



The Cat® C1.5 Industrial Diesel Engine is offered in ratings ranging from 20.9-30 bkW (28-40.2 bhp) @ 2200-3000 rpm. These ratings meet EU Stage IIIA emission standards. Applications powered by C1.5 engines include: Agriculture Tractors, Combines and Harvesters, Aircraft Ground Support, Bore/Drill Rigs, Chippers, Grinders, Compactors, Rollers, Compressors, Construction, Irrigation, Pumps, Turf, Landscaping, Mobile Earthmoving, Paving, Trenchers, Underground Mining, and Material Handling.

Specifications

Power Rating		
Minimum Power	20.9 bkW	28 bhp
Maximum Power	30 bkW	40.2 bhp
Rated Speed	2200-3000 rpm	

Emission Standards	
Emissions	U.S. EPA Tier 4 Interim Equivalent

General	
Engine Configuration	Inline 3, 4-Stroke-Cycle Diesel
Bore	84 mm (3.3 in)
Stroke	90 mm (3.5 in)
Displacement	1.496 L (91 in³)
Aspiration	Naturally Aspirated (NA) or Turbocharged (T)
Compression Ratio	22.5:1
Combustion System	Indirect Injection
Rotation (from flywheel end)	Counterclockwise
Lube System (refill)	6 L (6.3 qt)

Engine Dimensions (Approximate. Final dimensions dependent on selected options)	
Length	572 mm (22.5 in)
Width	453-512 mm (17.8-20.2 in)
Height	643 mm (25.3 in)
Weight, Net Dry (Basic Operating Engine Without Optional Attachments)	149-156.5 kg (328-345 lb)

Benefits and Features

Emissions

Meets U.S. EPA Tier 4 Interim equivalent emission standards. Available using U.S. EPA Flexibility, and for other 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.

High Performance

Substantial torque rise delivers impressive performance throughout a wide speed range while maintaining low operating costs.

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

Ultra-compact package size ensures ease of installation as well as exceptional power density.

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

- Inlet manifold with choice of inlets.

Control System

- Alternator 12 volt 65 amp
- Starter motor 12 volt
- Glow plug starting aid
- Tier 4 Final: Alternator 12V 85 amp

Cooling System

- Belt-driven coolant pump
- Coolant temperature switch
- Choice of cooling fans

Flywheel & Flywheel Housing

- Naturally Aspirated: SAE No. 7 1/2 flywheel

- Turbocharged: SAE No. 6 1/2 or SAE No. 7 1/2 flywheel
- EPA Tier 4 Final Turbocharged: SAE No. 7 1/2 flywheel
- Naturally Aspirated: Choice of SAE No. 4 or standard backplate flywheel housing
- Turbocharged: Choice of SAE No. 4 or SAE No. 5 or standard backplate flywheel housing
- Tier 4 Final Turbocharged: Choice of SAE No. 4 or SAE No. 5 or standard backplate flywheel housing

Fuel System

- Fuel injection pump
- Spin-on fuel filter
- Electronic Shut-off Solenoid (ESOS)

Lube System

- Alternative oil fillers
- Spin-on lube oil filter
- Lube oil pressure switch
- Lube oil sump

General

- Cast iron, engine block
- Cast iron exhaust manifold--side outlet
- Cold start capability to -20° C (-4° F)
- Gradeability 35° continuous
- 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.