



The Cat® C32 ACERT™ Industrial Diesel Engine is offered in ratings ranging from 746-895 bkW (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 bkW	1000 BHP
Maximum Power	895 bkW	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 in³)
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	
Height	1370 mm (53.9 in)
Length	1874 mm (73.78 in)
Weight - Net Dry - Basic Operating Engine Without Optional Attachments	3004 kg (6625 lb)
Width	1600 mm (63 in)

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.

World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance, including SOSM 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

General

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

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C32 ACERT
895 bkW (1200 bhp) @ 1800 rpm



Rating Type: IND-D RATING

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



Image shown may not reflect actual configuration

C32 ACERT
DITA
895 bkW (1200 bhp) @ 1800 rpm

Metric English

General Engine		
Power Rating	895 kW	1200 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

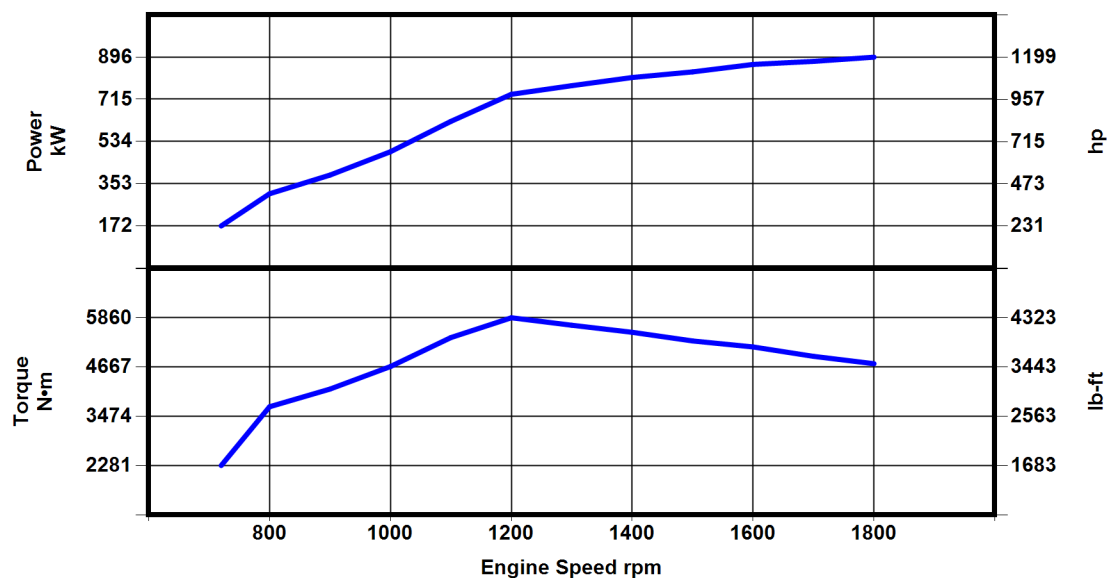
IND-D RATING:For service where maximum power is required for periodic overloads (time at full load not to exceed 10% of the duty cycle).

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.

Rating Type: IND-D 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	895	1200	4748	3502
1700	877	1176	4926	3633
1600	864	1158	5154	3801
1500	832	1116	5299	3908
1400	808	1083	5509	4063
1300	773	1037	5680	4190
1200	737	988	5861	4323
1100	620	831	5381	3969
1000	490	657	4679	3451
900	390	522	4133	3048
800	310	416	3705	2733
720	172	231	2281	1683

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