



Cat® C4.4 ACERT Industrial Diesel Engines offer the perfect balance of durability, fuel efficiency and low emissions. Extensively tested on the job, these engines use a range of common rail fuel systems and advanced control systems to deliver maximum uptime in the harshest environment. They have proven they can handle the toughest applications and deliver superior performance that exceeds the expectations of the most demanding users. Industries and applications powered by C4.4 ACERT engines include: Agriculture, Aerial Lifts, Aircraft Ground Support, Bore/Drill Rigs, Chippers/Grinders, Compactors/Rollers, Compressors, Construction, Cranes, Crushers, Feller Bunchers, Forestry, Forklifts, General Industrial, Harvesters, Hydraulic Power Units, Irrigation Equipment, Loaders/Forwarders, Material Handling, Mining, Mobile Earthmoving Equipment, Mobile Sweepers, Paving Equipment, Pumps, Skidders, Specialty Ag Equipment, Sprayers, Trenchers, Turf and Landscaping and Underground Mining Equipment.

Specifications

Power Rating		
Minimum Power	65.9 kW	88.4 bhp
Maximum Power	129.4 kW	173.5 bhp
Rated Speed	2200 rpm	

Emission Standards	
Emissions	U.S. EPA Tier 4 Final, EU Stage IV

General	
Engine Configuration	Inline 4, 4-Stroke-Cycle Diesel
Bore	105 mm (4.13 in)
Stroke	127 mm (5.00 in)
Displacement	4.4 L (268.5 in ³)
Aspiration	Turbocharged Aftercooled (TA) or Series Turbocharged Aftercooled (TTA)
Compression Ratio	16.5:1
Combustion System	Direct Injection
Rotation (from flywheel end)	Counterclockwise
Cooling System Capacity	10.8 L (11.4 qt)
Lube System (refill)	5.2-13.5 L (5.5-14.27 qt)

Engine Dimensions (Approximate. Final dimensions dependent on selected options)	
Length	845.1 mm (33.3 in)



Width	741.6-772.4 mm (29.1-30.4 in)
Height	848.2-867.6 mm (33.4-34.1 in)
Weight - Net Dry (Basic Operating Engine Without Optional Attachments)	400-420 kg (881.8-926 lb)

Aftertreatment Dimensions (Approximate. Final dimensions dependent on selected options)	
Length	647-828 mm (25.5-32.6 in)
Width	365-695 mm (14.3-27.4 in)
Height	279-430 mm (11-16.9 in)
Weight	34-80 kg (75-17;6.4 lb)
Diameter	224.9-270.3 mm (9.6-10.6 in)

Benefits and Features

Emissions

Meets U.S. EPA Tier 4 Final, EU Stage IV emission standards. U.S. EPA Tier 4 Interim, EU Stage IIIB configurations are also available using EPA or EU Flexibility Process.

Reliable, Quiet and Durable Power

World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life.

High Performance

Series turbocharging with smart wastegate available on specific ratings for fast response, high power, and increased torque.

Fuel Efficiency

Fuel consumption optimized to match operating cycles of a wide range of equipment and applications while maintaining low operating costs.

Fuel & Oil

Tier 4 Interim or Tier 4 Final, Stage IIIB or Stage IV engines require Ultra Low Sulfur Diesel (ULSD) fuel containing a maximum of 15 ppm sulfur, and new oil formulations to support the new technology. Cat® engines are designed to accommodate B20 biofuel. Your Cat dealer can provide more information regarding fuel and oil.

Broad Application Range

Industry leading range of factory configurable ratings and options for agricultural, material handling, construction, mining, aircraft ground support, and other industrial applications.

Package Size

Ideal for equipment with narrow engine compartments. Multiple installation options minimize total package size.

Low Cost Maintenance

Worldwide service delivers ease of maintenance and simplifies the servicing routine. Hydraulic tappets, multi-vee belts, "no ash service" aftertreatment, and 500-hour oil change intervals enable low-cost maintenance. Many service items have a choice of location on either side of the engine to enable choice of service access. The S·O·SSM program is available from your Cat dealer to determine oil change intervals and provide optimal performance.

Quality

Every Cat engine is manufactured to stringent quality standards in order to assure customer satisfaction.

World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance, including SOSSM sample
- Customer Support Agreements (CSA)
- Caterpillar Extended Service Coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

Tier 4 Interim, Stage IIIB Aftertreatment Features

Regeneration. Passive regeneration completely transparent to the operator. **Mounting.** Extensive range of inlets and outlets, as well as remote off- and on-engine installations, provide flexibility for many installations. **Service.** Service-free DPF for the emissions life of the engine.

Tier 4 Final, Stage IV Aftertreatment Features

Regeneration. The DOC/SCR modular design offers a simple, compact package while providing high levels of performance. A DOC/DPF/SCR option is available for higher power machines. While in use, both DOC/SCR and DOC/DPF/SCR systems offer transparent operation to the user. **Mounting.** Extensive range of inlets and outlets, as well as remote and on-engine installations, provide flexibility for many installations. **Service.** Both DOC/SCR and DOC/DPF/SCR systems are service-free for the emissions life of the engine. Available in 12V or 24V systems

Standard Equipment

Air Inlet System

- Standard air cleaners

Control System

- Full electronic control system, all connectors and wiring looms waterproof and designed to withstand harsh off-highway environments
- Flexible and configurable software features and well-supported SAE J1939 CAN bus enables highly integrated machines

Cooling System

- Top tank temperature 108° C (226° F) as standard to minimize cooling pack size
- 50:50 water glycol mix

Flywheels and Flywheel Housing

- Wide choice of drivetrain interfaces, including SAE No. 2 and SAE No. 3 configurations

Fuel System

- Electronic high pressure common rail
- ACERT™ Technology
- Innovative filter design to ensure maximum protection of the engine

Lube System

- Wide choice of sumps for different applications

Power Take Off



- SAE A and SAE B flanges on left-hand side. Additional SAE A flange available on left-hand side. Engine power can also be taken from the front of the engine on some applications. Factory fitted compressors are also available.

General

- Available with or without a balancer
- Paint: Caterpillar yellow, with optional colors available at request

U.S. EPA Tier 4 Interim Equivalent, EU Stage IIIB Equivalent Aftertreatment / Clean Emissions Control Equipment

- Clean Emissions Module (CEM), consisting of Diesel Particulate Filter (DPF) and Diesel Oxidation Catalyst (DOC)
- No ash service requirement
- Passive regeneration

U.S. EPA Tier 4 Final, EU Stage IV Aftertreatment/ Clean Emissions Control Equipment

- Clean Emissions Module (CEM), consisting of Diesel Particulate Filter (DPF) and Diesel Oxidation Catalyst (DOC)
- Selective Catalytic Reduction (SCR)
- 3" flex pipe connection with straight, 45°, and 90° options for flexibility

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.