

# Cat® 920 Wheel Loader

#### FEATURES:

- Cat<sup>®</sup> 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 920 features the Cat exclusive, Performance Series Buckets, as well as high visibility pallet forks and other attachment options. These tools enhance productivity and are available with an Integrated Toolcarrier (IT) coupler.
- 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.
- Tuned Drivetrain Smooth shifting and powerful acceleration is matched with modulated hydrostatic braking in the inching/braking pedal, creating a rhythm for material moving. 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 comfortable seat and easy to use controls. Available features such as Implement and Hystat Aggressiveness, Lift and Tilt Kickouts 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 increased engine power the 920 delivers a balanced solution for all customer applications.
- Fuel Savings Features such as Eco Mode and an On Demand Cooling Fan make the 920 both powerful and fuel efficient.

# **Specifications**

<b>1</b>		
En	gin	e

Linginic			
Engine Model	Cat C4.4		_
Maximum Gross Power:			
Maximum Engine Speed	2,350 RPM		
SAE J1995	76 kW	102 hp	
ISO 14396	75 kW	100 hp	
ISO 14396 (DIN)	75 kW	102 hp	
Rated Net Power:			
Rated Engine Speed	2,200 RPM		
SAE J1349	73 kW	98 hp	
ISO 9249	74 kW	99 hp	
ISO 9249 (DIN)	74 kW	101 hp	
Displacement	4.4 L	268 in <sup>3</sup>	
Bore	105 mm	4.13 in	
Stroke	127 mm	5.00 in	

#### Engine (continued)

<u> </u>			
Maximum Gross Torque:			
SAE J1995	415 N⋅m	306 lbf-ft	
ISO 14396	410 N⋅m	302 lbf-ft	
Maximum Net Torque:			
SAE J1349	<b>400 N</b> ⋅m	295 lbf-ft	
ISO 9249	<b>405 N</b> ⋅m	299 lbf-ft	

• Engine meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3/EU Stage IIIA.

 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.



# 920 Wheel Loader

Buckets		
Bucket Capacities		
General Purpose	1.6-1.9 m <sup>3</sup>	2.1-2.5 yd <sup>3</sup>
Light Material	2.5-3.5 m <sup>3</sup>	3.2-4.6 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	20 000 kPa	2,901 psi
Steering Cycle Times – Lock to Lock:		
At 2,350 RPM	2.3 seconds	
Number of Steering Wheel Turns – Lock to Lock	3.4 turns	
Loader Hydraulic System		
Maximum Flow – Implement Pump	148 L/min	39 gal/min
3rd Function, Maximum Flow		
(standard flow)	95 L/min	25 gal/min
3rd Function, Maximum Flow (high flow)	135 L/min	36 gal/min
4th Function, Maximum Flow	95 L/min	25 gal/min
Maximum Working Pressure –		-
Implement Pump	28 000 kPa	4,061 psi
Relief Pressure – Tilt Cylinder	32 000 kPa	4,641 psi
3rd and 4th Function		
Maximum Working Pressure	28 000 kPa	4,061 psi
3rd and 4th Function Relief Pressure	32 000 kPa	4,641 psi
Hydraulic Cycle Times (maximum engine spe	ed):	
Raise (ground level to maximum lift)	4.8 seconds	
Dump (at maximum reach)	1.8 seconds	
Rack Back	2.2 seconds	
Float Down (maximum lift to ground level)	2.7 seconds	
Total Cycle Time	11.5 seconds	
Service Refill Capacities		
Fuel Tank	154.0 L	40.7 gal
Cooling System	21.5 L	5.7 gal
Engine Crankcase	9.0 L	2.4 gal
Axles:		
Front Center Differential	12.5 L	3.3 gal
Rear Center Differential	12.5 L	3.3 gal
Hydraulic System (including tank)	98.0 L	25.9 gal
Hydraulic System (including tank) Hydraulic Tank		25.9 gal 14.5 gal

#### Transmission

Forward and Reverse:	
----------------------	--

Low Range, Speed Range 1*	10 km/h	6.3 mph
Low Range, Speed Range 2*	20 km/h	12.5 mph
High Range	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	17.5-25 16 PR (L-3)
Other Choices Include:	17.5-25 12 PR (L-2), 1 pc rim
	17.5-25 12 PR (L-3), 1 pc rim
	17.5R-25, radial (L-3), 1 or 3 pc rim
	20.5-25 16PR (L-2)
	20.5-25 16PR (L-3)
	20.5 R25, radial (L-3)

- Tire options may vary by region. 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 Level II

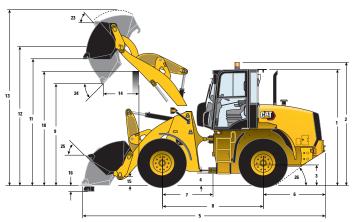
- Cab and Rollover Protective Structures (ROPS) are standard.
- The declared dynamic operator sound pressure levels per ISO 6396:2008\*, when properly installed and maintained, is 77 dB(A).
- The labelled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC is 103 dB(A).

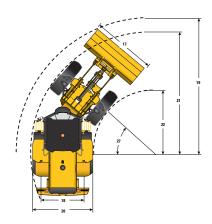
\*The measurements were conducted with the cab doors and windows closed.

#### 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.	Standard	Standard Lift – IT		Standard Lift – PO	
* 1 Height: Ground to Cab	<b>3067</b> mm	10'0"	3067 mm	10'0"	
* 2 Height: Ground to Beacon	3257 mm	10'8"	3257 mm	10'8"	
* 3 Height: Ground Axle Center	597 mm	1'11"	597 mm	1'11"	
* 4 Height: Ground Clearance	395 mm	1'3"	395 mm	1'3"	
* 5 Length: Overall	6757 mm	22'2"	6655 mm	21'10'	
6 Length: Rear Axle to Bumper	1615 mm	5'3"	1615 mm	5'3"	
7 Length: Hitch to Front Axle	1350 mm	4'5"	1350 mm	4'5"	
8 Length: Wheel Base	2700 mm	8'10"	2700 mm	8'10"	
* 9 Clearance: Bucket at 45 Degrees	2737 mm	8'11"	2814 mm	9'2"	
* 10 Clearance: Load Over Height	3338 mm	10'11"	3338 mm	10'11'	
* 11 Clearance: Level Bucket	3520 mm	11'6"	3520 mm	11'6"	
* 12 Height: Bucket Pin	3775 mm	12'4"	3775 mm	12'4"	
* 13 Height: Overall	4885 mm	16'0"	4816 mm	15'9"	
* 14 Reach: Bucket at 45 Degrees	957 mm	3'1"	893 mm	2'11"	
15 Carry Height: Bucket Pin	321 mm	1'0"	321 mm	1'0"	
* 16 Dig Depth	103 mm	0'4"	103 mm	0'4"	
17 Width: Bucket	2401 mm	7'10"	2401 mm	7'10"	
18 Width: Tread Center	1800 mm	5'10"	1800 mm	5'10"	
19 Turning Radius: Over Bucket	5437 mm	17'10"	5402 mm	17'8"	
20 Width: Over Tires	2410 mm	7'10"	2410 mm	7'10"	
21 Turning Radius: Outside of Tires	4834 mm	15'10"	4834 mm	15'10	
22 Turning Radius: Inside of Tires	2584 mm	8'5"	2584 mm	8'5"	
23 Rack Angle at Full Lift	55 deg	grees	55 degrees		
24 Dump Angle at Full Lift	47 deg	grees	47 deg	grees	
25 Rack Angle at Carry	44 deg	grees	44 degrees		
26 Departure Angle	33 deg	grees	33 de	grees	
27 Articulation Angle	40 deg	grees	40 deg	grees	
*Tipping Load – Straight (ISO 14397-1)	6815 kg	15,019 lb	6998 kg	15,423	
*Tipping Load – Full Turn (ISO 14397-1)	5472 kg	12,655 lb	5925 kg	13,059	
*Breakout Force	7894 kg	17,398 lb	8815 kg	19,428	
*Operating Weight	9132 kg	20,126 lb	8755 kg	19,295	

Dimensions listed are for a machine configured with general purpose 1.9 m3 (2.5 yd<sup>3</sup>) IT and Pin-On buckets (where stated), bolt-on cutting edges, standard counterweights, 80 kg (176 lb) operator, and 17.5-25 16 PR (L-3).

## **STANDARD EQUIPMENT**

#### **POWER TRAIN**

- Cat C4.4 mechanical engine
- Electric fuel pump with four micron filtration
- $S \cdot 0 \cdot S^{SM}$  port, transmission oil
- Hydrostatic transmission, 20 km/h (12.5 mph)
- Lubed for life universal joints
- Forward Neutral Reverse on joystick
- 100% locking differentials, while moving
- Brakes, service
  Enclosed, wet-disc full hydraulic
- Enclosed, wet-disc full hydraulic
  Brakes, parking (also secondary brake)
- Brakes, parking (also secondary brake)
  Radiator, serviceable core, single plane
- Air cleaner, radial seal, dual filters
- Air cleaner, radial seal, dda
  Air inlet heater starting aid
- Cooling fan, hydraulic
- Radiator expansion tank
- Tires, 17.5-25 16 PR (L-3)

#### LOADER

- Parallel lift, Z-bar loader
- Ground access grease points

#### HYDRAULICS

- Automatic lift kickouts
- Priority steering
- Hydraulics, two valve, one joystick
- Hydraulic diagnostic pressure taps
- S·O·S port, hydraulic oil
- Hydraulic oil cooler single plane
- Hydraulically driven cooling fan
- Pump, variable displacement piston

### **OPTIONAL EQUIPMENT**

- Integrated Toolcarrier (IT), standard coupler
- Lights, roading, dip
- Lights, cab, working (four)
- Feature package, load
- Return To Dig, Lift Kickout, Rimpull Control, Implement Modulation, Hystat Aggressiveness, Throttle Lock

additional equipment. See your Cat dealer for available options.

are trademarks of Caterpillar and may not be used without permission.

- Seat belt, retractable 75 mm (3 in)
- Heater and air conditioner
- Security system, machine

at www.cat.com

© 2024 Caterpillar

All rights reserved

#### ELECTRICAL

- 80-ampere alternator
- One 850 CCA maintenance free battery
- Halogen flood lights (front and rear)
- Directional signals (front and rear)
- 12-volt direct electric starting
- Ignition key start/stop switch
- Switch, battery disconnect key
- Product Link<sup>™</sup> ready wiring

#### **OPERATOR ENVIRONMENT**

- ROPS/FOPS cab, pressurized and sound suppressed
- Hydraulic control lever lockout
- Gauges
- Engine coolant temperature
- Hydraulic oil temperature
- Fuel level
- Speedometer
- Digital hour meter
- Operator warning system indicators:
- Brake charge pressure low
- Engine malfunction
- Park brake applied
- Electrical system voltage low
- Hydraulic oil filter bypass
- Action indicator
- Interior light
- Door

#### Seat

- Fabric only
- Adjustable height, backrest, armrest
- Seat belt, retractable 51 mm (2 in)
- Heater/defroster
- Wiper/washer front (intermittent)
- Wiper/washer rear
- Tinted front glass, laminated
- Adjustable steering column
- Rearview mirrors, exterior (two)
- Ground level door release

#### **FLUIDS**

- Extended life coolant antifreeze, protected to -36° C (-33° F)
- Cat Advanced HYDO<sup>™</sup> 10

#### **CHASSIS**

- Fenders, front
- Engine enclosure lockable
- Recovery hitch
- Vandalism protection locked service points
- Counterweight

#### **REGIONAL STANDARDS** (as required)

- Alarm, back-up alarm
- Wheel chocks

Radio

Toolbox

- Guard, bucket tooth or edge
- Decals, roading speed
- Decals, in cab, roof height

Counterweight, heavy

Feature package, road

Beacon, rotating

License plate mount

Alarm, back-up

Product Link

Reversing fan

Ride Control, Creep Control

AEHQ8459-01 (01-2024)

Replaces AEH08459 Build Number: 11B

(AME, ANZP, CIS,

S Am, SE Asia)

- Year of manufacture plate
- Tire options
- Seats (deluxe/premium/vinyl)
- Auxiliary hydraulics (3rd and 4th functions)
- Battery, heavy duty
- Fenders, rear

NOTE: Not all features are available in all regions. See your Cat dealer for more information.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web

Materials and specifications are subject to change without notice. Featured machines in photos may include

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein,

- Rear view camera
- Guards (lights, hitch, power train, driveshaft, crankcase)
   Rear blind