OILFIELD POWER GENERATION

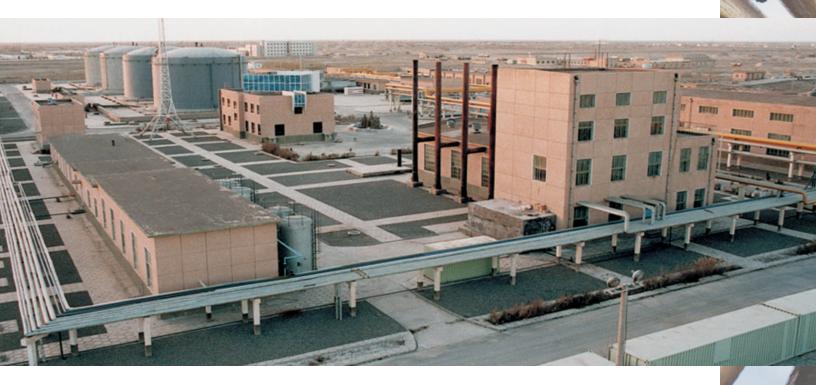




MORE FUEL CHOICES. LESS COST.

Increase return on investment on your production wells. Low operating cost and proven reliability have made Cat® engines the preferred choice in the oilfield. Whatever your application, we have options, with the widest range of oilfield power generations products. And it's all covered by the global Cat dealer network.

- From 270 to 14 590 ekW, your equipment is capable of running on liquid fuels, gaseous fuels, or a combination of both.
- You have the flexibility to choose the power you need with the fuel you have available.
- These products come with the industry-leading one-year warranty on parts for all factorypackaged components.



Power Choices

Pump Power

Prime power for production operations such as down-hole pumps, pump jacks, electric-driven gas lift pumps, central processing facilities

Camp Power

Accommodation and office facilities on a drilling or production site

Standby Power

Standby, emergency, and essential service applications

Field Electrification

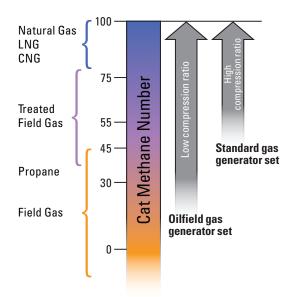
Large generator sets for centralized power generation in oilfield operations

Auxiliary Power

Supports miscellaneous oil and gas production operations



Oilfield Gas Generator Sets



CG170

Fuel Flexibility with Low Operating Cost

The CG170 has the versatility to let you run on abundant, low-cost field gas. It uses soot-free combustion with chamber plugs for extended maintenance intervals up to 4,000 hours. Newly optimized blow-by gas recirculation reduces turbocharger maintenance intervals and boosts efficiency.

- The lubrication system consumes up to 1,900 liters (500 gallons) less lubricating oil each year than the competition, giving you better return on investment.
- Power generation solutions are tailored for oilfield applications to give you the right product for your unique needs.



CG170 Land Production Generator Set										
		CG170-16	CG170-20							
Bore	mm (in)	170 (6.7)								
Stroke	mm (in)	195 (7.7)								
Displacement	L (in³)	70.8 (4320)	88.5 (5401)							
Power	ekW	1560	2000							
Frequency	Hz	50 /	50 / 60							
Speed	rpm	1500								
Efficiency (electrical)		43.3%	43.7%							

PERFORMANCE

Field-proven standard generator

sets use high quality fuels including diesel, pipeline natural gas, CNG, or LNG. Additional components may be necessary to ensure the product will withstand harsh operational and environmental conditions in the oilfield. Your Cat dealer will work with you to customize solutions with generators, radiators, or enclosures for your specific operation.

Oilfield generator sets are heavy-duty configurations made specifically for high reliability and durability in oil and gas production sites:

- Designed to operate in harsh conditions.
- Oversized generators for high-demand motor starting.
- · Cooling systems withstand high temperature and high dust conditions.
- Heavy-duty construction easily handles constant loading, transportation, and unloading operations.
- Flexible fuel systems:
- Gaseous fueled engines feature low compression ratio, allowing the use of field gas without loss of power.
- Dual-fuel engines operate on a combination of multiple liquid and gaseous fuels.

G3306B and **CG137**

- Designed to run on low- to no-cost well site natural gas
- · Operate on wellhead gas to pipeline quality natural gas
- Optimized for the harsh oilfield environment and simplified loading/unloading
- Configurations available with air-fuel ratio control and three-way catalyst or for non-regulated areas
- · Parallel up to eight units with EMCP 4.4 controls





Oilfield Dual-Fuel Generator Sets

Cat 3500 generator sets with Dynamic

Gas Blending ensure low owning and operating cost by replacing diesel with low-cost gas. Specifically designed for the oilfield, they give you the highest performance, optimum dual-fuel operation, low emissions, and simplified operator interface.

- Maintains diesel performance while automatically maximizing gas substitution up to 70%.
- Keeps component life and service intervals of diesel engine.
- Automatically adjusts to incoming changes in gas quality and pressure so operators can use gas fuels from highquality pipeline natural gas to low-quality field gas.



3516B Land Production Generator Set with Dynamic Gas Blending

CM Dual-Fuel Generator Sets

Bring fuel flexibility to your production operation by combining liquid and gaseous fuels in one product.

- Combine diesel, LFO, and crude oil fuels with natural gas down to MN 50.
- Operate in dual-fuel mode combining 99% gas and 1% diesel when gas fuel is available – switch to diesel mode operation when it's not.



6CM46DF Land Production
Dual-Fuel Generator Set

Oilfield Liquid Fuel Generator Sets

Caterpillar offers the widest range of liquid fueled generator sets suitable for oilfield applications; from 180 ekW to 14590 ekW.

- Applications from standalone generator sets for wellhead pumps to large multi-unit oilfield power plants for field electrification.
- Liquid fuel options include diesel fuel, heavy fuel oil, and crude oil.

CM25 Liquid Fuel Generator Set





YOUR APPLICATION, YOUR SOLUTION.

	ekW	kVA	Speed	Duty	Generator Set Type		Liquid Fuel		Gaseous Fuel					
Family					Oilfield	Standard	Diesel	HFO	Crude Oil	Natural gas	CNG	LNG	Propane	Field gas
						50 Hz			O.I.	guo				guo
3400C	220 720	275 000	1500	C D		JU 112	-							
C-Series	220 - 720 292 - 880	275 - 900 400 - 1100	1500 1500	S, P S, P, C	•	•	•							
3500	790 - 890	990 - 1220	1000		•	•			•*					
3500	800 - 1600	1000 - 2000	1500	S, P, C	•	•	•							
3500B	1056 - 2000	1320 - 2500	1500	S, P, C	•	•	•							
C175	2000 - 3200	2500 - 4000	1500	S, P, C		•	•							
CM20C	1090 - 1640	1360 - 2050	1000	C C	•	•	•	•	•					
3600	1760 - 5720	2200 - 7150	1000	C	•	•	•	•	•					
CM25C	1730 - 2590	2160 - 3240	750	C	•	•	•	•	•					
CM32C	2790 - 4190	3490 - 5240	600	C	•	•	•	•	•					
CM32C	5592 - 7450	6990 - 9310	750	C	•	•	•	•	•					
CM43C	5240 - 14590	6550 - 18240	500	C	•	•	•	•	•					
3512B DGB	1056 - 1200	1320 - 1500	1500	P, C	•	•	•	•		•	•	•	•	•
3516B DGB	1600	2000	1500	P P	•		•			•	•	•	•	•
CM34DF	2910 - 4370	3640 - 5460	750	C	•		•	•	•	•	•	•		
CM46DF	5240 - 13970	6550 - 17460	500	C	•	•	•	•	•	•	•	•		
G3300	110	138	1500	C	•	•				•	•	•	•	•
G3400	125 - 280	156 - 350	1500	C		•				•	•	•	•	•
G3500	510 - 1030	638 - 1288	1500	C	•	•				•	•	•	•	•
CG170	1500	2000	1500	C	•	•				•	•	•	•	•
G3500B	1145	1431	1500	C	-	•				•	•	•	•	•
G3500D	1600 - 1966	2000 - 2458	1500	C		•				•	•	•		-
G3600	1713 - 3860	2141 - 4825	1000	C		•				•	•	•		
GCM34	4890 - 9700	6110 - 12130	750	C		•				•	•	•		
GOIVIOT	4000 0700	0110 12100	700			60 Hz								
3400C	275 - 800	344 - 1000	1800	S, P		•	•							
C-Series	180 - 1000	225 - 1250	1800	S, P, C	•	•	•							
3500	610 - 1245	880 - 1835	1200	P P	•	<u> </u>	<u> </u>		•*					
3500	890 - 1750	1110 - 2188	1800	S, P, C	-	•	•							
3500B	648 - 1320	810 - 1885	1200		•	•			•*					
3500B	1230 - 2250	1538 - 2813	1800	S, P, C	-	•	•							
3500C	1230 - 2500	1538 - 3125	1800	S, P, C		•	•							
C175	2500 - 4000	3125 - 5000	1800	S, P, C		•	•							
CM20C	980 - 1470	1225 - 1838	900		•	•	•	•	•					
3600	1650 - 5320	2063 - 6650	900	S, P, C	•	•	•	•	•					
CM25C	1730 - 3520	2163 - 3238	720		•	•	•	•	•					
CM32C	2765 - 4190	3456 - 5238	600	C	•	•	•	•	•					
CM32C	5590 - 7450	6988 - 9313	720	C	•	•	•	•	•					
CM43C	5240 - 13970	6550 - 17463	514	C	•	•	•	•	•					
CM34DF	2910 - 4370	3640 - 5460	720	C	•	•	•	•	•	•	•	•		
CM46DF	5240 - 13970	6550 - 17460	514	C	•	•	•	•	•	•	•	•		
G3300	135	170	1800	C	•	•				•	•	•	•	•
G3400	190 - 375	238 - 469	1800	C		•				•	•	•	•	•
CG137	400	500	1800	C	•	•				•	•	•	•	•
G3500	370 - 770	463 - 963	1200	C	•					•	•	•	•	•
CG170	1500	2000	1500	C	•	•				•	•	•	•	•
G3500B	1300 - 1400	1625 - 1750	1800	C		•				•	•	•		
G3500D	1660 - 2055	2075 - 2569	1800	C		•				•	•	•		
G3600	1540 - 3480	1925 - 4350	900	C	•	•				•	•	•		
GCM34	4890 - 9700	6110 - 12130	720	C	•	•				•	•	•		
	1000 0700	3110 12100	120	<u> </u>										

 $S-Standby; \ output \ available \ with \ varying load for the \ duration of the interruption of the normal source of power$

 ${\sf Diesel-No.\,2\,diesel\,fuel}$

HFO – Heavy fuel oil

Natural gas – Pipeline quality natural gas, MN>75

CNG - Compressed natural gas, MN>75

LNG – Liquefied natural gas, MN>75

Field gas – Field and associated gas with varying gas quality,

generally > MN 30 for rating availability

Reference LECW2462 for additional details on available ratings.

* Operation of 3500 generator sets with crude oil require a "Special Rating Request"; contact your local dealer for further information.

 $[\]mathsf{P}-\mathsf{Prime}$ rating for power generation in oil and gas applications; output available with varying load for an unlimited time

 $C-Continuous\ rating,\,100\%$ of engine operating hours at 100% of rated power



One call, many answers

Reduce downtime with a single point of contact for all your purchasing, maintenance, and repair. Caterpillar is your one source for power with choices to fit your needs. Your dealer is ready to work with you to design solutions for your specific application.

And our worldwide industry specialists deliver technical support, parts, and service support wherever you are, whenever you need them. We're built to give you options. To learn more, call your local Cat dealer or visit www.catoilandgasinfo.com.

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