



POWER TO MATCH THE CHALLENGE.



CAT® C175 DIESEL GENERATOR SETS





CATERPILLAR



A large yellow generator component is visible on the left side of the page, showing a circular air filter and a control panel with a yellow warning symbol.

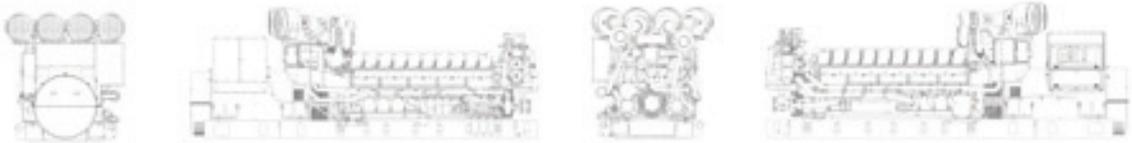
BUILT ON OUR PROMISE. BUILT FOR YOUR TRUST.

YOUR LONG-TERM SUCCESS AND REPUTATION ARE ON THE LINE WHEN YOU INVEST IN A POWER SYSTEM – AND SO IS OURS. WE’VE SPENT OVER 85 YEARS BUILDING A PROMISE THAT OUR POWER PRODUCTS WILL BE A MATCH FOR YOUR POWER CHALLENGE. AND WHAT WE BLUEPRINT AND BUILD IS BACKED BY AN EXPERT TEAM FOR PEAK PERFORMANCE AND EFFICIENCY.

Whether it’s your job to keep a factory running, to light a city, unearth hidden resources, power the places that saves lives or distribute data, we know it’s more than the job you show up to, it’s what you’ve been entrusted with – and it’s what you trust to our generator sets.

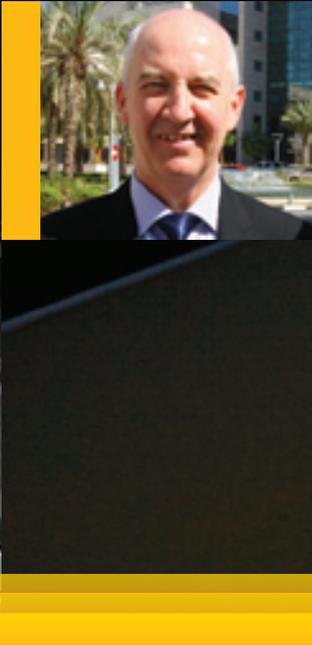
With the Cat C175-16 or C175-20 you get up to 4000 kW of quality power in one proven, high-speed power dense platform. Rigorously tested, totaling more than 200,000 hours on generator sets and more than 500,000 in our machines, our generator sets are guaranteed to provide non-stop power in any climate, under any condition.

Built for reliability. Built for peace of mind. Built for high demands and zero downtime. Our C175 generator sets are **BUILT FOR IT.™**



A HISTORY OF SOLVING YOUR NEXT CHALLENGE

Your industry is always changing but our promise never does. We engineer to meet the latest needs and we build to the highest standards. • The C175 generator sets are designed to keep you productive and profitable, offering fuel efficiency and lower emissions in a compact footprint, working with your existing spatial limits. The C175 family is well suited for all of today’s diverse power applications, delivering clean, dependable power – whether you’re in the busiest city or the most remote corner of the world.



CONTINUOUS POWER FOR CONTINUOUS CARE

To ensure patient safety at the American Hospital Dubai (AHD), it's critical that backup power is available within 20 seconds of a power failure. The AHD, a general medical and surgical hospital providing high-quality healthcare to Dubai, the United Arab Emirates (UAE) and the surrounding

Gulf States, was preparing for an expansion. Additions included a seven-story, in-patient tower, an expanded regional center for diagnostic and interventional radiology, and a reference laboratory. The AHD chose to install an integrated system consisting of two Cat



"We trust the quality of Cat products and the ongoing support we receive."

— Stephen Fenn, director of the facilities management department at AHD

C175-16 diesel generator sets rated at 3 MVA for standby power, and a UPS 300 (rated at 250 kVA) using an integrated, high-speed flywheel kinetic energy storage system.

The C175-16 generator sets have provided a variety of benefits. Not only

do they ensure sufficient energy, with rapid availability in the event of a grid outage, they extend oil change intervals, improve component life and reduce fuel consumption, all of which result in lower operating and maintenance costs for the expanding facility.

WHAT'S YOUR APPLICATION?

THERE'S A C175 CONFIGURATION FOR YOU: **COMMERCIAL • INSTITUTIONAL • INDUSTRIAL**
• COMMUNICATIONS • GOVERNMENT • UTILITIES • MINING • HEALTHCARE • DATA CENTER

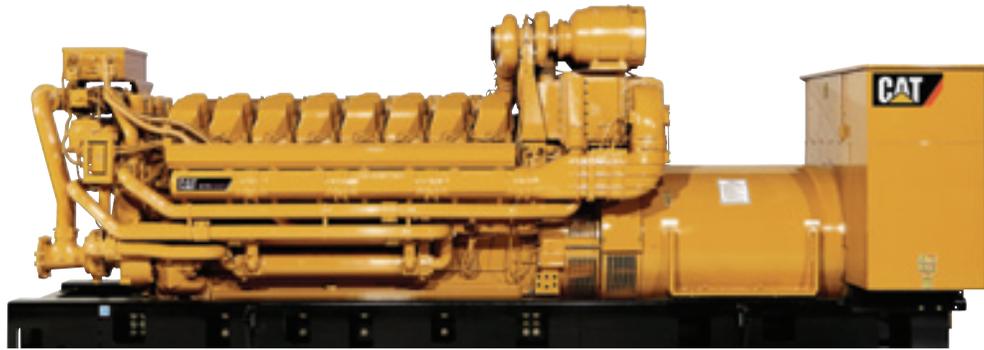


HOW THE RIGHT POWER BRINGS VALUE TO YOUR OPERATION

Your operation is expected to deliver consistency.
Expect the same from our C175 generator sets.

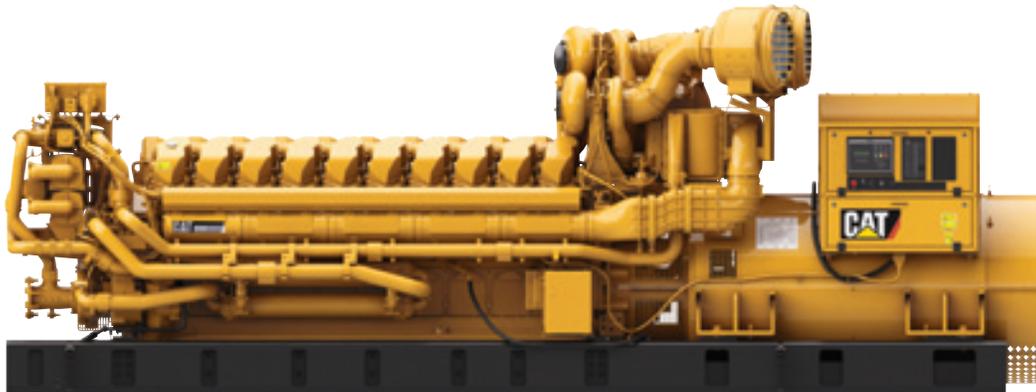
ADVANTAGES TO YOU:

- Greater versatility – Wide power range for use in more applications
- Lower installation and transportation costs – High power density and an integrated package
- Lower operating and maintenance costs – Longer maintenance intervals, long life components and reduced fuel consumption
- Easier serviceability – Simple, robust components built with internationally available tools and hardware, along with easy-to-replace parts and shared maintenance features with our engines on larger machines
- Systems integration – Integration of controls with other electric power products including Automatic Transfer Switch (ATS), Uninterruptible Power Supply (UPS), switchgear and remote monitoring



C175-16

APPLICATION	FREQUENCY (Hz)	RPM	WITH FAN RATINGS		WITHOUT FAN RATINGS	
			RATING (eKW)	RATING (kVA)	RATING (eKW)	RATING (kVA)
STANDBY	50	1500	2400	3000	2480	3100
MISSION CRITICAL	50	1500	2400	3000	2480	3100
PRIME	50	1500	2180	2725	2260	2825
CONTINUOUS	50	1500	2000	2500	2080	2600
STANDBY	60	1800	3000	3750	3100	3875
MISSION CRITICAL	60	1800	3000	3750	3100	3875
PRIME	60	1800	2725	3406	2825	3531
CONTINUOUS	60	1800	2500	3125	2600	3250



C175-20

APPLICATION	FREQUENCY (Hz)	RPM	WITH FAN RATINGS		WITHOUT FAN RATINGS	
			RATING (eKW)	RATING (kVA)	RATING (eKW)	RATING (kVA)
STANDBY	50	1500	—	—	3200	4000
MISSION CRITICAL	50	1500	—	—	3200	4000
PRIME	50	1500	—	—	2880	3600
CONTINUOUS	50	1500	—	—	2600	3250
STANDBY	60	1800	—	—	4000	5000
MISSION CRITICAL	60	1800	—	—	4000	5000
PRIME	60	1800	—	—	3600	4500
CONTINUOUS	60	1800	—	—	3250	4063

BUILDING YOUR GENERATOR SET WITH ADVANCED SYSTEMS

The C175 family's combination of advancements in electronics, air management and fuel delivery gives you the engine performance your application demands.

ENGINE CONTROLS

A robust control system features more pressure and temperature sensors for enhanced engine monitoring.

MANAGING AIRFLOW

- A tall cross-flow cylinder head accommodates larger ports and helps direct a large amount of cool air into the cylinder with the least resistance, resulting in the best port performance for you.
- Improved breathing enables a greater amount of cool air in and out of the engine, to help produce higher power ratings.

FUEL SYSTEM

- Features the Cat Common Rail Fuel System for full control of fuel delivery and fuel pressure at any load or speed, for superior transient response and block load acceptance, as well as shorter recovery time.
- Improves cold start capability and lowers fuel consumption.

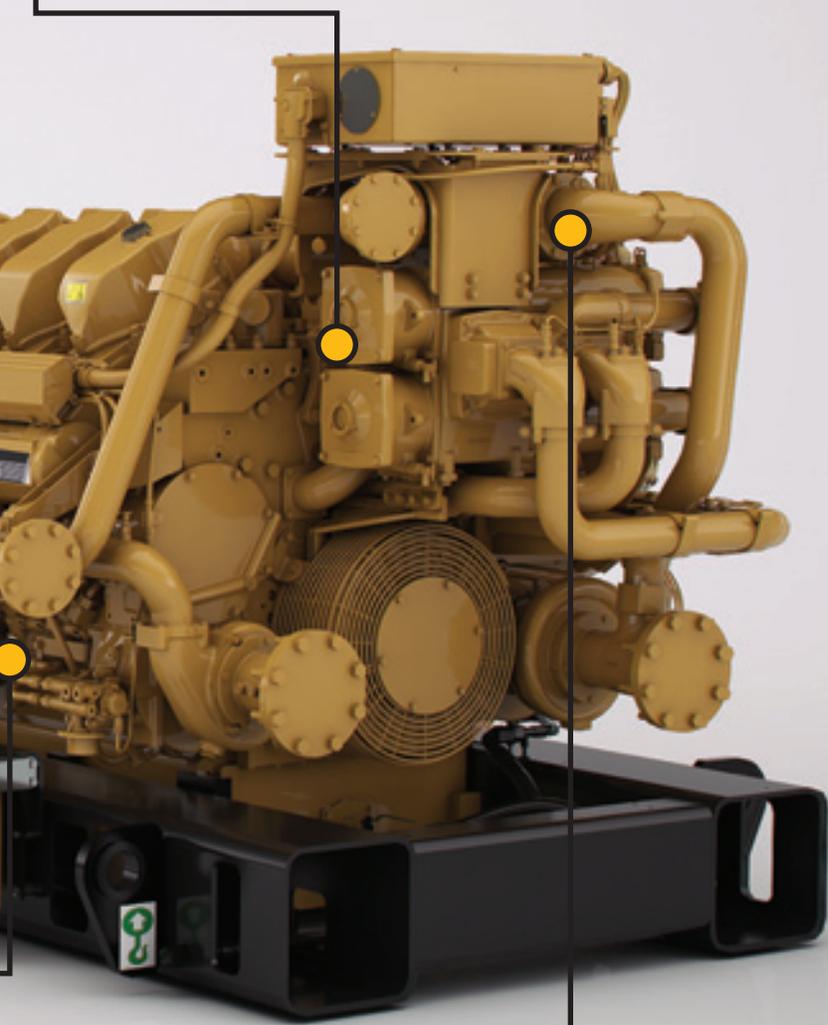


CORE ENGINE COMPONENTS

- Designed for higher strength, durability and compactness.
- A bigger, robust steel-forged crankshaft handles higher loads while the cast iron engine block provides increased strength and lighter weight so you get more power out of a small package.

LUBE SYSTEM

Features two piston cooling jets per piston, plus a large capacity oil pump and a pressure regulation valve that help maintain optimum oil pressure at all speeds, loads and throughout the life of the engine.



COOLING SYSTEM

Designed to minimize heat rejection by cooling only the parts that require it, resulting in up to a 30 percent improvement in heat rejection per kW produced.

DIESEL AND GAS GENERATOR SETS

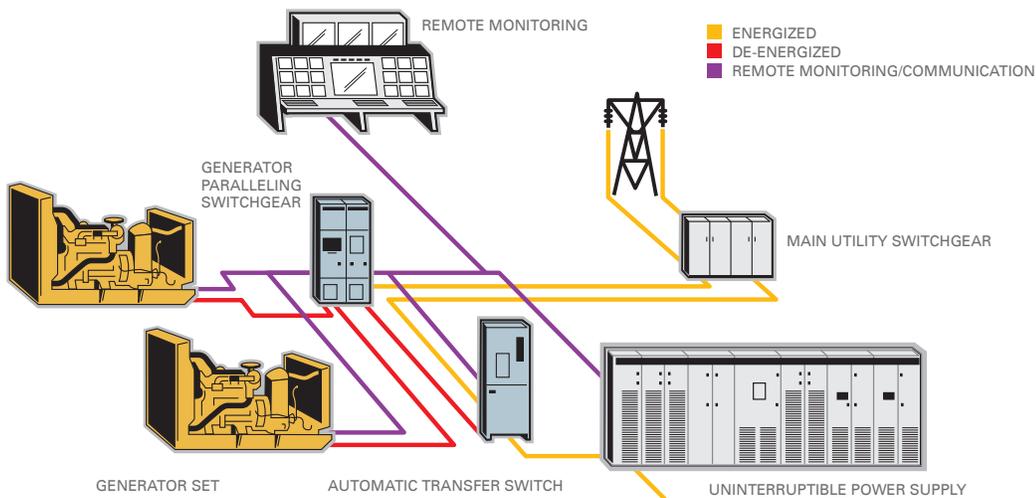
To keep consistency in your operation, you need consistency in power. The C175-16 and C175-20 generator sets are built with ingenuity. Built on quality. Built for reliability. Demand of them what you like — they're Built For It.

Whether you install a Cat diesel or gas generator set for continuous or standby use, your business will be protected with reliable performance. Our engineering programs demand some of the most stringent testing requirements in the industry, which means that the products you receive are manufactured to run thousands of hours without overhaul.

ADVANTAGES TO YOU

- Powered by Cat engines for the reliability you demand
- Wide range of factory-designed options to meet your requirements
- Easy to specify, permit, install and test
- Low life cycle costs
- Excellent transient response and steady state performance
- Emissions compliance with most worldwide regulations
- Single source and turnkey support from the Cat dealer network





INTEGRATED SOLUTIONS WITH YOU IN MIND

Saving you time, effort, money – and worry. That's our role in developing a customized power system for you. You can expect strong, expert support throughout the configuration, installation and operation of your system.

And with Caterpillar, you have the benefit of a single source provider for all of the products you need to power your operation, and the necessary parts and support to keep it up and running.

Pre-configured Cat components will decrease site installation time and cost, while increasing overall system reliability. Additionally, Caterpillar tailors each component to develop a fully optimized system via attachments and performance options to meet your specific application.

From diesel- and gas-powered generator sets to UPS, ATS and switchgear, Caterpillar has everything you need to maintain clean, uninterrupted power for your business operations. All Cat products are designed to work together, with all elements relating to the generator set production, control and monitoring functions integrated into a single-source package.

What does an integrated solution mean for you? It means getting the answers you need from one convenient partner, saving you time and work so you can keep focused on the job ahead.

UNINTERRUPTIBLE POWER SUPPLY (UPS)

Surges, sags, spikes, failures aren't options, because when it comes to your business, every second counts. The Cat UPS storage with flywheel or battery (double conversion) energy provides immediately available power to ride through disturbances and conditions power from the source. When integrated with other Cat products – including generator sets, ATS and switchgear – you can be assured of the cleanest, most reliable source of power protection.

1 ADVANTAGES OF THE FLYWHEEL UPS TO YOU:

- 98 percent total flywheel system efficiency
- Lower operating/maintenance/replacement costs
- Smallest available footprint
- Complete system capable of operating at 40°C; no need to up-size HVAC systems
- Industry leading Total Cost of Ownership

2 ADVANTAGES OF THE DOUBLE CONVERSION UPS TO YOU:

- Lower initial capital investment
- Ability to support extended ride through requirements
- Continuous control of UPS output sine wave
- Up to 94 percent total UPS system efficiency
- Electrical isolation between input and output

PARALLELING SWITCHGEAR

The amount of control you need changes depending on the demand. That's why, for simple or complex applications, Cat switchgear provides paralleling capability for multiple generator sets, with single or multiple points of utility connection.

Our switchgear also provides a single point of monitoring and control of your complete solution, including Cat ATS and Cat UPS. When you combine Cat switchgear with Cat generator sets, you get an integrated solution that meets your unique requirements.

3 ADVANTAGES TO YOU:

- Available 208 V to 35 kV
- Intuitive and easy-to-use graphical operator interface (minimizing potential for operator errors, and integrating other elements of your Cat system such as generator sets, ATS and UPS)
- Redundant communications bus and distributed control processing ensure the utmost in reliability for your business
- Automated reporting capability, including generation of custom reports and real-time PUE
- Available in a broad array of configurations, including highly customized designs, developed to address specific site requirements

AUTOMATIC TRANSFER SWITCH (ATS)

To ensure you have the power you need, a fully integrated system designed to operate together is crucial. And if your first indicator – your ATS – isn't reliable, your entire system can be compromised. Caterpillar offers you a broad range of transfer solutions and ATS products designed for mission critical applications. These transfer schemes can be arranged to suit any application from simple to highly complex multiple ATS/generator set switchgear systems.

4 ADVANTAGES TO YOU:

- Available in sizes from 40 to 5,000 amps in 2, 3 and 4 pole configurations
- Contactor and circuit breaker based solutions for flexible coordination
- Open, closed and delayed transition designs available to meet your specific needs
- Bypass / Isolation type ATS (UL/IEC type)
 - ATS and bypass mechanisms rack in/out with door closed to maximize operator safety
 - Load is not interrupted during bypass operation
 - Interchangeable ATS and bypass mechanisms provide the utmost in redundancy
 - Full automatic mode functionality is maintained with ATS in bypass

PACKAGING SOLUTIONS

No matter your location, a custom package containing Cat electric power equipment can meet your project specific needs. We've designed enclosures to withstand the most extreme environments and to provide solutions for your most complex design issues. Caterpillar can provide the flexible resources to design and procure parts not available in our standard price list, so that you can meet and exceed your project goals.

ADVANTAGES TO YOU:

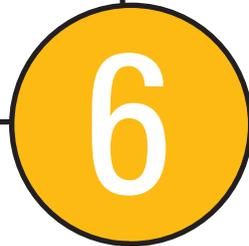
- 5 • Accountability for entire package and system integration
- Complete set of documentation from single provider
- Reduction of inventory carrying costs and labor resources
- Ability to leverage global Cat parts and service network
- Worldwide warranty

CONTROLS– EMCP 4

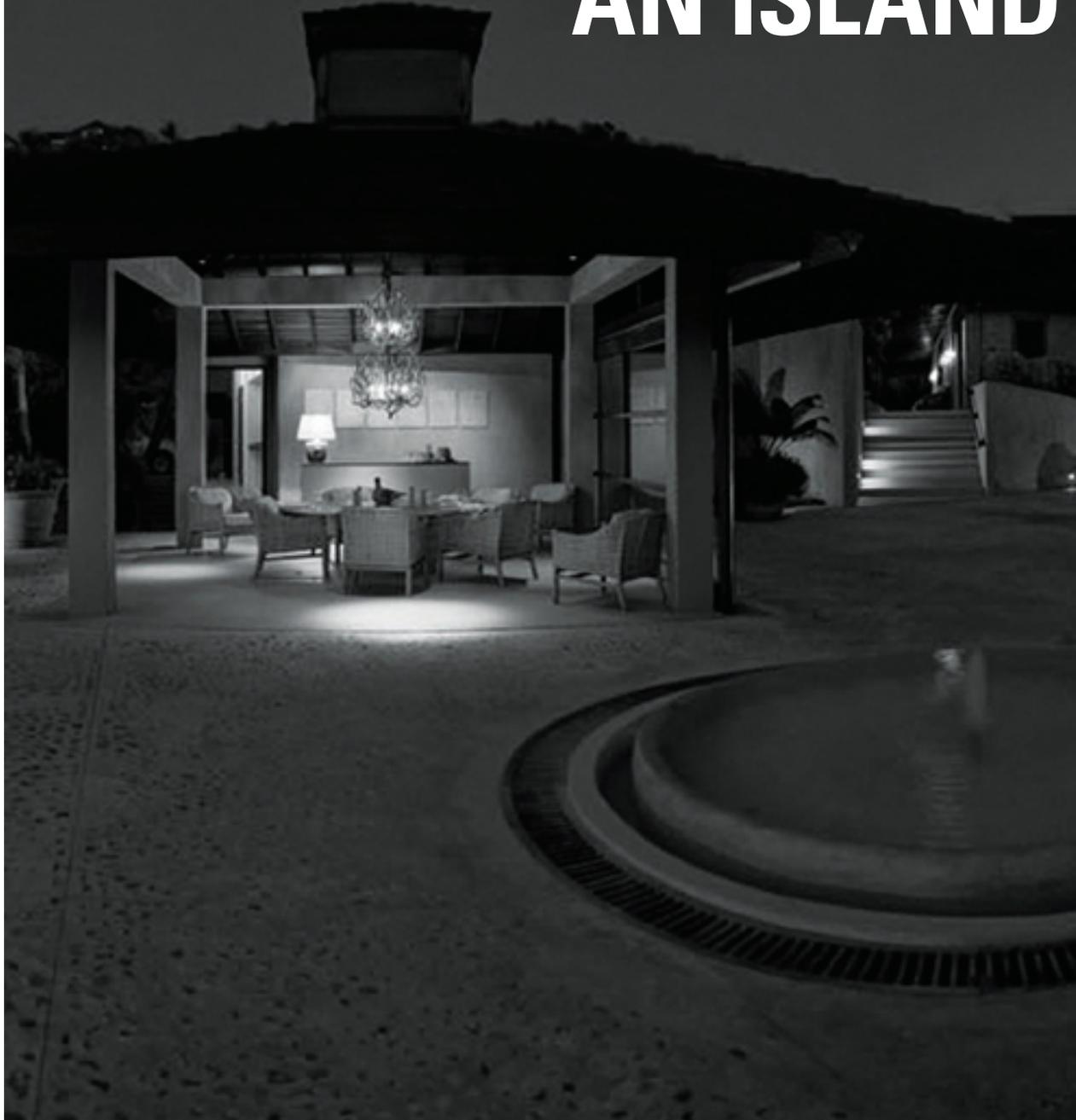
The EMCP 4 controllers feature the reliability and durability you have come to expect from your Cat equipment. EMCP 4 is a scalable control platform designed to ensure reliable generator set operation, providing extensive information about power output and engine operation. These systems can be further customized to meet your needs through programming and expansion modules.

ADVANTAGES TO YOU:

- 6 • Intuitive navigation and configuration
- Advanced telemetry capabilities for remote communications to ensure safety for operators
- Complete engine and generator monitoring, protection and control
- Generator protective relays, including over/under voltage, over/under frequency, over current and reverse power
- Communication options over Modbus and Ethernet
- Expansion modules, including local annunciators, remote annunciators, input/output and generator temperature monitoring



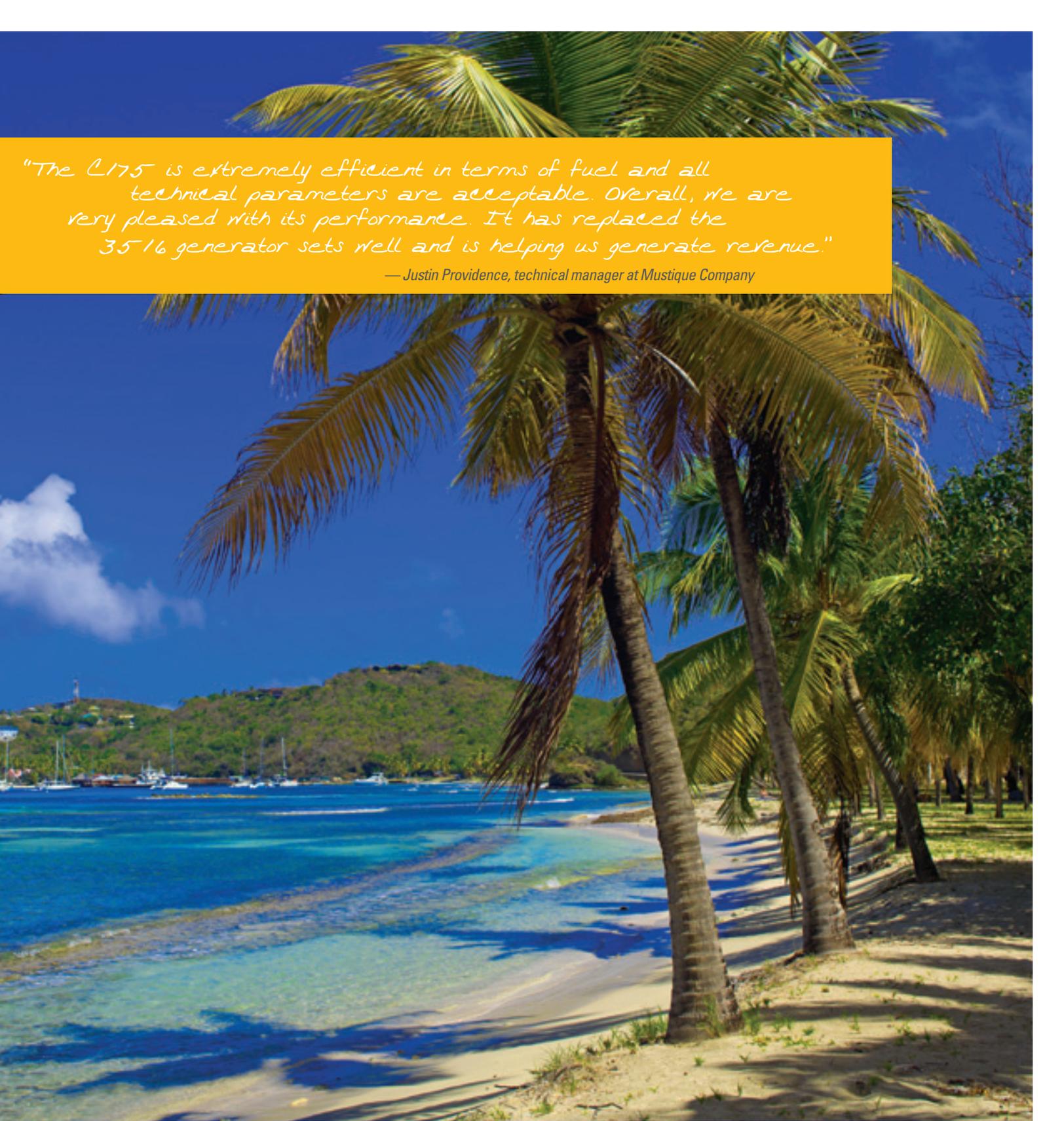
TRUSTED TO SUSTAIN AN ISLAND



Ensuring power to an island community takes the commitment of a strong company and the most reliable equipment available. Such is the case with the renowned vacation destination, the island of Mustique, located 32.2 kilometers (20 miles) south of St. Vincent in the Grenadine Islands.

The approximately 5.7-square-kilometer (2.2-square-mile) island is powered by four Cat 3516 generator sets, one C175-16 generator set and one C175-20 generator set.

For more than 40 years, the Mustique Company has utilized Cat generator sets to provide power services.



"The C175 is extremely efficient in terms of fuel and all technical parameters are acceptable. Overall, we are very pleased with its performance. It has replaced the 3516 generator sets well and is helping us generate revenue."

— Justin Providence, technical manager at Mustique Company

Today, the C175-16 runs continuously, providing the island with 1.3 to 2 MW of power. The island's peak power need of 3.3 MW is met with the addition of one of the 3516 generator sets. Generally, the two 3516 generator sets are used during routine maintenance and serve as stand-by units.

YOUR CAT DEALER IS HERE WITH THE ANSWER.

Your Cat dealer is committed to your success. Our dealers are committed to cost-effective, quality controlled, fast, turnaround service, because you have a budget and a schedule to keep. Each of our service facilities represents a substantial investment in plant, tooling, diagnostic and testing equipment.

Combined, Cat dealers have over 140,000 employees with more than 75 percent engaged in product support to help you attain maximum value and reliability from the Cat products you depend on.

You can also count on 24/7 technical assistance – we're just a phone call away. Our team is committed to having someone at your business within two hours of a reported problem. On average, there is a service location within a 20-mile radius of every one of our customers' businesses. Cat service, along with unparalleled parts availability, helps us ensure the long-term reliability of your Cat power system.

ADVANCED ELECTRICAL SERVICES

Along with proper configuration and installation of your power system, your Cat dealer is equipped to coordinate your necessary long-term electrical system maintenance, testing, retrofit and engineering service needs such as infrared thermography, circuit breaker testing and arc flash studies. You can depend on us to be your partner for all electrical power servicing before, during and after the installation of your electrical system components.

Cat dealers are in full compliance with global and local regulations to minimize the risk for personal injury or product damage. Proper testing and maintenance from your Cat dealer can minimize your exposure to major financial risks, legal risks and regulatory violations caused by unexpected downtime.

ELECTRIC POWER RENTAL FLEET

From unexpected surges to unplanned power outages, having a temporary power plan in place is crucial to ensuring you have power when you need it. Cat dealers carry a large equipment inventory (including generator sets, temperature control, chillers, load banks, ancillary equipment) and all dealers work together – 1,600 locations strong. That means your dealer is never "rented out." No matter where you are, how many you need or how soon you need them, make a call for equipment and consider it sent. Your dealer does the legwork, backed by the worldwide strength of Caterpillar, to get your equipment delivered, installed, fueled up and ready to run.

Our electric power rental fleets offer experienced technicians and engineers to help support your business in managing emergency contingency plans.



PEACE OF MIND.



Your power system can't take time off. To ensure that you are able to maintain your system simply and affordably, we offer several levels of support.

EXTENDED SERVICE COVERAGE

Your Extended Service Coverage offers transferable coverage beyond the standard warranty period, for all Cat electric power equipment. Extended Service Coverage protects against unexpected repair bills, and offers a hedge against rising parts and labor costs by providing 100 percent parts and labor reimbursement for covered components, less any applicable deductible. The broad range of coverage options, which can be customized to suit your individual needs, combined with simple pricing terms provides confidence and peace of mind toward your power system's performance.

CUSTOMER SUPPORT AGREEMENT

Your Customer Support Agreement is an individualized arrangement between you and your Cat dealer that helps you maintain your products while lowering your cost per unit of production, regardless of the size or age of your product. Agreements are tailored to fit your business needs and can range from simple preventive maintenance kits to sophisticated total cost performance guarantees. No matter which option you choose, you can be assured that your Cat dealer will provide you with the careful planning and ongoing attention that will help you succeed.

PARTS AVAILABILITY

Your Cat dealer is equipped with a parts inventory and access to the global Cat parts network to fulfill 98 percent of parts orders within 24 hours from the time of order. We know that having the right parts on hand is crucial to keep your power system running, so we also provide 24/7 access to information at parts.cat.com. Here you will find videos, reference material and specs on Cat original, Classic and remanufactured parts, as well as information on repair and maintenance parts for your Cat electric power products, all manufactured to original equipment specifications and recommended by Caterpillar.

EVERY SINGLE DAY.



CAT FINANCING OPTIONS

Just as every power situation is not the same, not every financial situation is the same either. That's why we provide you with highly customized financing packages based on your business needs. Cat finance services offer you direct access to local dealers, walking with you through financing options that are customized to fit your needs. We offer more industry knowledge than standard banks and lenders

to value equipment and structure loans or leases. We offer full financial support from the world's largest company for construction and mining equipment. Dedicated to helping you manage your investments, we can help locate markets in which your excess equipment will be redeemed for its maximum value. Cat finance is working to help guard and grow your business investments.



GET THE RIGHT TECHNOLOGY WITH THE RIGHT SUPPORT.

THIS ISN'T JUST ANOTHER BROCHURE, THIS IS OUR WRITTEN PROMISE. THIS IS THE STORY OF WHAT WE'RE BUILT ON: QUALITY, EXPERTISE AND AN INVESTMENT IN YOU. IT'S A DOCUMENT OF HOW THE C175 WAS ENGINEERED FOR YOUR WORK, AND HOW EVEN OUR SUPPORT IS **BUILT FOR IT.**

www.cat.com

LEXE0605-00 April 2013

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