



Image shown may not reflect actual configuration

The Cat® C15 Industrial Diesel Engine is offered in ratings ranging from 354-433 kW (475-580 bhp) @ 1800-2100 rpm. These ratings meet U.S. EPA Tier 4 Final, EU Stage V, Japan 2014, and Korea Tier 4 Final emission standards.

C15 engines are ideal choices to power applications in agriculture, aircraft ground support, construction, forestry, general industrial, material handling, and mining.

## Specifications

Power Rating		
Minimum Power	354 kW	475 bhp
Maximum Power	433 kW	580 bhp
Rated Speed	1800-2100 rpm	

Emission Standards	
Emissions	U.S. EPA Tier 4 Final, EU Stage V, Japan 2014, Korea Tier 4 Final Nonroad Emission Standards

Engine Specifications		
Engine Configuration	In-Line 6, 4-Stroke-Cycle Diesel	
Bore	137 mm	5.4 in
Stroke	171 mm	6.7 in
Displacement	15.2 L	927.6 in <sup>3</sup>
Aspiration	Turbocharged-Aftercooled (TA)	
Compression Ratio	17.0:1	
Combustion System	Direct Injection	
Rotation (from flywheel end)	Counterclockwise	
Cooling System Capacity (engine)	26.9 L	28.4 qts
Lube System (refill)	38-72 L	40-76 qts

Engine Dimensions (Approximate. Final dimensions dependent on selected options.)		
Length	1438 mm	56.6 in
Width	943 mm	37.1 in
Height	1239 mm	48.8 in
Weight – Net Dry (Basic Operating Engine Without Optional Attachments)	1542 kg	3399.5 lb

Aftertreatment Dimensions (Approximate. Final dimensions dependent on selected options.)		
Length	1153 mm	45.4 in
Width	1112 mm	43.8 in
Height	652 mm	25.7 in
Weight	268 kg	590.8 lb

## **Benefits & Features**

### **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.

### **Broad Application Range**

Industry-leading range of factory configurable ratings and options for agricultural, materials-handling, construction, mining, forestry, waste, and other industrial applications.

### **Fluid Efficiency**

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

### **Installation**

- Fully configurable engine with multiple ratings, a wide range of power, and numerous options to minimize total package size and enable commonization across a broad array of applications.
- Aftertreatment installation flexibility to meet all applications – including remote-mount and engine-mounted from the factory.
- Industrial power unit (IPU) available from factory to avoid significant design, validation, and manufacturing costs.
- Low heat rejection levels allow for optimized cooling package at equivalent power.
- The C15 is certified to U.S. EPA Tier 4 Final, EU Stage V, Japan 2014, and Korea Tier 4 Final Nonroad Emission Standards, simplifying customer design and installation across regions.

### **Low Cost Maintenance**

- Worldwide service delivers ease of maintenance and simplifies the servicing routine.
- Minimum 5000-hour diesel particulate filter (DPF) ash service interval ensures low-cost maintenance.
- Standard service intervals of 500 hours under normal operating conditions.
- The S•O•S<sup>SM</sup> program is available from your Cat dealer to optimize oil change intervals.
- Ideal for high-hour applications over 10,000 hours.
- Remote mount options for serviceable items such as oil and fuel filters.

### **Quality**

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

### **World-class Product Support Offered Through Global Cat Dealer Network**

- Scheduled maintenance, including S•O•S sample
- Customer support agreements (CSA)
- Extended service coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

## Benefits & Features (continued)

### Tier 4 Final, Stage V Aftertreatment

- Clean emissions module (CEM) consisting of diesel oxidation catalyst (DOC), diesel particulate filter (DPF), and selective catalytic reduction (SCR)
- Maximum uptime with transparent aftertreatment regeneration. No operator distraction or impact to machine performance.
- Remote-mounted aftertreatment standard for greatest flexibility. Engine-mounted aftertreatment (EMAT) optional for simplified installation.
- PETU DEF capacity up to 93.7 liters (24.8 U.S. gal)
- Minimum 5000-hour service interval for DPF/PETU filters



Optional IPU shown with engine-mounted aftertreatment (EMAT)

## Standard Equipment

### Air Inlet System

- Turbocharged
- Air-to-Air Aftercooled
- Mid-mount turbocharged system with front and rear exhaust configurations

### Control System

- Electronic control system
- Over-foam wiring harness
- Configurable software features
- Engine monitoring system SAE J1939 broadcast and control
- Integrated Electronic Control Unit (ECU)
- Remote fan control
- 12V and 24V available

### Cooling System

- Vertical outlet thermostat housing
- Centrifugal water pump
- Guidance on cooling system design available through your dealer to ensure equipment reliability

### Flywheels and Flywheel Housing

- SAE No. 0 and SAE No. 1 flywheel housings
- Available SAE 1 power take-off (PTO) housing with optional SAE B and SAE C power take-off drives
- Engine power can also be taken from the front of the engine with optional attachments

### Fuel System

- Mechanical Electronic Unit Injectors (MEUI)
- Primary fuel filter
- Secondary and tertiary fuel filters
- Fuel transfer pump
- Electronic fuel priming

## **Standard Equipment (continued)**

### **Lube System**

- Oil cooler
- Oil filler
- Lube oil filter
- Oil dipstick
- Gear-driven oil pump
- Choice of front, rear or center sumps
- Open crankcase ventilation system (optional OCV filter system)

### **PTO**

- SAE B or SAE C PTO drives
- Engine power can also be taken from the front of the engine on some applications

### **General**

- Caterpillar Yellow paint, with optional colors available



**Emissions: U.S. EPA Tier 4 Final,  
 EU Stage V, Japan 2014, and  
 Korea Tier 4 Final Nonroad Emission Standards**

**C15**

**354-433 kW/ 475-580 bhp  
 1800-2100 rpm**

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	Metric	English
<b>General Engine</b>		
Number of Cylinders	6	
Bore	137 mm	5.4 in
Stroke	171 mm	6.7 in
Displacement	15.2 L	928 in <sup>3</sup>
Compression Ratio	17.0:1	

**RATING DEFINITIONS AND CONDITIONS**

**IND-A (Continuous)** for heavy duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

**IND-B** for service where power and/or speed are cyclic (time at full load not to exceed 80%).

**IND-C (Intermittent)** is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

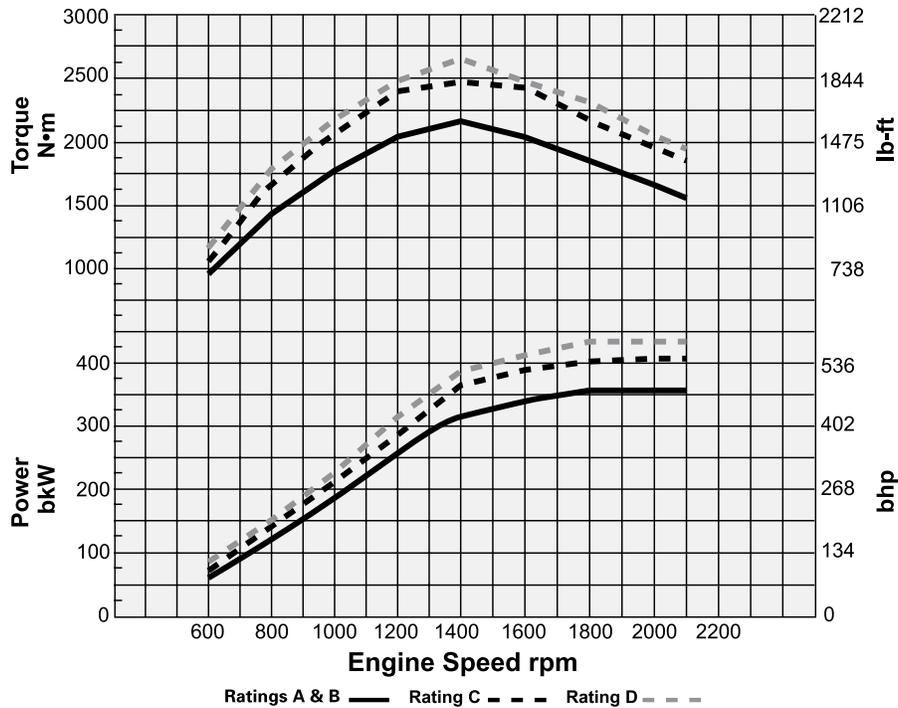
**IND-D** for service where maximum power is required for periodic overloads (time at full load not to exceed 10% of the duty cycle).

**Diesel Engines** – greater than 7.1 liter. All rating conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29°C (84.2°F) with a density of 838.9 g/L.



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 EU Stage V, Japan 2014, and  
 Korea Tier 4 Final Nonroad Emission Standards**

**Performance Data**



Rating	Aspiration	Rated Speed rpm	Rated Power kW	Rated Power bhp	Peak Torque N·m	Peak Torque lb-ft	Speed rpm
A	TA	1800-2100	354	475	2176	1605	1400
B	TA	1800-2100	354	475	2176	1605	1400
C	TA	1800-2100	403	540	2469	1821	1400
D	TA	1800-2100	432.5	580	2655	1958	1400

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