Cat® 914

Compact Wheel Loader

Features:

- **Cat® C3.6 Engine** – EU Stage V and U.S. EPA Tier 4 Final compliant.
- **Cat Optimized Z-bar Loader Linkage** – The Cat Optimized Z-bar Loader linkage combines the digging efficiency of a traditional Z-bar with tool carrier capabilities for great performance and versatility. With parallel lift and high tilt forces throughout the working range you can safely and confidently handle loads with precise control.
- **Work Tools** – The 914 features the Cat exclusive, Performance Series Buckets, as well as high visibility pallet forks. These tools enhance productivity and are available with either an Integrated Toolcarrier (IT), ISO (wide) and Fusion™ coupler style. Legacy coupler tools such as brooms, grapple buckets, multi-purpose buckets and other work tools remain compatible.
- **Hydraulics and Controls** – State of the art electro-hydraulic system provides low effort, fine control with fast cycle times. All-in-one joystick helps keep eyes on the work. Operator can adjust machine responsiveness with the push of a button, which allows the operator to set up the machine exactly the way they want it based on the application. High Flow option allows for the use of even the most demanding work tools.
- **Tuned Drivetrain** – Smooth shifting and powerful acceleration is matched with modulated hydrostatic braking in the inching/braking pedal, creating a rhythm for material moving. Creeper and electronic engine speed control makes broom and snow blower work easy. Operator tunes between smooth or aggressive shifting with the push of a button.
- **Cab** – All around visibility is further enhanced with the availability of a rearview camera. The deluxe cab ensures operator comfort with a heated, air suspension seat and easy to use controls. Available features such as Implement and Hystat Aggressiveness, Ride Control, Lift and Tilt Kickouts, Fork/Bucket mode and Rimpull Control allow the operator to customize the machine via a soft touch keypad.
- **Serviceability** – Extended service intervals and excellent service access make daily checks quick and easy allowing you to get to work sooner.
- **Efficiently Powerful** with its high full turn tipping loads, powerful breakout forces and efficient engine power delivers a balanced solution for all customer applications.
- **Standard Fuel Savings Features** such as Eco Mode, On Demand Cooling Fan, and Auto Engine Idle Shutdown make the 914 both powerful and fuel efficient.

Specifications

Engine

Engine Model	Cat® C3.6	
Maximum Gross Power:		
Maximum Engine Speed	2,350 RPM	
SAE J1995	83 kW	111 hp
ISO 14396	82 kW	110 hp
ISO 14396 (DIN)	82 kW	111 hp
Rated Net Power:		
Rated Engine Speed	2,200 RPM	
SAE J1349	74 kW	99 hp
ISO 9249	73 kW	98 hp
ISO 9249 (DIN)	73 kW	99 hp
Displacement	3.6 L	220 in^3
Bore	98 mm	3.86 in
Stroke	120 mm	4.72 in

Engine (continued)

Maximum Gross Torque:		
SAE J1995	454 N·m	335 lbf-ft
ISO 14396	450 N·m	332 lbf-ft
Maximum Net Torque:		
SAE J1349	446 N·m	329 lbf-ft
ISO 9249	443 N·m	327 lbf-ft

- Engine meets Tier 4 Final/Stage V emission standards.
- Net power advertised is the power available at the flywheel plus front drive implement pump when the engine is equipped with fan, air cleaner, muffler and alternator.

Buckets

Bucket Capacities – General Purpose	1.3-1.9 m^3	1.7-2.5 yd^3
Bucket Capacities – Light Material	2.5-3.5 m^3	3.3-4.6 yd^3

Steering

Steering Articulation Angle (each direction)	40 degrees	
Maximum Flow – Steering Pump	82 L/min	22 gal/min
Maximum Working Pressure – Steering Pump	22 500 kPa	3,263 psi
Steering Cycle Times (full left to full right):		
At 2,350 RPM: 90 RPM steering wheel speed	2.8 seconds	
Number of Steering Wheel Turns – full left to full right or full right to full left	3.75 turns	

Loader Hydraulic System

Maximum Flow – Implement Pump	148 L/min	39 gal/min
3rd Function, Maximum Flow, Standard	90 L/min	24 gal/min
3rd Function, Maximum Flow, High	120 L/min	32 gal/min
4th Function, Maximum Flow	90 L/min	24 gal/min
Maximum Working Pressure – Implement Pump	28 000 kPa	4,061 psi
Relief Pressure – Tilt Cylinder	34 000 kPa	4,931 psi
3rd Function Maximum Working Pressure	21 000 kPa	3,046 psi
4th Function Maximum Working Pressure	21 000 kPa	3,046 psi
Hydraulic Cycle Times:		
Raise (ground level to maximum lift)	5.2 seconds	
Dump (at maximum reach)	1.4 seconds	
Rack Back	2.2 seconds	
Float Down (maximum lift to ground level)	3.7 seconds	
Total Cycle Time	12.5 seconds	

Service Refill Capacities

Fuel Tank	165 L	43.6 gal
Cooling System	21.5 L	5.7 gal
Engine Crankcase	10 L	2.6 gal
Axles:		
Front Center Differential	7.5 L	2.0 gal
Rear Center Differential	7.5 L	2.0 gal
Hydraulic System (including tank)	98 L	25.9 gal
Hydraulic Tank	55 L	14.5 gal
Transmission	3.2 L	0.8 gal
Diesel Exhaust Fluid (DEF) Tank	18 L	4.8 gal

- DEF used in Cat SCR systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241-1.

Transmission

Forward and Reverse:		
Speed Range 1*	10 km/h	6.3 mph
Speed Range 2*	20 km/h	12.5 mph
Speed Range 3	40 km/h	25 mph

*Creeper Control allows speed control from a stand still up to 10 km/h (6.3 mph). The Creeper Control will only work in Range 1.

Tires

Standard Size	17.5 R25 L2 XTLA
Other Choices Include:	17.5 R25 L3 XHA2
	17.5-25 L2/L3 SGL
	17.5-25 L3 HRL D/L-3A
	17.5 R25 L2 Snow
	17.5 R25 Solid

- Other tire choices are available. Contact your Cat dealer for details.
- In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h (ton-mph) capabilities.
- Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

Cab

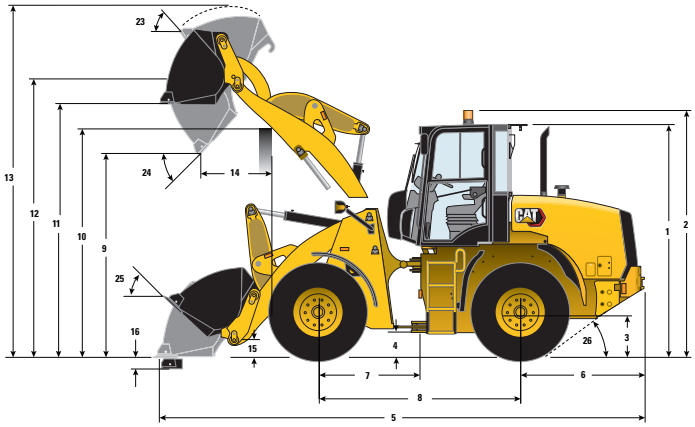
ROPS	ISO 3471:2008
FOPS	ISO 3449:2005

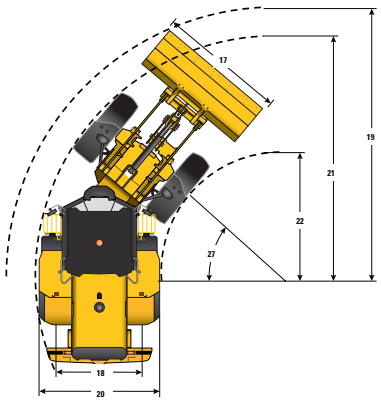
- Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.

Axles

Front	Fixed
	Locking differential (standard)
Rear	Oscillating ±11 degrees
	Locking differential (Standard)

Dimensions and Operating Specifications (All dimensions are approximate. Dimensions vary with bucket and tire choice.)





*Vary with bucket. **Vary with tire.	Standard Lift – IT		Standard Lift – ISO		Standard Lift – Pin On		Standard Lift – Fusion	
Bucket @100% fill factor used for below data	1.5 m³	2.0 yd³	1.5 m³	2.0 yd³	1.6 m³	2.1 yd³	1.5 m³	2.0 yd³
Tire used for below data	17.5 R25 L2 XTLA		17.5 R25 L2 XTLA		17.5 R25 L2 XTLA		17.5 R25 L2 XTLA	
** 1 Height: Ground to Cab	3093 mm	10'1"	3093 mm	10'1"	3093 mm	10'1"	3093 mm	10'1"
** 2 Height: Ground to Beacon	3283 mm	10'9"	3283 mm	10'9"	3283 mm	10'9"	3283 mm	10'9"
** 3 Height: Ground Axle Center	640 mm	2'1"	640 mm	2'1"	640 mm	2'1"	640 mm	2'1"
** 4 Height: Ground Clearance	405 mm	1'3"	405 mm	1'3"	405 mm	1'3"	405 mm	1'3"
* 5 Length: Overall	6428 mm	21'1"	6484 mm	21'3"	6356 mm	20'10"	6548 mm	21'5"
6 Length: Rear Axle to Bumper	1600 mm	5'2"	1600 mm	5'2"	1600 mm	5'2"	1600 mm	5'2"
7 Length: Hitch to Front Axle	1300 mm	4'3"	1300 mm	4'3"	1300 mm	4'3"	1300 mm	4'3"
8 Length: Wheel Base	2600 mm	8'6"	2600 mm	8'6"	2600 mm	8'6"	2600 mm	8'6"
* 9 Clearance: Bucket at 45 Degrees	2775 mm	9'1"	2738 mm	8'11"	2820 mm	9'3"	2652 mm	8'8"
** 10 Clearance: Load Over Height	3315 mm	10'10"	3315 mm	10'10"	3315 mm	10'10"	3315 mm	10'10"
** 11 Clearance: Level Bucket	3446 mm	11'3"	3446 mm	11'3"	3447 mm	11'3"	3377 mm	11'0"
** 12 Height: Bucket Pin	3701 mm	12'1"	3701 mm	12'1"	3701 mm	12'1"	3701 mm	12'1"
** 13 Height: Overall	4674 mm	15'4"	4695 mm	15'4"	4621 mm	15'1"	4593 mm	15'0"
* 14 Reach: Bucket at 45 Degrees	847 mm	2'9"	889 mm	2'10"	790 mm	2'7"	748 mm	2'5"
15 Carry Height: Bucket Pin	317 mm	1'0"	322 mm	1'0"	317 mm	1'0"	327 mm	1'0"
** 16 Dig Depth	90 mm	3.5"	90 mm	3.5"	90 mm	3.5"	189 mm	7.5"
17 Width: Bucket	2401 mm	7'10"	2401 mm	7'10"	2401 mm	7'10"	2401 mm	7'10"
18 Width: Tread Center	1800 mm	5'10"	1800 mm	5'10"	1800 mm	5'10"	1800 mm	5'10"
19 Turning Radius: Over Bucket	5222 mm	17'1"	5240 mm	17'2"	5200 mm	17'0"	5267 mm	17'3"
20 Width: Over Tires	2259 mm	7'4"	2259 mm	7'4"	2259 mm	7'4"	2259 mm	7'4"
21 Turning Radius: Outside of Tires	4741 mm	15'6"	4741 mm	15'6"	4741 mm	15'6"	4716 mm	15'5"
22 Turning Radius: Inside of Tires	2426 mm	7'11"	2426 mm	7'11"	2426 mm	7'11"	2446 mm	8'0"
23 Rack Angle at Full Lift	57 degrees		57 degrees		57 degrees		58 degrees	
24 Dump Angle at Full Lift	47 degrees		48 degrees		48 degrees		46 degrees	
25 Rack Angle at Carry	42 degrees		42 degrees		42 degrees		42 degrees	
26 Departure Angle	33 degrees		33 degrees		33 degrees		33 degrees	
27 Articulation Angle	40 degrees		40 degrees		40 degrees		40 degrees	
*Tipping Load – Straight (ISO 14397-1)	6292 kg	13,867 lb	6149 kg	13,551 lb	6649 kg	14,654 lb	5803 kg	12,789 lb
*Tipping Load – Full Turn (ISO 14397-1)	5265 kg	11,603 lb	5140 kg	11,328 lb	5586 kg	12,312 lb	4892 kg	10,643 lb
*Breakout Force	7357 kg	16,214 lb	6924 kg	15,259 lb	7981 kg	17,589 lb	7090 kg	15,625 lb
*Operating Weight	8646 kg	19,056 lb	8668 kg	19,103 lb	8458 kg	18,641 lb	8821 kg	19,442 lb

Dimensions listed are for a machine configured with bolt-on cutting edges and an 80 kg (176 lb) operator.

914 Compact Wheel Loader

Dimensions and Operating Specifications (All dimensions are approximate. Dimensions vary with bucket and tire choice.)

*Vary with bucket. **Vary with tire.	High Lift – IT		High Lift – ISO		High Lift – Pin On		High Lift – Fusion	
Bucket @100% fill factor used for below data	1.5 m^3	2.0 yd^3	1.5 m^3	2.0 yd^3	1.6 m^3	2.1 yd^3	1.5 m^3	2.0 yd^3
Tire used for below data	17.5 R25 L2 XTLA		17.5 R25 L2 XTLA		17.5 R25 L2 XTLA		17.5 R25 L2 XTLA	
** 1 Height: Ground to Cab	3093 mm	10'1"	3093 mm	10'1"	3093 mm	10'1"	3093 mm	10'1"
** 2 Height: Ground to Beacon	3283 mm	10'9"	3283 mm	10'9"	3283 mm	10'9"	3283 mm	10'9"
** 3 Height: Ground Axle Center	640 mm	2'1"	640 mm	2'1"	640 mm	2'1"	640 mm	2'1"
** 4 Height: Ground Clearance	405 mm	1'3"	405 mm	1'3"	405 mm	1'3"	405 mm	1'3"
* 5 Length: Overall	6971 mm	22'10"	7027 mm	23'0"	6899 mm	22'7"	7069 mm	23'2"
6 Length: Rear Axle to Bumper	1600 mm	5'2"	1600 mm	5'2"	1600 mm	5'2"	1600 mm	5'2"
7 Length: Hitch to Front Axle	1300 mm	4'3"	1300 mm	4'3"	1300 mm	4'3"	1300 mm	4'3"
8 Length: Wheel Base	2600 mm	8'6"	2600 mm	8'6"	2600 mm	8'6"	2600 mm	8'6"
* 9 Clearance: Bucket at 45 Degrees	3141 mm	10'3"	3105 mm	10'2"	3188 mm	10'5"	3025 mm	9'11"
** 10 Clearance: Load Over Height	3429 mm	11'2"	3429 mm	11'2"	3429 mm	11'2"	3429 mm	11'2"
** 11 Clearance: Level Bucket	3800 mm	12'5"	3799 mm	12'5"	3800 mm	12'5"	3730 mm	12'2"
** 12 Height: Bucket Pin	4055 mm	13'3"	4055 mm	13'3"	4055 mm	13'3"	4055 mm	13'3"
** 13 Height: Overall	5027 mm	16'5"	5048 mm	16'6"	4974 mm	16'3"	4947 mm	16'2"
* 14 Reach: Bucket at 45 Degrees	1083 mm	3'6"	1127 mm	3'8"	1029 mm	3'4"	1003 mm	3'3"
15 Carry Height: Bucket Pin	483 mm	1'6"	455 mm	1'5"	483 mm	1'6"	471 mm	1'6"
** 16 Dig Depth	273 mm	10.7"	273 mm	10.7"	272 mm	10.7"	373 mm	1'2.7"
17 Width: Bucket	2401 mm	7'10"	2401 mm	7'10"	2401 mm	7'10"	2401 mm	7'10"
18 Width: Tread Center	1800 mm	5'10"	1800 mm	5'10"	1800 mm	5'10"	1800 mm	5'10"
19 Turning Radius: Over Bucket	5471 mm	17'11"	5484 mm	17'11"	5448 mm	17'10"	5525 mm	18'1"
20 Width: Over Tires	2259 mm	7'4"	2259 mm	7'4"	2259 mm	7'4"	2259 mm	7'4"
21 Turning Radius: Outside of Tires	4741 mm	15'6"	4741 mm	15'6"	4741 mm	15'6"	4716 mm	15'5"
22 Turning Radius: Inside of Tires	2426 mm	7'11"	2426 mm	7'11"	2426 mm	7'11"	2446 mm	8'0"
23 Rack Angle at Full Lift	59 degrees		60 degrees		59 degrees		60 degrees	
24 Dump Angle at Full Lift	44 degrees		44 degrees		44 degrees		42 degrees	
25 Rack Angle at Carry	49 degrees		49 degrees		50 degrees		50 degrees	
26 Departure Angle	33 degrees		33 degrees		33 degrees		33 degrees	
27 Articulation Angle	40 degrees		40 degrees		40 degrees		40 degrees	
*Tipping Load – Straight (ISO 14397-1)	5497 kg	12,114 lb	5390 kg	11,879 lb	5797 kg	12,775 lb	5088 kg	11,213 lb
*Tipping Load – Full Turn (ISO 14397-1)	4567 kg	10,066 lb	4474 kg	9,860 lb	4841 kg	10,669 lb	4201 kg	9,258 lb
*Breakout Force	7466 kg	16,456 lb	7024 kg	15,481 lb	8100 kg	17,853 lb	7180 kg	15,823 lb
*Operating Weight	8946 kg	19,717 lb	8968 kg	19,765 lb	8758 kg	19,302 lb	9121 kg	20,103 lb

Dimensions listed are for a machine configured with bolt-on cutting edges and an 80 kg (176 lb) operator.

914 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® C3.6 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.

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.0 kg (2.2 lb) of refrigerant which has a CO_2 equivalent of 1.430 metric tonnes (1.57 tons).

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

With cooling fan speed at maximum value:
Operator Sound Pressure Level (ISO 6396:2008) – 77 dB(A)*
Exterior Sound Power Level (ISO 6395:2008) – 103 dB(A)**
Exterior Sound Pressure Level (SAE J88:2013) – 101 dB(A)**

*Measurements were conducted with properly installed and maintained cab doors and windows closed.

**The labeled sound power level for the CE and UK marked configurations when measured according to the test procedure and conditions specified in 2000/14/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™ 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.
  - Engine Idle Shutdown
  - Advanced Electro Hydraulics
  - Engine Demand Fan
  - ECO Mode
  - Hydrostatic Transmission
  - Programmable Linkage Sensors and Kickouts
  - Performance Series Buckets and Optimized Z Bar Linkage
  - Rimpull
  - Remote Flash and Remote Troubleshoot

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.

Material Type	Weight Percentage
Steel	60.41%
Iron	27.24%
Nonferrous Metal	2.77%
Mixed Metal	0.71%
Mixed-Metal and Nonmetal	0.80%
Plastic	1.16%
Rubber	2.46%
Mixed Nonmetallic	0.04%
Fluid	1.82%
Other	2.59%
Uncategorized	0%
Total	100%

- 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 (Earthmoving 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 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 value in the table may vary.

Recyclability – 95%

Notes

Notes

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

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

AEHQ8247-01 (10-2020)
Replaces AEHQ8247
Build Number: 14A
(EU, Am North, ANZP, Japan)