



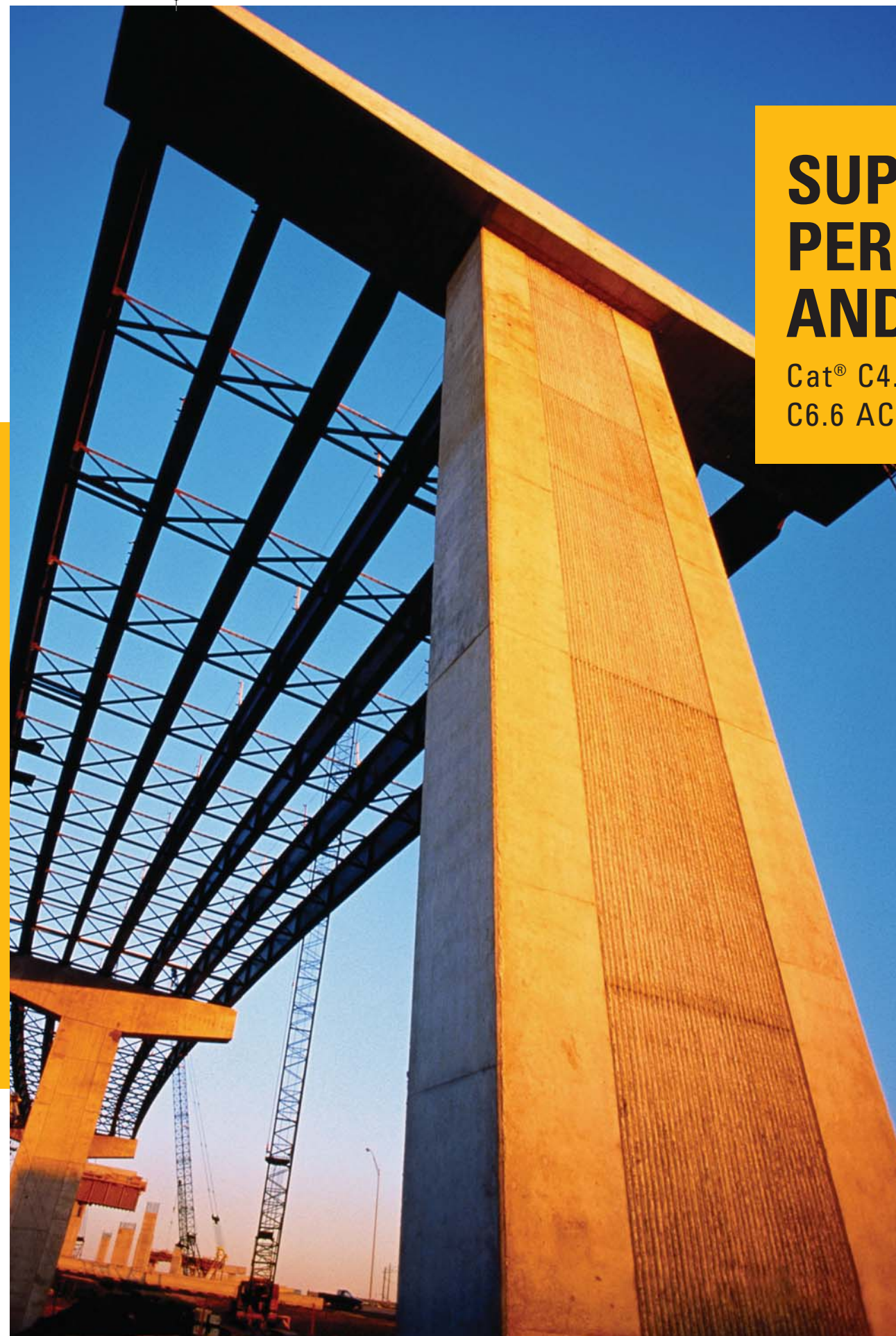
### Worldwide Cat® Dealer Support

For decades, Cat® Dealers have provided the most comprehensive support services in the industry. Today, the Cat Dealer network supplies the highest-quality engine parts around the globe, with best-in-the-industry parts availability.

Whatever you need and whenever you need it, your Cat Dealer can get it to you. Cat support services also include scheduled maintenance, Customer Support Agreements and Caterpillar Extended Service Coverage.

Cat Dealer service technicians are highly trained and experienced. They know Cat engines inside and out, so they can diagnose problems fast and maintain peak performance.

All around the world, you can count on the Cat Dealer Network for high-quality parts, service and support.



# SUPERIOR PERFORMANCE AND BEYOND

Cat® C4.4, C4.4 ACERT™ & C6.6 ACERT Engines



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**CATERPILLAR®**  
TODAY'S WORK. TOMORROW'S WORLD.™

**CATERPILLAR®**

# PERFORMANCE IS JUST THE BEGINNING

Customers have come to expect long life and dependable performance from Cat® engines, and the Cat C4.4, C4.4 ACERT™ and C6.6 ACERT deliver that and more. They also offer a perfect balance of other critical requirements including low emissions, fuel efficiency, and noise reduction. Extensively tested on the job, the C4.4, C4.4 ACERT and C6.6 ACERT have proven that they can handle the toughest applications...and go beyond the expectations of the most demanding users.



## Achieving New Levels of Performance

**ACERT™ Technology reduces emissions while enhancing performance.**

The C4.4 ACERT™ and C6.6 ACERT electronically-controlled engines take advantage of ACERT Technology to comply with all Tier 3/Stage IIIA emissions standards while enhancing overall performance. ACERT Technology is a Cat breakthrough that synergizes a number of individual technologies including:

- Precision fuel injection using HEUI™, MEUI (Hydraulically- and Mechanically-actuated Electronic Unit Injectors) and Cat Common Rail
- Development and refinement of electronic engine control, culminating in the advanced Cat ADEM™ A4 controllers used in today's Cat engines
- Smart wastegate turbocharging

Working together, these technologies control the combustion process with extreme precision and efficiency...without the need for the bulky or complicated add-on systems.

**Constant Net Horsepower keeps the power on.**

Electronic control helps the C4.4 ACERT and C6.6 ACERT deliver consistent power in any job condition. Cat ADEM™ A4 controllers match machine performance to changing hydraulic demands. They can even adjust engine performance to gear selection, boosting productivity and optimizing fuel consumption.

Electronic control also compensates for the power demands of air conditioners and cooling fans. As a result, the C4.4 ACERT and C6.6 ACERT meet horsepower requirements. That means there is no change in performance due to parasitic losses from other systems.

## Maintaining Reliability and Durability

**Commonality means confidence.**

The C4.4 ACERT and C6.6 ACERT share components with other Cat platforms, so you can count on the same durable, reliable performance you'd expect from Caterpillar.

In addition, ACERT Technology is used in many Cat Tier 3/Stage IIIA-compliant engines. Proven over countless hours in many applications, it provides a flexible, reliable emissions solution for Cat engine customers.

Engine commonality also means that rebuild procedures and service routines are familiar, which helps service technicians keep the engines running at their best all day, every day.

**Job tested for more than 1.5 million hours.**

During their development, the Cat C4.4 ACERT and C6.6 ACERT underwent extensive on-the-job testing. Together, they racked up more than a million and a half hours in the field in a wide range of applications. They have proven themselves to be durable, reliable performers under even the most demanding conditions.

# SUPERIOR PERFORMANCE ALL AROUND



### ACERT™ Technology

A combination of advanced fuel delivery, crossflow cylinder heads and smart wastegate turbocharging precisely controls the combustion process to reduce emissions and improve performance.

### Cat® Common Rail Fuel System

This proven, cost-effective system delivers long, reliable life—with the high fuel pressures needed for injection timing.

### Minimum Oil Consumption & Blow-by

Tighter engine tolerances result in improved oil control. Oil consumption is reduced to less than 0.1% of fuel used. Less blow-by over the life of the engine reduces the need for additional oil between service intervals and helps lower overall operating costs.

### Crossflow Cylinder Heads

Advanced air management helps improve combustion performance and lower emissions output. The crossflow design is also quieter and more efficient.



### Smart Wastegate Turbocharging

Standard on the C4.4 ACERT and C6.6 ACERT, smart wastegate technology optimizes performance by varying air-flows and boost to better match engine speed and load.

### Optimum Power Density

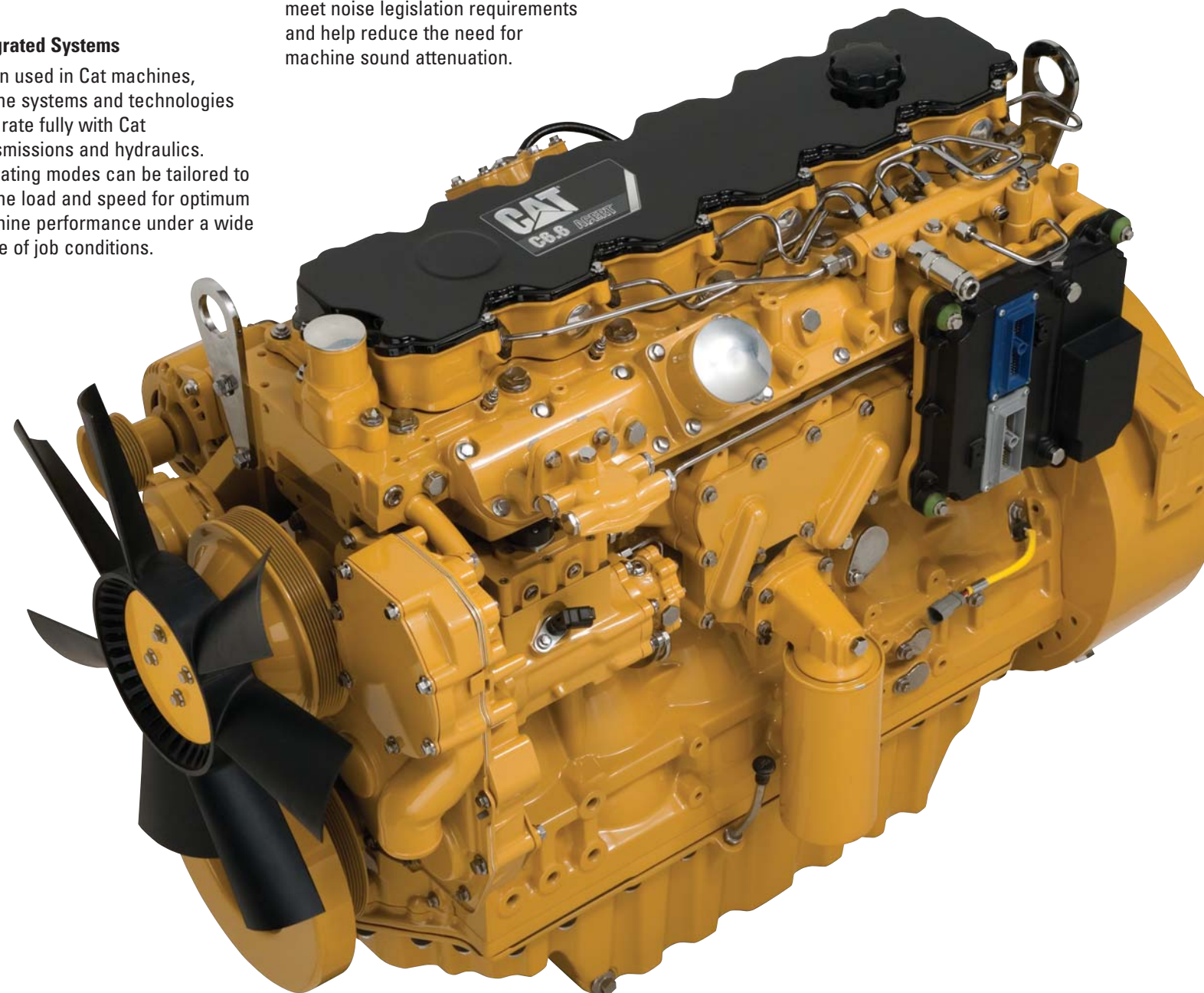
Both engines produce high power output for their size and weight. The C6.6 ACERT offers up to 275 hp/205 kW in a smaller, lighter platform than its predecessor.

### Integrated Systems

When used in Cat machines, engine systems and technologies integrate fully with Cat transmissions and hydraulics. Operating modes can be tailored to engine load and speed for optimum machine performance under a wide range of job conditions.

### Reduced Noise

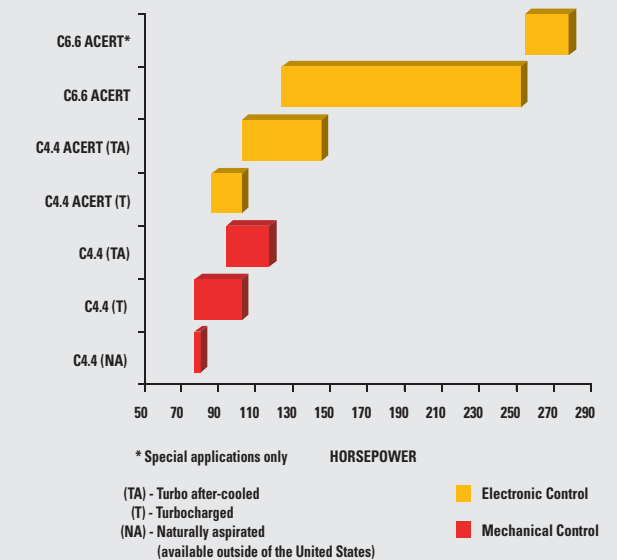
The C4.4 ACERT and C6.6 ACERT employ a variety of strategies to meet regulatory requirements for reduced engine noise, up to 5 dBA on the C6.6 ACERT. This can help meet noise legislation requirements and help reduce the need for machine sound attenuation.



### Competitive Power Ratings

Both the C4.4 ACERT™ and C6.6 ACERT offer a wide range of power ratings. The ratings overlap across platforms to provide customers with a choice of ratings and aspirations to meet specific power needs.

Compact and lightweight, the C4.4 ACERT and C6.6 ACERT offer excellent power density. They deliver horsepower ratings comparable to heavier engines with larger displacements.



### C4.4 Mechanical

The C4.4 Mechanical shares the same platform and many of the same features as the C4.4 ACERT. It's a mechanical engine designed for applications that may not benefit from electronic control.



For engine availability, contact your local Cat® Dealer.

# REDUCING OWNING & OPERATING COSTS



## Standard service intervals reduce operating costs.

Standard 500-hr service intervals allow C4.4, C4.4 ACERT™ and C6.6 ACERT users to maintain familiar service and maintenance practices. In addition, the C4.4, C4.4 ACERT and C6.6 ACERT do not require specialized oils which provides a cost advantage when servicing. “Plug-and-play” diagnostics capabilities also help control owning and operating costs.

In addition, the smaller profile of the C4.4, C4.4 ACERT and C6.6 ACERT engines can improve service access to further reduce service and maintenance costs.

## A smaller platform enhances fuel efficiency.

Compared with other engines in similar power classes, the Cat C4.4, C4.4 ACERT and C6.6 ACERT have a smaller displacement and less overall weight. With higher power density, this results in lower fuel consumption at idle.

In addition, improved bore sealing results in better fuel utilization and less fuel loss. The Cat Common Rail fuel system, smart wastegate turbocharging and integrated systems also contribute to better fuel efficiency.

When comparing engines, it is important to remember that Caterpillar rates engine fuel consumption based on actual usage in the field.

## Worldwide fuel capability adds flexibility.

Alternative fuel capability is increasingly important to diesel engine users. In the C4.4, C4.4 ACERT and C6.6 ACERT, an oil lubricated fuel pump is just one design feature that improves worldwide fuel tolerance.

Currently, these engines are approved for bio-diesel (B5) concentrations up to 5%.



## Built for demanding applications

### Construction

- Bore/Drill Rigs
- Compactors/Rollers
- Mobile Earthmoving Machines
- Paving Equipment
- Trenchers
- Other Construction Equipment

### Mining

- Underground Mining Equipment

### Agriculture

- Ag Tractors
- Combines/Harvesters
- Specialty Ag Equipment
- Sprayers

### Forestry/Waste

- Chippers/Grinders
- Feller Bunchers
- Harvesters
- Loaders/Forwarders
- Skidders
- Other Forestry Equipment

### Material Handling

- Aerial Lifts
- Chippers/Grinders
- Cranes
- Crushers
- Forklifts
- Pumps (Non-fire, Irrigation, Petroleum)

### Light Construction/General Industrial

- Aircraft Ground Support
- Compressors
- Hydraulic Power Units
- Mobile Sweepers
- Turf & Landscape

### Other Industrial Applications

(Including snow grooming and removal)