



# Cat<sup>®</sup> 966L

## Wheel Loader

### 2017

**The new 966L Wheel Loader, with the 2017 product update, applies proven technologies systematically and strategically to meet your high expectations for reliability, productivity, fuel efficiency, and long service life. Meets China Nonroad Stage III emission standards and U.S. EPA Tier 3/EU Stage IIIA equivalent emission standards.**

#### Reliability

- Cat<sup>®</sup> C9.3 ACERT<sup>™</sup> engine offers increased power density.
- Utilizing rigorous component design and machine validation processes results in unmatched reliability, durability and high uptime.

#### Durability

- Heavy-duty powershift transmission and axles handle extreme applications.
- Improved hydraulic hose routing reduces potential hose wear.
- Full flow hydraulic filtration system with additional loop filtration improves hydraulic system robustness and component life.

#### Productivity

- Engine power increased by approximately 10% improves machine performance and response (compared to H Series).
- Lock-up clutch torque converter, combined with lock-to-lock shifting, delivers smooth shifts, fast acceleration and speed on grade.
- High capacity torque converter results in greater digging efficiency.
- Z-bar linkage provides high breakout force at ground level.
- Optional high lift linkage offers increased hinge pin height to load more easily in a variety of applications.
- Easy-to-load Performance Series Buckets feature a wider mouth and curved side plates that improve material retention (fill factor) and decrease cycle times.
- Optional fully automatic traction control system (differential locks) improves performance in the pile and poor underfoot conditions.
- Optional Aggregate Handler configuration offers slightly higher payload capability for loose aggregate rehandling.\*

#### Fuel Efficiency

- Up to 15% lower fuel consumption than H Series.\*\*
- Power dense ACERT engine burns less fuel by providing power and torque when needed.
- Performance Series Buckets feature a longer floor that easily digs through the pile resulting in lower fuel consumption.
- Load sensing hydraulics result in proportional flow for implement and steering on demand.
- Standard productive Economy Mode provides maximum fuel savings with minimal productivity impact.

#### Ease of Operation

- New best-in-class operator environment provides unmatched comfort, visibility, and efficiency.
- Intuitive, ergonomic controls keep operators focused on their work.
- Optional new ride control system with dual accumulators provides excellent ride quality and lowers cab vibrations.

#### Safety

- Excellent cab access with wide door and stair-like steps.
- Floor to ceiling windshield, large mirrors with integrated spot mirrors and rear vision camera provide industry leading all-around visibility.
- Robust, repositioned grab bars provide safe access to the machine.

#### Serviceability

- One-piece tilting hood with side and rear doors; hydraulic and electrical service centers make access fast and easy.
- Safe, ground level access to fuel fill and daily maintenance points means less servicing time is required.
- Optional, fully integrated Cat Autolube system provides full lube system monitoring and diagnostic test visibility.

#### Cat Connect Technology

- Monitor, manage and enhance job site operations.
- Cat LINK Technologies: VisionLink<sup>®</sup> enables owners to access data wirelessly to monitor machine health, utilization and location.
- Cat DETECT Technologies: Integrated rear vision camera enhances visibility behind machine to help operators work safely. Optional Cat Rear Object Detection increases operator awareness of the working environment which enhances site safety.
- Cat PAYLOAD Technologies: Optional Cat Production Measurement 2.0 brings simple and accurate on-the-go payload scale allowing operators to deliver exact loads and work more efficiently. Advanced Productivity subscription provides comprehensive actionable information to help you manage and improve the productivity and profitability of your operations.

\*\*Actual results may vary based on factors such as, but not limited to, machine configuration, operator technique, machine application, climate, etc.

\*Optional configurations and equipment may vary from region to region and requires conformance to Caterpillar payload policy. Consult your dealer or Caterpillar representative for details.



# Cat® 966L Wheel Loader

## Engine

Engine Model	Cat C9.3 ACERT
Max Gross Power @ 1,700 rpm – ISO 14396 (metric)	227 kW (309 hp)
Max Net Power @ 1,700 rpm – ISO 9249 (metric)	207 kW (281 hp)
Peak Gross Torque (1,200 rpm) – ISO 14396	1581 N-m
Maximum Net Torque (1,000 rpm)	1507 N-m
Displacement	9.3 L

## Weights

Operating Weight	23 220 kg
<ul style="list-style-type: none"> <li>• Weight based on a machine configuration with Michelin 26.5R25 XHA2 L3 radial tires, full fluids, operator, standard counterweight, cold start, roading fenders, Product Link™, manual diff lock/open axles (front/rear), power train guard, secondary steering, sound suppression and a 4.2 m<sup>3</sup> general purpose bucket with BOCE.</li> </ul>	

## Bucket Capacities

Bucket Range	3.20-7.40 m <sup>3</sup>
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## Operating Specifications

Static Tipping Load – Full 37° Turn – with Tire Deflection	14 686 kg
Static Tipping Load – Full 37° Turn – No Tire Deflection	15 822 kg
Breakout Force	173 kN
<ul style="list-style-type: none"> <li>• For a machine configuration as defined under “Weight.”</li> <li>• Full compliance to ISO 143971:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.</li> </ul>	

## Sound

With Cooling Fan Speed at Maximum Value:	
Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)
Exterior Sound Pressure Level (SAE J88:2013)	76 dB(A)*
*Distance of 15 m, moving forward in second gear ratio.	
With Cooling Fan Speed at 70% of Maximum Value:**	
Operator Sound Pressure Level (ISO 6396:2008)	69 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	108 L <sub>WA</sub> ***
**For machines in countries that adopt the “EU Directives.”	
***European Union Directive “2000/14/EC” as amended by “2005/88/EC.”	

## Transmission

Forward 1	6.5 km/h
Forward 2	13.1 km/h
Forward 3	23.5 km/h
Forward 4	39.5 km/h
Reverse 1	7.1 km/h
Reverse 2	14.4 km/h
Reverse 3	25.9 km/h
Reverse 4	39.5 km/h

- Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm roll radius.

## Service Fill Capacities

Fuel Tank	303 L
Cooling System	71.6 L
Crankcase	24.5 L
Transmission	58.5 L
Differentials and Final Drives – Front	57 L
Differentials and Final Drives – Rear	57 L
Hydraulic Tank	125 L

## Hydraulic System

Implement Pump Type	Variable Displacement Piston
Implement System:	
Maximum Pump Output (2,200 rpm)	360 L/min
Maximum Operating Pressure	31 000 kPa
Hydraulic Cycle Time – Total	10.1 Seconds

## Dimensions

	Standard Lift	High Lift
Height to Top of Hood	2818 mm	2818 mm
Height to Top of Exhaust Pipe	3522 mm	3522 mm
Height to Top of ROPS	3859 mm	3859 mm
Ground Clearance	434 mm	434 mm
Center Line of Rear Axle to Edge of Counterweight	2251 mm	2500 mm
Center Line of Rear Axle to Hitch	1775 mm	1775 mm
Wheelbase	3550 mm	3550 mm
Overall Length (without bucket)	7362 mm	8111 mm
Hinge Pin Height at Maximum Lift	4235 mm	4793 mm
Hinge Pin Height at Carry	630 mm	778 mm
Lift Arm Clearance at Maximum Lift	3643 mm	4140 mm
Rack Back at Maximum Lift	62 degrees	71 degrees
Rack Back at Carry Height	50 degrees	49 degrees
Rack Back at Ground	42 degrees	39 degrees
Maximum Width over Tires	3009 mm	3009 mm
Tread Width	2230 mm	2230 mm

- All dimensions are approximate and based on L3 XHA2 tires.

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)

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