



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 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 | |
|--|--------------------|
| 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

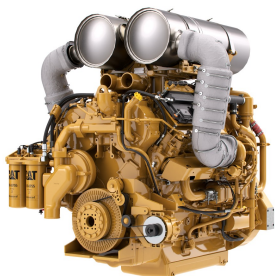
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C32 ACERT

839 kW (1125 bhp) @ 1800 rpm

Rating Type: IND-C (INTERMITTENT) RATING

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



C32 ACERT

DITA

839 kW (1125 bhp) @ 1800 rpm

Image shown may not reflect actual configuration

| | Metric | English |
|-----------------------|----------|---------------|
| General Engine | | |
| Power Rating | 839 kW | 1125 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-C (INTERMITTENT) RATING: Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

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.

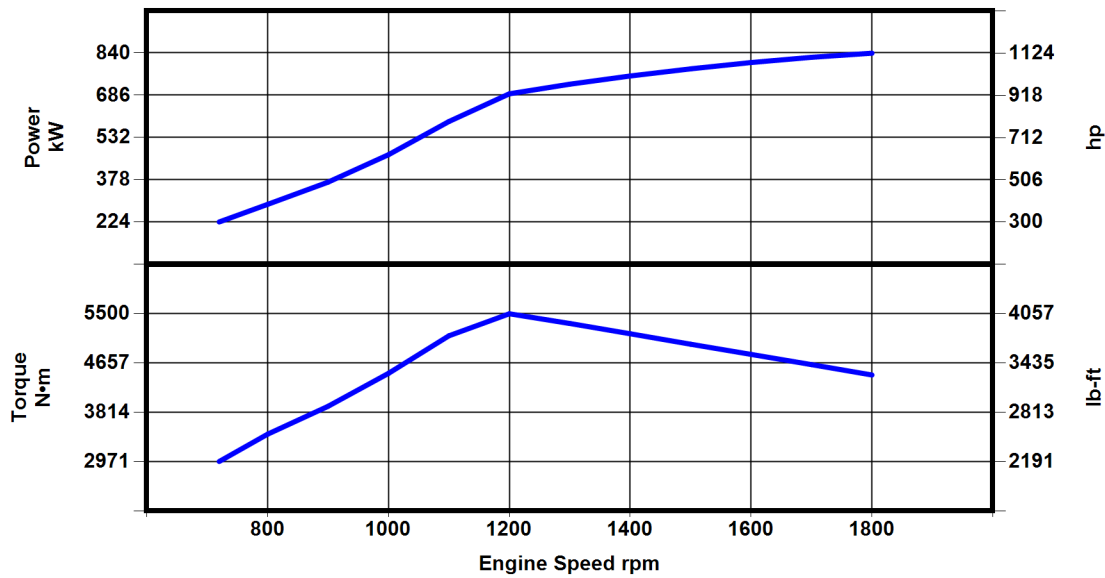


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| Engine Speed rpm | Engine Power bkW | Engine Power bhp | Torque N*m | Torque lb-ft |
|------------------|------------------|------------------|------------|--------------|
| 1800 | 839 | 1125 | 4451 | 3283 |
| 1700 | 824 | 1105 | 4629 | 3414 |
| 1600 | 805 | 1080 | 4804 | 3544 |
| 1500 | 782 | 1049 | 4978 | 3672 |
| 1400 | 756 | 1014 | 5157 | 3803 |
| 1300 | 726 | 974 | 5333 | 3933 |
| 1200 | 691 | 927 | 5499 | 4056 |
| 1100 | 590 | 791 | 5122 | 3778 |
| 1000 | 469 | 629 | 4479 | 3303 |
| 900 | 369 | 495 | 3915 | 2888 |
| 800 | 288 | 386 | 3438 | 2536 |
| 720 | 224 | 300 | 2971 | 2191 |

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