

# 994K

## Wheel Loader



### Engine

Engine Model	Cat® 3516E	
Emissions	U.S. EPA Tier 1/ EU Stage I Equivalent	
Gross Power – ISO 14396	1377 kW	1,847 hp
Net Power – SAE J1349 (Standard Ambient)	1297 kW	1,739 hp
Net Power – SAE J1349 (High Ambient)	1265 kW	1,696 hp

### Buckets

Bucket Capacities	19.1-24.5 m <sup>3</sup>	25-32 yd <sup>3</sup>
<b>Operating Specifications</b>		
Rated Payload – Standard	40.8 tonnes	45 tons
Rated Payload – High Lift	38.1 tonnes	42 tons
Operating Weight	240 018 kg	529,149 lb

# Lower your cost per ton with built-in durability.



## Contents

- Structures.....4
- Power Train.....6
- Hydraulics .....8
- Operator Station.....10
- Technology Solutions .....12
- Cat MineStar™ System.....13
- Safety .....14
- Serviceability.....16
- Customer Support.....16
- Sustainability .....17
- Bucket and Ground Engaging Tools.....18
- System Match Efficiency.....20
- Specifications.....21
- Standard Equipment.....29
- Optional Equipment.....31
- Mandatory Attachments.....31



**Cat Large Wheel Loaders are designed with durability built in, ensuring maximum availability through multiple life cycles. With optimized performance and simplified serviceability, our machines allow you to move more material efficiently and safely at a lower cost per ton.**

**Introduced in 1990, the 994 has become the top customer choice in its size class for the last 25 years. Focused on helping our customers succeed, we have continued to build upon each new series' legacy of reliability, safety, operator comfort, serviceability and sustainability.**

# Structures

Built for the toughest conditions.



## Lift Arms

Your key to maximum uptime and productivity is our field-proven lift arms.

- Excellent visibility to the bucket edges and work area through a Z-bar design.
- High load stresses are absorbed by the solid steel lift arms.
- Enhanced strength in key pin areas through the use of one piece castings.
- Stress relieved lift arms increase durability.





### **Robust Structures**

Your bottom line is improved by highly durable structures that achieve multiple life cycles and withstand the toughest loading conditions.

- Full box-section rear frame resists torsional shock and twisting forces to maximize life of mounted components.
- Frames utilize castings in key areas to maximize frame durability and optimize efficiency.
- Rear axle mounting to frame optimized to better disperse loads for increased structural integrity.



### **Front Linkage**

To ensure long life and reliability, the linkage pin joints feature a greased pin design and standard automatic lubrication system.

# Power Train

Move material more efficiently with improved power and control.



## Impeller Clutch Torque Converter (ICTC) and Rimpull Control System (RCS)

Lower your cost per ton utilizing advanced ICTC and RCS for modulated rimpull.

- Reduce tire slippage and wear by modulating rimpull from 100 to 25 percent while depressing left pedal. After 25 percent rimpull is achieved the left pedal applies the brake.
- Reduce the potential for wheel slippage without reducing hydraulic efficiency with RCS.
- Improve fuel efficiency in certain applications with our lock-up clutch torque converter providing direct drive.

## Economy Mode

Enabling maximum productivity and efficiency, all day every day.



The 994K systems work hard to save you fuel through advanced technologies. Utilizing On Demand Throttle, operators maintain normal operation with the left pedal and implements while the 994K manages the engine speed.

- Provides similar control and feel to our traditional throttle lock feature.
- Efficiency of manual throttle and the ergonomics of throttle lock.

## Steering and Transmission Integrated Control System (STIC™)

Experience maximum responsiveness and control with STIC that combines directional selection, gear selection and steering into a single lever.

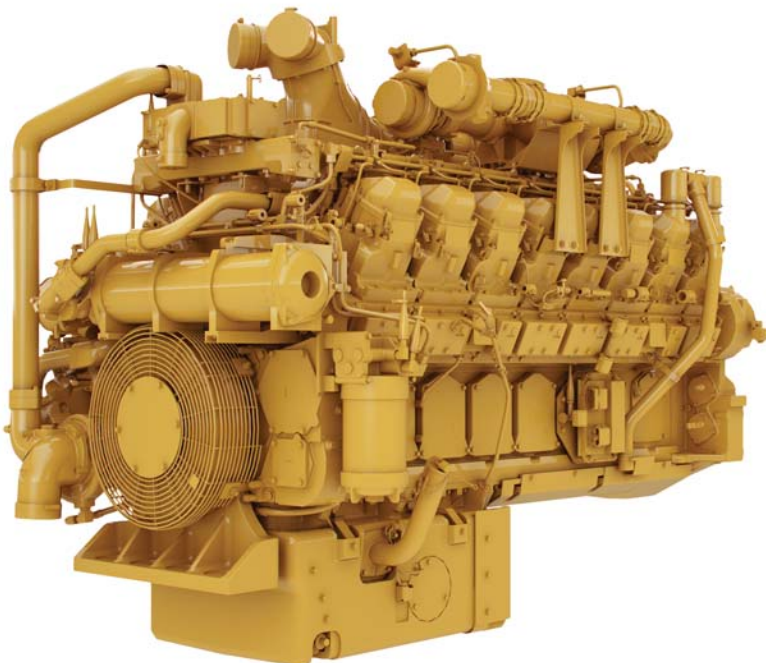
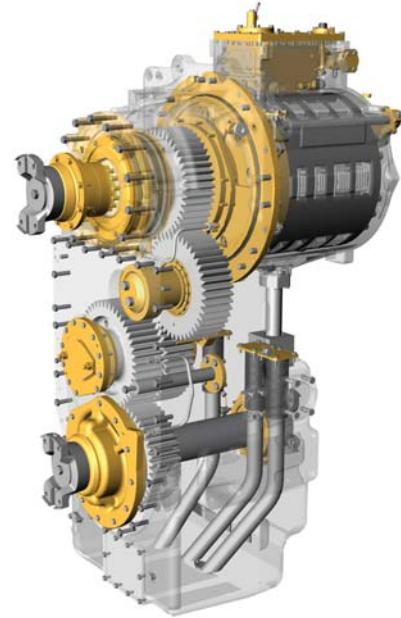
- Simple side-to-side motion turns machine right or left, minimizing operator movements.
- Easy to operate finger controlled gear selection.
- Smoother, faster cycles and less operator fatigue through the use of low effort integrated controls.



## Cat Planetary Powershift Transmission

Building your success begins with a best-in-class transmission designed specifically for mining applications.

- Consistent, smooth shifting and efficiency through integrated electronic controls.
- Long life and reliability through heat treated gears and metallurgy.
- Three forward and three reverse speeds to match your application.



## Cat 3516E Engine

Durability and reliability continues in the 994K with the proven 3500 Series engines. At the heart of the 994K is the new 3516E engine. Optimum performance is built in through the use of a 16-cylinder, four-stroke design.

- On-demand performance through the use of turbochargers and aftercoolers.
- High Torque Rise – 39% torque rise ensures high lugging forces during digging and acceleration in high rimpull conditions.
- Extended engine life through a longer stroke and lower rpm ratings.
- Quick engine response through the use of electronic controls.

# Hydraulics

Productivity enabling you to move more and make more.



## Positive Flow Control Hydraulics

Increase efficiency through our Positive Flow Control (PFC) Hydraulic System. PFC has concurrent pump and valve control. By optimizing pump control, hydraulic oil flow is proportionate to implement lever movement.

- Fast, productive cycles enabled by four electronically controlled, fully variable piston pumps.
- Increased bucket feel and control.
- Consistent performance and efficiency with lower system heat.



## Electro Hydraulic Controls

Increase operator productivity with these implement features.

- Operate comfortably through electronically controlled hydraulic cylinder stops.
- Handle easy-to-use soft detent controls.
- Conveniently set automatic implement kickouts from inside the cab.



## Steering System

Confident loader operation starts with precise machine control enabled by the 994K's load sensing hydraulic steering system.

- Efficient variable displacement piston pumps.
- Achieve precise positioning for easy loading in tight areas with 40 degrees of steering articulation.
- Enhance operator comfort with integrated steering and transmission control functions.



## Filtration System

Benefit from extended performance and reliability of your hydraulic system with our advanced filtration system.

- Lift/tilt case drain filters.
- Lift/tilt high pressure screens.
- Steering case drain filters.
- Steering high pressure screens.
- Hydraulic case drain filters.
- Power train filters for transmission, torque converter, and pump drives.
- Front and rear brake oil screens.



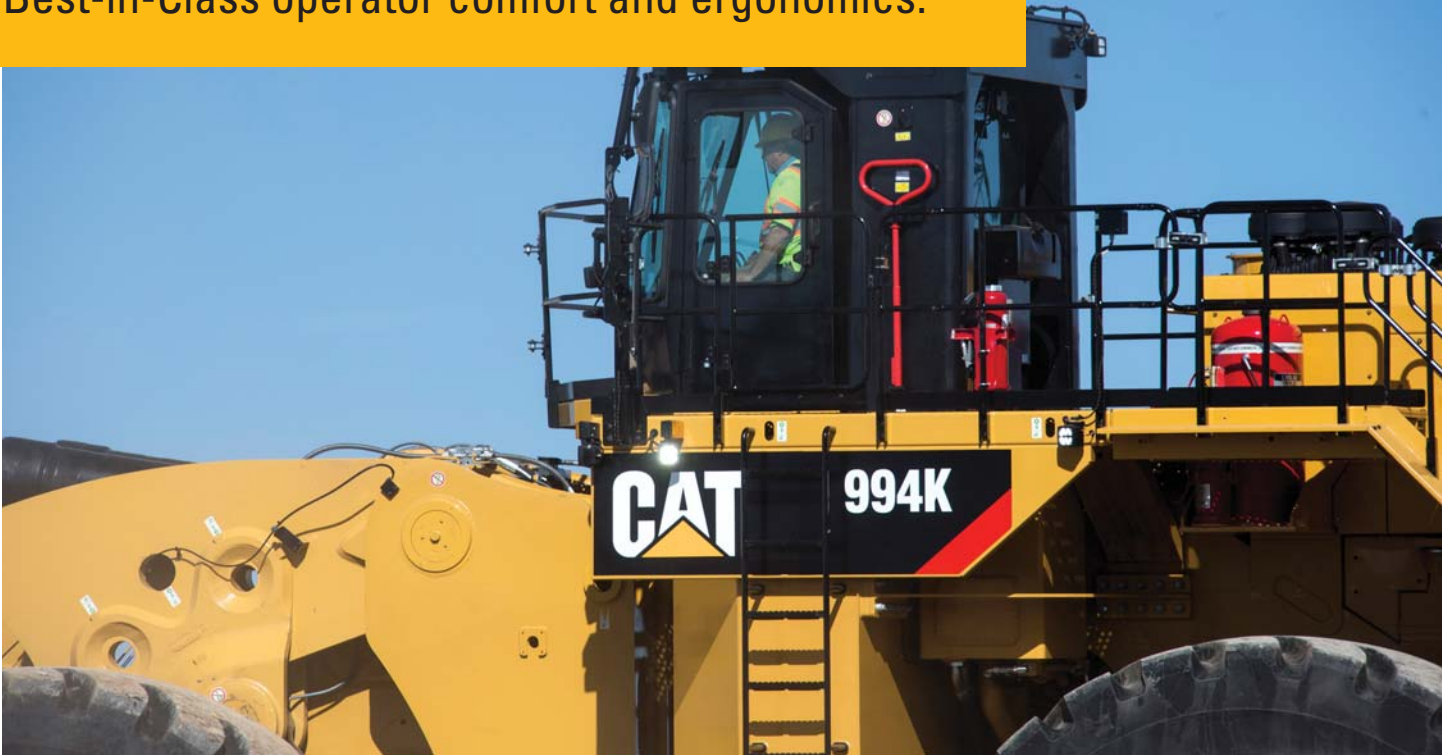
## Cooling System

- A standard demand fan to improve efficiency and cooling performance.
- Optional high ambient package for hot climate conditions.
- Optional fan control to enable proper cooling performance in cold weather.



# Operator Station

Best-in-Class operator comfort and ergonomics.



## Environment

Your operator's productivity is enhanced with our clean, comfortable cab environment.

- Experience reduced vibrations from viscous cab mounts and air seat suspension.
- Maintain desired cab temperature with automatic temperature controls.
- Pressurized cab with pressure indicator.
- Low operator sound levels.
- Available heated and ventilated seats featuring leather covered seat bolster and headrest.

**Your operators can work more efficiently and stay comfortable with our customer-inspired cab features.**

### **Deluxe Operator Seat**

Enhance comfort and reduce operator fatigue with Cat Comfort Series III seat.

- Available heated and ventilated seat featuring leather seat bolster surfaces.
- High back design and extra thick, contoured cushions.
- Air suspension system.
- Easy-to-reach seat levers and controls for six way adjustments.
- Seat-mounted implement pod and STIC steer that moves with the seat.
- 76 mm (3 in) wide retractable seat belt.
- Fold up STIC steer/armrest.

### **Trainer Seat**

Safely train other operators in comfort with our standard training seat.

- 76 mm (3 in) wide, retractable seat belt.
- Fold-down design with molded drink tray and storage.



# Technology Solutions

Greater productivity through integrated electronic systems.

Integrated electronics provide flexible levels of information to both the site and the operator. This integration creates a smart machine and more informed operator, maximizing the productivity of both.

## Information Display

We have worked hard to help our customers and operators perform at their best through our newly upgraded touch screen information display.

- Intuitive operation and easy navigation with our enhanced user interface.
- Decrease service time by keeping operators informed about machine systems.
- Quick on-the-go weighing with the Cat Production Measurement (CPM).

## Cat Product Link™

Take the guesswork out of asset management with Product Link remote monitoring.

- Remote access to information through the easy-to-use VisionLink® interface.
- Maximize uptime by staying informed on machine systems and diagnostic codes.
- Track machine with utilization, fuel usage, and payload summaries.
- Stay up to date on machine location, service meter hours, and reporting status.

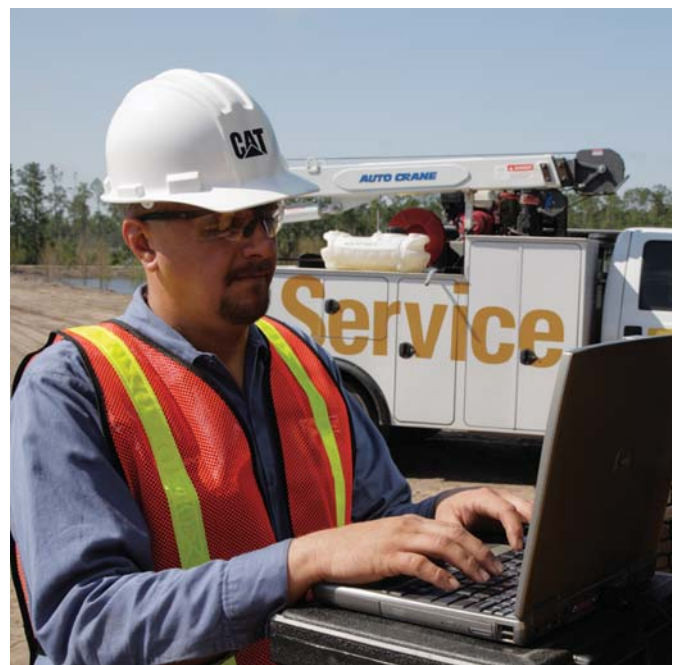
## Vital Information Management System (VIMS™)

Connect directly to the machine for access to a wide range of sensor information and enhanced machine data.

- Create productivity reports with payload and work cycle segmentation.
- Identify operator training needs through productivity data.
- Detailed data logging of machine parameters and diagnostic codes.
- Track machine sensor information with trend analysis and histograms to monitor machine health.



Asset ID	Lab Number	Source	Sample Date	Meter Reading	Severity	Status
Unit 20						
Unit 12	Y123-456789-1234	RADIATOR	09/05/12	DEF3 hrs	Alert/PreAlert	Action Taken
Unit 48	Y234-567891-2345	RADIATOR	09/19/12	8550 hrs	Monitor	Action Taken
Unit 36	Y345-678912-3456	ENGINE	09/17/12	800 hrs	No Action	Action Taken
Unit 11						
Unit 23						



# Cat MineStar System

Work more productively.

Cat MineStar System is the industry's broadest suite of integrated mine operations and mobile equipment management technologies, configurable to suite your operation's needs. Its capability sets – Fleet, Terrain, Detect, Health and Command – contain a range of technologies that let you manage everything from fleet assignment and condition monitoring to remote and autonomous control. The 994K can take advantage of many of these advanced technologies, some of which are standard out of the factory.

## Fleet

Fleet provides comprehensive, real-time machine tracking, assignment and productivity management, giving you a comprehensive overview of all operations from anywhere in the world.

## Terrain for Loading

Terrain with your 994K enables high-precision management of loading operations through the use of guidance technology. It increases 994K's productivity and provides you real-time feedback for improved efficiency.

## Detect

Detect helps increase operator awareness, enhancing safety at your operation. It includes a range of capabilities designed to assist the operator with areas of limited visibility around fixed and mobile equipment.

## Health

Health delivers critical event-based machine condition and operating data for your entire fleet. It includes comprehensive equipment health and asset monitoring capabilities, with a wide range of diagnostic, analytic and reporting tools.



# Safety

Making your safety our priority.



## Powered Access System

The Cat powered access system allows easier access to the primary stairs by improving ingress and egress to and from the rear platform.

- Safe, ergonomic access system.
- All operators have adequate space when using the wide stairway.
- Operators maintain three-point contact when using full handrails on each side.
- Raise and lower stairs from cab level or ground.

**We are constantly improving our products in an effort to provide a safe work environment for the operator and those who work on your job site.**

### **Machine Access**

- Wider stairs with 45 degree angles provide easy access for operators getting on and off the 994K.
- Wide walkways with non-skid surfaces and integrated lock out/tag out points are designed into the service areas.
- Windshield cleaning platforms provide safe and convenient access for the operator.
- Maintain three points of contact at all times through ground level or platform accessible service areas.
- Emergency egress ladder provides a third exit, if needed.

### **Visibility**

- Cat Detect, which includes Cat Vision plus an optional object detection radar system, enhances operator awareness around the machine.
- Standard LED lights provide excellent workspace visibility.
- LED warning lights, programmable for site-specific signaling.
- Six mirror system improves operator line of sight to the side and rear of the machine. Heated option also available.
- Standard pull down window shade.
- Higher cab position for improved visibility during truck loading operations.

### **Operator Environment**

- Viscous cab mounts and seat air suspension reduce vibrations from the machine to the operator.
- Low interior sound levels.
- Standard 76 mm (3 in) seat belt with minder.
- Optional 4 point harness with minder.
- Operator training seat with standard 76 mm (3 in) seat belt facilitates safe new operator training.





# Serviceability

Enabling high uptime by reducing your service time.



**We help you succeed by ensuring your 994K has design features to increase uptime.**

- The standard, comprehensive filtration system maintains clean fluids to enable high component reliability.
- Safe and convenient service with ground level or platform access and grouped service points.
- Swing-out doors on both sides of the engine compartment provide easy access to important daily service checks.
- Ecology drains for ease of service and prevention of spills.
- Centralized remote pressure taps.
- Reduce downtime with VIMS system notifications so your operators and technicians can resolve any problems before failure.
- Powered fresh air filter extends cab filter life.
- Optional lighting for main service compartments.

# Customer Support

Your Cat dealers know how to keep your mining machines productive.

## Superior Cat Dealer Support

A valued partner, your Cat dealer is available whenever you need them.

- Preventive maintenance programs and guaranteed maintenance contracts.
- Best-in-class parts availability.
- Improve your efficiency with operator training.
- Genuine Cat Remanufactured parts.







# Sustainability

Stewards of the environment.

## Protecting the Environment

Environmental responsibility is designed and built into our 994K's features.

- Increased fuel efficiency to minimize your carbon footprint.
- Engine Idle Shutdown can help you save fuel by avoiding unnecessary idling.
- Built for multiple lives, the Cat 994 is one of the most rebuilt products. To assist with maximizing machine life, Caterpillar provides a number of sustainable options such as our Reman and Certified Rebuild programs. In these programs, reused or remanufactured components can deliver cost savings of 40 to 70 percent, which lowers operating cost while benefiting the environment.
- Caterpillar offers retrofit packages to bring new features to older machines, maximizing your resource. When you go through the Cat Certified Rebuild program, these retrofit kits are part of the rebuild process.
- Fluids are better controlled through use of Cat anti-drain filter housings and component ecology drains.

# Buckets and Ground Engaging Tools

It's all about performance.

## Increase Productivity and Fuel Efficiency

Performance Series Buckets are designed for superior performance in a variety of materials. They are engineered to dig into piles quickly and load efficiently. Fill factors are up to 115% so you can get your job done and move on to other tasks. Fast load cycles and fewer trips mean less wear and tear on your machine and keep you working.

The buckets below are part of the Performance Series line. They come in different capacities and widths to fit your loading and carrying needs.



## 1 – Rock Buckets

Designed for use in bank or face loading of limestone and other unprocessed rock. Application also includes truck and hopper loading for a wide range of quarry materials. GET includes spade nose cutting edge with adapters, half arrow segments, bottom wear plates, boxed wings and side bar protectors.

## 2 – Heavy Duty Rock Buckets

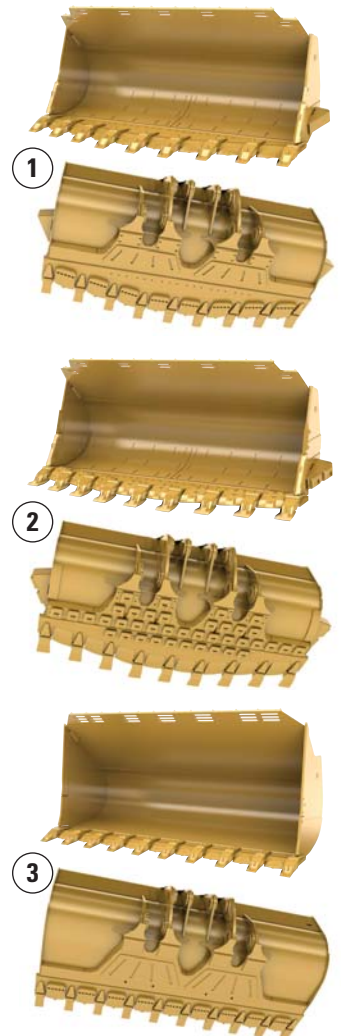
Designed for use in applications like face loading tightly compacted pit materials or handling materials of moderate abrasion and high impacts. GET are similar to the rock bucket with the additions of cutting edge shrouds and Mechanically Attached Wear Plate system (MAWPs) on wings and underneath the bucket. Base edge end protection, ski plates, additional side wear plates and an extra set of side bar protectors are also included.

## Iron Ore Buckets

Designed for use in extremely aggressive applications like face loading. They are built for high abrasion and moderate impact. GET are the same as Heavy Duty Rock buckets, except smaller in bucket capacity to accommodate for the higher density.

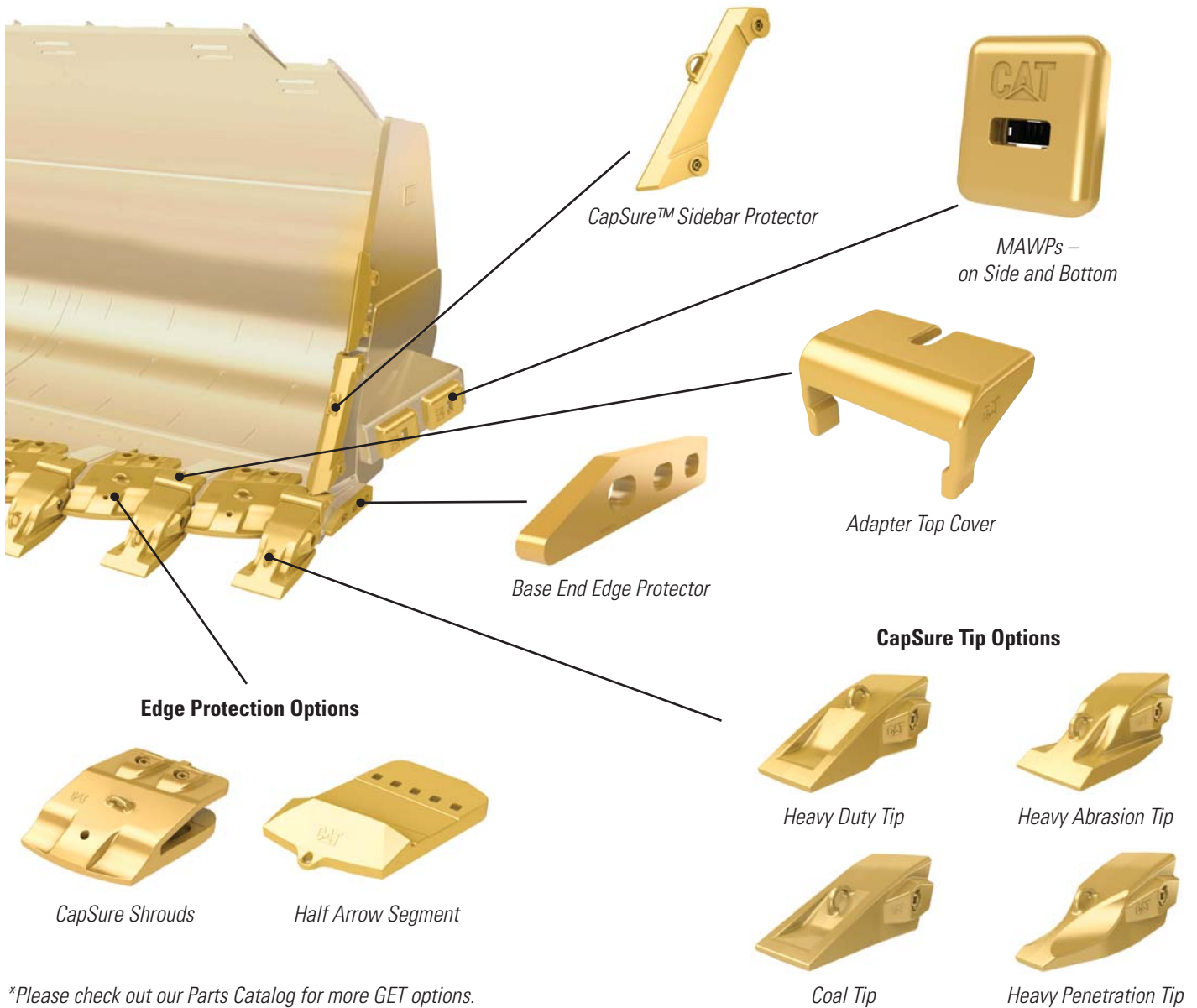
## 3 – Coal Buckets

Designed for use in applications with light density and non-abrasive materials. GET includes a straight base edge with adapters and half arrow segments.



## Ground Engaging Tools

Protect expensive components. Reduce your operating costs. Get the most out of your machine's performance. Choose from a variety of performance-built GET like these to meet your application requirements.



\*Please check out our Parts Catalog for more GET options.

## CapSure™ Retention Technology

Simplify GET component replacement with hammerless CapSure retention for fast, easy and safe installation. CapSure tips, shrouds and sidebar protectors are easily locked and unlocked with a 180 degree turn of a 3/4 inch ratchet.

# System Match Efficiency

Efficient loading/hauling system starts with a perfect match.



Cat Truck Pass Match	785	789	793
Standard Lift	4	5	
High Lift		5	6

## Application Match

The standard 994K is sized to load the 136 tonnes (150 ton) 785 in four passes. The 994K standard lift loads the 177 tonnes (195 ton) 789 in five passes, and loads the 227 tonnes (240 ton) 793 in six passes.

## Efficient Combination

For full truck payloads with minimum loading time, an efficient loading/hauling system starts with a perfect match. Cat wheel loaders are matched with Cat mining trucks to maximize volume of material moved at the lowest operating cost per ton.

## Bucket Selection

Selection of the right bucket depends on penetration requirements, material densities, abrasion, and the loading target. Bucket sizes are matched to truck bed capacities and material densities for optimum loading efficiency and greater productivity.

# 994K Wheel Loader Specifications

## Engine

Engine Model	Cat 3516E	
Emissions	Tier 1/Stage I Equivalent	
Rated Speed	1,600 rpm	
Gross Power – ISO 14396	1377 kW	1,847 hp
Gross Power – SAE J1995	1394 kW	1,870 hp
Net Power – SAE J1349		
Standard Ambient	1297 kW	1,739 hp
High Ambient	1265 kW	1,696 hp
Bore	170 mm	6.7 in
Stroke	215 mm	8.5 in
Displacement	78.1 L	4,766 in <sup>3</sup>
Peak Torque @ 1,200 rpm – SAE J1995	11 591 N·m	8,549 lbf-ft
Torque Rise	39%	

- The power ratings apply when tested under the reference conditions for the specified standard.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and muffler.
- The gross power advertised is with the fan at maximum speed.

## Operating Specifications

Operating Weight	240 018 kg	529,149 lb
Rated Payload – Standard	40.8 tonnes	45 tons
Rated Payload – High Lift	38.1 tonnes	42 tons
Bucket Capacity Range	19.1-24.5 m <sup>3</sup>	25-32 yd <sup>3</sup>
Iron Ore	17.2 m <sup>3</sup>	22.3 yd <sup>3</sup>
Rock	19.1-24.5 m <sup>3</sup>	25-32 yd <sup>3</sup>
Coal	32.1-39.7 m <sup>3</sup>	42-52 yd <sup>3</sup>

## Transmission

Transmission Type	Cat Planetary Power Shift	
Forward 1	7.4 km/h	4.6 mph
Forward 2	12.9 km/h	8.0 mph
Forward 3	21.9 km/h	13.6 mph
Reverse 1	8.1 km/h	5.0 mph
Reverse 2	14.1 km/h	8.8 mph
Reverse 3	24.0 km/h	14.9 mph
Direct Drive – Forward 1	Lock-up disables	
Direct Drive – Forward 2	14.0 km/h	8.7 mph
Direct Drive – Forward 3	24.5 km/h	15.2 mph
Direct Drive – Reverse 1	Lock-up disables	
Direct Drive – Reverse 2	15.5 km/h	9.6 mph
Direct Drive – Reverse 3	27.0 km/h	16.8 mph

- Travel speeds based on 58/85-57 tires.

## Hydraulic System – Lift/Tilt

Lift/Tilt System – Circuit	Positive Flow Control	
Lift/Tilt System – Pumps	Variable Displacement Piston	
Maximum Flow at 1,700 rpm Engine Speed	2047 L/min	541 gal/min
Relief Valve Setting – Lift/Tilt	32 500 kPa	4,587 psi
Cylinders, Double Acting		
Lift, Bore and Stroke	370 × 1713 mm	14.6 × 67.4 in
Tilt, Bore and Stroke	310 × 1086 mm	12.2 × 42.8 in
Pilot System	Open Loop and Pressure Reducing	

# 994K Wheel Loader Specifications

## Hydraulic Cycle Time

Rack Back	4.9 seconds
Raise	12.6 seconds
Dump	3.1 seconds
Lower Float Down	4.2 seconds
Total Hydraulic Cycle Time (empty bucket)	23.5 seconds

## Complete System Fill

Fuel Tank (standard)	3445 L	910 gal
Fuel Tank (with 24 hr attachment)	5678 L	1,500 gal
Cooling System	520 L	137.5 gal
Engine Crankcase	288 L	76 gal
Transmission	416 L	110 gal
Differentials and Final Drives – Front	833 L	220 gal
Differentials and Final Drives – Rear	757 L	200 gal
Hydraulic Tank (implement and hydraulic fan)	1022 L	270 gal
Hydraulic Tank (steering and braking)	379 L	100 gal
Oil Renewal System (ORS)	75.7 L	20 gal

## Axles

Front	Fixed
Rear	Trunnion
Oscillation Angle	9°

## Brakes

Brakes	ISO 3450:2011
--------	---------------

## Cooling System

Ambient Capability Hydraulically Driven Demand Fan		
Standard	43° C	109.4° F
High	53° C	127.4° F

## Sound Performance

	Standard	Suppression
Operator Sound Level (ISO 6396)	72 dB(A)	71 dB(A)
Machine Sound Level (ISO 6395)	119 dB(A)	117 dB(A)

### Sound Performance

- The operator sound pressure level is 72 dB(A), measured according to the test procedures and conditions specified in ISO 6396:2008 for the standard machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- The operator sound pressure level is 71 dB(A), measured according to the test procedures and conditions specified in ISO 6396:2008 for the sound suppressed machine configurations. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.
- The machine sound power level is 119 dB(A), measured according to the test procedures and conditions specified in ISO 6395:2008 for the standard machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- The machine sound power level is 117 dB(A), measured according to the test procedures and conditions specified in ISO 6395:2008 for the sound suppressed machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.

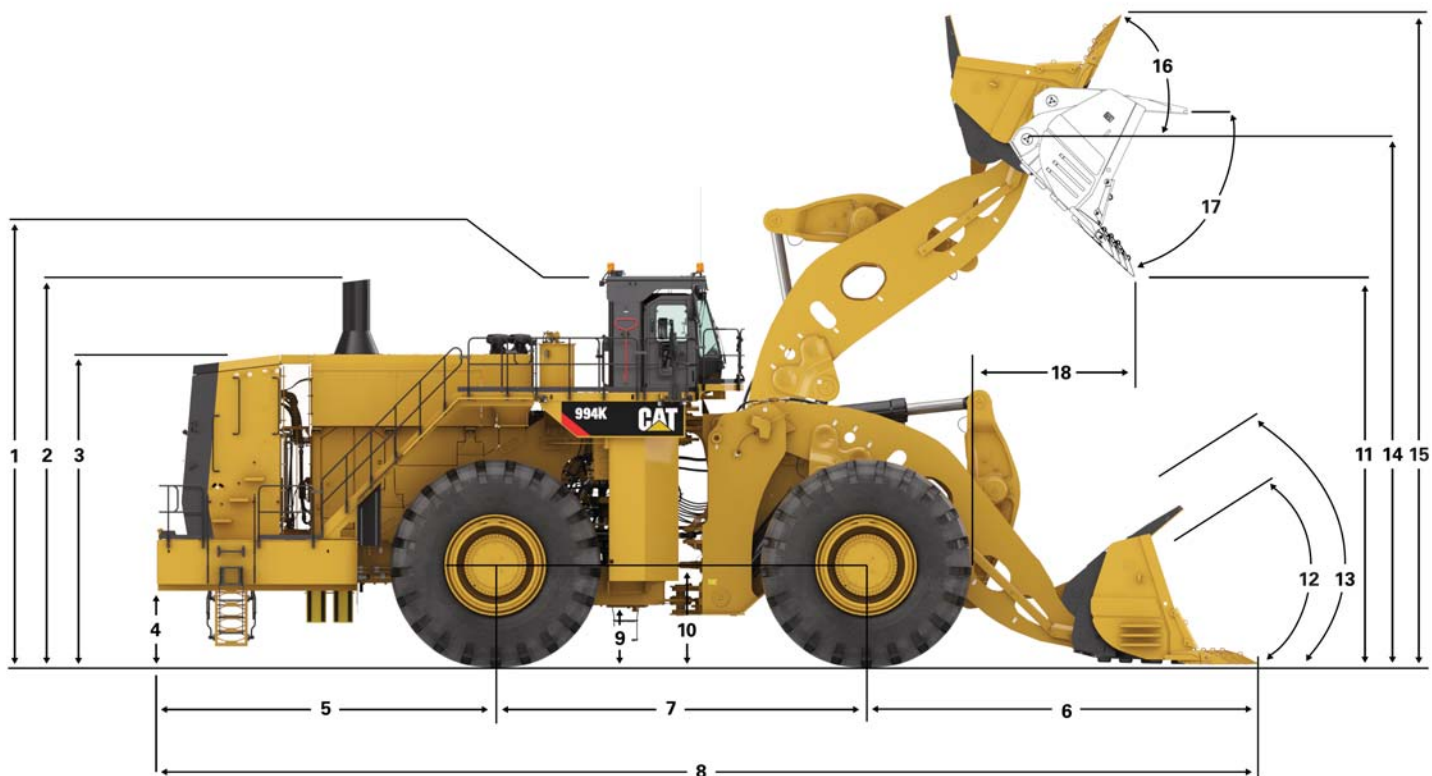
## Hydraulic System – Steering

Steering System – Circuit	Pilot, Load Sensing	
Steering System – Pump	Piston, Variable Displacement	
Maximum Flow @ 1,700 rpm Engine Speed	980 L/min	259 gal/min
Relief Valve Setting – Steering	31 000 kPa	4,496 psi
Total Steering Angle	70°	
Steering Cycle Time (low idle)	7.6 seconds	
Steering Cycle Time (high idle)	4.3 seconds	

# 994K Wheel Loader Specifications

## Dimensions

All dimensions are approximate.



	Standard Lift		High Lift	
<b>1</b> Ground to Top of ROPS	7118.5 mm	23.4 ft	7118.5 mm	23.4 ft
<b>2</b> Ground to Top of Exhaust Stacks	7067 mm	23.2 ft	7067 mm	23.2 ft
<b>3</b> Ground to Top of Hood	5682 mm	18.6 ft	5682 mm	18.6 ft
<b>4</b> Ground to Bumper Clearance	1355 mm	4.4 ft	1355 mm	4.4 ft
<b>5</b> Rear Axle Center Line to Bumper	6205 mm	20.4 ft	6205 mm	20.4 ft
<b>6</b> Front Axle Center Line to Bucket Tip	6503 mm	21.3 ft	7097 mm	23.3 ft
<b>7</b> Wheel Base	6800 mm	22.3 ft	6800 mm	22.3 ft
<b>8</b> Maximum Overall Length	17 860 mm	58.6 ft	18 454 mm	60.5 ft
<b>9</b> Ground to Lower Hitch Clearance	898 mm	2.9 ft	898 mm	2.9 ft
<b>10</b> Ground to Center of Axles	1820 mm	6.0 ft	1820 mm	6.0 ft
<b>11</b> Clearance at Maximum Lift	6167 mm	20.2 ft	7095 mm	23.3 ft
<b>12</b> Rack Back Angle at Ground Level	39.7 degrees		45.0 degrees	
<b>13</b> Rack Back Angle at Carry	47.7 degrees		53.7 degrees	
<b>14</b> B-Pin Height at Maximum Lift	8790 mm	28.8 ft	9647 mm	31.7 ft
<b>15</b> Maximum Overall Height, Bucket Raised	11 771 mm	38.6 ft	12 545 mm	41.2 ft
<b>16</b> Rack Angle at Maximum Lift	59.5 degrees		59.4 degrees	
<b>17</b> Dump Angle at Maximum Lift	-50.0 degrees		-50.0 degrees	
<b>18</b> Reach at Maximum Lift	2821 mm	9.3 ft	2688 mm	8.8 ft

# 994K Wheel Loader Specifications

## Bucket Specs

Bucket Type	Bucket Capacity		GET	Standard Lift Material Density		High Lift Material Density	
	m <sup>3</sup>	yd <sup>3</sup>	No. of Tips	kg/m <sup>3</sup>	lb/yd <sup>3</sup>	kg/m <sup>3</sup>	lb/yd <sup>3</sup>
Rock	19.1	25.0	9	2138	3,600	1995	3,360
	21.4	28.0	9	1909	3,215	1781	3,000
	22.9	30.0	9	1781	3,000	1663	2,800
	24.5	32.0	9	1669	2,810	1559	2,625
HD Rock	19.1	25.0	9	2090	3,520	1900	3,200
	21.4	28.0	9	1802	3,035	1675	2,820
Coal	32.1	42.0	10	1271	2,140	1188	2,000
	39.8	52.0	10	1027	1,730	959	1,615
Iron Ore	17.2	22.5	9	2286	3,850	2126	3,580

Custom buckets are available upon request. Please work with your dealer for more information.



# 994K Wheel Loader Specifications

## Operating Specifications – Standard Lift

For machines equipped with 58/85-57 tires (SLR: 1820 mm/6 ft) – see additional tables for other tire sizes.

Bucket Type		Rock			
		Teeth & Segment			
Ground Engaging Tools		Spade			
Cutting Edge Type					
Bucket Part No. (Group Level)		389-4420	389-4430	389-4440	389-4450
Bucket Load at Rated Capacity	kg	40 823	40 823	40 823	40 823
	lb	90,000	90,000	90,000	90,000
Rated Capacity	m <sup>3</sup>	19.1	21.4	22.9	24.5
	yd <sup>3</sup>	25	28	30	32
Struck Capacity – ISO	m <sup>3</sup>	15	18	19	20
	yd <sup>3</sup>	19.6	23.5	24.9	26.2
Heaped Capacity – ISO	m <sup>3</sup>	19	21	23	24
	yd <sup>3</sup>	24.9	27.5	30.0	31.4
Bucket Width – Overall	mm	6240	6240	6240	6240
	ft	20.5	20.5	20.5	20.5
Clearance at 45° Dump (Tooth Tip)	mm	6347	6238	6167	6100
	ft	20.8	20.5	20.2	20.0
Reach at 45° Dump (Tooth Tip)	mm	2641	2750	2821	2888
	ft	8.7	9.0	9.3	9.5
Bucket Pin at Maximum Lift	mm	8790	8790	8790	8790
	ft	28.8	28.8	28.8	28.8
Horizontal Arm and Level Bucket Reach	mm	5583	5737	5837	5932
	ft	18.3	18.8	19.1	19.5
Digging Depth (Segment)	mm	232	232	232	232
	ft	0.8	0.8	0.8	0.8
Overall Length – Bucket Level Ground	mm	17 606	17 760	17 860	17 955
	ft	57.8	58.3	58.6	58.9
Front Axle to Bucket Tip Ground	mm	6249	6403	6503	6598
	ft	20.5	21.0	21.3	21.6
Overall Height	mm	11 541	11 688	11 771	11 874
	ft	37.9	38.3	38.6	39.0
Turning Radius – Corner SAE Carry	mm	13 727	13 771	13 800	13 828
	ft	45.0	45.2	45.3	45.4
Reach at 45° Dump and 2.13 m (7 ft) Height (with Teeth)	mm	4349	4454	4522	4585
	ft	14.3	14.6	14.8	15.0
Rack Back Angle at SAE Carry	degree	47.7	47.7	47.7	47.7
Full Dump at Maximum Lift	degree	-50.0	-50.0	-50.0	-50.0

(chart continued on next page)

# 994K Wheel Loader Specifications

## Operating Specifications – Standard Lift *(continued)*

For machines equipped with 58/85-57 tires (SLR: 1820 mm/6 ft) – see additional tables for other tire sizes.

Bucket Type		Rock			
		Teeth & Segment			
Ground Engaging Tools		Spade			
Cutting Edge Type					
Bucket Part No. (Group Level)		389-4420	389-4430	389-4440	389-4450
Bucket Load at Rated Capacity	kg	40 823	40 823	40 823	40 823
	lb	90,000	90,000	90,000	90,000
Rated Capacity	m <sup>3</sup>	19.1	21.4	22.9	24.5
	yd <sup>3</sup>	25	28	30	32
Struck Capacity – ISO	m <sup>3</sup>	15	18	19	20
	yd <sup>3</sup>	19.6	23.5	24.9	26.2
Heaped Capacity – ISO	m <sup>3</sup>	19	21	23	24
	yd <sup>3</sup>	24.9	27.5	30.0	31.4
Tipping Load at Operating Weight – Straight	kg	159 823	158 190	157 062	156 085
	lb	352,348	348,749	346,263	344,107
Tipping Load at Operating Weight – Straight*	kg	150 697	149 006	147 840	146 825
	lb	332,230	328,502	325,931	323,693
Tipping Load at Operating Weight – Articulated 40°	kg	137 845	136 286	135 207	134 275
	lb	303,896	300,459	298,081	296,025
Tipping Load at Operating Weight – Articulated 40°*	kg	123 391	121 745	120 610	119 624
	lb	272,030	268,401	265,899	263,725
Tipping Load at Operating Weight – Bucket Level Ground	kg	135 113	130 634	127 808	125 353
	lb	297,872	287,997	281,768	276,356
Tipping Load at Operating Weight – Bucket Level Ground*	kg	126 010	121 984	119 430	117 209
	lb	277,804	268,928	263,298	258,401
Breakout Force – SAE Rated	kN	1401.1	1307.7	1252.7	1206.2
	lbf	314,980	293,992	281,617	271,160
Operating Weight	kg	238 466	239 371	240 018	240 554
	lb	525,727	527,723	529,149	530,329
Weight Distribution at SAE Carry – Front	kg	124 673	126 336	127 518	128 511
	lb	274,858	278,522	281,129	283,319
Weight Distribution at SAE Carry – Rear	kg	113 792	113 036	112 500	112 042
	lb	250,869	249,200	248,020	247,010
Loaded Machine Weight	kg	279 289	280 194	280 841	281 377
	lb	615,726	617,722	619,148	620,329
Weight Distribution at SAE Carry – Front	kg	192 099	193 989	195 324	196 461
	lb	423,505	427,672	430,615	433,121
Weight Distribution at SAE Carry – Rear	kg	87 190	86 205	85 518	84 916
	lb	192,220	190,050	188,534	187,208

\*With Tire Squash.

# 994K Wheel Loader Specifications

## Operating Specifications – High Lift

For machines equipped with 58/85-57 tires (SLR: 1820 mm/6 ft) – see additional tables for other tire sizes.

Bucket Type		Rock			
		Teeth & Segment			
Ground Engaging Tools		Spade			
Cutting Edge Type					
Bucket Part No. (Group Level)		389-4420	389-4430	389-4440	389-4450
Bucket Load at Rated Capacity	kg	38 102	38 102	38 102	38 102
	lb	84,000	84,000	84,000	84,000
Rated Capacity	m <sup>3</sup>	19.1	21.4	22.9	24.5
	yd <sup>3</sup>	25	28	30	32
Struck Capacity – ISO	m <sup>3</sup>	15	18	19	20
	yd <sup>3</sup>	19.6	23.5	24.9	26.2
Heaped Capacity – ISO	m <sup>3</sup>	19	21	23	24
	yd <sup>3</sup>	24.9	27.5	30.0	31.4
Bucket Width – Overall	mm	6240	6240	6240	6240
	ft	20.5	20.5	20.5	20.5
Clearance at 45° Dump (Tooth Tip)	mm	7204	7095	7024	6957
	ft	23.6	23.3	23.0	22.8
Reach at 45° Dump (Tooth Tip)	mm	2579	2688	2758	2826
	ft	8.5	8.8	9.0	9.3
Bucket Pin at Maximum Lift	mm	9647	9647	9647	9647
	ft	31.6	31.6	31.6	31.6
Horizontal Arm and Level Bucket Reach	mm	6149	6303	6403	6498
	ft	20.2	20.7	21.0	21.3
Digging Depth (Segment)	mm	239	239	239	239
	ft	0.8	0.8	0.8	0.8
Overall Length – Bucket Level Ground	mm	18 300	18 454	18 554	18 649
	ft	60.0	60.5	60.9	61.2
Front Axle to Bucket Tip Ground	mm	6943	7097	7197	7292
	ft	22.8	23.3	23.6	23.9
Overall Height	mm	12 398	12 545	12 628	12 731
	ft	40.7	41.2	41.4	41.8
Turning Radius – Corner SAE Carry	mm	13 976	14 017	14 045	14 071
	ft	45.9	46.0	46.1	46.2
Reach at 45° Dump and 2.13 m (7 ft) Height (with Teeth)	mm	4916	5021	5088	5152
	ft	16.1	16.5	16.7	16.9
Rack Back Angle at SAE Carry	degree	53.5	53.5	53.5	53.5
Full Dump at Maximum Lift	degree	-50.0	-50.0	-50.0	-50.0

(chart continued on next page)

# 994K Wheel Loader Specifications

## Operating Specifications – High Lift *(continued)*

For machines equipped with 58/85-57 tires (SLR: 1820 mm/6 ft) – see additional tables for other tire sizes.

Bucket Type		Rock			
Ground Engaging Tools		Teeth & Segment			
Cutting Edge Type		Spade			
Bucket Part No. (Group Level)		389-4420	389-4430	389-4440	389-4450
Bucket Load at Rated Capacity	kg	40 823	40 823	40 823	40 823
	lb	90,000	90,000	90,000	90,000
Rated Capacity	m <sup>3</sup>	19.1	21.4	22.9	24.5
	yd <sup>3</sup>	25	28	30	32
Struck Capacity – ISO	m <sup>3</sup>	15	18	19	20
	yd <sup>3</sup>	19.6	23.5	24.9	26.2
Heaped Capacity – ISO	m <sup>3</sup>	19	21	23	24
	yd <sup>3</sup>	24.9	27.5	30.0	31.4
Tipping Load at Operating Weight – Straight	kg	140 091	138 667	137 676	136 827
	lb	308,847	305,708	303,524	301,651
Tipping Load at Operating Weight – Straight*	kg	132 782	131 300	130 272	129 385
	lb	292,734	289,467	287,200	285,245
Tipping Load at Operating Weight – Articulated 40°	kg	120 292	118 917	117 960	117 141
	lb	265,198	262,168	260,057	258,251
Tipping Load at Operating Weight – Articulated 40°*	kg	108 277	106 814	105 800	104 925
	lb	238,710	235,484	233,249	231,320
Tipping Load at Operating Weight – Bucket Level Ground	kg	117 056	113 375	111 031	108 994
	lb	258,063	249,948	244,782	240,291
Tipping Load at Operating Weight – Bucket Level Ground*	kg	110 225	106 841	104 676	102 794
	lb	243,004	235,544	230,771	226,622
Breakout Force – SAE Rated	kN	1335.0	1245.6	1192.9	1148.3
	lbf	300,129	280,028	268,171	258,148
Operating Weight	kg	239 693	240 598	241 245	241 781
	lb	528,432	530,428	531,854	533,034
Weight Distribution at SAE Carry – Front	kg	129 194	130 922	132 151	133 180
	lb	284,823	288,633	291,343	293,611
Weight Distribution at SAE Carry – Rear	kg	110 499	109 677	109 094	108 601
	lb	243,609	241,795	240,511	239,423
Loaded Machine Weight	kg	277 795	278 700	279 347	279 883
	lb	612,432	614,428	615,855	617,035
Weight Distribution at SAE Carry – Front	kg	195 479	197 370	198 709	199 840
	lb	430,958	435,126	438,077	440,571
Weight Distribution at SAE Carry – Rear	kg	82 315	81 330	80 639	80 043
	lb	181,474	179,302	177,777	176,464

\*With Tire Squash.

## Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

### ELECTRICAL

- Back-up alarm
- Alternator (225 amp)
- Dry batteries
- 10/15 amp, 24V to 12V converter
- Disconnect switch in bumper
- LED warning lights (pattern selectable)
- LED lighting system (working lights, access and service platform lights, turn signals/hazard lights)
- Emergency jump start receptacle
- Starter and transmission lockout in bumper
- Combined VIMS download and Cat Electronic Technician service port in bumper
- 24V starting and charging system
- Electric starters

### OPERATOR ENVIRONMENT

- Air conditioner
- Cab pressure indicator
- Cab is sound suppressed and pressurized with separate external rollover protective structure (ROPS/FOPS) radio ready for entertainment, includes antenna, speakers and converter (12-volt 5-amp) and power port
- Cat Vision (rear vision camera system)
- Coat hook
- Lift and tilt function controls
- Graphical touchscreen information display, conveys real time operating information and payload measurement
- Heater, defroster, auto temperature controls
- Electric (field and shop) horns

- Gauge instrumentation
  - Coolant temperature
  - Hydraulic oil temperature
  - Fuel level
  - Power train oil temperature
  - Engine speed (tachometer)
  - Transmission gear
  - Ground speed
  - Engine hour meter
- Warning indicator instrumentation
  - Three category action alert system
  - Brake malfunction
  - Bucket float status
  - Delayed engine shutdown status
  - Engine idle shutdown status
  - Engine malfunction
  - Fuel economy mode enable status
  - Hydraulic lockout
  - Lockup clutch enable status
  - Low fuel level
  - Parking brake status
  - Quick shift enable status
  - Rimpull control enable status
  - Seat belt warning
  - Secondary steering
  - Throttle lock status
  - Transmission gear
  - Turn signal

- Keypad control with indicator lights
  - Fuel economy mode
  - Implement kickouts
  - Lockup clutch
  - Manual lube
  - Quickshift enable
  - Rimpull control system
  - Side rearview mirror heater
  - Throttle lock
  - Turn signals
    - Dash backlight control
  - Hazard lights
- Dome light in cab
- Lunchbox and beverage holders
- Rearview mirrors (externally mounted)
- Retractable seat belt, 76 mm (3 in) wide
- Cat Comfort (cloth), air suspension, six-way adjustable seat
- Trainer seat with lap belt, 76 mm (3 in) wide
- STIC system
- Sun screen, pull down (front and rear)
- Tinted glass
- VIMS with Information Display: external data port, Cycle Timer, integrated Cat Production Measurement
- Intermittent wet arm wipers/washers (front and rear)
- Service center
  - Keypad, messenger, ET, VIMS, stairway lamp

*(continued on next page)*

## Standard Equipment *(continued)*

Standard equipment may vary. Consult your Cat dealer for details.

### POWER TRAIN

- Oil cooled, multi-disc, service/secondary brakes
- Case drain filters
- Electro-hydraulic parking brake
- Engine, 3516E High Displacement (HD) Mechanical Electronic Unit Injector (MEUI™-A) Air-to-Air After Cooling (ATAAC) diesel, turbocharged/aftercooled
- Engine prelude
- Fuel priming pump (electric)
- Ground level engine shutoff
- Engine air intake (above hood) precleaner
- Radiator, Aluminum Modular Radiator (AMR)
- Automatic, ether starting aid
- Electronic throttle lock
- Impeller Clutch Torque Converter (ICTC) with Lock-Up Clutch (LUC) and rimpull control system
- Planetary powershift, 3F/3R electronic control transmission
- Hydraulic lash adjustment engine

### OTHER

- Automatic bucket lift/tilt kickout/positioner
- Automatic lubrication system
- Cat O-ring face seal couplings
- Lockable service access doors
- Ecology drains
- Economy Mode
- High speed engine oil change system
- Front frame access with steps
- Front walkway
- Ground level fast fill fuel system
- Transmission guard
- Drawbar hitch with pin
- Cat XT™ hoses
- Implement, steering and brake filtration/screening system
- Left side service center
- Mufflers (2)
- Oil sampling valves
- Premixed 50% concentration of extended life coolant with freeze protection to -34° C (-29° F)
- Pump bay access ladders with T-handle and platform
- Rear access to cab and service platform
- Load sensing steering
- Supplemental steering system
- Tie-offs on ROPS and radiator guards
- Toe kicks
- Vandalism protection caplocks
- Cooling cleanout service package
- Venturi stacks

# 994K Optional Equipment and Mandatory Attachments

## Optional Equipment

With approximate changes in operating weights. Optional equipment may vary. Consult your Cat dealer for specifics.

### POWER TRAIN

- Engine oil renewal system

### ELECTRICAL

- Service lights

### OPERATOR ENVIRONMENT

- AM/FM/CD/MP3 radio
- AM/FM/CD/MP3 radio with bluetooth and satellite ready

### MACHINE CONTROL AND GUIDANCE

- Cat Terrain ready

### SPARE RIMS

- 1118 mm (44") spare rim
- 1194 mm (47") spare rim

### MISCELLANEOUS ATTACHMENTS

- Wheel chocks

## Mandatory Attachments

Select one from each group. Mandatory and optional equipment may vary. Consult your Cat dealer for specifics.

### LINKAGE

- Standard lift
- High lift

### ELECTRICAL

- No Product Link
- Product Link satellite
- Product Link cellular
- Product Link (dual mode – satellite/cellular)

### SPECTATOR SOUND PACKAGE

- No sound suppression
- Sound suppression

### FUEL TANK

- Standard
- 24 hour

### COOLING

- Standard ambient
- High ambient

### FAN CONTROL

- Standard
- Cold weather bypass

### OPERATOR ENVIRONMENT

- Standard glass
- Rubber mounted glass
- Rubber mounted solar and impact resistant

- Standard seat
- Deluxe heated and ventilated seat

- Standard mirror
- Heated mirror

### ACCESS

- Access steps
- Powered access
- Vision Display
- Cat Detect (Object Detection)

### FUEL SYSTEM

- Fuel line heater delete
- Cold weather starting with 240V oil and Jw H

### RIMS

- 1118 mm (44") (44×57)
- 1194 mm (47") (47×57)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

AEHQ7391-01 (05-2015)  
Replaces AEHQ7391

© 2015 Caterpillar  
All rights reserved

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

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

