

# **Cat**® 285

# **COMPACT TRACK LOADER**

#### FEATURES:

The Cat<sup>®</sup> 285 Compact Track Loader, with its vertical lift design, delivers extended reach and lift height for quick and easy truck loading. Its standard equalizer bar (E-bar) undercarriage system and two speed travel provides superior traction, flotation, and stability to work in a wide range of applications and underfoot conditions. The 285 features the following:

- Redesigned Operator Station delivers a larger operating environment, and combined with additional seat travel, the 285 provides more space for operators of any size. The optional one-piece, sealed, and pressurized cab offers a clean and quiet workspace with excellent air distribution through optimally placed vents throughout the cab.
- Available ventilated and heated high-back air ride seat with seat-mounted adjustable joystick controls deliver industry-leading operator comfort.
- High-performance power train provides standard two-speed travel, combined with the optional Speed Sensitive Ride Control system for operation on rough terrain, enabling better load retention, increased productivity, and greater operator comfort.
- Three levels of auxiliary hydraulic performance available Standard Flow, High Flow, and High Flow XPS. Standard flow for attachments that require a base level of auxiliary flow and horsepower, and the High Flow XPS hydraulic system delivers high flow and high pressure, and is available for applications that demand maximum hydraulic work tool performance.
- High Horsepower, High Torque Engine with Electronically controlled Cat<sup>®</sup> C3.6TA (turbocharged, after-cooled) engine that meets U.S. EPA Tier 4 Final and EU Stage V emission standards while delivering maximum horsepower across a wide RPM range and providing high torque for increased working performance, no matter the application.

- Standard equalizer bar (E-bar) undercarriage and standard two-speed travel. Harnessing Caterpillar's heritage and leadership with track-type tractors, the standard E-bar CTL undercarriage provides a hybrid undercarriage solution delivering the benefits of a rigid style undercarriage design when lifting heavy loads or when using heavy attachments (example: mulcher, dozer blade, grader blade), while also providing the benefits of an oscillating undercarriage design when encountering terrain or obstacles.
- Maximize machine capability and control with the Advanced Joysticks and Advanced Touchscreen Monitor. The 20.3 cm (8-inch) Advanced Touchscreen Monitor offers cutting-edge functionality and control that includes an integrated radio, Bluetooth<sup>®</sup> connectivity, and multi-camera (side-view) option, and supports 32 different language choices. The Advanced Joysticks provide unmatched control of machine functions and adjustments within the monitor without operators having to remove their hands from the controls. This includes the on-joystick navigation of the Advanced Touchscreen Monitor, radio volume up/down/mute, creep activation, creep on/off, creep speed increment/decrement, one-button Smart Attachment control activation, and additional auxiliary control buttons that deliver single-button control of complex attachment functions.
- Ground-level access to all daily service and routine maintenance points help reduce machine downtime for greater productivity.
- Broad range of performance-matched Cat Attachments make the Cat Compact Track Loaders the most versatile machine on the job site.

# **Specifications**

#### Engine

Engine Model	US EPA Tier EU Stage V, ( (turbocharged	
Gross Power SAE J1995	82 kW	111 hp
Net Power SAE 1349	82 kW	111 hp
Net Power ISO 9249	81 kW	109 hp
Peak Torque at 1,500 rpm SAE J1995	501 N·m	370 lbf-ft
Displacement	3.6 L	220 in <sup>3</sup>
Stroke	120 mm	4.7 in
Bore	98 mm	3.9 in
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 Advertised power is tested per the specified standard in effect at the time of manufacture.

 Net power advertised is the power available at the flywheel when the engine is equipped with fan at minimum speed, air intake system, exhaust system, and alternator.

#### Weights\*

Operating Weight	6122 kg	13,497 lb

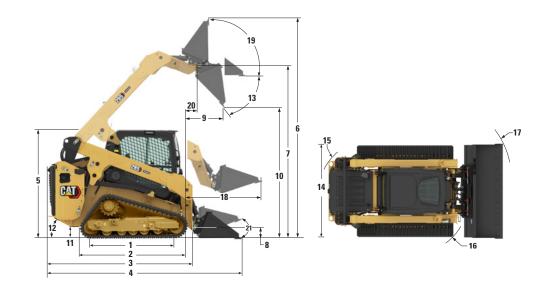
\*Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, two speed, 2188 mm (86 in) low profile bucket, 400 mm (15.7 in) tracks, dual flange front idler/single flange rear idler, standard flow hydraulics, enclosed cab with glass door, side windows, heater, mechanical suspension seat, standard monitor, 1,000 CCA battery, no optional counterweights and manual quick coupler (unless otherwise noted).

#### **Power Train**

Travel Speed (Forward or Reverse)		
One Speed	7.8 km/h	4.8 mph
Two Speed	12.4 km/h	7.7 mph
Cab		
Rollover Protective Structure (ROPS)	ISO 3471:200	)8
Falling Object Protective Structure (FOPS) Level I FOPS Level II	ISO 3449:200 ISO 3449:200	
Service Refill Capacities		
Cooling System	17.5 L	4.6 gal
Engine Crankcase	9.0 L	2.4 gal
Fuel Tank	136.1 L	36.0 gal
Hydraulic System	41.0 L	10.8 gal
Hydraulic Tank	26 L	6.9 gal
Diesel Exhaust Fluid (DEF) Tank	11.0 L	2.9 gal



# **285 Compact Track Loader**



# **Dimensions\***

1 Length of Track on Ground	1830 mm	72.0 in
2 Overall Length of Track	2180 mm	85.8 in
3 Length without Bucket	3360 mm	132.3 in
4 Length with Bucket on Ground	3998 mm	157.4 in
5 Height to Top of Cab	2230 mm	87.8 in
6 Maximum Overall Height	4520 mm	178.0 in
7 Bucket Pin Height at Maximum Lift	3724 mm	146.6 in
8 Bucket Pin Height at Carry Position	209 mm	8.2 in
9 Reach at Maximum Lift and Dump	882 mm	34.7 in
10 Clearance at Maximum Lift and Dump	3039 mm	119.6 in
11 Ground Clearance	280 mm	11.0 in

<b>Hydraulic</b>	System
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Hydraulic Flow – Standard:		
Loader Hydraulic Pressure	24 130 kPa	3,500 psi
Loader Hydraulic Flow	86 L/min	23 gal/min
Hydraulic Power (calculated)	34.6 kW	46.4 hp
Hydraulic Flow – High Flow XPS:		
Loader Hydraulic Pressure	28 000 kPa	4,061 psi
Loader Hydraulic Flow	129 L/min	34 gal/min
Hydraulic Power (calculated)	60.2 kW	80.7 hp
<b>Operating Specifications*</b>		
Enclosed Cab:		
Operating Weight	6122 kg	13,497 lb
Tipping Load	5781 kg	12,745 lb
Rated Operating Capacity (ROC) (35%)	2023 kg	4,461 lb
Rated Operating Capacity (50%)	2891 kg	6,372 lb
Ground Contact Area (400 mm/15.7 in tracks)	1.56 m <sup>2</sup>	2,421 in <sup>2</sup>
Ground Contact Area (450 mm/17.7 in tracks)	1.76 m <sup>2</sup>	2,724 in <sup>2</sup>
Ground Pressure (400 mm/15.7 in tracks)	38.4 kPa	5.6 psi
Ground Pressure (450 mm/17.7 in tracks)	34.3 kPa	5.0 psi

12	Departure Angle	269	)
13	Maximum Dump Angle	40.5	j°
14	Vehicle Width (400 mm/15.7in tracks)	2028 mm	79.8 in
	Vehicle Width (450 mm/17.7 in tracks)	2078 mm	81.8 in
15	Turning Radius from Center – Machine Rear	1887 mm	74.3 in
16	Turning Radius from Center – Coupler	1578 mm	62.1 in
17	Turning Radius from Center – Bucket (racked)	2400 mm	94.5 in
18	Maximum Reach with Arms Parallel to Ground	1285 mm	50.6 in
19	Rack Back Angle at Maximum Height	899	<b>)</b>
20	Bucket Pin Reach at Maximum Lift	413 mm	16.3 in
21	Bucket rollback angle (ground level)	27.2°	

# **Operating Specifications\*** (continued)

Canopy Subtracts:		
Operating Weight	86 kg	-190 lb
Tip Load	—65 kg	-143 lb
ROC (35%)	—23 kg	–50 lb
ROC (50%)	–33 kg	–72 lb
Counterweight Adds:		
Operating Weight	194 kg	428 lb
Tip Load	384 kg	847 lb
ROC (35%)	134 kg	296 lb
ROC (50%)	192 kg	423 lb
Breakout Force, Tilt Cylinder	6314 kg	13,920 lb
Breakout Force, Lift Cylinder	3960 kg	8,730 lb

# **285 Environmental Declaration**

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

#### Engine

- The Cat<sup>®</sup> C3.6TA (turbocharged and after-cooled) engine meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels\*\* up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*
  - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

- \*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).
- \*\*Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

## **Air Conditioning System**

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg of refrigerant which has a CO<sub>2</sub> equivalent of 1.216 metric tonnes.

#### Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- Cadmium < 0.01%
- Chromium < 0.01%
- Lead < 0.01%

#### **Sound Performance**

Operator Sound Pressure Level\* 82 dB(A) (ISO 6396:2008)

Exterior Sound Power Level\*\* 105 dB(A) (ISO 6395:2008)

- Cab and ROPS are standard in North America and Europe.
- \*The declared dynamic operator sound pressure levels per ISO 6395:2008. The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.
- \*\*The labeled sound power level for the CE/UKCA marked configurations when measured according to the test procedure and conditions specified in European Union Directive "2000/14/EC" as amended by "2005/88/EC" and UK Noise Regulation 2001 No. 1701.

## **Oils and Fluids**

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO<sup>™</sup> Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

#### **Features and Technology**

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
- Extended life coolant and long life hydraulic fluid extend maintenance intervals to reduce fluid consumption
- Boost productivity with Cat technologies like work tool positioner, return to dig and Cat Smart Attachments
- Save fuel with efficiency features such as foot throttle pedal and cooling system demand fan
- Remote machine monitoring through onboard Product Link telematics

#### Recycling

• The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Steel60.7Rubber18.5Iron9.5Nonferrous Metal2.7	ercentage
Iron 9.5	78%
	53%
Nonferrous Metal 2.7	3%
	2%
Fluid 1.6	4%
Plastic 1.5	6%
Other 1.5	1%
Uncategorized 1.2	0%
Mixed Metal 1.0	7%
Mixed-Metal and Nonmetal 0.9	9%
Lead (Batteries) 0.4	7%
Mixed Nonmetallic 0.0	0%
Total 100.	00%

 A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714:2008 (Earth-moving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused or both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714:2008 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following values in the table may vary.

Recyclability - 96%

The data provided above was based on the product configuration as provided by the individual product group.

# **ATTACHMENTS**

Get more from your machine with Cat attachments. Choose from a wide variety of options and tailor your machine to different tasks and conditions.



### **MANDATORY EQUIPMENT**

- Quick Coupler: Manual or Hydraulic
- High Visibility Seat Belt: 50 mm (2 in), 75 mm (3 in), or 3-point lap/shoulder
- Steel Imbed Rubber Track 400 mm (15.7 in) block tread, 450 mm (17.7 in) block tread, 450 mm (17.7 in) bar tread
- Dual Flange Front Idler/Single Flange Rear Idler or Triple Flange Front/Rear Idlers

#### **PERFORMANCE PACKAGES**

- Performance Package HP1: Standard Flow Hydraulics
- Performance Package HP3: High Flow XPS Hydraulics
- Performance Package HP4: High Flow XPS Hydraulics, Rear Auxiliary Ready

#### **COMFORT PACKAGES**

- Open canopy: Cup Holder, Cell Phone Pocket, choice of vinyl Seat (Mechanical Suspension, or High Back/Heated/Air Ride Seat)
- Enclosed Cab with heat and air conditioning: Side Windows, Cup Holder, Cell Phone Pocket, choice of Seat (Mechanical Suspension, High Back/Heated Air Ride Seat, or High Back/Ventilated and Heated Air Ride Seat) and Door choice (Glass or Polycarbonate)

#### **TECHNOLOGY PACKAGES**

- T2 Standard Monitor, Standard Joysticks, traditional Key Start switch, and Rear-view camera.
- T4 Advanced Touchscreen Monitor, Advanced Joysticks, Push start, X-mount cell phone holder, and a Rear-view camera.
- T5 T4 + 2 additional side view cameras.

#### RADIO

- Radio, none for open canopy machines and countries not certified for Bluetooth<sup>®</sup> technology
- Integrated AM/FM radio with Bluetooth technology. Includes USB port, 3.5 mm (0.13 in) AUX input, and BT microphone. Only for use with enclosed cab. Availability varies by country.
- Integrated DAB+/AM/FM radio with Bluetooth technology. Includes USB port, 3.5 mm (0.13 in) AUX input, and BT microphone. Only for use with enclosed cab. Availability varies by country.

#### **PRODUCT LINK™**

- Product Link<sup>™</sup> Basic series PL243
- Product Link Elite series PLE643

#### **COOLING FAN**

- On-demand, variable speed hydraulic cooling fan
- On-demand, variable speed hydraulic cooling fan, with automatic and manual purge reversing operation

#### **GUARDING AND SEALING PACKAGES**

- HD0 base guarding and sealing (engine air inlet rain cap, front cabto-frame sealing, and hydraulic fill access door)
- HD1- intermediate guarding and sealing† (HD0 + cab-to-frame side sealing, lockable fuel fill access door, and tilt cylinder guarding)
- HD2 most comprehensive guarding and sealing† (HD1 + turbo guard, exhaust stack wrap, DPF wrap, quick disconnect guarding, under step hydraulic lines guard cover, engine air inlet pre-cleaner.)

†Some equipment varies by region.

# **285 Compact Track Loader**

## **STANDARD EQUIPMENT**

#### ELECTRICAL

- Work Tool Electrical Harness
- Heavy duty battery
- Battery disconnect with lockout feature
- 12-volt Electrical System
- 100 Ampere Alternator
- LED Work Lights
- Auto Reverse Lights
- Switch Backlighting
- Interior LED Dome Light
- Backup Alarm
- Electrical Outlet, Beacon
- Exterior Courtesy Lighting

#### **OPERATOR ENVIRONMENT**

- Full color LCD monitor: Creep speed control, Drive response adjustment, Implement response adjustment, Drive Power Priority adjustment, Language selection (× 32), Multi-operator Anti-theft Security System and Monitoring, Maintenance schedule and reminders, Event and Diagnostic Code monitoring, Date /Time/ Units/Brightness settings, and Smart Technology for use with Smart Attachments.
- Operator Warning System Indicators: Air Filter Restriction, Alternator Output, Armrest Raised/Operator Out of Seat, Engine Coolant Temperature, Engine Oil Pressure, Glow Plug Activation, Hydraulic Supply Filter Restriction, Hydraulic Oil Temperature, Park Brake Engaged, Engine Emission System (where applicable)
- Gauges: Fuel Level, Hour Meter, Hydraulic Temperature, Hour Meter, Battery Voltage, Tachometer
- Fold In Ergonomic Contoured Armrest
- Control Interlock System, when operator leaves seat or armrest raised: Hydraulic System Disables, Hydrostatic Transmission Disables, Parking Brake Engages
- ROPS Cab, Tilt Up
- FOPS, Level I
- Top and Rear Windows
- Floor Mat
- Headliner
- Interior Rearview Mirror
- Horn
- Hand (Dial) Throttle, Electronic
- Seat Mounted Joystick Controls
- Cell Phone Storage Pocket
- Cup Holder
- 12-volt power port
- Foot Throttle

#### HYDRAULICS

- Selectable control pattern ISO or H
- Electro/hydraulic implement control
- Electro/hydraulic hydrostatic transmission control
- Speed sensor guarding
- Heavy duty flat faced quick disconnects with integrated pressure release lever and case drain
- Hydraulic oil level sight gauge

#### **POWER TRAIN**

- Cat C3.6TA turbocharged, after-cooled diesel engine, meeting Tier 4 Final and Stage V Emission Standards:
  - Glow plugs starting aid
- Liquid cooled, direct injection
- Extended life antifreeze (-37° C, -34° F)
- Air cleaner, dual element, radial seal
- Scheduled Oil Sampling (S·O·S<sup>SM</sup>) Valve, Hydraulic Oil
- Ecology drain coolant
- Radiator coolant level sight gauge
- Radiator expansion bottle
- Filter, hydraulic supply, cartridge type
- Filter, hydraulic return, cartridge type
- Filter, canister type, engine oil
- Filter, canister type, fuel and water separator
- Radiator/hydraulic oil
- Cooler (side-by-side)
- Spring applied, hydraulically released, parking brakes
- Hydrostatic transmission
- Lockable fuel cap
- Hydraulic demand cooling fan
- Auto engine idle

#### UNDERCARRIAGE

- E-bar (equalizer bar) suspension
- Two speed travel
- Integrated tie downs on track frame (4)

#### FRAME

- Machine tie down points (9)
- Removable panels for machine frame cleanout
- Support, lift arm
- Steel rear and front bumpers, welded
- Fuel fill, machine right hand side

#### OTHER

- Auxiliary Hydraulics, Continuous Flow
- Telematics, Product Link, Cellular
- Steel engine door with replaceable louvers
- Engine door lockable
- Work tool attachment coupler
- Cat ToughGuard<sup>™</sup> hose

## **OPTIONAL EQUIPMENT**

- External Counterweights
- Beacon, LED
- Oil, Hydraulic, Cold Operation
- 4-point machine lifting eyes
- Paint, Custom

- Speed Sensitive Ride Control
- Bluetooth Key Security
- Attachment Hose Guide
- Corrosion Inhibitor Coating (FOPS, Level II)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com** 

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