

# **Cat**® 914

# **COMPACT WHEEL LOADER**

#### FEATURES:

- Cat<sup>®</sup> 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<sup>™</sup> 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

| 9                    |           |                     |
|----------------------|-----------|---------------------|
| 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 <sup>3</sup> |
| Bore                 | 98 mm     | 3.86 in             |
| Stroke               | 120 mm    | 4.72 in             |
|                      |           |                     |

## Engine (continued)

| <u> </u>              |         |            |  |
|-----------------------|---------|------------|--|
| 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.



# 914 Compact Wheel Loader

| Bucket Capacities – General Purpose  | 1.3-1.9 m <sup>3</sup> | 1.7-2.5 yd <sup>3</sup> |
|--|------------------------|-------------------------|
| Bucket Capacities – Light Material   | 2.5-3.5 m <sup>3</sup> | 3.3-4.6 yd <sup>3</sup> |
| 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<br>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        |
| 0.1                    |                       |

• 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 EN ISO 3449:2008 (ISO 3449:2005) • Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe. • The declared dynamic operator sound pressure levels per 100 concerned with the standard in the s

ISO 6396:2008\*, when the cab is properly installed and maintained, is 77 dB(A).

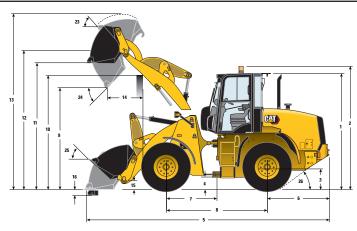
 The labelled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC (as amended by 2005/88/EC) is 103 dB(A).

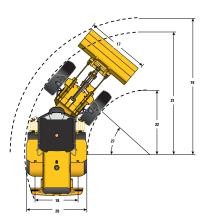
\*The measurements were conducted with the cab doors and windows closed.

#### **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.         | Standar            | l Lift – IT         | Standard           | Lift – ISO                 | Standard Lift – Pin On   |                            | n Standard Lift – Fusion |                            |
|--|--------------------|---------------------|--------------------|----------------------------|--------------------------|----------------------------|--------------------------|----------------------------|
| Bucket @100% fill factor used for below data | 1.5 m <sup>3</sup> | 2.0 yd <sup>3</sup> | 1.5 m <sup>3</sup> | <b>2.0 yd</b> <sup>3</sup> | <b>1.6 m<sup>3</sup></b> | <b>2.1 yd</b> <sup>3</sup> | 1.5 m <sup>3</sup>       | <b>2.0 yd</b> <sup>3</sup> |
| 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 de              | grees               | 57 de              | grees 57 degrees           |                          | 58 degrees                 |                          |                            |
| 24 Dump Angle at Full Lift                   | 47 de              | grees               | 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 de              | grees                      | 40 de                    | grees                      | 40 de                    | grees                      |
| *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 <sup>3</sup>    | <b>2.0 yd</b> <sup>3</sup> | 1.5 m <sup>3</sup> | <b>2.0 yd</b> <sup>3</sup> | 1.6 m <sup>3</sup> | <b>2.1 yd</b> <sup>3</sup> | 1.5 m <sup>3</sup> | 2.0 yd <sup>:</sup> |                  |  |
| Fire used for below data                     | 17.5 R25              | L2 XTLA                    | 17.5 R25           | 17.5 R25 L2 XTLA           |                    | L2 XTLA                    | 17.5 R25 L2 XT     |                     | 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 de                 | grees                      | 60 de              | egrees 59 degrees          |                    | 60 degrees                 |                    |                     |                  |  |
| 24 Dump Angle at Full Lift                   | 44 de                 | grees                      | 44 degrees         |                            | 44 degrees         |                            | 42 degrees         |                     |                  |  |
| 25 Rack Angle at Carry                       | 49 de                 | grees                      | 49 de              | 49 degrees 50              |                    | 50 degrees                 |                    | 50 degrees          |                  |  |
| 26 Departure Angle                           | 33 degrees 33 degrees |                            | grees              | 33 degrees                 |                    | 33 degrees                 |                    |                     |                  |  |
| 27 Articulation Angle                        | 40 de                 | 40 degrees 40 deg          |                    | grees                      | 40 degrees         |                            | 40 de              | grees               |                  |  |
| *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              |                  |  |
| *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 l             |                  |  |
| *Breakout Force                              | 7466 kg               | 16,456 lb                  | 7024 kg            | 15,481 lb                  | 8100 kg            | 17,853 lb                  | 7180 kg            | 15,823              |                  |  |
| *Operating Weight                            | 8946 kg               | 19,717 lb                  | 8968 kg            | 19,765 lb                  | 8758 kg            | 19,302 lb                  | 9121 kg            | 20,103              |                  |  |

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

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