

# Cat® 966M XE

Wheel Loader

The new 966M XE Wheel Loader has a U.S. EPA Tier 4 Final and EU Stage IV ACERT™ engine equipped with a combination of proven electronic, fuel, air and aftertreatment components. Applying proven technologies systematically and strategically lets us meet our customer's high expectations for productivity, fuel efficiency, reliability and service life. Deep system integration results in reduced emissions, improved performance and improved fuel economy without interrupting machine performance making it seamless to operators. The XE technology results in a 25% improvement in fuel efficiency over the M Series standard configuration.\*

The 966M XE Wheel Loader, with an advanced power train, has been designed to deliver superior performance and fuel efficiency while simplifying the operator's interface and operating technique. Aggregate Handler and other optional configurations are available.\*\*

## RELIABILITY, PRODUCTIVITY AND FUEL EFFICIENCY

- 25% more fuel efficient than M Series standard configuration\*
- 35% more fuel efficient than K Series standard configuration\*

## **Linkage and Work Tools**

- · Performance Series buckets and range of work tools
- Fusion™ « zero-offset » coupler (option)

#### **Engine and Aftertreatment Advancements**

- Cat® engine with ACERT Technology
- U.S. EPA Tier 4 Final and EU Stage IV emission standards
- Cat Clean Emissions Module (CEM) with Selective Catalytic Reduction and automatic Cat Regeneration System

#### **Transmission Advancements**

- Next generation integrated continuously variable transmission with multi-viscosity oil
- · Power train control independent of engine speed with energy recovery

#### **Axle Advancements**

- On-the-go disc-type front differential locks (front and rear fully automatic option)
- Caliper disc parking brake
- · Bevel gear shrouds

#### **Next Generation Hydraulic Systems**

- Next generation main valve
- Next generation ride control system with dual accumulators
- Next generation implement pump with increased displacement
- Full flow and kidney loop filtration
- · Load-sensing hydraulics with simultaneous hydraulic functions
- 3rd and 4th function (option)

## **EASE OF OPERATION**

## **Best-in-class Operator Environment**

- Optimized all-around visibility
- E-H joystick steering (steering wheel optional)
- Touch screen multifunction color display with integrated controls and rearview camera
- Stair-like ingress and egress
- New wider door and increased glass area
- Seat-mounted fingertip electro-hydraulic implement controls
- · Large convex rearview mirrors with integrated spot mirror
- Remote door opening (option)
- · Automatic climate control
- · Viscous cab mounts
- · Low operator sound levels
- · Simplified 2-pedal propulsion controls

#### **Advanced Technology with Cat Connect**

- Link technologies, like Product Link<sup>TM</sup> to monitor equipment and manage production using online VisionLink® software
- Payload technologies, like Cat Production Measurement (option) to measure payloads and optimize productivity
- Detect technologies, like the rear vision camera to keep people safe and help the operator work more productively

### **SERVICE ACCESS**

- · One-piece tilting hood with side and rear doors
- · Centralized service centers for hydraulic and electrical components
- · Windshield cleaning platform and harness tie-off



<sup>\*</sup>Fuel efficiency is measured in mass of material moved per volume of fuel burned. Average efficiency improvement as tested and analyzed for an average composite cycle and stand configuration with variations per comparable model with and without economy mode active.

Factors influence result variation such as, but not limited to, machine configuration, operator technique, machine application, climate, etc.

<sup>\*\*</sup>Optional configuration and equipment may vary from region to region. Consult your Caterpillar representative for further details.

# Cat® 966M XE Wheel Loader

Engine		
Engine Model	Cat C9.3 ACERT	
Maximum Net Power @ 1,600 rpm – SAE J1349	222 kW	298 hp
Maximum Net Power @ 1,600 rpm – SAE J1349 (metric)		302 hp
Maximum Net Power @ 1,600 rpm – ISO 9249	222 kW	298 hp
Maximum Net Power @ 1,600 rpm – ISO 9249 (metric)		302 hp
Peak Gross Torque (1,200 rpm) — SAE J1995	1728 N⋅m	1,275 lbf-ft
Peak Gross Torque (1,200 rpm) – ISO 14396	1708 N⋅m	1,260 lbf-ft
Maximum Net Torque (1,200 rpm)	1618 N·m	1,193 lbf-ft
Displacement	9.3 L	568 in <sup>3</sup>

## Weights

Operating Weight 23 220 kg 51,176 lb

• 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 m³ (5.5 yd3) general purpose bucket with BOCE.

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2.5-3.25-**Bucket Capacities** 9.2 m<sup>3</sup> 12.0 yd3

0	perating	j Speci	fications

Static Tipping Load – Full 37° Turn – with Tire Deflection	14 668 kg	32,329 lb
Static Tipping Load – Full 37° Turn – No Tire Deflection	15 822 kg	34,873 lb
Breakout Force	173 kN	38 984 lhf

- For a machine configuration as defined under "Weight."
- Full compliance to ISO 143971:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

Transmission – Virtual Gears				
Forward 1	6.7 km/h	4.1 mph		
Forward 2	12.6 km/h	7.7 mph		
Forward 3	22.1 km/h	13.5 mph		
Forward 4	39.5 km/h	24.5 mph		
Reverse 1	6.7 km/h	4.1 mph		
Reverse 2	12.6 km/h	7.7 mph		
Reverse 3	28.0 km/h	17.1 mph		
Maximum travel speed in standard vehicle with empty bucket and				

standard L3 tires with 826 mm (32.5 in) roll radius.

## **Hydraulic System**

Implement Pump Type	Variable Displacement Piston	
Implement System:		
Maximum Pump Output (1,600 rpm)	385 L/min 102 gal/min	
Maximum Operating Pressure	31 000 kPa 4,496 psi	
Hydraulic Cycle Time – Total	10.1 Seconds	

Service Refill Capacities				
Fuel Tank	313 L	82.7 gal		
DEF Tank	16.8 L	4.4 gal		
Cooling System	71.6 L	19 gal		
Crankcase	24.5 L	6.5 gal		
Transmission	63 L	16.6 gal		
Differentials and Final Drives – Front	57 L	15.1 gal		
Differentials and Final Drives – Rear	57 L	15.1 gal		
Hydraulic Tank	125 L	33 gal		

Sound

With Cooling Fan Speed at Maximum Value:	
Operator Sound Pressure Level (ISO 6396:2008)	67 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	107 dB(A)
Exterior Sound Pressure Level (SAE J88:2013)	76 dB(A)*

\*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

With Cooling Fan Speed at 70% of Maximum Value:\*\*

the "EU Directives."

Operator Sound Pressure Level (ISO 6396:2008) 67 dB(A) 105 L<sub>WA</sub>\*\*\* Exterior Sound Power Level (ISO 6395:2008)

- \*\*For machines in European Union countries and in countries that adopt
- \*\*\*European Union Directive "2000/14/EC" as amended by "2005/88/EC."

Dimensions				
	Standard Lift		High Lift	
Height to Top of Hood	2818 mm	9'3"	2818 mm	9'3"
Height to Top of Exhaust Pipe	3522 mm	11'7"	3522 mm	11'7"
Height to Top of ROPS	3587 mm	11'9"	3587 mm	11'9"
Ground Clearance	434 mm	1'5"	434 mm	1'5"
Center Line of Rear Axle to Edge of Counterweight	2180 mm	7'2"	2500 mm	8'2"
Center Line of Rear Axle to Hitch	1775 mm	5'10"	1775 mm	5'10"
Wheelbase	3550 mm	11'8"	3550 mm	11'8"
Overall Length (without bucket)	7289 mm	23'11"	8109 mm	26'7"
Hinge Pin Height at Maximum Lift	4235 mm	13'11"	4793 mm	15'9"
Hinge Pin Height at Carry	630 mm	2'1"	778 mm	2'7"
Lift Arm Clearance at Maximum Lift	3643 mm	11'11"	4140 mm	13'7"
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	9'10"	3009 mm	9'10"
Tread Width	2230 mm	7'4"	2230 mm	7'4"
• 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

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