

# Cat<sup>®</sup> 270 Skid Steer Loader

#### FEATURES:

The Cat<sup>®</sup> 270 Skid Steer Loader, with its vertical lift design, delivers extended reach and lift height for quick and easy truck loading. Its stability and lifting performance provides excellent material handling. The 270 features the following:

- Redesigned Operator Station delivers a larger operating environment and combined with additional seat travel, the 270 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 seatmounted adjustable joystick controls deliver industry-leading operator comfort.
- High performance power train provides maximum performance and production capability through the Electronic Torque Management system, optional two speed travel and an electronic hand/foot throttle with decel pedal capability.
- High Flow XPS auxiliary hydraulic system delivering high flow and high pressure, is available for applications that demand maximum hydraulic work tool performance.
- High Horsepower, High Torque Engine Electronically controlled Cat C3.6TA (turbocharged, aftercooled) engine 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.

- Speed sensitive ride control option improves operation on rough terrain, enabling better load retention, increased productivity, and greater operator comfort.
- 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 display without the operator having to remove their hands from the controls. This includes on-joystick navigation of the Advanced Touchscreen Monitor, radio volume up/down/mute, creep activation, 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 helps reduce machine downtime for greater productivity.
- **Broad range of performance matched Cat Attachments** make the Cat Skid Steer Loader the most versatile machine on the job site.

1614 kg

1786 kg

3227 kg

3750 kg

2880 kg

Operating Specifications\* Rated Operating Capacity (ROC): 50% Tipping Load

Rated Operating Capacity with Optional Counterweights (@50%)

Breakout Force, Tilt Cylinder

Breakout Force, Lift Cylinder

**Tipping Load** 

# **Specifications**

#### Engine

Engine Model	Cat C3.6TA	
	(turbocharged, after-cooled)	
Gross Power SAE J1995:2014	75 kW	100 hp
Net Power SAE 1349:2011	74 kW	100 hp
Net Power ISO 9249:2007	74 kW	99 hp
Peak Torque at 1,500 rpm SAE J1995:2014	451 N-m	333 lbf·ft
Displacement	3.6 L	221 in <sup>3</sup>
Stroke	120 mm	4.7 in
Bore	98 mm	3.9 in

• 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** 



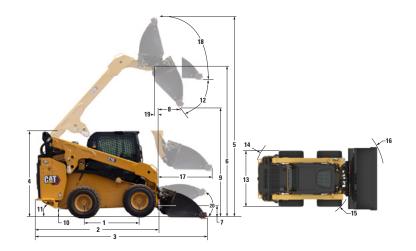
3,557 lb

3,914 lb

7,114 lb

8,267 lb

6,349 lb



#### **Dimensions\***

1 Wheelbase	1386 mm	54.6 in	13	Vehicle Width over Tires	1830 mm	72 in
2 Length without Bucket	3270 mm	128.7 in		(12" Tire Aspect Ratio [AR])		
3 Length with Bucket on Ground	3908 mm	153.9 in		Tread Width (gauge) (12" Tire AR)	419 mm	16.5 in
4 Height to Top of Cab	2189 mm	86.2 in		Vehicle Width over tires (14" Tire AR)	1950 mm	76.8 in
5 Maximum Overall Height	4174 mm	164.3 in		Tread Width (gauge) (14" Tire AR)	444 mm	17.5 in
6 Bucket Pin Height at Maximum Lift	3391 mm	133.5 in	14	Turning Radius from Center – Machine Rear	1897 mm	74.7 in
7 Bucket Pin Height at Carry Position	220 mm	8.7 in	15	Turning Radius from Center – Coupler	1471 mm	57.9 in
8 Reach at Maximum Lift and Dump	786 mm	30.9 in	16	Turning Radius from Center – Bucket	2228 mm	87.7 in
9 Clearance at Maximum Lift and Dump	2676 mm	105.4 in	17	Maximum Reach with Arms Parallel to Ground	1220 mm	48.0 in
10 Ground Clearance	202 mm	8.0 in	18	Rack Back Angle at Maximum Height	88°	I
11 Departure Angle	23.	6°	19	Bucket Pin Reach at Maximum Lift	320 mm	12.6 in
12 Maximum Dump Angle	43.	5°	20	Bucket rollback angle (Ground Level)	28°	

\*Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, one speed, 1883 mm (74 in) low profile bucket, 12 × 16.5 tires, standard flow hydraulics, enclosed cab with glass door, mechanical suspension seat, advanced display, 1000 CCA battery, front counterweight, no optional counterweights and manual quick coupler (unless otherwise noted).

#### **Power Train**

Travel Speed (Forward or Reverse):		
One Speed	10.6 km/h	6.6 mph
Two Speed Option	15.4 km/h	9.6 mph
Hydraulic System		
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 – SEA High Flow::		
Loader Hydraulic Pressure	24 130 kPa	3,500 psi
Loader Hydraulic Flow	129 L/min	34 gal/min
Hydraulic Power (calculated)	51.9 kW	69.6 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
Cab		
	100 0474 000	0

Rollover Protective Structure (ROPS) Falling Object Protective Structure (FOPS) FOPS Level II

ISO 3471:2008 ISO 3449:2005 Level I ISO 3449:2005 Level II (Optional)

#### **Service Refill Capacities**

Cooling System	17.5 L	4.6 gal	_
Engine Crankcase	9.0 L	2.4 gal	
Fuel Tank	130.7 L	34.5 gal	
Hydraulic System	41.0 L	10.8 gal	
Hydraulic Tank	26.0 L	6.9 gal	
Diesel Exhaust Fluid (DEF)	11.0 L	2.9 gal	

#### Weight Changes with Additional Components

Canopy Cab Subtracts:	–90 kg	-198 lb	
Tip Load	36 kg	–79 lb	
ROC (50%)	—18 kg	–39 lb	
Operating Weight Enclosed Roll Over Protective Structures (EROPS):			
Operating Weight	4736 kg	10,441 lb	
Tip Load	3227 kg	7,114 lb	
ROC (50%)	1614 kg	3,557 lb	
Front Counterweight Adds:			
Operating Weight	+194 kg	+428 lb	
Tip Load	+324 kg	+714 lb	
ROC (50%)	162 kg	357 lb	

# **270 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, 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\* 83 dB(A) (ISO 6396:2008)

Exterior Sound Power Level\*\* 103 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**

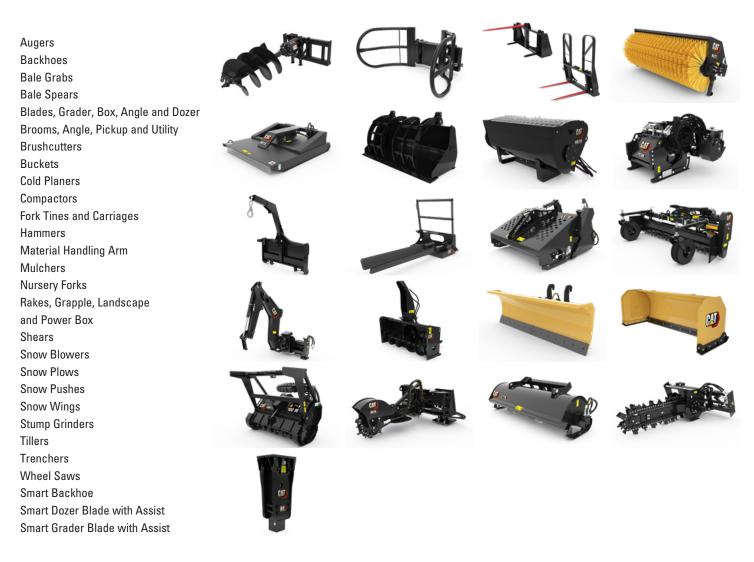
- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO<sup>™</sup> Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional 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<sup>™</sup> telematics

# **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**

- Auxiliary Hydraulics: Standard or High Flow XPS
- Quick Coupler: Mechanical or Hydraulic
- High Visibility Seat Belt: 50 mm (2 in), 75 mm (3 in), or 3-point lap/shoulder
- Tires: 12 × 16.5 or 14 × 17.5

#### **PERFORMANCE PACKAGES**

- Performance Package HP1: Standard Flow Hydraulics
- Performance Package H3: *High Flow XPS Hydraulics*

#### **COMFORT PACKAGES**

- Open canopy: Cup Holder, Cell Phone Pocket, choice of vinyl Seat (Mechanical Suspension, 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, High Back/Ventilated and Heated Air Ride Seat) and Door choice (Glass or Polycarbonate)

#### **TECHNOLOGY PACKAGES**

- T2 Standard Joysticks, Standard Monitor, Key Start, 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 (.14 in) Auxiliary (AUX) input, and Bluetooth 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 (.14 in) AUX input, and Bluetooth microphone. Only for use with enclosed cab. Availability varies by country.

#### **PRODUCT LINK™**

- Product Link 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 cab-toframe sealing, and hydraulic fill access door)
- HD1– intermediate guarding and sealing (HD0 + cab-to-frame side sealing, lockable fuel fill access door, tilt cylinder guarding. Some equipment varies by region)
- HD2 most comprehensive guarding and sealing (HD1 + turbo guard, exhaust stack wrap, Diesel Particulate Filter (DPF) wrap, quick disconnect guarding, under step hydraulic lines guard cover, engine air inlet pre-cleaner. Some equipment varies by region)

## **STANDARD EQUIPMENT**

#### ELECTRICAL

- Work Tool Electrical Harness
- Heavy duty battery
- Battery disconnect with lockout feature
- 12-volt Electrical System
- 85 Ampere Alternator
- LED Work Lights
- Auto Reverse Lights
- Switch Backlighting
- Interior LED Dome Light
- Backup Alarm
- Electrical Outlet, Beacon
- Exterior Courtesy Lighting
- Automatic Work light notification flash when parking brake is released

#### **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
- Hydraulic oil level sight gauge

#### **POWER TRAIN**

- Cat C3.6TA turbocharged 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

#### FRAME

- Machine tie down points (7)
- 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
- Engine Block Heater 120V
- Oil, Hydraulic, Cold Operation
- 4-point machine lifting eyes

- Paint, Custom
- Speed Sensitive Ride Control
- Bluetooth Key Security
- Attachment Hose Guide
- Corrosion Inhibitor Coating

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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