



The Cat® C32 ACERT™ Industrial Diesel Engine is offered in ratings ranging from 708-1007 bkW (950-1350 bhp) @ 1800-2100 rpm. These ratings meet U.S. EPA Tier 2 equivalent emission standards. Industries and applications powered by these high power 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	708 bkW	950 bhp
Maximum Power	1007 bkW	1350 bhp
Rated Speed		1800-2100 rpm

Emission Standards	
Emissions	U.S. EPA Tier 2 Equivalent

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	Turbocharged Aftercooled (TA)	
Compression Ratio	16.5:1	
Combustion System	Direct Injection	
Rotation (from flywheel end)	Counterclockwise	

Engine Dimensions (Approximate. Final dimensions dependent on selected options)			
Length	1917 mm (75.5 in)		
Width	1479 mm (58.2 in)		
Height	1319 mm (51.9 in)		
Weight, Net Dry (Basic Operating Engine Without Optional Attachments)	2946 kg (6495 lb)		

Benefits and Features

Emissions



Meets U.S. EPA Tier 2 equivalent emission standards. Available using U.S. EPA Flexibility, and for other global regulated and non-regulated areas.

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, 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.

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

- Twin Turbocharged Aftercooled
- · Air-to-Air Aftercooled

Control System

- Electronic governing, PTO speed control
- Programmable ratings
- Automatic altitude compensation
- Power compensation for fuel temperature
- Programmable low and high idle and total engine limit
- · Electronic diagnostics and fault logging
- Engine monitoring system SAE J1939 broadcast and control
- ADEM™ A4 Electronic Control Unit (ECU)

Cooling System

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

Exhaust System

MSS-IND-18397141-010 pdf

- · Exhaust manifold, dry
- · Optional exhaust outlet

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Cat® C32 ACERT™

Industrial



Flywheels and Flywheel Housing

• SAE No. 1 flywheel housing

Fuel System

- MEUI injection
- Fuel filter, secondary (2 micron)
- ACERT™ Technology
- · Fuel transfer pump
- · Fuel priming pump

Lube System

- · Crankcase breather
- · Oil cooler
- · Oil filler
- · Lube oil filter
- · Front sump oil pan
- Oil dipstick
- · Gear driven oil pump

General

- Vibration damper
- · Lifting eyes
- Cold start capability to -20° C (-4° F)
- Paint: Caterpillar yellow, with optional colors available at request

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839 bkW (1125 bhp) @ 2100 rpm

Rating Type: IND-C (INTERMITTENT) RATING

Emissions: U.S. EPA Tier 2 Nonroad Equivalent Emission Standards (Not Currently EPA Certified)

> C32 ACERT DITA 839 bkW (1125 bhp) @ 2100 rpm



Image shown may not reflect actual configuration

	Metric	English		
General Engine				
Power Rating	839 kW	1125 hp		
Number of Cylinders	12	12		
Bore	145 mm	5.7 in		
Stroke	162 mm	6.4 in		
Displacement	32.1 L	1959.0 cu in.		
Compression Ratio	16.5	16.5 : 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).

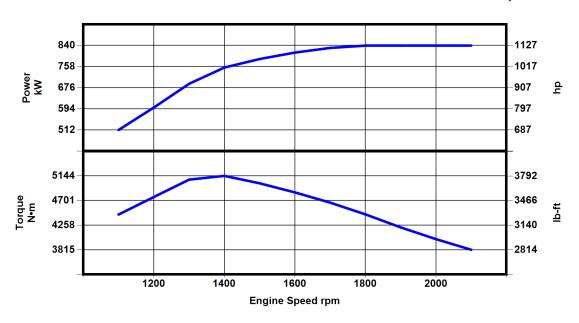
Diesel Engines — greater than 7.1 liter All rating conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 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
2100	839	1125	3815	2814
2000	839	1125	4006	2955
1900	839	1125	4217	3110
1800	839	1125	4451	3283
1700	830	1113	4662	3439
1600	812	1089	4846	3574
1500	787	1055	5010	3695
1400	754	1011	5143	3793
1300	691	927	5076	3744
1200	599	803	4764	3514
1100	512	687	4448	3281

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