		Doosan Infracore									
Model		D1146	D1146T	DE12T	P086TI	P126TI-3	P126TI	P126TI-II	P158LE-2	P158LE-1	
Stand-by Power(60/50)	HP	141/114	197/158	267/223	299/267	370/338	399/365	458/394	503/430	539/485	
Prime Power(60/50)	HP	129/103	168/143	241/202	275/237	338/299	373/323	416/394	464/393	491/438	
RPM	RPM	1,800 / 1,500									
No. of Cylinder	EA	6	6	6	6	6	6	6	8	8	
Bore x Stroke	mm	111x139	111x139	123x155	111x139	123x155	123x155	123x155	128x142	128x142	
Displacement	cc	8,071	8,071	11,051	8,071	11,051	11,051	11,051	14,618	14,618	
Compression Ratio		17.5 : 1	16.8 : 1	17.1 : 1	16.4 : 1	17.0 : 1	17.0 : 1	17.0 : 1	15.0 : 1	15.0 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine(with radiator or heat exchanger)									
Aspiration		Natural	Turbocharged		Turbocharged & Air-intercooled						
Starting System		Electric motor by DC24 battery									
Governor		Mechanical Centrifugal Type				Electronic Type					
Coolant Cap.(ENGINE)	L	14	14	19	14	19	19	19	19	19	
Coolant Cap.(SET)	L	38.5	38.5	52	48.5	60	60	60	88.5	88.5	
Lube Oil Capacity	L	15.5	15.5	23	15.5	23	23	23	28	28	
Fuel Consumption(60/50)	L/Hr	26.6/20.8	35.9/27	49/41	56.8/48.4	68.2/59.6	76.5/66.2	89.5/77.6	93.5/84.4	104/93.6	
DIM	Length	mm	2,400	2,400	2,600	2,650	2,994	2,994	2,994	2,990	2,990
	Width	mm	850	850	920	946	1,120	1,122	1,122	1,397	1,397
	Height	mm	1,440	1,502	1,428	1,635	1,634	1,541	1,541	1,794	1,794
	Weight	kg	1,487	1,722	1,957	1,913	2,226	2,256	2,366	2,595	2,655
PAD	Length	mm	3,000	3,000	3,200	3,200	3,500	3,500	3,500	3,500	3,500
	Width	mm	1,400	1,400	1,700	1,700	1,700	1,700	1,700	1,800	1,800
	Height	mm	300	300	300	300	300	300	300	300	300
D.A	Radiator air flow	m ³ /min	230	230	433	224	480	433	530	618	618
	Combustion air flow	m ³ /min	16.57	19.07	21.95	23.35	23	27.68	30.22	32.1	33.7
	E.A (OUT - LET)	m ²	0.5	0.5	0.9	0.5	1	0.9	1.1	1.3	1.3
	O.A (IN-LET)	m ²	0.6	0.6	1.1	0.6	1.2	1.1	1.3	1.5	1.6

※ All parameters are for reference only, final technical data should refer to approval specification for each model.



SET MODEL		DG400-DS	DG450-DS	DG500-DS	DG550-DS	DG610-DS	DG660-DS	DG715-DS	DG750-DS	
Generator	Stand-by Power (60/50)	kW	400/378	450/400	500/460	550/500	610/560	660	715/600	750/660
		kVA	500/472	562/500	625/575	687/625	762/700	825	894/750	937/825
	Prime Power (60/50)	kW	364/332	400/364	455/418	500/455	555/509	600	650/545	682/600
		kVA	455/415	500/455	569/523	625/569	694/636	750	813/681	853/750
	Frequency	Hz	60 / 50							
	RPM	RPM	1,800 / 1,500							
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire							
	Insulation Class		F,H CLASS							
	Power Factor		0.8							
	Exciting System		Brushless Self Exciting							
Bearing		Single Ball Bearing								
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600								
Manufacturer		Doosan Infracore								
Model		P158LE	DP158LC	DP158LD	DP180LA	DP180LB	DP222LA	DP222LB	DP222LC	
Stand-by Power(60/50)	HP	614/555	688/602	745/684	824/740	886/765	988	1,048/890	1,110/969	
Prime Power(60/50)	HP	539/487	625/547	677/622	749/673	805/695	898	953/809	1,009/881	
RPM	RPM	1,800 / 1,500								
No. of Cylinder	EA	8	8	8	10	10	12	12	12	
Bore x Stroke	mm	128x142	128x142	128x142	128x142	128x142	128x142	128x142	128x142	
Displacement	cc	14,618	14,618	14,618	18,273	18,273	21,927	21,927	21,927	
Compression Ratio		15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	15.0 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)								
Aspiration		Turbocharged & Air-intercooled								
Starting System		Electric motor by DC24 battery								
Governor		Electronic Type								
Coolant Cap.(ENGINE)	L	19	20	20	21	21	23	23	23	
Coolant Cap.(SET)	L	88.5	79	79	91	91	114	114	114	
Lube Oil Capacity	L	28	19	22	34	34	40	40	40	
Fuel Consumption(60/50)	L	115.7/102.9	123.8/110.9	139.6/127.8	154.1/135.4	165.3/149.5	179.9	192.8/162.7	203.8/172.8	
DIM	Length	mm	2,990	2,990	2,990	3,200	3,200	3,390	3,390	3,390
	Width	mm	1,397	1,397	1,397	1,397	1,397	1,397	1,397	1,397
	Height	mm	1,854	1,794	1,855	1,873	1,873	2,130	2,130	2,130
	Weight	kg	2,690	2,770	2,810	3,312	3,340	3,705	3,880	3,910
PAD	Length	mm	3,500	3,700	3,700	3,700	3,700	4,000	4,000	4,000
	Width	mm	1,800	1,800	1,800	1,800	1,800	2,000	2,000	2,000
	Height	mm	300	300	300	300	300	300	300	300
D.A	Radiator air flow	m ³ /min	618	850	850	850	850	1,050	1,050	1,050
	Combustion air flow	m ³ /min	36.9	34.5	36.6	43	45.5	53.5	56	58.6
	E.A (OUT - LET)	m ²	1.3	1.8	1.8	1.8	1.8	2.2	2.2	2.2
	O.A (IN-LET)	m ²	1.6	2.1	2.1	2.1	2.1	2.6	2.6	2.6

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Diesel Engine Generator

디젤 엔진 발전기



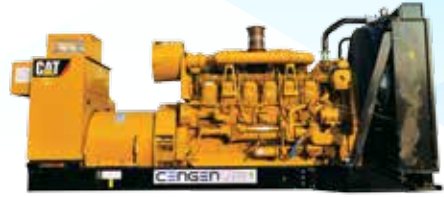
CUMMINS

SET MODEL		DG800-CM	DG900-CM	DG1000-CM	DG1250-CM	DG1500-CM	DG2000-CM	DG2250-CM	DG2500-CM	DG2750-CM	DG3000-CM	DG3250-CM	DG3500-CM	
Generator	Stand-by Power	kW	800	900	1,000	1,250	1,500	2,000	2,250	2,500	2,750	3,000	3,250	3,500
		kVA	1,000	1,125	1,250	1,560	1,875	2,500	2,812	3,125	3,438	3,750	4,063	4,375
	Prime Power	kW	750	800	900	1,100	1,350	1,818	-	-	2,500	2,750	3,000	3,000
		kVA	937	1,000	1,125	1,375	1,687	2,272	-	-	3,125	3,438	3,750	3,750
	Frequency	Hz	60											
	RPM	RPM	1,800											
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire											
	Insulation Class		H Class											
	Power Factor		0.8											
	Exciting System		P.M.G - Permanent Magnet Generator											
Bearing		Single Ball Bearing or Double Ball Bearing												
Voltage	V	220/127, 380/220, 440/254, 3300, 6600												
Manufacturer		CUMMINS												
Model		QSK23-G3	QST30-G3	KTA38-G14	KTA50-G3	KTA50-G9	QSK60-G6	QSK60-G9	QSK60-G19	QSK78-G8	QSK95-G2	QSK95-G2	QSK95-G2	
Stand-by Power	HP	1,200	1,350	1,490	1,850	2,220	2,922	3,251	2,715	4,060	4,351	4,351	5,051	
Prime Power	HP	1,085	1,220	1,350	1,742	1,855	2,647	-	-	3,670	3,962	4,309	4,309	
RPM	RPM	1,800												
No. of Cylinder	EA	6	12	12	16	16	16	16	16	18	16	16	16	
Bore x Stroke	mm	170x170	140x165	140x165	159x159	159x159	159x190	159x190	159x190	170x190	190x210	190x210	190x210	
Displacement	cc	23,150	30,480	30,480	50,300	50,300	60,200	60,200	60,200	77,600	95,300	95,300	95,300	
Compression Ratio		16.0:1	14.0:1	14.0:1	13.9:1	13.9:1	14.5:1	14.5:1	14.5:1	15.5:1	15.5:1	15.5:1	15.5:1	
Engine Type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)												
Aspiration		Turbocharged Aftercooled												
Starting System		Electric motor by DC24 battery												
Governor		Electronic Type												
Coolant Cap.(ENGINE)	L	46.5	85	124	161	174	193	193	194	224	380	380	380	
Coolant Cap.(SET)	L	89	84	253	345	310	430	492	682	738	1,120	1,120	1,120	
Lube Oil Capacity	L	103	133	135	152	152	378	378	378	413	647	647	647	
Fuel Consumption	L/Hr	206	228	306	330	392	521	569	655.3	704	753	821	878	
DIM	Length	mm	4,300	4,297	4,470	5,180	5,960	6,175	6,175	7,051	7,138	7,889	7,889	7,889
	Width	mm	1,855	1,673	1,780	2,000	2,033	2,286	2,494	2,713	2,750	3,028	3,028	3,028
	Height	mm	2,150	2,079	2,330	2,238	2,330	2,537	3,200	3,186	3,388	3,810	3,810	3,810
	Weight	kg	6,528	6,296	8,350	10,075	10,326	15,945	17,217	23,299	23,777	30,700	30,700	30,700
PAD	Length	mm	5,200	5,200	5,500	6,000	6,700	6,700	6,700	8,000	8,500	9,000	9,000	9,000
	Width	mm	2,400	2,400	2,500	2,500	2,500	3,000	3,000	3,200	3,200	3,800	3,800	3,800
	Height	mm	300	300	350	400	400	500	500	500	500	500	500	500
D.A	Radiator Air Flow	m ³ /min	1,416	1,146	1,062	1,698	1,362	1,998	1,998	2,649	3,060	4,098	4,098	4,098
	Combustion Air Flow	m ³ /min	67.9	76.3	86.1	110.4	125	174	183	193	236	267	274	280
	E.A (OUT - LET)	m ²	3	2.4	2.2	3.6	2.8	4.2	4.2	5.5	6.4	8.5	8.5	8.5
	O.A (IN-LET)	m ²	3.5	2.9	2.7	4.3	3.5	5.2	5.2	6.8	7.8	10.4	10.4	10.4

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※ 상기 데이터는 커민스 발전기 세트 데이터 기준이므로, 커민스 조립품의 경우 당사 기술팀으로 문의 주시기 바랍니다.

CATERPILLAR



SET MODEL		DG800-CA	DG1000-CA	DG1100-CA	DG1250-CA	DG1400-CA	DG1500-CA	DG1750-CA	DG2000-CA	DG2500-CA	DG3000-CA	DG3900-CA	
Generator	Stand-by Power (60/50)	kW	800	1,000	1,100	1,250	1,400	1,500	1,750	2,000	2,500	3,000	3,900
		kVA	1,000	1,250	1,375	1,563	1,750	1,875	2,188	2,500	3,125	3,750	4,875
	Prime Power (60/50)	kW	725	910	1,000	1,135	1,275	1,360	1,600	1,825	2,250	2,725	3,545
		kVA	906	1,138	1,250	1,419	1,594	1,700	2,000	2,281	2,813	3,406	4,431
	Frequency	Hz	60										
	RPM	RPM	1,800										
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire										
	Insulation Class		H Class										
	Power Factor		0.8										
	Exciting System		P.M.G - Permanent Magnet Generator										
Bearing		Single or Double Bearing											
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600										3,300, 6,600	
Manufacturer		CATERPILLAR											
Model		3412	C32	3512	3512	3512B	3512B	3516	3516B	3516C	C175-16	C175-20	
Stand-by Power	HP	1,180	1,502	1,603	1,818	2,032	2,172	2,520	2,876	3,634	4,423	5,647	
Prime Power	HP	1,072	1,341	1,455	1,662	1,848	1,971	2,304	2,628	3,272	4,034	5,136	
RPM	rpm	1,800											
No. of Cylinder	EA	12	12	12	12	12	12	16	16	16	16	20	
Bore x Stroke	mm	137x152	145x162	170x190	170x190	170x190	170x190	170x190	170x190	170x215	175x220	175x220	
Displacement	cc	27,020	32,100	51,800	51,800	51,800	51,800	69,000	69,000	78,080	84,670	105,800	
Compression Ratio		13 : 1	15 : 1	13.5 : 1	13 : .5 : 1	14 : 1	14 : 1	13.5 : 1	14 : 1	14.7 : 1	15.3 : 1	15.5 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine(with radiator or heat exchanger)											
Aspiration		Turbocharged & Aftercooled	Air to Air Aftercooled	Turbocharged & Aftercooled						Air to Air Aftercooled	Turbocharged & Aftercooled		
Starting System		Electric motor by DC24 battery											
Governor		Electronic Type											
Coolant Cap.(ENGINE)	L	59	55	157	157	157	157	233	233	233	303.5	440	
Coolant Cap.(SET)	L	120	147	287	287	306	306	398	370	405	1,039	1,285	
Lube Oil Capacity	L	139	99	311	311	311	311	402	402	401	540	675	
Fuel Consumption	L	222	263	306	354	377	405	470	559	657	806	1,039	
DIM	Length	mm	4,485	4,475	5,138	5,138	5,241	5,241	5,815	6,267	6,983	7,802	8,392
	Width	mm	1,742	2,011	2,188	2,188	2,286	2,286	2,286	3,051	3,010	3,410	3,827
	Height	mm	1,987	2,174	2,368	2,368	2,342	2,342	2,368	2,588	2,570	2,890	3,249
	Weight	kg	7,200	10,000	12,000	13,000	14,500	14,500	15,500	17,000	19,000	23,000	35,000
PAD	Length	mm	5,000	5,100	5,800	5,800	6,000	6,000	7,000	7,000	7,700	8,400	9,200
	Width	mm	2,500	2,600	2,600	2,600	3,000	3,000	3,000	3,200	3,200	3,500	4,000
	Height	mm	400	400	500	500	500	500	500	500	500	500	600
D.A	Radiator Air Flow	m ³ /min	1,464	987	1,331	1,614	1,430	1,501	1,671	2,011	2,800	2,933	3,646.3
	Combustion Air Flow	m ³ /min	70	82.6	92.3	106	123.9	127.9	155.8	171.4	204.2	264.2	338.3
	E.A (OUT - LET)	m ²	3.1	2.1	2.8	3.4	3	3.1	3.5	4.2	5.8	6.1	7.6
	O.A (IN-LET)	m ²	3.7	2.5	3.4	4.1	3.7	3.9	4.4	5.2	7.1	7.6	9.5

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Diesel Engine Generator

디젤 엔진 발전기



MITSUBISHI

SET MODEL		DG600-MI	DG800-MI	DG900-MI	DG1000-MI	DG1200-MI	DG1320-MI	DG1500-MI	DG1600-MI	DG1750-MI	DG2000-MI	
Generator	Stand-by Power (60/50)	kW	600/520	800/690	900/800	1,000/900	1,200/1,118	1,320/1,200	1,500/1,400	1,600/1,495	1,750/1,590	2,000
		kVA	750/650	1,000/862	1,125/1,000	1,250/1,125	1,500/1,397.5	1,650/1,500	1,875/1,750	2,000/1,869	2,187/1,987	2,500
	Prime Power (60/50)	kW	540/470	710/620	790/697	900/820	1,075/1,015	1,210/1,095	1,340/1,250	1,440/1,365	1,650/1,490	1,800
		kVA	675/588	887/775	988/871	1,125/1,025	1,344/1,269	1,513/1,369	1,675/1,562	1,800/1,706	2,062/1,862	2,250
	Frequency	Hz	60 / 50									
	RPM	RPM	1,800 / 1,500									
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire									
	Insulation Class		F,H CLASS									
	Power Factor		0.8									
	Exciting System		Brushless Self Exciting									
Bearing		Single Ball Bearing										
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600										
Manufacturer		MITSUBISHI										
Model		S6R-PTA	S12A2-PTA	S12A2-PTA2	S12H-PTA	S12R-PTA	S12R-PTA2	S12R-PTAA2	S16R-PTA	S16R-PTA2	S16R-PTAA2	
Stand-by Power(60/50)	HP	851/744	1,146/970	1,233/1,096	1,448/1,314	1,702/1,595	1,903/1,723	2,139/1,882	2,279/2,131	2,547/2,359	2,822	
Prime Power(60/50)	HP	771/670	980/880	1,118/994	1,314/1,193	1,528/1,448	1,729/1,562	1,940/1,711	2,064/1,944	2,312/2,145	2,540	
RPM	RPM	1,800 / 1,500										
No. of Cylinder	EA	6	12	12	12	12	12	12	16	16	16	
Bore x Stroke	mm	170x180	150x160	150x160	150x175	170x180	170x180	170x180	170x180	170x180	170x180	
Displacement	cc	24,510	33,930	33,930	37,110	49,030	49,030	65,370	65,370	65,370	65,370	
Compression Ratio		14.0 : 1	14.5 : 1	15.3 : 1	14.0 : 1	14.0 : 1	13.5 : 1	13.5 : 1	14.0 : 1	13.5 : 1	14.0 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine(with radiator or heat exchanger)										
Aspiration		Turbocharged with Aftercooler						Turbocharged with air-to-air	Turbocharged with Aftercooler		Turbocharged with air-to-air	
Starting System		Electric motor by DC24 battery										
Governor		Electronic Type										
Coolant Cap.(ENGINE)	L	50	100	100	100	125	125	125	170	170	170	
Coolant Cap.(SET)	L	120	215	235	285	305	305	327	350	445	413	
Lube Oil Capacity	L	100	120	120	200	180	180	180	230	230	230	
Fuel Consumption(60/50)	L	172.2	222/182	256.9	265/238	305	358/287	404	408/363	479/438	521/403	
DIM	Length	mm	3,500	3,800	4,000	4,100	4,300	4,750	5,000	5,200	5,280	5,700
	Width	mm	1,600	1,600	1,650	1,650	1,820	1,820	2,200	2,700	2,700	2,400
	Height	mm	1,990	1,990	2,320	2,330	1,340	2,780	2,980	2,900	2,900	3,330
	Weight	kg	5,000	6,400	6,740	8,175	9,385	9,900	11,850	12,500	12,800	13,900
PAD	Length	mm	4,200	4,500	4,500	5,000	5,200	5,200	5,500	6,000	6,000	6,500
	Width	mm	2,000	2,000	2,000	2,200	2,500	2,500	3,000	3,000	3,000	3,000
	Height	mm	400	400	400	400	400	450	400	400	400	400
D.A	Radiator air flow	m ³ /min	720	1,100	1,380	1,800	1,800	1,800	1,800	1,950	2,040	2,500
	Combustion air flow	m ³ /min	54	78	85	93	109	121	148	141	160	194
	E.A (OUT - LET)	m ²	1.5	2.3	2.9	3.8	3.8	3.8	3.8	4.1	4.3	5.2
	O.A (IN-LET)	m ²	1.8	2.8	3.5	4.5	4.5	4.6	4.6	5	5.2	6.4

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SET MODEL		DG900-MT	DG1000-MT	DG1200-MT	DG1250-MT	DG1600-MT	DG1750-MT	DG2100-MT	DG2300-MT	DG2500-MT	DG2750-MT	DG3250-MT	
Generator	Stand-by Power (60/50)	kW	900/800	1,000/870	1,200/980	1,250	1,600/1,450	1,750/1,600	2,100/1,800	2,300/2,000	2,500/2,250	2,750/2,500	3,250/2,650
		kVA	1,125/1,000	1,250/1,088	1,500/1,225	1563	2,000/1,813	2,188/2,000	2,625/2,250	2,875/2,500	3,125/2,813	3,438/3,125	4,063/3,313
	Prime Power (60/50)	kW	820/727	910/800	1,090/890	-	1,400/1,320	1,600/1,430	1,880/1,650	2,100/1,820	2,300/2,030	2,500/2,220	2,800/2,420
		kVA	1,025/909	1,138/1,000	1,363/1,113	-	1,750/1,650	2,000/1,788	2,350/2,063	2,625/2,275	2,875/2,538	3,125/2,775	3,500/3,025
	Frequency	Hz	60 / 50										
	RPM	RPM	1,800 / 1,500										
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire										
	Insulation Class		F,H CLASS										
	Power Factor		0.8										
	Exciting System		Brushless Self Exciting										
Bearing		Single Ball Bearing or Double Ball Bearing											
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600											
Manufacturer		MTU											
Model		16V2000G45/25	16V2000G85/65	18V2000G85/65	18V2000G76S	12V4000G43/23	12V4000G83/63	16V4000G43/23	16V4000G83/63	20V4000G43/23	20V4000G83/63	20V4000G83/63L	
Stand-by Power(60/50)	HP	1,354/1,194	1,495/1,307	1,757/1,475	1,839	2,328/2,112	2,561/2,347	3,058/2,635	3,353/2,930	3,674/3,245	4,036/3,580	4,680/3,822	
Prime Power(60/50)	HP	1,227/1,086	1,354/1,194	1,597/1,341	-	2,038/1,904	2,328/2,112	2,709/2,411	3,058/2,635	3,339/2,950	3,674/3,245	4,036/3,473	
RPM	RPM	1,800 / 1,500											
No. of Cylinder	EA	16	16	18	18	12	12	16	16	20	20	20	
Bore x Stroke	mm	130x150	130x150	130x150	135x156	170x210	170x210	170x210	170x210	170x210	170x210	170x210	
Displacement	cc	31,800	31,800	35,800	40,200	57,200	57,200	76,300	76,300	95,400	95,400	95,400	
Compression Ratio		14.0 : 1	14.0 : 1	14.0 : 1	17.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.5 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)											
Aspiration		Turbocharged with Aftercooler											
Starting System		Electric motor by DC24 battery											
Governor		Electronic Type											
Coolant Cap.(ENGINE)	L	110	110	120	73	200	200	225	225	255	255	255	
Lube Oil Capacity	L	102	102	130	122	260	260	300	300	390	390	390	
Fuel Consumption(60/50)	L/Hr	240/207	265/227	314/260	329.9	404/349	459/402	537/436	609/484	619/538	701/598	878/643	
DIM	Length	mm	4,230	4,230	4,600	5,036	6,400	6,400	7,300	7,300	7,900	7,900	9,100
	Width	mm	1,900	1,900	2,130	2,275	2,150	2,150	2,377	2,377	2,370	2,370	2,370
	Height	mm	2,300	2,300	2,400	2,459	2,450	2,450	3,280	3,280	3,280	3,280	3,280
	Weight	kg	6,890	6,990	8,060	9,525	11,300	11,300	15,183	15,433	16,182	16,182	20,673
PAD	Length	mm	5,000	5,000	5,500	5,500	6,500	7,000	8,000	8,000	8,500	8,500	10,000
	Width	mm	2,500	2,500	2,500	2,700	2,700	2,700	2,700	2,700	3,000	3,000	3,000
	Height	mm	400	400	400	400	400	400	500	500	500	500	500
D.A	Radiator Air Flow	m ³ /min	1,476	1,476	1,716	1,758	1,598	1,850	2,141	2,522	2,591	3,643	4,079
	Combustion Air Flow	m ³ /min	84	87	108	102	138	144	186	192	228	246	270
	E.A (OUT - LET)	m ²	3.1	3.1	3.6	3.8	3.3	3.9	4.5	5.3	5.4	7.6	8.5
	O.A (IN-LET)	m ²	3.7	3.7	4.3	4.6	4.1	4.7	5.5	6.5	6.7	9.3	10.4

※ All parameters are for reference only, final technical data should refer to approval specification for each model.

Diesel Engine Generator

디젤 엔진 발전기



SCANIA

SET MODEL		DG250-SC	DG275-SC	DG300-SC	DG330-SC	DG360-SC	DG400-SC	DG450-SC	DG500-SC	DG560-SC	DG610-SC	DG660-SC	DG700-SC	
Generator	Standby Power	kW	250	275	300	330	360	400	450	500	560	610	660	700
		kVA	312	343	375	412	450	500	562	625	700	762	825	875
	Prime Power	kW	227	250	272	300	327	363	409	454	509	554	600	636
		kVA	283	312	340	375	408	453	511	567	636	692	750	795
	Frequency	Hz	60											
	RPM	RPM	1,800											
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire											
	Insulation Class		F,H CLASS											
	Power Factor		0.8											
	Excitation System		Brushless Self Exciting or PMG (Permanent Magnet Generator)											
Bearing System		Single Ball Bearing												
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600												
Manufacturer		SCANIA												
Model		DC09 072A (02-11)	DC09 072A (02-12)	DC09 072A (02-13)	DC09 072A (02-14)	DC13 072A (02-11)	DC13 072A (02-12)	DC13 072A (02-13)	DC16 49A (10-28C)	DC16 49A (10-28D)	DC16 072A (02-11)	DC16 072A (02-12)	DC16 072A (02-13)	
Standby Power	kW	280	308	338	370	408	448	503	550	617	678	731	754	
Prime power	kW	254	280	307	336	371	407	457	500	561	619	664	685	
RPM	RPM	1,800												
No. of Cylinder	EA	5	5	5	5	6	6	6	8	8	8	8	8	
Bore x Stroke	mm	130x140	130x140	130x140	130x140	130x160	130x160	130x160	127x154	127x154	130x154	130x154	130x154	
Displacement	cc	9,300	9,300	9,300	9,300	12,700	12,700	12,700	15,600	15,600	16,400	16,400	16,400	
Compression Ratio		16.0 : 1	16.0 : 1	16.0 : 1	16.0 : 1	16.3 : 1	16.3 : 1	16.3 : 1	16.0 : 1	16.0 : 1	16.7 : 1	16.7 : 1	16.7 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)												
Aspiration		Turbocharged & Aftercooled												
Starting system		Electric motor by DC24 battery												
Governor		Electronic type												
Coolant Cap.(SET)	L	37	37	37	37	45	45	45	68	68	68	68	68	
Lube Oil Capacity	L	36	36	36	36	36	36	36	35	35	48	48	48	
Fuel Consumption	L/Hr	58.9	65.6	72.6	80.6	82.1	91.5	104.8	118.2	134.0	144.9	155.5	160.4	
DIM	Length	mm	2,900	2,900	2,900	2,900	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100
	Width	mm	1,014	1,014	1,014	1,014	1,128	1,128	1,128	1,316	1,316	1,316	1,316	1,316
	Height	mm	1,558	1,558	1,558	1,558	1,795	1,795	1,795	1,920	1,920	1,920	1,920	1,920
	Weight	kg	2,805	2,805	2,851	2,873	3,181	3,231	3,431	3,503	3,803	4,653	4,703	4,703
PAD	Length	mm	3,500	3,500	3,500	3,500	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700
	Width	mm	1,400	1,400	1,400	1,400	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
	Height	mm	300	300	300	300	300	300	300	300	300	400	400	400
D.A	Radiator air flow	m ³ /min	500	500	500	500	821	821	821	1,079	1,079	1,079	1,079	1,079
	Combustion air flow	m ³ /min	20	23	25	28	28	32	36	41	46	50	54	55
	E.A (OUT - LET)	m ²	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.1	2.1	2.1	2.1	2.1
	O.A (IN-LET)	m ²	1.3	1.3	1.3	1.3	1.5	1.5	1.5	2.8	2.8	2.8	2.8	2.8

※ All parameters are for reference only, final technical data should refer to approval specification for each model.



PERKINS

SET MODEL		DG780-PK	DG875-PK	DG1100-PK	DG1200-PK	DG1280-PK	DG1330-PK	DG1500-PK	
Generator	Standby Power	kW	780	875	1,100	1,200	1,280	1,330	1,500
		kVA	975	1,094	1,375	1,500	1,600	1,663	1,875
	Prime Power	kW	707	796	1,001	1,091	1,200	1,210	1,365
		kVA	884	995	1,251	1,364	1,500	1,513	1,706
	Frequency	Hz	60						
	RPM	RPM	1,800						
	Pole, Phase, Wire		4Pole, 3Phase, 4Wire						
	Insulation Class		F, H Class						
	Power Factor		0.8						
	Excitation System		Brushless Self Exciting						
	Bearing System		Single Ball Bearing						
Voltage	V	220/127, 380/220, 440/254, 3,300, 6,600							
Manufacturer		PERKINS							
Model		4008TAG1	4008TAG2	4012-46TWG2A	4012-46TWG3A	4012-46TWG4A	4012-46TAG2A	4012-46TAG3A	
Standby Power	HP	1,176	1,314	1,631	1,761	1,871	1,956	2,202	
Prime power	HP	1,072	1,198	1,483	1,609	1,753	1,784	2,011	
RPM	RPM	1,800							
No. of Cylinder	EA	8	8	12	12	12	12	12	
Bore x Stroke	mm	160x190	160x190	160x190	160x190	160x190	160x190	160x190	
Displacement	cc	30,561	30,561	45,842	45,842	45,842	45,842	45,842	
Compression Ratio		13.6 : 1	13.6 : 1	13.6 : 1	13.6 : 1	13.1 : 1	13.6 : 1	13.6 : 1	
Engine Type		4-stroke, Internal combustion Diesel Engine (with radiator or heat exchanger)							
Aspiration		Turbocharged, ATAAC		Turbocharged, ATWAC			Turbocharged, ATAAC		
Starting system		Electric motor by DC24 battery							
Governor		Electronic type							
Coolant Cap.(ENGINE)	L	-	-	-	-	-	-	-	
Coolant Cap.(SET)	L	162	162	201	201	201	210	209	
Lube Oil Capacity	L	165.6	165.6	177.0	177.0	177.0	177.0	177.0	
Fuel Consumption	L/Hr	212	216	298	325	355	252	300	
DIM	Length	mm	4500	4500	4500	4700	4700	4900	5000
	Width	mm	1790	1790	1790	1790	1990	1790	2200
	Height	mm	2354	2354	2354	2425	2382	2390	2459
	Weight	kg	6600	6700	8340	8940	9030	9670	10290
PAD	Length	mm	5200	5200	5200	5500	5500	5700	6000
	Width	mm	2200	2200	2200	2200	2500	2500	2700
	Height	mm	300	300	400	400	400	400	500
D.A	Radiator air flow	m ³ /min	1215	1228	1328	1375	1535	1684	1784
	Combustion air flow	m ³ /min	70	75	114	116	122	133	145
	E.A (OUT - LET)	m ²	2.5	2.6	2.8	2.9	3.2	3.5	3.7
	O.A (IN-LET)	m ²	3.1	3.1	3.4	3.6	3.9	4.3	4.6

※ All parameters are for reference only, final technical data should refer to approval specification for each model.

Gas Engine Generator

가스 엔진 발전기

Doosan Gas Engine

Model	Combustion	Cylinder	Aspiration	Displacement (liter)	Bore x Stroke (mm)	eKW (1800rpm)
GE08TI	Spark ignition	IN-6	Turbocharged	8.1	111 x 139	128
GE12TI	Spark ignition	IN-6	Turbocharged	11.1	123 x 155	170
GV158TI	Spark ignition	V-8	Turbocharged	14.6	128 x 142	230
GV180TI	Spark ignition	V-10	Turbocharged	18.3	128 x 142	290
GV222TI	Spark ignition	V-12	Turbocharged	21.9	128 x 142	350

- 1) Outputs are based on the continuous rating of the Co-Gen use
 2) All specifications are reference only, subject to change without notice.

Caterpillar Gas Engine

Model	1800rpm@60Hz		Note
	Emergency Power(ekW)	Continuous Power(ekW)	
G3306	-	100	6
G3306	-	135	3
G3306	-	150	1
G3406	150	150	6
G3406	245	190	3, 5
G3412	-	250	6
G3408	310	255	3
G3408	340	280	1
G3412	350	350	3, 5
G3412C	375	375	3, 5
G3412	450	-	3,5
G3412	515	-	1
G3412	515	-	3
G3516B	-	1,300	3
G3516B	-	1,400	1
G3516C	-	1,600	3
G3520C	-	1,900	4
G3520C	-	2,055	3

Note All ratings at 0.8pf and without fan Air-cooler temperature(1 ~ 32℃, 3 ~ 54℃, 4 ~ 70℃)
 5) Ratings at 0.8pf with fan. 6) Digester gas. 7) Digester & landfill gas(110℃)
 All specifications are for reference only, subject to change without notice.



Model	1200rpm@60Hz		Note
	Emergency Power(ekW)	Continuous Power(ekW)	
G3512	-	365	7
G3508	-	360	3, 7
G3508	-	400	1, 7
G3512	-	555	3, 7
G3512	-	570	3, 7
G3512	-	600	1, 7
G3516	-	750	3, 7
G3516	-	770	3, 7
G3516	-	820	1, 7
G3520C	-	1,600	3, 7

Model	900rpm@60Hz		Note
	Emergency Power(ekW)	Continuous Power(ekW)	
G3606	-	1,155	5, 3
G3606	-	1,235	5, 1
G3608	-	1,540	5, 3
G3608	-	1,540	5, 1
G3612	-	1,640	5, 3
G3612	-	2,310	5, 3
G3612	-	2,615	5, 1
G3616	-	3,080	5, 3
G3616	-	3,285	5, 1
G3616	-	3,480	5, 1

Model	720rpm@60Hz		Note
	Emergency Power(ekW)	Continuous Power(ekW)	
G3606	-	6,520	-



Wartsila Gas engine

Technical data	Unit	720rpm@60Hz			750rpm@50Hz		
		9L34SG	16V34SG	20V34SG	9L34SG	16V34SG	20V34SG
Power, electrical	kW	4,169	7,434	9,341	4,343	7,744	9,730
Heat rate	kJ/kWh	7,843	7,819	7,779	7,843	7,819	7,779
Electrical efficiency	%	45.9	46.0	46.3	45.9	46.0	46.3
Length	mm	10,400	11,300	12,890	10,400	11,300	12,890
Width	mm	2,780	3,300	3,300	2,780	3,300	3,300
Height	mm	3,840	4,240	4,440	3,840	4,240	4,440
Weight	tone	77	120	130	77	120	130

Heat rate and electrical efficiency at generator terminals, including engine driven pumps, ISO3046 conditions and gas LHV >28MJ/m³N. Tolerance 5%, Power factor 0.8, Gas methane number >80, Nm³ defined at NTP(273.15K and 101.3kPa). Specifications are subject to change without notice.

Wartsila Dual-fuel engine

Technical data	Unit	720rpm@60Hz			750rpm@50Hz		
		9L34DF	16V34DF	20V34DF	9L34DF	16V34DF	20V34DF
Power, electrical	kW	3,758	6,737	8,439	3,888	6,970	8,730
Heat rate	kJ/kWh	8,303(8,175)*	8,048(8,107)*	8,031(8,127)*	8,303(8,214)*	8,048(8,146)*	8,031(8,127)*
Electrical efficiency	%	43.4(44.0)*	44.7(44.4)*	44.8(44.3)*	44.4(44.3)*	44.7(44.1)*	44.8(44.3)*
Length	mm	10,400	11,300	12,890	10,400	11,300	12,890
Width	mm	2,780	3,300	3,300	2,780	3,300	3,300
Height	mm	3,840	4,240	4,440	3,840	4,240	4,440
Weight	tone	77	120	130	77	120	130

Heat rate and electrical efficiency at generator terminals, including engine driven pumps, ISO3046 conditions and gas LHV >28MJ/m³N. Tolerance 5%, Power factor 0.8, Gas methane number >80, Nm³ defined at NTP(273.15K and 101.3kPa). * In oil mode. Specifications are subject to change without notice.

Gas Turbine Generator

가스 터빈 발전기



NIIGATA

Model		CNT-500ERA	CNT-625ERA	CNT-750ER	CNT-1000ER	CNT-1250E	CNT-1500E	CNT-2000E		
Generating equipment	Rated output	kVA	500	625	750	1000	1250	1500	2000	
	Voltage	V	200 ~ 6600							
	Frequency	Hz	50 / 60							
	Fuel consumption	L/h	293	340	384	429	516	561	706	
	Start-up time		within 40 seconds							
	Load input allowable	%	100 (resistance load)							
	Instant. frequency fluctuation variability ratio	%	± 4 (100% load input and shutoff)							
	Steady frequency fluctuation variability ratio	%	± 0.3							
	Stabilization time	sec	8							
	Noise	Machine side	dB(A)	approx. 85						
Exhaust silencer		dB(A)	approx. 90							
Gas turbine	Type		simple open cycle single-shaft type							
			RGT5	RGT8	NGT2A-S	NGT2B-S				
	Structure	Compressor		1 stage centrifugal type		2 stage centrifugal type				
		Turbine		1 stage radial type		3 stage axial type				
		Combustor		single can type						
		Reduction gear		parallellism gear mechanism				planetary gear mechanism		
		Governor		electronic type						
	Performance	Rated output	PS	600	750	900	1200	1500	1800	2400
			kW	441	552	662	883	1103	1324	1765
		Main shaft rotating	rpm	28,800		26,500		22,000		
	Output shaft rotating speed	rpm	1500 / 1800							
	Fuel			Diesel oil						
	Lubricant oil	Type of L.O		mineral based oil, synthetic based oil						
Quantity possessed		L	60	80	100	160				
Generator	Type		Horizontal shaft, revolving field, automatic							
	Capacity	kVA	500	625	750	1000	1250	1500	2000	
	Rotating speed	rpm	1500 / 1800							
	Pole number	P	4							
	Power factor		0.8							
	Excitation		AC-excitation / brushless excitation							
Starting device	Electric type	HS-shaped lead	DC60V-HS400E x 1		DC48V-HS600E x 1		DC48V-HS600E x 1		DC48V-HS600E x 2	
		MSE-shaped lead	DC60V-MSE200 x 1		DC48V-MSE500 x 1		DC48V-MSE500 x 1		DC48V-MSE500 x 2	
		AHH-shaped Alkali	DC60V-AHH120SE x 1		DC48V-AHH250SE x 1		DC48V-AHH250SE x 1		DC48V-AHH200SE	
	Air type	Air tank	---		---		4.5m ³ x 1		8m ³ x 1	
		Air compressor	---		---		5.5kW x 1		5.5kW x 2	

Note : 1. Generator rated output(kW) is set by taking 0.8 power factor subject to intake air temperature at 40°C, mean sea level less than 150m, intake air pressure loss less than 0.5kPa(50mmH₂O) and exhaust gas back pressure less than 2.5kPa(250mmH₂O).
 2. FOC is figured based on fuel oil 42,700kJ/kg(10,200kcal/kg) LHV and 0.83 specific gravity with 5% tolerance at generator terminal.
 3. Specifications are subject to change without notice.

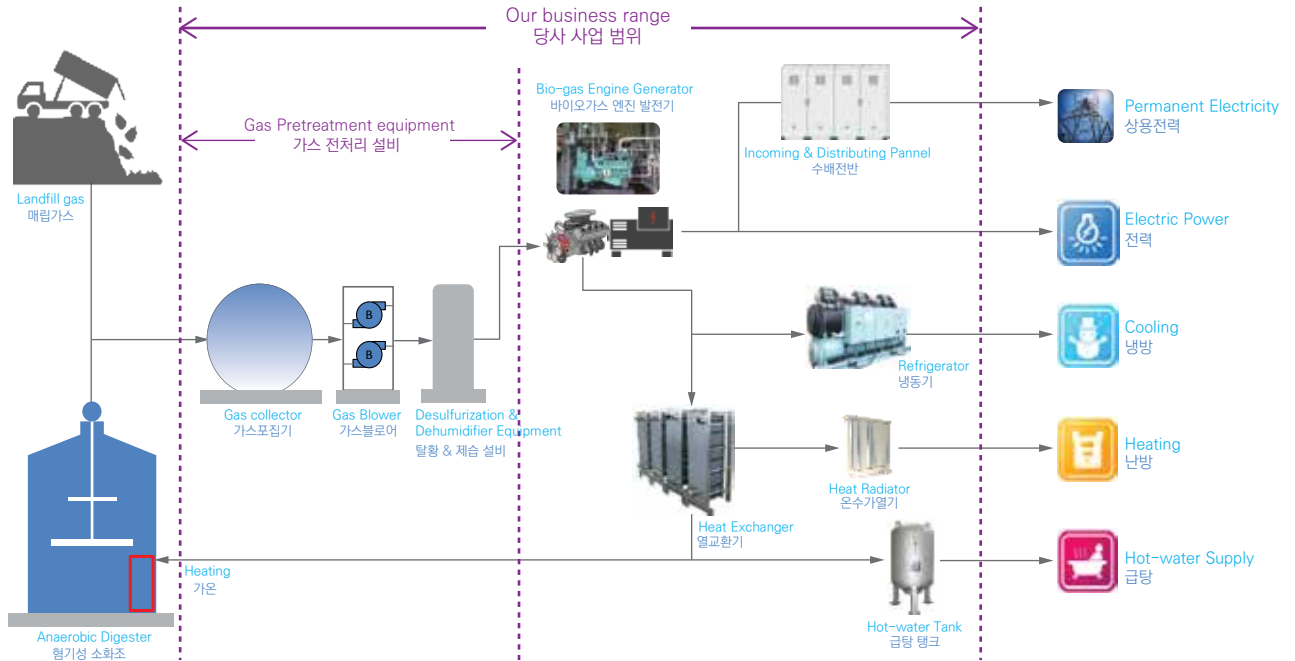


Model			CNT-2500E	CNT-3000EA	CNT-3250E	CNT-4000E	CNT-5000EN	CNT-6000EN	CNT-6500EN	
Generating equipment	Rated output	kVA	2500	3000	3250	4000	5000	6000	6500	
	Voltage	V	380 ~ 6600			3300 ~ 6600				
	Frequency	Hz	50 / 60							
	Fuel consumption	L/h	957	1075	1201	1402	1835	2151	2402	
	Start-up time		within 40 seconds							
	Load input allowable	%	100 (resistance load)							
	Instant. frequency fluctuation variability ratio	%	± 4 (100% load input and shutoff)							
	Steady frequency fluctuation variability ratio	%	± 0.3							
	Stabilization time	sec	8							
	Noise	Machine side	dB(A)	approx. 85						
Exhaust silencer		dB(A)	approx. 90							
Gas turbine	Type		simple open cycle single-shaft type							
			NGT3A-S	NGT3B-S	NGT3B-S/H	NGT2B-T	NGT3A-T	NGT3B-T	NGT3B-T/H	
	Structure	Compressor		2 stage centrifugal type						
		Turbine		3 stage axial type						
		Combustor		single can type						
		Reduction gear		planetary gear mechanism						
		Governor		electronic type						
	Performance	Rated output	PS	3000	3600	3900	4800	6000	7200	7800
			kW	2207	2648	2868	3530	4413	5296	5736
		Main shaft rotating	rpm	17,900	17,600		22,000	17,900	17,600	
	Output shaft rotating speed	rpm	1500 / 1800							
	Fuel			Diesel oil						
	Lubricant oil	Type of L.O		mineral based oil, synthetic based oil						
Quantity possessed		L	170			250	350			
Generator	Type		Horizontal shaft, revolving field, automatic							
	Capacity	kVA	2500	3000	3250	4000	5000	6000	6500	
	Rotating speed	rpm	1500 / 1800							
	Pole number	P	4							
	Power factor			0.8						
	Excitation			AC-excitation / brushless excitation system						
Starting device	Electric type	HS-shaped lead	DC48V-HS1200E x 1	DC48V-HS600E x 1, HS1200E x 1		DC48V-HS600E x 4		DC48V-HS1200E x 4		
		MSE-shaped lead	DC48V-MSE1000 x 1	DC48V-MSE500 x 1, MSE1000 x 1		DC48V-MSE500 x 4		DC48V-MSE1000 x 4		
		AHH-shaped Alkali	DC48V-AHH4000SE x 1	DC48V-AHH2000SE x 3		DC48V-AHH2000SE x 4		DC48V-AHH4000SE x 4		
	Air type	Air tank		10m ³ x 1 (5m ³ x 2)		8m ³ x 2		10m ³ x 2		
		Air compressor		5.5kW x 2		5.5kW x 4		5.5kW x 4		

Note : 1. Generator rated output(kW) is set by taking 0.8 power factor subject to intake air temperature at 40°C, mean sea level less than 150m, intake air pressure loss less than 0.5kPa(50mmHzO) and exhaust gas back pressure less than 2.5kPa(250mmHzO).
 2. FOC is figured based on fuel oil 42,700kJ/kg(10,200kcal/kg) LHV and 0.83 specific gravity with 5% tolerance at generator terminal.
 3. Specifications are subject to change without notice.

Eco-friendly Generation

친환경 발전



RECORDS 실적

Client 발주처	Site 현장	Engine 엔진	Capacity(kW) 용량(kW)	Q'ty 수량	Remarks 비고
Korea Institute of Machinery & materials 한국기계연구원	Metropolitan-landfill 수도권매립지	Doosan(gas engine)	350	2	The first time in Korea, landfill gas powergeneration 국내최초 국산엔진 매립가스 발전
KOREA EAST WEST POWER Co., Ltd. 동서발전	Metropolitan-landfill 수도권매립지	Doosan(gas turbine)	5,000	1	Bio-gas power generation 바이오가스 발전
Eco Energy Holdings Co., Ltd. 에코에너지홀딩스	Masan, Gumi-landfill 마산, 구미 매립지	Doosan(gas engine)	450	3	Landfill-gas power generation 매립가스발전
Korea Institute of Machinery & materials 한국기계연구원	Daejeon-city, Sindae-dong 대전 신대동	Doosan(gas engine)	100	1	Landfill-gas power generation 매립가스발전
GnCenergy Co., Ltd. (주)지엔씨에너지	Metropolitan-landfill 수도권매립지	Doosan(gas engine)	400	3	Bio-gas power generation 바이오가스 발전
ByuckSan Engineering 백산엔지니어링	Cheongju-Waste water treatment plant 청주읍폐수처리장	Doosan(gas engine)	360	2	Bio-gas power generation 바이오가스 발전
ByuckSan Engineering 백산엔지니어링	Cheongju-Waste water treatment plant 청주읍폐수처리장	Doosan(gas engine)	150	1	Bio-gas power generation 바이오가스 발전
GnCenergy Co., Ltd. (주)지엔씨에너지	Metropolitan-landfill 수도권매립지	Man D&T(gas engine)	500	1	Bio-gas power generation 바이오가스 발전
GnCenergy Co., Ltd. (주)지엔씨에너지	Dongducheon-Waste water treat. plant 동두천읍폐수처리장	Doosan(gas engine)	400	2	Bio-gas power generation 바이오가스 발전
GnCenergy Co., Ltd. (주)지엔씨에너지	Cheongju-landfill 청주매립지	Doosan(gas engine)	400	2	Bio-gas power generation 바이오가스 발전
GnCenergy Co., Ltd. (주)지엔씨에너지	Cheongju-Waste water treatment plant 청주읍폐수처리장	Man D&T(gas engine)	500	1	Bio-gas power generation 바이오가스 발전



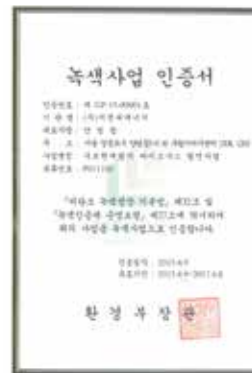
Bare Engine(MAN Diesel & Turbo)



Bare Engine(Doosan Infracore)

Benefits at a glance

- Proven and fully developed
- Flexibility and individuality
- Robust and compact
- Efficient
- Low emissions



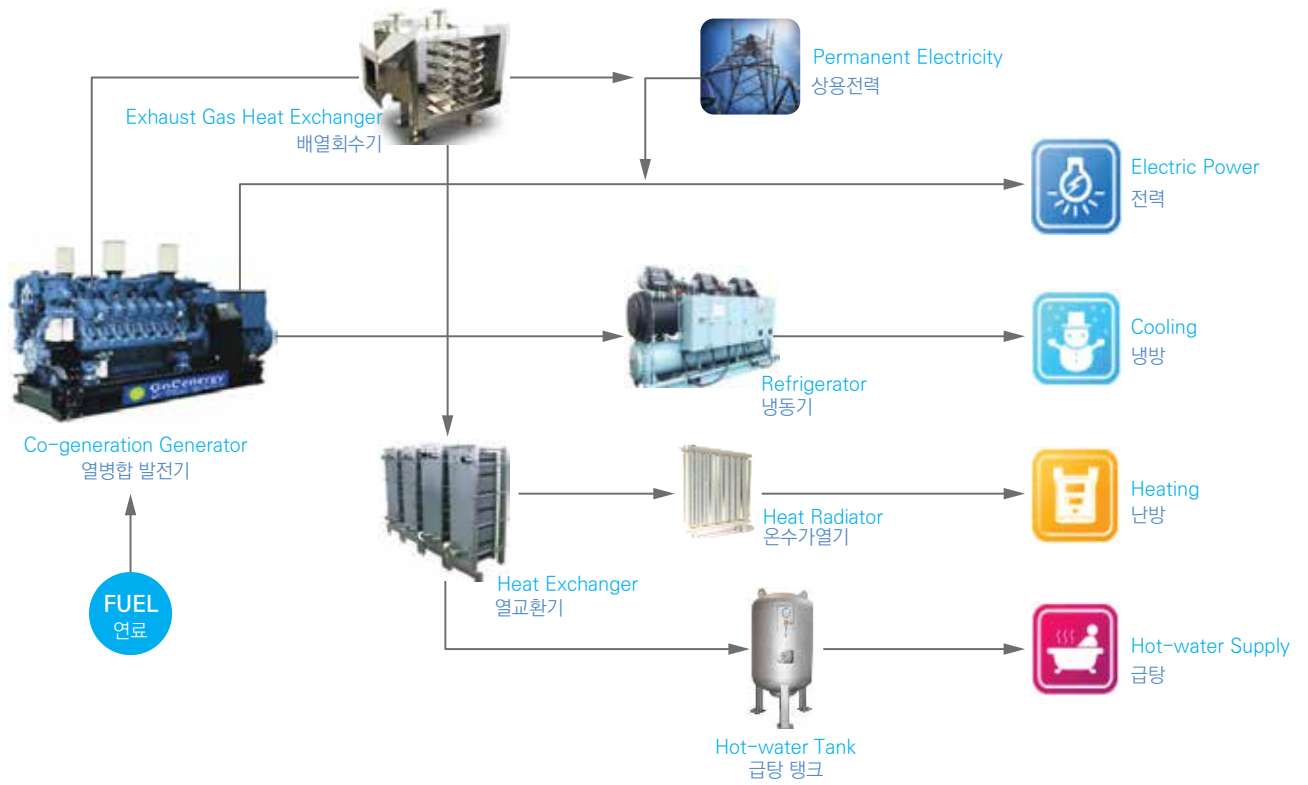
Model Line-up

Model	Bare Engine	Cylinder	Displacement	Bore x Stroke (mm)	Output(kW)	
					@1800rpm(60Hz)	@1500rpm(50Hz)
BG075D	GE06TI	IN-6	5.8	102 x 118	90	75
BG125D	GE08TI	IN-6	8.1	111 x 139	125	105
BG180D	GE12TI	IN-6	11.1	123 x 155	180	150
BG200D	GV158TI	V-8	14.6	128 x 142	200	170
BG300D	GV180TI	V-10	18.3	128 x 142	300	250
BG400D	GV222TI	V-12	21.9	128 x 142	360	300
BG500M	E3262-LE202	V-12	25.8	132 x 157	530	450



Co-generation EPC

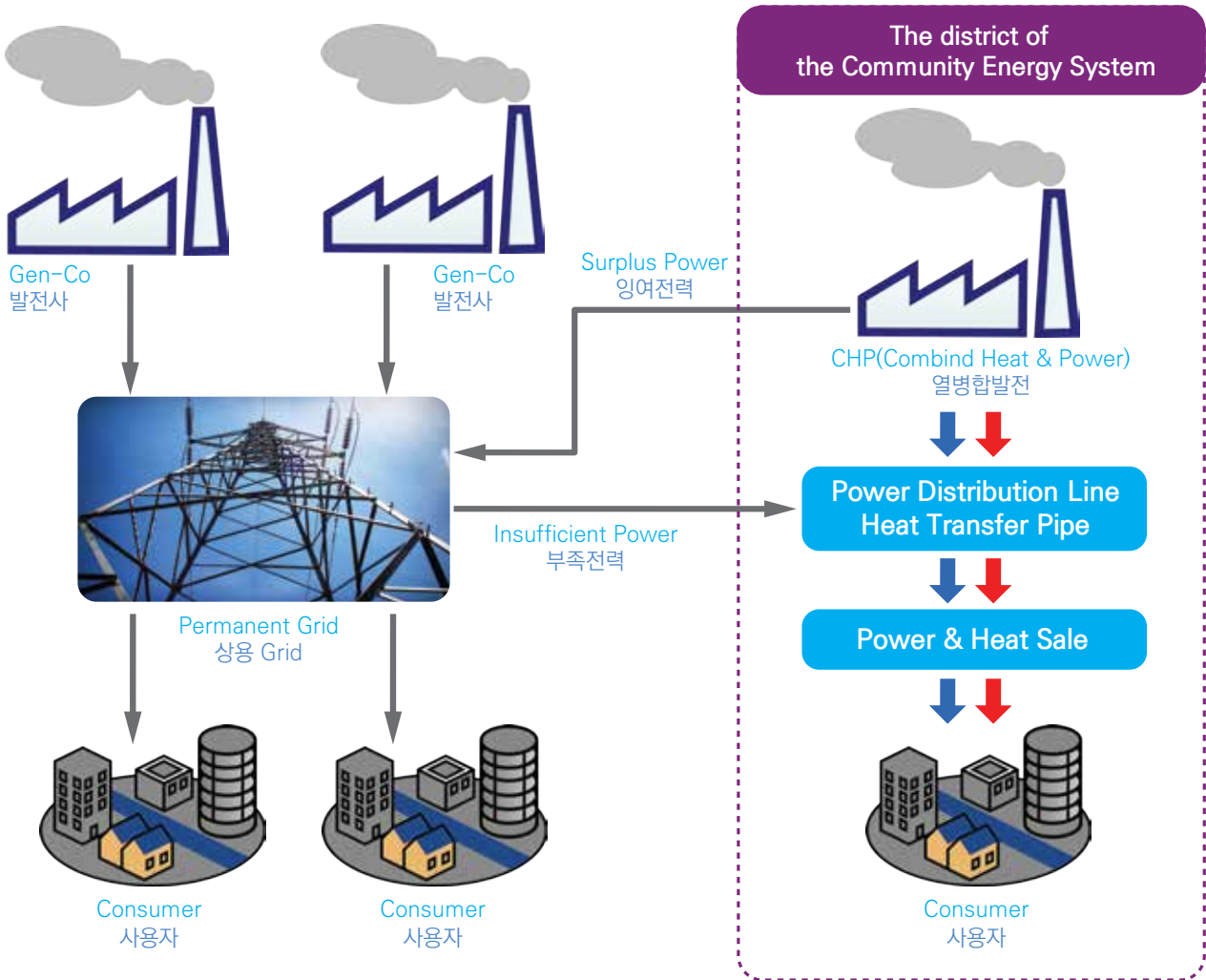
열병합 발전 EPC



Co - generation EPC Scope 열병합 발전 EPC 범위

- Engine Generator 엔진 발전기
- Heat Exchanger 열교환기
- Auxiliaries 부대품
- Synchro and Control Panel 병렬 및 제어 판넬
- Incoming and Distributing Panel 수배전반





Central Post Office

중앙우체국

Gas-turbine Co-Generation,
for the first time in Korea
국내 최초 가스터빈 열병합
(1,040kW x 2set)



Time Square(K-project)

타임스퀘어(K-프로젝트)

Gas-engine Co-Generation
가스엔진 열병합
(1,635kW x 3set)



Sin-jeong CES

신정 CES

Gas-engine Co-Generation
가스엔진 열병합
(3,000kW x 2set)



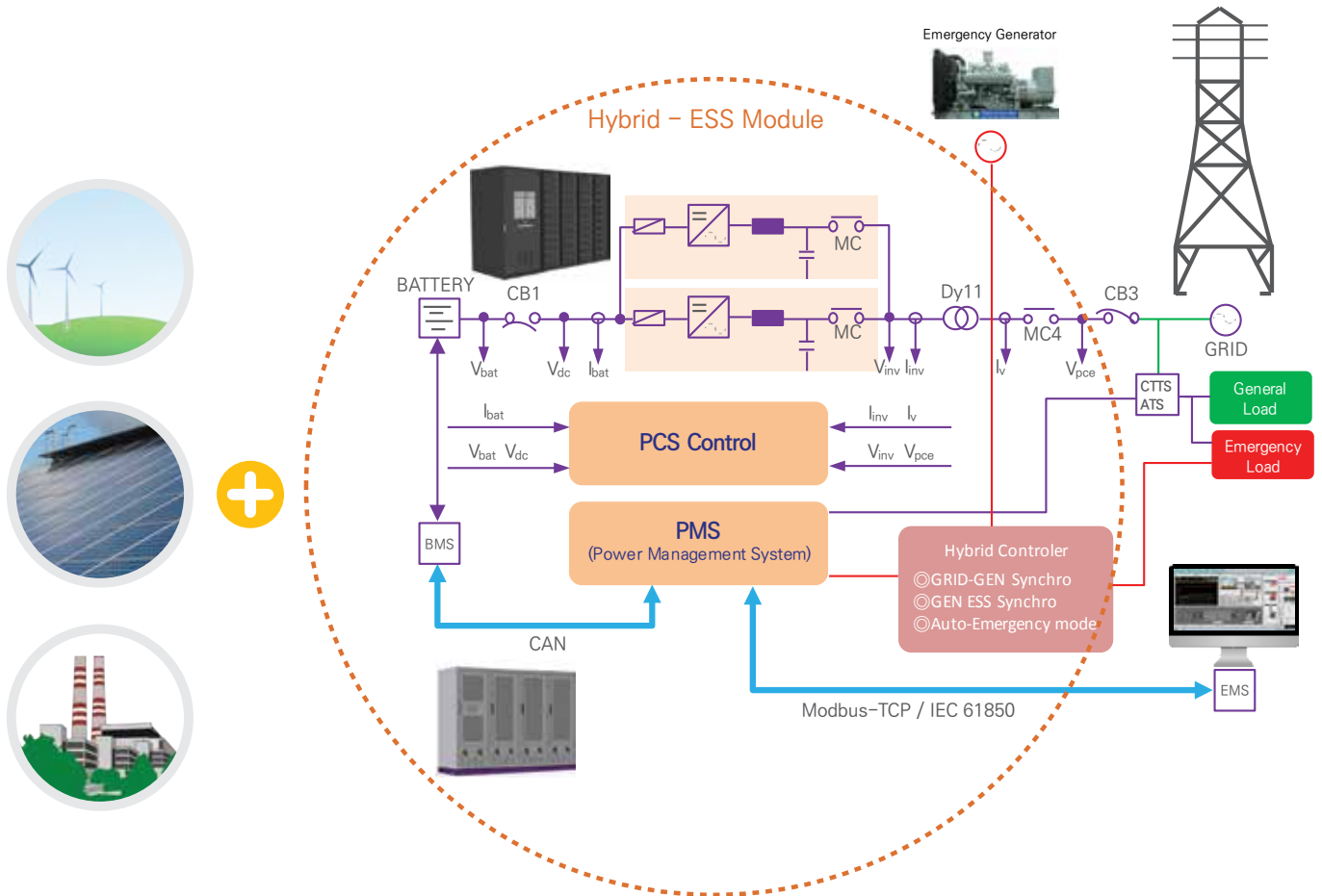
Cheonan Cheongsu CES

천안청수 CES

Gas-engine Co-Generation
가스엔진 열병합
(8,430kW x 3set)

ESS(Energy Storage System)

에너지 저장 장치



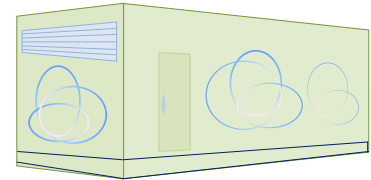
Hybrid – ESS System

- Emergency power generator – connected ESS
비상발전 연계 ESS(에너지저장장치)
- Wind power generation – connected ESS
풍력발전 연계 ESS(에너지저장장치)
- Photovoltaic power generation – connected ESS
태양광발전 연계 ESS(에너지저장장치)
- Bio-gas power generation – connected ESS
바이오가스발전 연계 ESS(에너지저장장치)
- Land fill-gas power generation – connected ESS
매립가스발전 연계 ESS(에너지저장장치)



ESS Module

ESS 모듈



Compositions		ESS Module Models	ES50/100	ES100/200	ES150/300	ES200/400	ES250/500
PCS (Power Control System)	DC(Input)	Bat. Maximum Power(kW)	55	110	165	220	275
		Rated Operating Range(Vdc)	570 ~830	570 ~830	570 ~830	570 ~830	570 ~830
		DC Allowable Voltage(Vdc)	830	830	830	830	830
		DC Maximum Current(Adc)	96.5	193	289	386	482
	AC(Output)	Rated Power(kW)	50	100	200	250	250
		Phase & Wire	3P & 3W / 3P & 4W				
		System Voltage(Vac)	3*380(±10%)				
		Rated Current(Aac)	75	152	228	304	361
		Rated Frequency(Hz)	60				
		Total Harmonic Distortion(THD)	within 3% at rated operation				
		Power Factor@rated power	1				
	Consumption Power@Working	<500W			<1,000W		
	Maximum Efficiency(%)	96.5%					
	Ambient conditions	Operating Temperature(°C)	-10 ~ 40				
		Relative Humidity(%)	0 ~ 95				
		Altitude(m)	≤ 1000				
		Cooling method	Forced air cooling				
		Noise(dB)	<78				
		Protection degree	IP20(IPX1 option)				
	Case	Size(W / H / D) (mm)	800 / 1,800 / 800			1,900 / 1,800 / 800	
		Weight(kg)	about 500			about 1,500	
Power Density(W/cm ³)		0.09746					
Battery & BCS	Operating Capacity	100kWh	200kWh	300kWh	400kWh	500kWh	
	Nominal Voltage	744Vdc					
	Operating Voltage Range	640 ~ 830Vdc					
	Battery Type	LITHIUM-ION					
	Cont. Charge/Discharge C-rate	over 4,000 Cycle(DOD 80%, @23±5°C, EOL 75%, 1cycle/1day)					
	Cycle Life	1,900 / 1,800 / 750					
	Shelf Life	over 20years(25°C, SOC 20%)					
PMS (Power Management System)	Type	19 Inch rack type					
	Measurement	Cell Voltage, Current, Temperature, SOC, SOH					
	Control	Cell-Blancing					
	Protection	Over Voltage, Low Voltage, Over Current, High Temperature					

All parameters are for reference only, final technical data should refer to approval specification for each model.

Supply Scope

공급 범위

Standard 표준

- Generator set(w/ base frame & radiator)
- Silencer(industrial type)
- Flexible connector
- Battery(lead-acid type)
- Filters(Fuel, Lube oil etc. spare portion)

- 발전기세트(베이스프레임 및 라디에터 포함)
- 소음기(산업용)
- 플렉시블 연결자
- бат데리(연축전지)
- 필터류(연료, 오일 등 예비품분)



Options 선택

- Fuel oil Daily Tank
 - Free standing type Mounted base type
- Exhaust reduction system
- Enclosure
 - Weather-proof Weather&sound-proof

- 연료탱크
 - 자립형 탑재형
- 배기가스 저감장치
- 엔클루저
 - 옥외형 옥외 방음형



Control panel 운전반

- Mounted Engine Instrument Panel
- Mounted Generator set Panel
- Free-standing Generator set Panel

- 탑재 엔진 판넬
- 탑재 발전기 판넬
- 별치 발전기 판넬



탑재 엔진 판넬 (기계식 | 전자식)



탑재 발전기 판넬 (기계식 | 전자식)



별치 발전기 판넬

Installation Information

설치 정보

Gen. Foundation 발전기 기초대

If a concrete foundation is required, minimum design guidelines include :

- Strength must support wet weight of units plus dynamic loads.
- Outside dimensions exceed that of the generator set a minimum of 300mm(1ft) on all sides.
- Depth sufficient to attain a minimum weight equal to generator set wet weight (only if large mass, ie., inertia block, is specified for vibration control)

$$FD = W / (D \times B \times L)$$

FD = foundation depth, m(ft)

W = total wet weight of generator set, kg(lb)

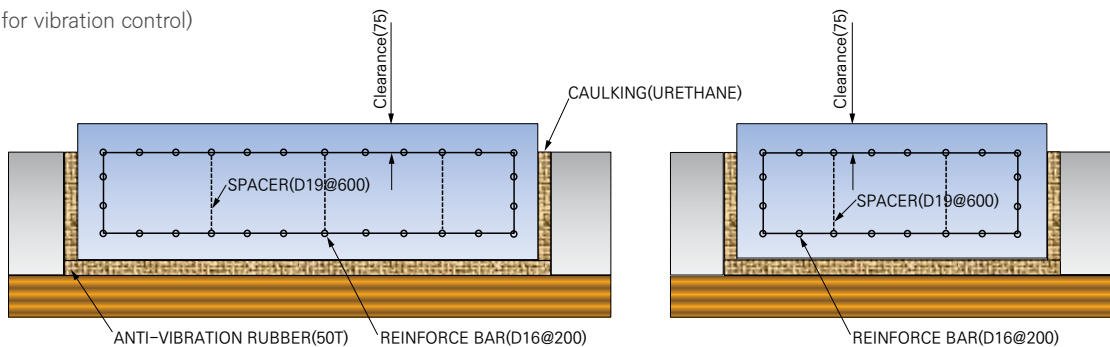
D = density of concrete, kg/m³(lb/ft³)
note : use 2403 for metric units and 150 for English units.

B = foundation width, m(ft)

L = foundation length, m(ft)

콘크리트 기초대가 사용될 경우, 최소 설계 기준은 다음과 같다 :

- 강도는 유닛의 습중량에 동하중을 더한 하중을 견뎌야 한다.
- 외곽 치수는 발전기의 모든 외곽에서 300mm(1ft)를 벗어나야 한다.
- 깊이는 발전기세트의 습중량과 최소 동등 이상의 중량이 되어야 한다.



Miscellaneous Inform. 기타 정보

CAPACITY(kW)	EXHAUST GAS PIPE SIZE	SPRING ISOLATER	STARTING BATTERY
3,000 kW Class	20 INCH(500A)	2,000 kg x 16EA	DC24V, 1200AH (DC12V - 200AH x 6EA)
2,500 kW Class	20 INCH(500A)	2,000 kg x 14EA	
2,250 kW Class	16 INCH(400A)	2,000 kg x 12EA	DC24V, 800AH (DC12V - 200AH x 4EA)
2,000 kW Class	16 INCH(400A)	2,000 kg x 12EA	
1,750 kW Class	16 INCH(400A)	2,000 kg x 12EA	
1,500 kW Class	14 INCH(350A)	2,000 kg x 10EA	
1,250 kW Class	12 INCH(300A)	1,500 kg x 10EA	
1,000 kW Class	10 INCH(250A)	1,500 kg x 10EA	DC24V, 400AH (DC12V - 200AH x 2EA)
900 kW Class	10 INCH(250A)	1,000 kg x 10EA	
750 kW Class	8 INCH(200A)	750 kg x 10EA	
650 kW Class	8 INCH(200A)	750 kg x 10EA	
500 kW Class	6 INCH(150A)	500 kg x 10EA	
400 kW Class	6 INCH(150A)	500 kg x 10EA	
300 kW Class	5 INCH(125A)	500 kg x 6EA	
200 kW Class	4 INCH(100A)	500 kg x 6EA	DC24V, 300AH (DC12V - 150AH x 2EA)
100 kW Class	3 INCH(80A)	500 kg x 6EA	

Generator Set Power Ratings

발전기 출력 정격

비상 출력(ESP)

정격 정의 : 변동 부하, 연간 200시간 제한

이 정격은 정상적으로 이용 가능한 전기 공급 망 또는 그리드(grid)가 고장나는 장소에 부하가 변동하며 운전 시간이 연간 200시간 미만일 경우의 비상출력 적용으로 사용되는 발전기에 사용 가능하다.

상용 출력 (PRP)

정격 정의 : 변동 부하, 무제한 운전 시간

이 정격은 공급망이나 그리드 이용이 가능하지 못한 장소에 일년 365일, 하루 24시간 전력을 공급하기 위하여 사용되는 발전기세트에 사용 가능하다. 평균 출력은 상용출력(PRP)의 70%이다. 12시간중 최대 1시간 기술적인 목적으로 10% 과부하가 가능하다. 과부하 운전은 연간 50시간을 초과해서는 않된다.

예 : 도서지역이나 고립지에 위치한 발전기세트

연속 출력 (COP)

정격 정의 : 일정 부하, 무제한 운전 시간

이 정격은 모선 측, 국가 전력 공급 망(network) 또는 그리드(grid)와 병렬되는 발전기세트로 일년 365일, 하루 24시간 100%로 운전되며 잉여 전력은 그리드(grid)로 내보내어지는 발전기세트에 적용 가능하다.

예 : 열병합 발전기세트(Combined Heat & Power (CHP))

☞ 상기 정격은 ISO8528 및 ISO3046에 따릅니다.

EMERGENCY STANDBY POWER (ESP)

Rating definition: variable load : limited to 200 hours per year

This rating is appropriate for a generator set used in standby power applications where the normally available electrical supply network or grid fails and where it has been determined that the load will be varying and the running hours will be less than 200 hours a year.

PRIME POWER (PRP)

Rating definition: variable load : unlimited running hours

This rating is appropriate for a generator set used to supply power 24 hours a day, 365 days a year where there is no supply network or grid available. Average power output is 70% of the prime power rating. With 10% overload capability for technical purposes for a maximum of one hour in twelve. Overload operation cannot exceed 50 hours per year.

Example: Generator set located on an off-shore island or in the middle of a desert.

CONTINUOUS POWER (COP)

Rating definition: constant load : unlimited running hours

This rating is appropriate for a generator set paralleled with an infinite bus e.g. a national electrical supply network or grid where the generator set is run at 100% load, 24 hours a day, 365 days a year and any surplus power is exported into the grid.

Example: Combined Heat & Power (CHP) generator set.

☞ Ratings are in accordance with ISO8528, ISO3046

Unit Conversions

1Hp = 0.746kW

1PS = 0.735kW

1HP = 1.0138PS

1PS = 0.986HP

1CMM = 1m³/min

1CFM = 35.3m³/min

1kWh = 860kcal

1kWh = 3,412BTU

1kWh = 3,600 KJ

1kgf/m² = 98kPa

1g/PS-H = 1.36g/kW-h

1Liter = 0.833kg(경유)

Company Culture

기업 문화

꿈을 키우는 지엔씨에너지

소외계층 후원과 자원봉사 참여

1993년 설립 이후, 갈 곳 없는 독거노인, 치매노인 및 장애인 등 소외계층을 후원하며, 매년 전국 각지의 자원봉사에 적극 참여하고 있습니다.

첨단 기술 개발 및 유능한 인재 개발 육성 사업

We 우리사주 제도를 통한 주인의식 고취와, 꿈과 희망을 공유하는 기업을 지향하며, 끊임없는 연구 개발 및 교육프로그램 을 통한 인재 개발 육성에 투자를 아끼지 않고 있습니다.



GnEnergy growing the dreams

Participation in voluntary support and support for the underprivileged

Since its foundation in 1993, we have been supporting the underprivileged, including the elderly living alone, the elderly with dementia and the disabled, and actively participating in volunteer activities around the country every year.

High-tech development and talented human resource development business

We aim to become a company that shares our dreams and hopes with our employees through our employee stock ownership system. We are investing in endless research and development, training and development of human resources.

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Dangjin Plant

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최고의 기업첨단 비즈니스 현장에 지엔씨에너지가 있습니다.



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