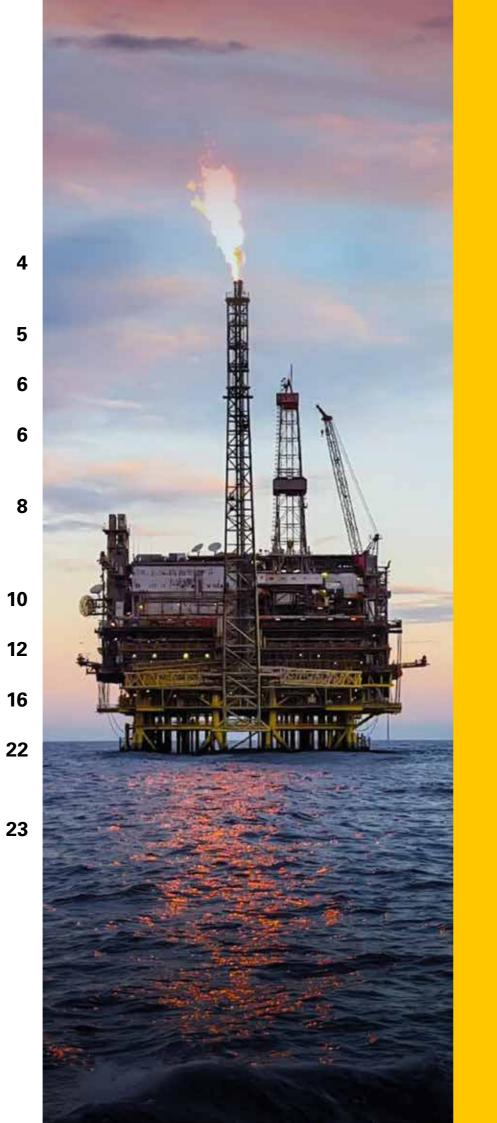
## **OIL & GAS** WE PROVIDE SOLUTIONS FOR YOUR BUSINESS





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CAT FINANCIAL SERVICES
REMOTE CONTROL MONITORING





We are a long-standing Italian group, active in 14 European countries and operating in Italy since more than 80 years under the CGT brand. In each country and sector where we operate, we are committed to find the most suitable solution to meet your needs.

*In the energy power generation sectors, we design and offer integrated solutions that guarantee timely and reliable performances, while optimizing operating costs.* 

What makes us stand out is our customers' satisfaction, built day by day through accuracy, expertise, and the quality of our services and products.

Your trust make us prouder and more motivated every day.

Lino Tedeschi Chairman & CEO of CGT

## THE ENERGY OF A GREAT **INTERNATIONAL GROUP**

CGT is part of an European Group, active in providing integrated solutions in Construction Equipment, Energy & Power Generation, Industrial Vehicles, Warehousing and Logistics Equipment. A highly integrated community, characterized by a strong sense of belonging, team work and strong focus on customers.

**M€ TURNOVER** 

IN 14

COUNTRIES

 $\mathbf{0}\mathbf{0}\mathbf{0}$ 

# **CGT YOUR RELIABLE PARTNER SINCE 1934**

CGT offers integrated sales solutions, rental and service in order to promptly and efficiently meet the needs of **Oil & Gas, Extractive Industries**, Major Works, Infrastructures, Construction, Power Generation and Naval Mechanics.

1934 SERVICE VANS 350

SINCE

**EMPLOYEES** 

**BRANCHES** 28 IN ITALY



**SERVICE VANS** 

**TECHNICIANS** 

 $(\mathbf{0}\mathbf{0}\mathbf{0})$ 

**EMPLOYEES** 

2,700

**BRANCHES** 

>90

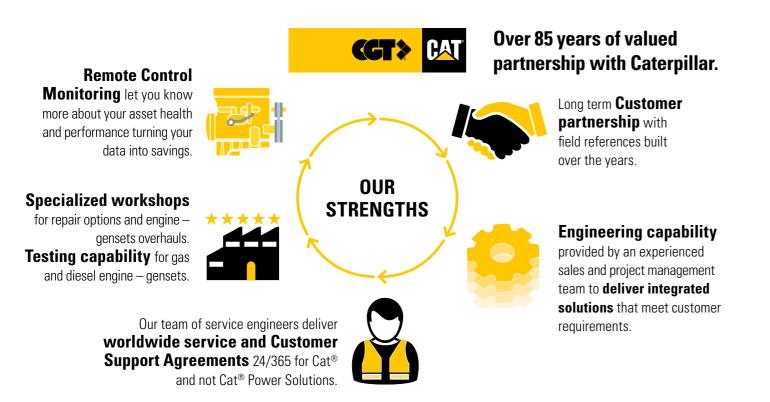
M€ TURNOVER TECHNICIANS

370



# **CGT POWER SYSTEMS**

Power Systems industry is strategic for CGT, leader in providing integrated and bespoke solutions in all areas of expertise in which it operates: OEM, Oil & Gas, Power Generation, Marine.



# **CGT OIL & GAS**

Energy is needed to explore, extract and transport oil and gas that are often found in remote and inaccessible locations.

CGT is your single-source supplier, offering you bespoke solutions for all upstream and downstream applications, whether it is for pumping, compression or any other form of auxiliary, main or emergency power.

Matching the high quality of the Cat<sup>®</sup> engines, in a power range from 100 kW to 15.000 kW, with its engineered solutions, CGT has the tools and expertise to support you through the entire cycle, from the pre-contractual analysis phase to the commissioning and plant start up. Our service and parts organization will keep you then running for years.



## THE MOST IMPORTANT **OIL&GAS COMPANIES HAVE CHOSEN** THE ENERGY THAT CGT SUPPLIES.



# **CGT CUSTOMIZED SOLUTIONS**

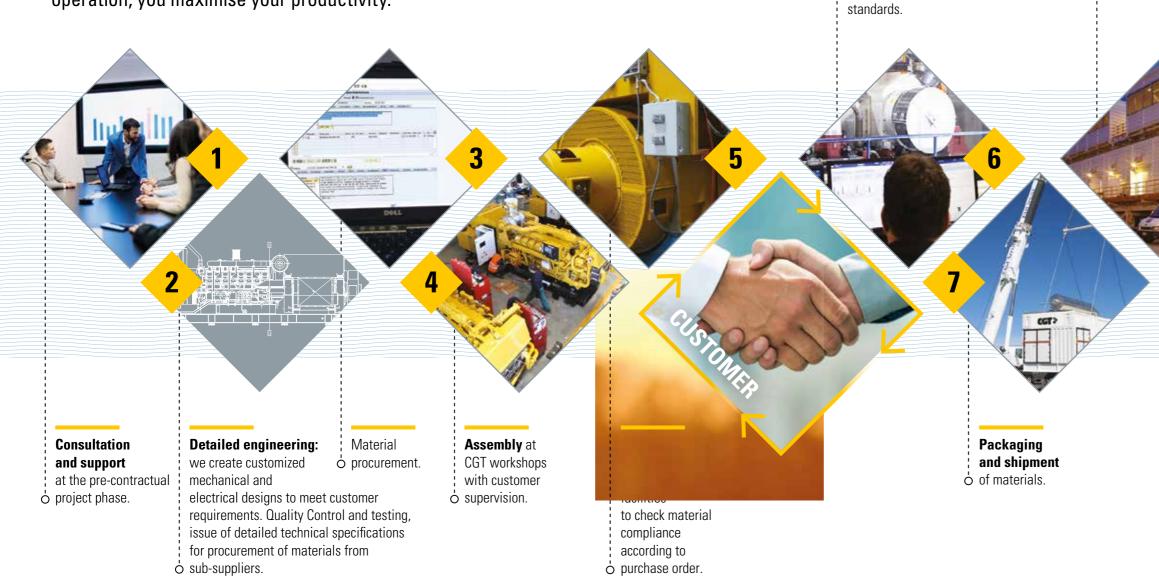
For any Oil and Gas application, **CGT** helps you meet challenges from the toughest environments and most complex design issues with a custom-made packaged solution. With proven components and **CGT** engineering expertise running through your entire operation, you maximise your productivity. Installation,
 Commissioning
 and Plant start-up.

**Final inspection** 

of scope of supply,

according to contractual

requirements and quality





## CGT WITH ITS CUSTOMERS EVERYWHERE IN THE WORLD



Onshore Onsh

Production

## CGT KEY REFERENCE DATA IN OIL & GAS:

- International experience
- Packages delivered:
  more than 1,500
- Installed power in the Oil and Gas market since 1980:
   **1,000 mw**
- Keeping your business running:
  24/365 Service

 Energy secured by maintenance contracts

**550** мw



## CASE HISTORY

## **EMERGENCY POWER GEN** IN THE OFFSHORE CASPIAN

Scope of supply includes:

- Six Emergency Diesel generators 2000ekW -2500kVA, 6,6kV powered by Cat<sup>®</sup> engines 3516B-HD.
- Unit Control Panels & Master paralleling control panels.
- Dual starting system with Ni-Cd starting batteries & hydraulic starting skid.
- MV NER & Line panel.

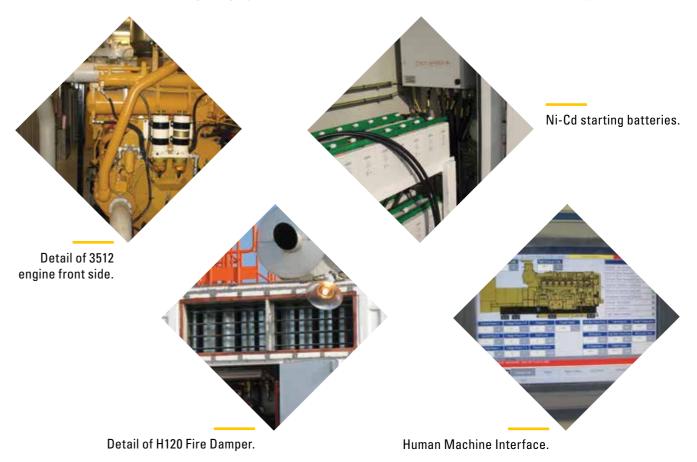
- Winterized cooling radiator.
- ASME "U" stamped fuel tank.
- Preheating systems and cable tracing for winterzation.

CGT has provided a **complete service**, including: engineering, procurement, testing and supply of the units, long term preservation activities at site and final commissioning and start up.

CASE HISTORY **ONSHORE EMERGENCY POWER GENERATION** 

Scope of supply includes:

- One Emergency Diesel generator set 1020ekW -1275VA 400V with Cat® engine 3512 and Cat® SR4B alternator.
- Container H60-J45 rated and designed for cold ambient down to -40°C.
- Separate electrical room container with dual **HVAC system** and pressurizing system.
- Water mist + IG541 fire fighting systems.

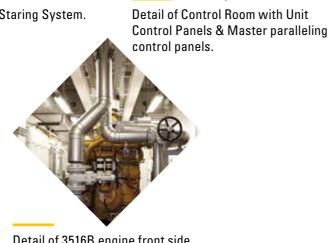




**Detail of Power Generation room** & MV alternator.



Detail of Hydraulic Staring System.





Detail of 3516B genset with local panel & preheating system.

Detail of 3516B engine front side.



- Dual starting system with Ni-Cd starting batteries & hydraulic starting skid.
- Pre-heating systems and cable tracing for winterzation.
- + ASME "U" stamped fuel tank.

CGT has provided a **complete service**, including: engineering, procurement, testing and supply of the units, long term preservation activities at site and final commissioning and start up.

◆ 14/15

## CASE HISTORY MAIN AND EMERGENCY POWER GENERATION FOR DRILLING IN ARCTIC CLIMATES

## Scope of supply includes:

- Ten Diesel generators 1000ekW -1500kVA 600V with Cat<sup>®</sup> engine 3512B.
- Seven diesel generators for drilling.
- + Two for camp power feeding.
- One Emergency generator.

 Soundproof containers, Fire fighting systems Control, Synchronizing & Power Distribution panels.

CGT has provided a **complete service**, including: engineering, procurement, testing and supply of the units, long term preservation activities at site and final commissioning and start up.

## POWER GENERATION

**ONSHORE EMERGENCY** 

## Scope of supply includes:

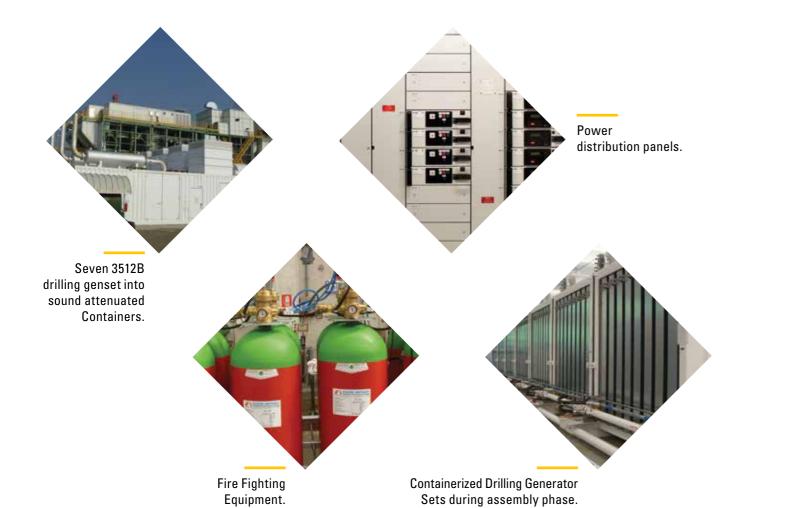
- One Emergency Diesel generator set 5500ekW -687kVA.
- + 400V with Cat<sup>®</sup> engine C18.

+ Container.

Cat C18 engine.

CASE HISTORY

- Separate electrical room.
- $\diamond$  CO<sub>2</sub> fire fighting system.



Fire Fighting Equipment.



- + Starting system.
- Pre-heating system.
- 🔶 Fuel tank.

CGT has provided a **complete service**, including: engineering, procurement, testing and supply of the unit, final commissioning and start up at site.



◆ 16/17



## **C-Series Engine Family**

- A Mechanical drilling & Well service
- M C13, C15, C18, C27, C32
- F Diesel
- P 300 750 kW



## 3500 Engine Family

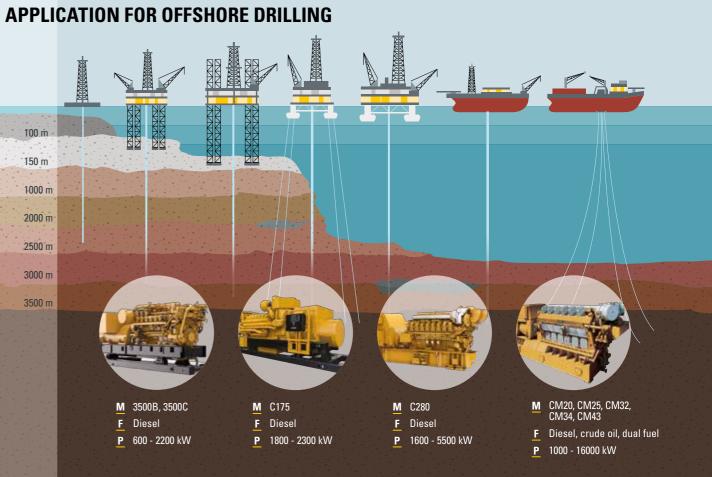
- A Mechanical drilling &
- Well service **M** 3500, 3500B, 3500C, 3500E
- F Diesel
- P 500 2400 kW
- P 1000 1600 kW

F Diesel and Gas

P 800 - 1300 kW

## **DRILLING & WELL SERVICE**

**CGT** can tailor the right power solution for your needs, providing you with engines, transmissions and packages needed to complete new wells or improve production. Whether you require electrical power on land, offshore or for electric-driven drilling rigs, **CGT**'s range of Cat® generator sets are widely known for performance, reliability, durability, and fuel flexibility in the oil and gas industry. **CGT** is there for you and with you when constructing your power solutions for your drilling applications and for the long term maintenance.



		Contraction of the second		
100 m 150 m				
1000 m				
2000 m				
2500 m				
3000 m				
3500 m				
	M	3500B, 3500C	M	C175
	F	Diesel	F	Diesel

M = Models

F = Fuel

P = Power



A Electric land drilling M 3500, 3500B, 3500C, 3500E



3500 Generator Sets with Dynamic Gas Blending

A Electric land drilling M 3500B & 3500C with DGB F Diesel with fuel gas



**C-Series Generator Sets** 

- A Electric land drilling & camp power
- M C15, C18, C27, C32 ACERT
- F Diesel
- P 300 900 kW



### Hazardous locations engines

- A Mechanical drive
- M C7, C9, C15, C32
- F Diesel
- P 200 1000 kW



### **C-Series Engine Family**

- A Mechanical
- **M** C13, C15, C18, C27, C32
- F Diesel
- P 300 1000 kW

Gas Engines

A Pump engines

F

and auxiliary power.

Field gas, associated gas,

M G3300, G3400, G3500

pipeline gas

P 70 - 1300 kW



F Pipeline gas, field Gas P 100 - 9700 kW



### Fire Pump Engines

- A Fire pump engines
- M C series, 3400 & 3500 series
- F Diesel
- P 150 2300 kW



## **PRODUCTION**

♦ 18/19

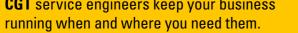
144 58.2

THURSDAY

- 10 -

5 M

**CGT** is constantly working to improve and adapt its products and services to meet the stated requirements for environmental conditions, emission legislations, area classifications and the specifications of marine classification societies. The different solutions for offshore and land based applications can meet also the additional requirements to operate in hazardous areas. **CGT** service engineers keep your business







### C175 Offshore Generator Sets

A Main power, emergency power, essential services onboard, offshore production platforms and vessels

3500 Offshore Generator Sets

- M 3500B, 3500C
- F Diesel
- P 600 2200 kW



### Fire Pump Engines

- A Fire pump engines
- M C series, 3400 & 3500 series
- F Diesel
- P 150 2300 kW

- A Main power, emergency power M C175 F Diesel
- P 1800 2300 kW



- power onboard production platforms and vessels.
- M C280
- F Diesel
- P 1600 5500 kW

M = Models

F = Fuel

P = Power



M G3300, G3400, G3500, G3600, GCM





and essential services onboard offshore production platforms and vessels



### C280 Offshore Generator Sets

A Main power and essential services



### **Dual Fuel Generator Sets**

- A Plant electrification, camp power and auxiliary power
- M 3500B, 3500C, CM family F Diesel & fuel gas
- P 1000 14000 kW



## **Diesel Generator Sets**

- A Plant electrification, standby, camp power, and auxiliary power
- M C series, 3500, C175, 3600 & CM family
- F Diesel
- P 200 14500 kW



## CM Offshore Generator Sets

- A Main power and essential service for offshore production platforms and vessels
- M CM20, CM25, CM32, CM43
- F Crude oil, MDO and dual fuel
- P 1000 16000 kW



A Gas compression

A Gas compression

P 160 - 480 kW

. mechanical drive

**M** G3406, G3408, G3412

P 70 - 160 kW

A B an the

mechanical drive

**M** G3304, G3306, G3500

G3300 Caterpillar Engine Family

F Pipeline, field and associated gas

G3400 Caterpillar Engine Family

F Pipeline, field and associated gas

CG137 Gas Engine Family

- A Gas compression mechanical drive
- M CG137-08, CG137-12
- F Pipeline, field and associated gas
  - P 300 450 kW



- A Gas compression
- mechanical drive M G3508, G3512, G3516, G3520

- P 400 1300 kW

## **GAS COMPRESSION-CRUDE TRANSMISSION**

A variety of processes, different performance requirements: whatever your application, **CGT Power Systems** is the partner that makes the difference by standing beside you and our products.

Gas engines by Caterpillar are characterised by excellent mechanical efficiency (up to 44%) and low fuel consumption. With our broad operating ranges and options, you can tailor engine specifications to any application, and to your site-specific requirements.



## **C-Series Engine Family**

- A Mechanical drive
- **M** C13, C15, C18, C27, C32
- F Diesel
- P 300 1000 kW



### 3500 Engine Family

- A Mechanical drive
- M 3500, 3500B, 3500C, 3500E
- F Diesel
- P 500 2400 kW

M = Models

F = Fuel





## G3500 Caterpillar Engine Family

F Pipeline, field and associated gas



## G3600 Caterpillar Engine Family

- A Gas compression mechanical drive
- **M** G3606, G3608, G3612, G3616
- F Pipeline, field and associated gas
- P 1300 3800 kW



## GCM34 Gas Engine Family

- A Gas compression mechanical drive
- M G12CM34, G16CM34
- F Pipeline, field and associated gas
- **P** 4500 6100 kW



### Hazardous locations engines

- A Mechanical drive **M** C7, C9, C15, C32 F Diesel
- P 150 800 kW

## CAT FINANCIAL SERVICES

## OUR CUSTOMERS CAN COUNT ON CAT FINANCIAL TO PROVIDE THE BEST FINANCING SOLUTION FOR THEIR BUSINESS.

Increased efficiency, including more time for planning and decisions, are advantages that our customers expect from us. Cat Financial knows the challenges of the Oil & Gas industry.

Cat Financial offers financing and leasing for all of Caterpillar's product line, with services available for each market that Caterpillar serves and it provides services to customers throughout Africa, the Americas, Asia, Australia and Europe, supported by offices in over 40 countries.



From supporting gas compression and storage to well servicing and onshore drilling, Cat Financial can help, providing service to customers in a variety of industries with a variety of demands. Every Petroleum customer needs a financing contact who not only knows the financial sector but also knows the business. Cat Financial experts are part of Caterpillar and are specialized by industry, adding real value to your bottom line.

WHY CAT FINANCIAL?

## LOCAL PRESENCE

Need a local expert? Cat Financial knows local markets and how to navigate the legal and regulatory environments. Cat Financial has offices in the Americas, Europe, and Asia, and financing representatives all over the world. Put our knowledge to work to power the deal.

## **EXCEEDING CUSTOMER EXPECTATIONS**

The right process simplifies everything. Our process begins with understanding your critical requirements and developing a tailored solution. We then document, close, and fund the deal to exceed the expectations of all parties involved.

## **ONE CUSTOMER EXPERIENCE WORLDWIDE**

Strong relationships are the key to our success. That's why Cat Financial works across geographical boundaries to deliver the same quality experience to every customer, every time.



# START TURNING YOUR DATA

## INTO SAVINGS, PEACE OF MIND AND REVENUES



REMOTELY ACCESS INFORMATION FROM A SINGLE ASSET OR AN ENTIRE FLEET.



KNOW MORE ABOUT YOUR ASSET HEALTH AND PERFORMANCE WITH THE EASY-TO-USE WEB INTERFACE THAT TRANSFORMS DATA INTO INSIGHTS.



MAKE MORE INFORMED DECISIONS WITH ACCURATE INFORMATION AVAILABLE AT YOUR FINGERTIPS.



3/2019



**CGT S.p.A.** Power Systems Tool free number: 800 827 134 **energia.cgt.it** 

