

Cat® 903

COMPACT WHEEL LOADER

FEATURES:

The Cat[®] 903 is compact, yet powerful, delivering high performance with outstanding versatility. The all new C1.7 engine provides better all-around performance. Features such as engine and ground speed control, provides customizable control when running hydromechanical work tools. With an ergonomic cab, multi-function joystick, and optional ride control, the 903 allows the operator to enjoy all day comfort.

- Work Made Easy: The 903 makes work easy with a 17% increase in horsepower with the all-new Cat C1.7 engine. This provides for improved performance when operating on grades and when using drive, steer, and lift simultaneously. The all-new optional hydraulic skid steer loader style coupler allows for faster and more efficient work tool changes while providing a viewing window that enables the operator to see the fork tips when using compact wheel loader style forks. Optional front and rear diff-lock can be activated on the fly, providing maximum traction in slick underfoot conditions.
- Enjoy All Day Comfort: Operators will enjoy all day comfort with a multi-function joystick, spacious leg room, ergonomic pedal positioning, easy entry/exit, and optional speed sensitive ride control. The all-new seat provides optimal comfort, while featuring yellow adjustment touch points that make finding that perfect seat position easy. The minimal engine overhang provides excellent rear and corner visibility, making the 903 easy to operate in confined areas.

- Configured for Success: Configure the 903 for success with new options such as engine and ground speed control, ideally suited for hydro-mechanical work such as using a broom. With the addition of a work tool electrical harness option, you can now run more tools than ever before. Two loader linkage options, standard and high lift, provide either improved capacity or improved lift height based on your application.
- Simply Reliable: Fully opening rear hood allows easy access to the engine compartment featuring side-by-side coolers and transparent fuel/water separator with optional engine air pre-cleaner and radiator screen for high debris applications. Rear tie down locations under the machine allow for easy transport, while the service locations under the hood provide easy access for daily maintenance.



Specifications

Engine

Engine Model	Cat C1.7*	
Gross Power	36 kW	48 hp
Net Power @ 2,200 rpm		
SAE J1349:2011	33.6 kW	45 hp
ISO 9249:2007	33.6 kW	45 hp
Bore	84 mm	3.3 in
Stroke	100 mm	3.9 in
Displacement	1.7 L	104 in ³
• Advertised power is tested per the specifie at the time of manufacture.	d standard in	effect

• Net power advertised is the power available at the flywheel.

*Engine meets U.S. EPA Tier 4 Final emission standards.

Weight

Operating Weight	4173 kg	9,200 lb
Buckets		
Bucket Capacities	0.6-1.0 m ³	0.8-1.3 yd ³
Transmission		
Travel Speed	20 km/h	12.4 mph

Hydraulic System

Main Relief	230 bar	3,336 psi
3rd Auxiliary Flow	53.5 L/min	14.1 gpm
Hydraulic Cycle Time – Lift	4.5 seconds	
Hydraulic Cycle Time – Dump	0.7 seconds	
Hydraulic Cycle Time – Lower, Float	2.3 seconds	

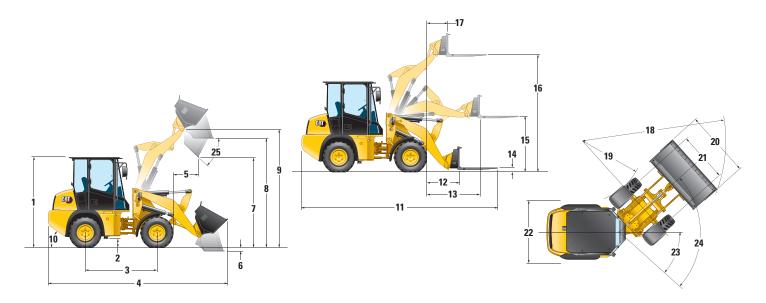
Cab

Rollover Protective Structure (ROPS)	ISO 3471:2008
Falling Object Protective Structure (FOPS)	ISO 3449:2005 Level II

Service Refill Capacities

Cooling System	11 L	3 gal	
Fuel Tank	43 L	11.4 gal	
Hydraulic System	24 L	6.3 gal	
Engine Oil	6 L	1.6 gal	

903 Compact Wheel Loader



Dimensions (All dimensions are approximate.)

		Star	ndard Lift	Higl	h Lift
1	Cab Height	2510 mm	8 ft 3 in	2510 mm	8 ft 3 in
2	Ground Clearance	250 mm	10 in	250 mm	10 in
3	Wheelbase	1950 mm	6 ft 5 in	1950 mm	6 ft 5 in
* 4	Overall Length with Bucket	4693 mm	15 ft 5 in	4894 mm	16 ft 1 in
* 5	Reach at Maximum Dump Height	705 mm	2 ft 4 in	715 mm	2 ft 4 in
6	Dig Depth	131 mm	5 in	163 mm	6 in
* 7	Maximum Dump Height	2355 mm	7 ft 9 in	2496 mm	8 ft 2 in
8	Load Over Height	2832 mm	9 ft 3 in	2974 mm	9 ft 9 in
9	Hinge Pin at Maximum Height	3086 mm	10 ft 1 in	3227 mm	10 ft 7 in
10	Departure Angle (degrees)			30°	
11	Overall Length with Forks	5129 mm	16 ft 10 in	5263 mm	17 ft 3 in
12	Reach at Level Ground	765 mm	2 ft 6 in	900 mm	2 ft 11 in
13	Maximum Reach	1311 mm	4 ft 4 in	1429 mm	4 ft 8 in
14	Fork Depth Above Ground	67 mm	3 in	40 mm	2 in
15	Fork Height at Maximum Reach	1447 mm	4 ft 9 in	1429 mm	4 ft 8 in
16	Maximum Fork Height	3031 mm	9 ft 11 in	3172 mm	10 ft 5 in
17	Fork Reach at Maximum Height	543 mm	1 ft 9 in	552 mm	1 ft 10 in
* 18	Turning Radius Over Bucket	3891 mm	12 ft 9 in	3977 mm	13 ft 5 in
** 19	Turning Radius Inside Tire	1834 mm	6 ft 0 in	1834 mm	6 ft 0 in
* 20	Width Over Bucket	1790 mm	5 ft 10 in	1790 mm	5 ft 10 in
21	Tire Gauge	1314 mm	4 ft 4 in	1314 mm	4 ft 4 in
** 22	Machine Width	1708 mm	5 ft 7 in	1708 mm	5 ft 7 in
23	Articulation Angle			40°	
24	Steering Angle		80°		
25	Dump Angle at Maximum Height		40°		

*Vary with bucket size.

**Vary with tire size.

Dimensions listed are based on a machine configured with cab, air conditioning, remote quick coupler, general purpose bucket or 1067 mm (42 in) forks, 75 kg (165 lb) operator, 33 × 15.5-16.5, 12 PR tires, without ride control, without pre-cleaner.

Operating Specifications

	Stand	ard Lift	High	ı Lift
Tire Size	33 × 15.5-16.5, 12 PR			
Rated Bucket Capacity	0.6 m ³	0.8 yd ³	0.6 m ³	0.8 yd ³
Breakout Force	28 kN	6,294 lbf	29 kN	6,519 lbf
Operating Weight	4173 kg	9,200 lb	4187 kg	9,231 lb
Rated Operating Load @ Full Turn, Bucket***	1251 kg	2,756 lb	1158 kg	2,553 lb
Straight Tipping Load, Bucket***	2910 kg	6,415 lb	2710 kg	5,975 lb
Full Turn Static Tipping Load, Bucket (ISO 14397-1*)***	2502 kg	5,516 lb	2317 kg	5,108 lb
Full Turn Static Tipping Load, Bucket (Rigid Tire**)***	2552 kg	5,626 lb	2376 kg	5,238 lb
Rackback, Transport Position			51°	
Rated Operating Load @ Full Turn, Forks (EN 474-3:2006, Firm and Level Ground, 500 mm [20 in] Load Center) (80% FTSTL)***	1539 kg	3,393 lb	1440 kg	3,175 lb
Rated Operating Load @ Full Turn, Forks (EN 474-3:2006, Rough Terrain, 500 mm [20 in] Load Center) (60% FTSTL)***	1154 kg	2,544 lb	1080 kg	2,381 lb

*Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculation and testing.

**Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

***Manual quick coupler, precleaner hood.

Operating specifications shown are based on machine equipped with enclosed ROPS cab with air conditioning, remote quick coupler, 75 kg (165 lb) operator and general purpose bucket (GP), without ride control, without precleaner unless otherwise noted.

Maximum Material Densities

Based on ISO 7546: 1983 and rated operating loads at full turn and standard linkage.

	General Purpose		Light N	laterial
Bucket Type	General Purpose		Light N	laterial
Rated Capacity	0.6 m ³	0.8 yd ³	1.0 m ³	1.3 yd ³
Dump Height	2355 mm	93 in	2225 mm	88 in
Maximum Material Density	1880 kg/m³	3,169 lb/yd ³	1180 kg/m ³	1,989 lb/yd ³
Bucket Width	1790 mm	70 in	1880 mm	74 in

STANDARD EQUIPMENT

POWER TRAIN

- Air cleaner, two stage with visual indicator
- Cat C1.7 engine
 Meets U.S. EPA Tier 4 Final emission standards
- Closed circuit breather
- Cold start plugs
- Electrical fuel priming pump
- Eco drain, engine oil
- Extended life coolant protects to -37° C (-34° F)
- Frame mounted heavy duty axles with outboard planetary reduction
- Maintenance free, sealed for life, prop shaft and universal joints
- Transmission, 20 km/h (12.4 mph)

ELECTRICAL

- 12 volt direct electric starting
- Alternator, 70A
- Battery disconnect switch
- Cab mounted fuse panel
- Ignition key start/stop switch
- Maintenance free, sealed for life, 650 CCA heavy duty battery

OPERATOR ENVIRONMENT

- Cup holder
- Digital service hour meter
- Engine coolant temperature gauge
- Fuel level gauge
- Heavy duty, easy clean floor mat
- Operator warning system indicators:
 DPF monitor
 - Parking brake applied
 - Hydraulic oil temperature
 - Engine oil pressure
 - Service brake pressure
 - Hydraulic filter bypass
- Seat
- Static, vinyl with 51 mm (2 in) retractable seat belt
- Two external mirrors knock back

OTHER STANDARD EQUIPMENT

- 3rd valve auxiliary hydraulics with continuous flow detent, standard flow
- Engine enclosure lockable
- Guarded front headlight
- Hydraulic auxiliary lines with quick disconnects
- Hydraulic oil level sight gauge
- Lift arm safety brace
- Loader arm float function
- Lockable fuel filler cap
- Manual quick coupler, skid steer loader compatible
- Parking brake (secondary brake)
- Product Link[™], PL243
- Quick release fuel filter/water separator
- Reversing light
- Self-canceling direction indicators
- Work tool return to dig
- Z-bar linkage

903 Optional Equipment

OPTIONAL EQUIPMENT

- Air conditioning/heater
- Alternator, 90 amp for air conditioning
- Antifreeze/coolant, extended life, protects to -50° C (-58° F)
- Beacon ready
- Cab
 - Open
 - Enclosed
- Differential lock, front and rear axles
- Hydraulic quick coupler, skid steer loader compatible
- Engine air pre-cleaner
- Engine block heater 120V (dealer installed)
- Engine Speed Control (Throttle Lock)
- Fenders
 - Rear only
 - Front and rear

- Ground Speed Control (Creeper Control)
- Linkage
 - Standard lift
 - High lift
 - Radiator debris screen
 - Radio Ready or AM/FM radio
 - Ride Control
 - Seats
 - Mechanical suspension, vinyl with 51 mm (2 in) seat belt
 - Mechanical suspension, vinyl with 75 mm (3 in) seat belt
 - Mechanical suspension, fabric with 51 mm (2 in) seat belt
 - Mechanical suspension, fabric with 75 mm (3 in) seat belt

- Tires
- 12-16.5 10PR
- \bullet Flotation 33-15.5 \times 16.5
- FlexportTM 33 × 6 × 11
- Working lights, front and rear
 - Halogen
 - LED
- Work Tool Electrical Harness

WORK TOOLS

 For all work tool options, consult your Cat dealer.

903 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 C1.7 engine meets U.S. EPA Tier 4 Final.
- 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 0.7 kg (1.54 lb) of refrigerant which has a CO₂ equivalent of 1.0 metric tonnes (1.1 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) – 80.8 dB(A)*

Exterior Sound Power Level (ISO 6395:2008) – 99.8 dB(A)

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

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.
- Hydrostatic transmission
- Common pump system for implement and steering

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	54.64%
Iron	27.39%
Rubber	4.56%
Other	3.59%
Fluid	2.89%
Nonferrous Metal	2.89%
Uncategorized	1.90%
Plastic	1.00%
Mixed-Metal and Nonmetal	0.76%
Mixed Metal	0.38%
Mixed Nonmetallic	0.0%
Total	100.00%

• 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%

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

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

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AEHQ8467-00 (04-2023) Build Number: 04B (N Am)

