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## **LNG CNG Natural Methane Gas Generator Set**

This series generator sets choose high quality Man, Cummins, Weifang ricardo, Doosan natural gas engine assembled with alternators (Stamford, Faraday or other famous brand), the control system adopts PLC automatic controller.

This series of natural gas generator can be used in natural gas power plant, school, hospital, oil field and others, as a 24-hour uninterrupted power or standby power.



#### Advantages of LNG CNG Natural Methane Gas Generator Set

High efficiency and Cost effective Low Emissions due to advantage technologies Low space requirement due to compact design Reliable service life resulting from application-specific design Powerful to ensure uninterrupted operation Adapt to harsh conditions

#### Applications of LNG CNG Natural Methane Gas Generator Set

Supply Scope	of LNG CNG natural methane gas generator set
Engine Brands	Man, Cummins, Weifang Ricardo, Doosan
Man	from 36kW to 500kW
Cummins Series	from 15kW to 500kW

Weifang Ricardo Series	from 10kW to 250kW
Doosan Series	from 100kW to 300kW
Fuel Types	CNG, LNG, PNG Oilfield Associated Gas, Coalmine Gas, Coalbed Gas, methane gas.

	Specific	cations LNG CNG natural methane gas generator set					
	Model	HTG-XXG					
	Rated Power	10KW-2000KW/12.5KVA-2500KVA					
Generator Set	Rated Voltage	400V/230V					
	Rated Frequency	50Hz/60Hz					
	Туре	Open/Silent/Soundproof/Container					
Gas Engine	Engine Brand	Man, Cummins, Baudouin Weifang ricardo, Doosan					
	Туре	Brushless					
Alternator	Brand	Stamford, Leroy-Somer, Faraday, Lingyu, etc.					
	Connection	3-pahse, 4-wire					
Controller	Туре	Auto PLC Controller					
Controller	Brand	Deepsea, SmartGen, ComAp etc.					
Fuel		Natural Gas 0.3m³/kw·h					
Application		Mines, Building, Oil Fields, Hospitals, Schools, Ports, Hotels, etc.					
Delivery		By Sea, By Air, By Train, By Express					
Warranty		12 months or 1500 running hours (subject to the earlier)					
Optional Parts		CHP/Cogeneration/CCHP/Trigeneration Soundproof Canopy (Super Silent canopy)Containerized Canopy Automatic Transfer Switch Synchronization Parallelling Panel Remote Control PMG Alternator Oil and Water Heater High Voltage Alternator 6.3kv and 10.5kv, High Voltage Electrical Control Cells (PT Cabinet, CT Cabinet, High Voltage outgoing cabinet, DC Panel, Groud Resistance Cabinet and low voltage distribution cabinet etc)					



# **Cummins LNG CNG Natural Methane Gas Generator Set**

Cummins technology series gas generator is developed from cummins G-Drive 3.9L-38L engine on our independent research.

The engine used in this series of generators continues cummins compact design, using high-strength cylinders, integral crankshafts and efficient lubrication systems. the main heat load components were redesigned such as cylinder head, piston, piston ring, the intake and exhaust valves, camshaft, exhaust pipe, etc.

According to the fuel type re-designed the piston compression ratio, optimizing the gas intake phase position, reducing

the engine temperature, to ensure the stability of the engine power output, extended engine life under high heat load confitions,

we have selected high-performance ignition system(ECU) and "Impco"brand gas-air mixer,

"Madas"brand pressure regulator assembled on the engine meanwhile using the latest lean burning technology to reduce the engine emissions.

Model		rime	Standby power		Engine model	Bore*Stor ke	DsHT	Faraday	Smargen/D eepsea	LxWxH (Open Type)	Weig ht
	kW	kVA	kW	kVA		(mm)	(L)	Model		mm	kg
HTG- 15GF	15	20	16.5	22	HT4B3.9- G	102*120	3.9	FD1ES	HGM6110/ DSE7320	1800*90 0*1400	800
HTG- 20GF	20	25	22	27.5	HT4B3.9- G	102*120	3.9	FD1F	HGM6110/ DSE7320	1800*90 0*1400	800
HTG- 25GF	25	30	27.5	33	HT4BT3. 9-G	102*120	3.9	FD1G	HGM6110/ DSE7320	1800*90 0*1400	900
HTG- 30GF	30	37.5	33	41.2	HT4BT3. 9-G	102*120	3.9	FD1J	HGM6110/ DSE7320	1800*90 0*1400	900
HTG- 35GF	35	43.75	38.5	48.1	HT4BT3. 9-G	102*120	3.9	FD2B	HGM6110/ DSE7320	1800*90 0*1400	900
HTG- 40GF	40	50	44	55	HT4BTA3 .9-G	102*120	3.9	FD2B	HGM6110/ DSE7320	1800*90 0*1400	920
HTG- 50GF	50	62.5	55	68.4	HT6B5.9- G	102*120	5.9	FD2C	HGM6110/ DSE7320	2200*90 0*1400	1050
HTG- 60GF	60	72.5	66	80	HT6BT5. 9-G	102*120	5.9	FD2DS	HGM6110/ DSE7320	2200*90 0*1400	1120
HTG- 80GF	80	100	88	110	HT6BTA A5.9-G	102*120	5.9	FD3A	HGM6110/ DSE7320	2200*90 0*1400	1140
HTG- 100GF	100	125	110	137. 5	HT6CT8. 3-G	114*135	8.3	FD3C	HGM6110/ DSE7320	2450*11 00*1650	1500

HTG- 120GF	120	150	132	165	HT6CTA8 .3-G	114*135	8.3	FD3D	HGM6110/ DSE7320	2450*11 00*1650	1550
HTG- 150GF	150	200	165	220	HT6LTA A8.9-G	114*135	8.9	FD3EM	HGM6110/ DSE7320	2450*11 00*1650	1550
HTG- 200GF	200	250	220	275	HTNTA8 55-G	140*152	14	FD3H	HGM6110/ DSE7320	3200*10 00*1930	1700
HTG- 250GF	250	300	275	300	HTKTA1 9-G	159*159	19	FD4M	HGM6110/ DSE7320	3850*15 30*2270	3300
HTG- 300GF	300	375	330	412	HTKTA1 9-G	159*159	19	FD4L	HGM6110/ DSE7320	3850*15 30*2270	3300
HTG- 400GF	400	500	440	550	HTKTA3 8-G	159*159	19	FD5M	HGM6110/ DSE7320	4300*16 20*2370	3700



## Weifang Ricardo LNG CNG Natural Methane Gas Generator Set

This series of gas engine designed based on Ricardo and Steyr model technical for the fuel of natural gas and combustible gas, which is special improved in accordance with the relevant state standard. We have re-designed main parts like cylinder, piston, crankshaft, connecting rod etc, through adopt the importing spare parts, ensure the whole engine's severity and tolerance.

	Generator spec.					ngine Spec.		Alterna tor	Controller	Dimensions	
Model	Prime Stand		•	Engine model	Bore*Sto rke	DsHT	Farada y	Smargen/Dee psea	LxWxH (Open Type)	Weig ht	
	kW	kVA	kW	kVA		(mm)	(L)	Model		mm	kg
HTG- 15GF	15	20	16.5	22	HT485 NG	85*90	1.8	FD1ES	HGM6110/D SE7320	1620*600* 1320	620
HTG- 20GF	20	25	22	27.5	HT4102 G	102*120	4.1	FD1F	HGM6110/D SE7320	1620*600* 1320	620
HTG- 25GF	25	30	27.5	33	HT4102 G	102*120	4.1	FD1G	HGM6110/D SE7320	1620*600* 1320	620
HTG- 30GF	30	37.5	33	41.2	HT4105 G	105*120	4.5	FD1J	HGM6110/D SE7320	1750*740* 1480	812
HTG- 35GF	35	43.7 5	37.8	48.1	HT4105 ZG	105*120	4.5	FD2B	HGM6110/D SE7320	1750*740* 1480	850

HTG- 40GF	40	50	44	55	HT6105 G	105*130	6.7	FD2B	HGM6110/D SE7320	2150*740* 1480	870
HTG- 50GF	50	62.5	55	68.4	HT6105 G	105*130	6.7	FD2C	HGM6110/D SE7320	2150*740* 1480	870
HTG- 60GF	60	72.5	66	80	HT6105 ZG	105*130	6.7	FD2DS	HGM6110/D SE7320	2150*740* 1480	870
HTG- 80GF	80	100	88	110	HT10D- NG	126*130	10	FD3A	HGM6110/D SE7320	2850*740* 1550	1600
HTG- 100GF	100	125	110	137.5	HT10Z D-NG	126*130	10	FD3C	HGM6110/D SE7320	2850*740* 1550	1600
HTG- 120GF	120	150	132	165	HT10ZI D-NG	126*130	10	FD3D	HGM6110/D SE7320	2850*740* 1550	1600
HTG- 150GF	150	200	165	220	HT12Z D-NG	126*155	12	FD3E M	HGM6110/D SE7320	2900*740* 1650	2000
HTG- 200GF	200	250	220	275	HT13Z D-NG	127*165	13	FD3H	HGM6110/D SE7320	3100*1000 *1780	2400



## Baudouin LNG CNG Natural Methane Gas Generator Set

All Weichai baudouin engines are built with the best technology and components. baudouin engines are ISO 9001: 2008 certified; which demonstrates its commitment to quality under European standards.

Generato	r spec		Engine S		Alternator	Controller	Dimensions		
Prir Model Pow		-	Engine Model	Bore*Stor ke	DsHT	Faraday	Smargen/ Deepsea	LxWxH (Open Type)	Weight
	KW	KVA		mm	L	Model		mm	kg
HTG-30GF	30	37.5	WP4D40E30 0NG	105*130	4.5	FD3C	HGM6110 /DSE7320	1820*738* 1084	760
HTG-50GF	50	62.5	WP4D66E30 0NG	105*130	4.5	FD3C	HGM6110 /DSE7320	1931*738* 1086	860
HTG-80GF	80	100	WP6D100E3 00NG	105*130	6.75	FD3C	HGM6110 /DSE7320	1931*738* 1086	860
HTG-100GF	100	125	WP6D132E3 00NG	105*130	6.75	FD3C	HGM6110 /DSE7320	2532*950* 1365	1085

HTG-120GF	120	150	WP10D158E 300NG	126*130	9.7	FD3D	HGM6110 /DSE7320	2667*950* 1322	1632
HTG-150GF	150	187.5	WP10D200E 300NG	126*130	9.7	FD3EM	HGM6110 /DSE7320	2667*950* 1322	1715
HTG-180GF	180	225	WP12D238E 300NG	126*155	11.6	FD3G	HGM6110 /DSE7320	2713*950* 1410	2010
HTG-200GF	200	250	WP12D264E 300NG	126*155	11.6	FD3H	HGM6110 /DSE7320	2713*950* 1411	2070
HTG-250GF	250	312.5	WP13D317E 300NG	127*165	12.5	FD4M	HGM6110 /DSE7320	3110*1134 *1450	2275
HTG-500GF	500	625	12M26D605 E300NG	150*150	31.8	FD5L	HGM6110 /DSE7320	3747*1486 *1909	5040
HTG-800GF	800	1000	12M33D880 E310NG	150*150	39.6	FD6C	HGM6110 /DSE7320	5500*2000 *2100	7500
HTG-1100GF	1100	1375	16M33D128 0NG10	150x185	52.5	FD7A	HGM6110 /DSE7320	6090*2300 *2900	12300
HTG-1400GF	1400	1750	12M55D158 8A0NG	180x215	65.6	FD7A	HGM6110 /DSE7320	6090*2300 *2900	12300

# **DOOSAN**Doosan LNG CNG Natural Methane Gas Generator Set

#### **Outstanding Drivability**

Doosan Natural Gas Engines, bases on Doosan's diesel engines meet the best-level performance even under harsh conditions thanks to proven heavy-duty and advanced fuel system-electric controlled air-gas mixture throttling and ignition system.

Doosan Natural Gas Engines can meet the stringent US EPA and CARB regulations.

Optimized fuel combustion realizes the excellent fuel

economy that customers can benefit from.

Doosan Natural Gas Engines deliver an easy installation thanks to Gen-Pack type

(radiator, intercooler, bed frame integrated with engine) and standard Flywheel and Housing.

Doosan's Gen-pack minimizes the design changes for installation which able to avoid cost and space impacts

	Gene	rator s	pec.		Engine Spec.			Alterna tor	Controller	Dimens	ions
Model	Prime Standby power Power		Engine model	_		Farada y	Smargen/ Deepsea	LxWxH (Open Type)	Weight		
	kW kVA kW kVA			mm	(L)	Model		mm	kg		

HTG- 114GF	114	142. 5	125.4	156.8	GE08T I	111*139	8.07	FD3DS	HGM6110 /DSE7320	2500×950× 1520	1550
HTG- 157GF	157	196. 3	172.7	215.6	GE012 TI	123*155	11.05	FD3F	HGM6110 /DSE7320	2750×1015 ×1460	2170
HTG- 201GF	201	251. 3	221.1	276.4	GV158 TI	128*142	14.6	FD3H	HGM6110 /DSE7320	2850×1390 ×1820	2320
HTG- 258GF	258	322. 5	283.8	354.8	GV180 TI	128*142	18.27	FD4M	HGM6110 /DSE7320	3000×1390 ×1820	2580
HTG- 301GF	301	376. 3	331.1	413.9	GV222 TI	128*142	21.92	FD4L	HGM6110 /DSE7320	3200×1400 ×1820	3400



## Man LNG CNG Natural Methane Gas Generator Set

**HAITAI MAN** series gas gensets & CHPs are driven by MAN engines originally made in Germany, one of the world top engine brands all over the world.

	Gene	rator sp	ec.		Er	ngine Spec		Alternat	Controller	Dimensi	ions
Model	Prime Power		Standby Power		Engine Model	Model oke		Faraday	Smargen/ Deepsea	LxWxH (Open Type)	Weight
	KW	KVA	KW	KVA		(mm)		Model		mm	kg
HTG- 50GF	50	62.5	55	681	E0834E 302	108*125	4.6	FD2C	HGM6110 /DSE7320	2800*1050 *1550	1600
HTG- 100GF	100	125	110	137.5	E0836L E202	108*125	6.9	FD3C	HGM6110 /DSE7320	3700*1150 *1750	2200
HTG- 200GF	200	250	220	275	E2676L E202	128*166	12.4	FD3H	HGM6110 /DSE7320	4300*1300 *2000	4400
HTG- 250GF	250	312	275	342	E3262L E302	132*157	25.8	FD4M	HGM6110 /DSE7320	4300*1300 *2000	4600
HTG- 400GF	400	500	440	550	E2842L E232	132*157	25.8	FD5M	HGM6110 /DSE7320	5200*2000 *2100	6400
HTG- 520GF	500	625	550	681	E3262L E202	132*157	25.8	FD5LP	HGM6110 /DSE7320	5500*2000 *2100	7500

## **Propane Gas LPG Power Generator Set**

#### **Advantages of Propane Gas LPG Power Generator Set**

- 1. High efficiency and Cost effective
- 2. Low Emissions due to advantage technologies
- 3. Low space requirement due to compact design
- 4. Reliable service life resulting from application-specific design
- 5. Powerful to ensure uninterrupted operation
- 6. Adapt to harsh conditions

#### **Applications of Propane Gas LPG Power Generator Set**

Supply Scope of Propane gas LPG power generator set		
Engine Brands	Cummins, Weifang Ricardo	
Cummins Series	from 15kW to 300kW	
Weifang Ricardo Series	from 10kW to 250kW	
Fuel Types	LPG	

Specification	Specifications of Propane gas LPG power generator set					
	Model	HTG-XXG				
	Rated Power	10KW-300KW/12.5KVA-375KVA				
Generator Set	Rated Voltage	400V/230V				
	Rated Frequency	50Hz/60Hz				
	Туре	Open/Silent/Soundproof/Container				
Gas Engine	Engine Brand	Cummins, Weifang ricardo				
	Туре	Brushless				
Alternator	Brand	Stamford, Leroy-Somer, Faraday, Lingyu, etc.				
	Connection	3-pahse, 4-wire				
Controll	Туре	Auto PLC Controller				
Controll	Brand	Deepsea, SmartGen, ComAp etc.				
Fuel		LPG 0.26kg/kw·h				
Application		LPG Gas plant				
Delivery		By Sea, By Air, By Train, By Express				
Warranty		12 months or 1500 running hours (subject to the earlier)				

Optional Parts	CHP/Cogeneration/CCHP/Trigeneration Soundproof Canopy (Super Silent canopy)Containerized Canopy Automatic Transfer Switch Synchronization Parallelling Panel Remote Control PMG Alternator Oil and Water Heater High Voltage Alternator 6.3kv and 10.5kv, High Voltage Electrical Control Cells (PT Cabinet, CT Cabinet, High Voltage outgoing cabinet, DC Panel, Groud Resistance Cabinet and low voltage distribution cabinet etc)
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## **Cummins LNG CNG Natural Methane Gas Generator Set**

Cummins technology series gas generator is developed from cummins G-Drive 3.9L-38L engine on our independent research.

The engine used in this series of generators continues cummins compact design, using high-strength cylinders, integral crankshafts and efficient lubrication systems. The main heat load components were redesigned. such as cylinder head, piston, piston ring, the intake and exhaust valves, camshaft, exhaust pipe, etc.

According to the fuel type re-designed the piston compression ratio, optimizing the gas intake phase position, reducing the engine temperature, to ensure the stability of the engine power output, extended engine life under high heat load confitions, we have selected high-performance ignition system(ECU) and "Impco"brand gas-air mixer, "Madas"brand pressure regulator assembled on the engine. meanwhile using the latest lean burning technology to reduce the engine emissions.

Generator spec.			Engine Spec.					
Model	Rated	power	Frenquency/vo ltage	Power/Speed		Power/Speed Bore*Storke Engine model		Dspl
	kW	kVA	Hz/V		kW/RPM	(mm)	(L)	
HTG-15GF	15	20	50/400	HT4B3.9-NG	26/1500	102*120	3.9	
HTG-20GF	20	25	50/400	HT4B3.9-NG	26/1500	102*120	3.9	
HTG-25GF	25	30	50/400	HT4BT3.9-NG	30/1500	102*120	3.9	
HTG-30GF	30	37.5	50/400	HT4BT3.9-NG	34/1500	102*120	3.9	
HTG-35GF	35	43.75	50/400	HT4B3.9-NG	40/1500	102*120	3.9	
HTG-40GF	40	50	50/400	HT4BTA3.9- NG	45/1500	102*120	3.9	
HTG-50GF	50	62.5	50/400	HT6B5.9-NG	60/1500	102*120	5.9	
HTG-60GF	60	72.5	50/400	HT6BT5.9-NG	70/1500	102*120	5.9	
HTG-80GF	80	100	50/400	HT6BTAA5.9- NG	90/1500	102*120	5.9	

HTG-100GF	100	250	50/400	HT6CT8.3- G1-NG	110/1500	114*135	8.3
HTG-120GF	120	150	50/400	HT6CTA8.3- NG	132/1500	114*135	8.3
HTG-150GF	150	200	50/400	HT6LTAA8.9- NG	180/1500	114*135	8.9
HTG-200GF	200	250	50/400	HTNTA855- NG	220/1500	140*152	14
HTG-250GF	250	300	50/400	HTKTA19-NG	280/1500	159*159	19
HTG-300GF	300	375	50/400	HTKTA19-NG	320/1500	159*159	19



## Weifang Ricardo LNG CNG Natural Methane Gas Generator Set

This series of gas engine designed based on Ricardo and Steyr model technical for the fuel of natural gas and combustible gas, which is special improved in accordance with the relevant state standard. We have redesigned main parts like cylinder, piston, crankshaft, connecting rod etc, through adopt the importing spare parts, ensure the whole engine's severity and tolerance.

Generator spec.			Engine Spec.				
Model	Rated power		Frenquency/voltage	Engine model	Power/Speed	Bore*Storke	Dspl
Model	k W	kVA	Hz/ V	Engine model	kW/RPM	(mm)	(L)
HTG-15GF	15	20	50/400	HT485NG	22/1500	85*90	1.8
HTG-20GF	20	25	50/400	HT4102D	22/1500	102*120	4.1
HTG-25GF	25	30	50/400	HT4102D	32/1500	102*120	4.1
HTG-30GF	30	37.5	50/400	HT4105D	32/1500	105*120	4.5
HTG-35GF	35	43.75	50/400	HT4105ZD	38/1500	105*120	4.5
HTG-40GF	40	50	50/400	HT6105D	45/1500	105*130	6.7
HTG-50GF	50	62.5	50/400	HT6105D	58/1500	105*130	6.7
HTG-60GF	60	72.5	50/400	HT6105ZD	68/1500	105*130	6.7
HTG-80GF	80	100	50/400	HT10D-NG	88/1500	126*130	10
HTG-100GF	100	250	50/400	HT10ZD-NG	110/1500	126*130	10
HTG-120GF	120	150	50/400	HT10ZID-NG	132/1500	126*130	10

HTG-150GF	150	200	50/400	HT12ZD-NG	160/1500	126*155	12
HTG-200GF	200	250	50/400	HT13ZD-NG	210/1500	127*165	13

### **Land Fill Gas Generator**

#### Introduction of Land Fill Gas generator set

This series generator sets choose high quality Man, Cummins, Weifang ricardo, Biogas engine assembled with alternators (Stamford, Faraday or other famous brand), the control system adopts PLC automatic controller.

#### Advantages of Land Fill Gas generator set

High efficiency and Cost effective
Low Emissions due to advantage technologies
Low space requirement due to compact design
Reliable service life resulting from application-specific design
Powerful to ensure uninterrupted operation
Adapt to harsh conditions

#### Applications of Land Fill Gas generator set

Supply Scope of Biogas electricity generation generator set			
Engine Brands	Man, Cummins, WeifangRicardo		
Man	from 36kW to 500kW		
Cummins Series	from 15kW to 500kW		
Weifang Ricardo Series	from 10kW to 250kW		
Fuel Types	Biogas, methane gas.		

Specifications of Land Fill Gas generator set				
	Model	HTG-XXG		
	Rated Power	10KW-500KW/12.5KVA-625KVA		
Generator Set	Rated Voltage	400V/230V		
Generaler 200	Rated Frequency	50Hz/60Hz		
	Туре	Open/Silent/Soundproof/Container		
Gas Engine	Engine Brand	Man, Cummins, Weifang ricardo		
Alternator	Туре	Brushless		
	Brand	Stamford, Leroy-Somer, Faraday, Lingyu, etc.		

	Connection	3-pahse, 4-wire		
C 4 11	Type	Auto PLC Controller		
Controller	Brand	Deepsea, SmartGen, ComAp etc.		
Fuel		landfill Gas 0.6m³/kw·h		
Application		Langfill Plant		
Delivery		By Sea, By Air, By Train		
Warranty		12 months or 1500 running hours (subject to the earlier)		
Optional Parts		CHP/Cogeneration/CCHP/Trigeneration Soundproof Canopy (Super Silent canopy) Automatic Transfer Switch Synchronization Parallelling Panel Remote Control PMG Alternator Oil and Water Heater High Voltage Alternator 6.3kv and 10.5kv, High Voltage Electrical Control Cells (PT Cabinet, CT Cabinet, High Voltage outgoing cabinet, DC Panel, Groud Resistance Cabinet and low voltage distribution cabinet etc)		

## **Dual Generator set**

#### First, the need for energy saving

1. Since the beginning of the 21st century, with the development of the petroleum industry and the continuous updating of drilling equipment, the industrial power has increased substantially, the energy shortage and the restrictions on various industrial powers have become increasingly prominent. According to statistics, factories in 80% of the provinces are subject to industrial power cuts, staggering the peak electricity production.

At present, most of the northern cities have ready-made natural gas. At the same time, the development of the second line of the West-East Gas Pipeline will undoubtedly make the natural gas resources of the southern cities more scale, and the additional cost of natural gas as one of the dual fuels is lower. Need simple processing to meet the working needs of the generator.

Our company develops a dual fuel control system that uses natural gas resources to replace most of the diesel fuel as a fuel for power machinery, which can effectively reduce costs and achieve greater economic benefits.

2. The demand for high-power dual-fuel generator sets in the market is less developed and applied in China, but from the perspective of energy demand, there is a huge potential market for dual-fuel generator sets.

Considering the equipment maintenance and renewal requirements and the continued rise in international oil prices, dual-fuel generator sets must become the next-generation mainstream configuration, with lower retrofit costs and greater energy-saving advantages. At the same time, it is more suitable for areas with insufficient gas source and tight gas source.

The dual fuel mode has a pure diesel mode and a dual fuel mode.

#### Second, the advantages of dual fuel generator sets

1, can save a lot of diesel consumption, and effectively reduce costs.

When the dual fuel generator set is in the dual fuel working state, the rated power is equivalent to that of the pure diesel working state, and its power is the same as that of the original diesel engine. At high load conditions, the natural gas replacement rate can reach 70%.

- 2. When there is no natural gas, it can be converted to pure diesel working mode.
- 3. Improve the natural environment and improve people's living environment by reducing exhaust emissions, changing air quality.

#### Third, the configuration of dual fuel engines

1. Structure development

The diesel/natural gas dual-fuel engine diesel engine was rebuilt. The original diesel engine and the fuel supply system were not changed. Only one gas supply device was added. The gas supply system mainly includes two parts: gas supply system and gas control system:

1) The gas supply system includes: a high pressure relief valve, a gas shutoff solenoid valve, a low pressure regulator valve, a natural gas control valve, a mixer, and the like.

The system consists of a natural gas supply system, a diesel fuel supply system and an electronic control system.

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