



The Cat® C32 ACERT™ Industrial Diesel Engine is offered in ratings ranging from 746-895 kW (1000-1200 bhp) @ 1800 rpm. These ratings meet U.S. EPA Tier 4 Final emission standards. Applications powered by C32 ACERT engines include: Bore/Drill Rigs, Chippers/Grinders, Construction, Cranes, Dredgers, Forestry, Hydraulic Power Units, General Industrial, Irrigation Equipment, Material Handling, Mobile Earthmoving Equipment, Paving Equipment, Pumps, Shovels/Draglines, Surface Hauling Equipment and Trenchers.

Specifications

Power Rating		
Minimum Power	746 kW	1000 bhp
Maximum Power	895 kW	1200 bhp
Rated Speed	1800 rpm	

Emission Standards	
Emissions	U.S. EPA Tier 4 Final

General	
Engine Configuration	V-12, 4-Stroke-Cycle Diesel
Bore	145 mm (5.71 in)
Stroke	162 mm (6.38 in)
Displacement	32.1 L (1958.9 in ³)
Aspiration	Twin Turbocharged Aftercooled (TTA)
Compression Ratio	15.0:1
Combustion System	Direct Injection
Rotation (from flywheel end)	Counterclockwise
Cooling System Capacity	67.9 L (71.7 qt)
Lube System (refill)	68 L (71.9 qt)

Engine Dimensions (Approximate. Final dimensions dependent on selected options)	
Length	1874 mm (73.78 in)
Width	1600 mm (63 in)
Height	1370 mm (53.9 in)
Weight - Net Dry (Basic Operating Engine Without Optional Attachments)	3004 kg (6625 lb)

Benefits and Features

Emissions

Meets U.S. EPA Tier 4 Final emission standards.

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

Simple and efficient dual turbochargers -- 1 per bank.

Fuel Efficiency

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

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

Exceptional power density enables standardization across numerous applications. Multiple installation options minimize total package size. Ideal for equipment with narrow engine compartments.

Low Cost Maintenance

Worldwide service delivers ease of maintenance and simplifies the servicing routine. Service intervals at 250 hours are standards. Capable of optimal oil change intervals of up to 500-hours, depending on rating, application, operating conditions, and maintenance practices. No aftertreatment is required. 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

Standard Equipment

Air Inlet System

- Turbocharged
- Air-to-Air Aftercooled

Control System

- Electronic control system
- Over-foam wiring harness
- Automatic altitude compensation
- Power compensated for fuel temperature
- Configurable software features



- Engine monitoring system SAE J1939 broadcast and control

Cooling System

- Thermostats and housing, vertical outlet
- Jacket water pump, centrifugal
- Water pump, inlet

Exhaust System

- Exhaust manifold, dry
- Optional exhaust outlet

Flywheels and Flywheel Housing

- Choice of SAE No. 0 or SAE No. 1 flywheel housing

Fuel System

- MEUI injection
- Fuel filter, secondary (2 micron)
- Electronic fuel priming

Lube System

- Open crankcase ventilation system
- Oil cooler
- Oil filler
- Lube oil filter
- Rear sump oil pan
- Oil dipstick
- Gear driven oil pump

Power Take Off (PTO)

General

- Paint: Caterpillar yellow, with optional colors available at request

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.



C32 ACERT

746 kW (1000 bhp) @ 1800 rpm

Rating Type: IND-B RATING

Emissions: U.S. EPA Tier 4 Final Nonroad Emission Standards



C32 ACERT

DITA

746 kW (1000 bhp) @ 1800 rpm

Image shown may not reflect actual configuration

	Metric	English
General Engine		
Power Rating	746 kW	1000 hp
Number of Cylinders	12	
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1959.0 cu in.
Compression Ratio	16.0 : 1	

RATING DEFINITIONS AND CONDITIONS

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

Diesel Engines — up to 7.1 liter All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance measured using fuel to EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

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.

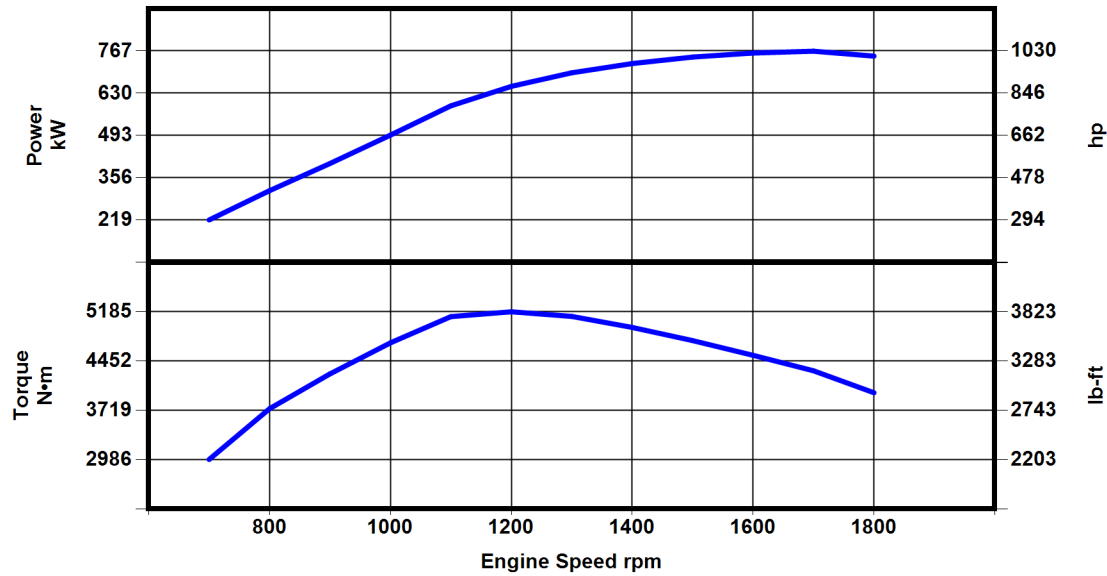


C32 ACERT

746 bkW (1000 bhp) @ 1800 rpm

Rating Type: IND-B RATING

Emissions: U.S. EPA Tier 4 Final Nonroad Emission Standards



Engine Speed rpm	Engine Power bkW	Engine Power bhp	Torque N*m	Torque lb-ft
1800	750	1006	3979	2935
1700	767	1028	4306	3176
1600	760	1019	4536	3346
1500	747	1002	4755	3507
1400	726	973	4951	3652
1300	696	934	5115	3773
1200	652	874	5184	3824
1100	589	790	5112	3771
1000	495	663	4722	3483
900	402	538	4260	3142
800	314	420	3742	2760
700	219	294	2986	2203

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