

# **966M XE**

Wheel Loader

# **Technical Specifications**

Engine	
Engine Model	Cat® C9.3
Maximum Net Power (1,600 rpm)	
ISO 9249	222 kW (302 hp metric)
Peak Gross Torque (1,200 rpm)	
ISO 14396	1708 N·m
Maximum Net Torque (1,200 rpm)	
ISO 9249	1618 N·m
Bore	115 mm
Stroke	149 mm
Displacement	9.3 L

- Cat engine with ACERT™ Technology either EU Stage V or Stage IV\* emission standards.
  - \*Stage IV engines comply with the transition provisions of the EU nonroad emission regulation.
- The power ratings apply at the stated speed when tested under the reference conditions for the specified standards.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan running up to maximum speed, alternator, air cleaner and aftertreatment.

Buckets			
Bucket Capacities	3.20-7.40 m <sup>3</sup>		
Weight			
Operating Weight	23 220 kg		

• 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 general purpose bucket with BOCE.

Operating Specifications		
Static Tipping Load – Full 37° Turn		
With Tire Deflection	14 668 kg	
No Tire Deflection	15 822 kg	
Breakout Force	173 kN	

- For a machine configuration as defined under "Weight."
- Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

Brakes	
Brakes	Brakes meet
	ISO 3450:2011
	standards

<b>Transmission Virtual G</b>	ears
Forward 1	6.7 km/h
Forward 2	12.6 km/h
Forward 3	22.1 km/h
Forward 4	39.5 km/h
Reverse 1	6.7 km/h
Reverse 2	12.6 km/h
Reverse 3	28.0 km/h

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

Hydraulic System	
Implement Pump Type	Variable Displacement Piston
Implement System	
Maximum Pump Output (1,600 rpm*)	385 L/min
Maximum Operating Pressure	31 000 kPa
Maximum Flow – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function	240 L/min
Maximum Pressure – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function	21 780 kPa
Hydraulic Cycle Time with Rated Payload	
Raise from Carry Position	6.1 Sec.
Dump, at Maximum Raise	1.4 Sec.
Lower, Empty, Float Down	2.6 Sec.
Total	10.1 Sec.

<sup>\*</sup>Engine speed.



Axles			
Front	Fixed		
Rear	Oscillating ±13 degrees		
Maximum Single-Wheel Rise and Fall	502 mm		
Cab			
ROPS/FOPS	ROPS/FOPS meet		
	*** * * * * * * * * * * * * * * * * *		
	ISO 3471:2008 and		
	ISO 3471:2008 and ISO 3449:2005 Level II		

#### Sound

The sound values indicated below are for specific operating conditions only. Machine and operator sound levels will vary at different engine and/or cooling fan speeds. Hearing protection may be needed when the machine is operated with a cabin that is not properly maintained, or when the doors and/or windows are open for extended periods or in a noisy environment.

Operator Sound Pressure Level (ISO 6396:2008)	67 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	105 L <sub>WA</sub> *
European Union Directive "2000/14/EC" as	
amended by "2005/88/EC"	

<sup>\*</sup>For a standard machine configuration, measured according to the procedures specified with the cooling fan speed set at 70% of maximum value.

Service Refill Capacities	
Fuel Tank	302 L
DEF Tank*	16.8 L
Cooling System	71.6 L
Crankcase	24.5 L
Transmission	63 L
Differentials and Final Drives – Front	57 L
Differentials and Final Drives – Rear	57 L
Hydraulic Tank	125 L

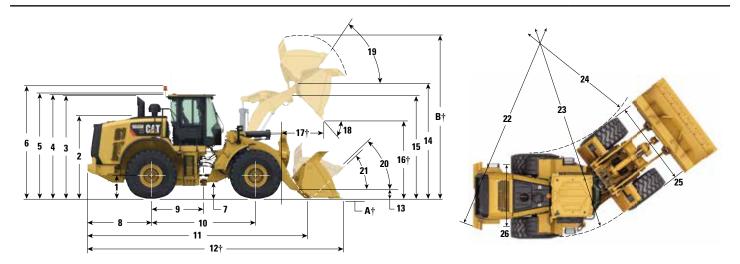
<sup>\*</sup>DEF must meet the requirements outlined in ISO 22241-1.

#### **Air Conditioning System**

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant which has a  $\rm CO_2$  equivalent 2.288 metric tonne.

#### **Dimensions**

All dimensions are approximate.



		Standard Lift	High Lift
1	Height to Axle Centerline	799 mm	799 mm
2	Height to Top of Hood	2818 mm	2818 mm
3	Height to Top of Exhaust Pipe	3522 mm	3522 mm
4	Height to Top of ROPS	3587 mm	3587 mm
5	Height to Top of Product Link Antenna	3636 mm	3636 mm
6	Height to Top of Warning Beacon	3859 mm	3859 mm
7	Ground Clearance	434 mm	434 mm
8	Center Line of Rear Axle to Edge of Counterweight	2180 mm	2500 mm
9	Center Line of Rear Axle to Hitch	1775 mm	1775 mm
10	Wheelbase	3550 mm	3550 mm
11	Overall Length (without bucket)	7289 mm	8109 mm
12	Shipping Length (with bucket level on ground)*†	8750 mm	9570 mm
13	Hinge Pin Height at Carry Height	630 mm	778 mm
14	Hinge Pin Height at Maximum Lift	4235 mm	4793 mm
15	Lift Arm Clearance at Maximum Lift	3643 mm	4140 mm
16	Dump Clearance at Maximum Lift and 45° Discharge*†	2991 mm	3549 mm
17	Reach at Maximum Lift and 45° Discharge*†	1353 mm	1328 mm
18	Dump Angle at Maximum Lift and Dump (on stops)*	49 degrees	48 degrees
19	Rack Back at Maximum Lift*	62 degrees	71 degrees
20	Rack Back at Carry Height*	50 degrees	49 degrees
21	Rack Back at Ground*	42 degrees	39 degrees
22	Clearance Circle (radius) to Counterweight	6804 mm	6804 mm
23	Clearance Circle (radius) to Outside of Tires	6761 mm	6761 mm
24	Clearance Circle (radius) to Inside of Tires	3853 mm	3853 mm
25	Max Width over Tires (unloaded)	2991 mm	2991 mm
	Max Width over Tires (loaded)	3009 mm	3009 mm
26	Tread Width	2230 mm	2230 mm

<sup>\*</sup>Standard and High Lift are with 4.2 m³ general purpose pin-on bucket with BOCE (see Operating Specifications for other buckets). †Dimensions are listed in Operating Specification charts.

All height and tire related dimensions are with Michelin 26.5R25 XHA2 L3 tires (see Dimension changes – Tires Chart for other tires).

#### **Dimension Changes – Tires**

Tire Brand	Michelin	Michelin	Michelin	Bridgestone	Bridgestone
Tire Size	26.5R25	26.5R25	26.5R25	26.5R25	26.5R25
Tread Type	L-4	L-5	L-5	L-3	L-4
Tread Pattern	XLDD1	XLDD2	XMINED2	VJT	VSNT
Width over Tires – Maximum (empty)*	2987 mm	2986 mm	2970 mm	2982 mm	2973 mm
Width over Tires – Maximum (loaded)*	3019 mm	3015 mm	2998 mm	3016 mm	2993 mm
Change in Vertical Dimensions (average of front and rear)	44 mm	39 mm	53 mm	15 mm	25 mm
Change in Horizontal Reach	-36 mm	−34 mm	−32 mm	−3 mm	-24 mm
Change in Clearance Circle (radius) to Outside of Tires	5 mm	1 mm	−7 mm	3 mm	–8 mm
Change in Clearance Circle (radius) to Inside of Tires	−5 mm	−1 mm	7 mm	−3 mm	8 mm
Change in Operating Weight (without Ballast)	420 kg	716 kg	1068 kg	164 kg	624 kg
Change in Static Tipping Load – Straight	303 kg	517 kg	771 kg	118 kg	451 kg
Change in Static Tipping Load – Articulated	271 kg	461 kg	688 kg	106 kg	402 kg

Tire Brand	Bridgestone	Bridgestone	Flexport	Flexport
Tire Size	26.5R25	775/65R29	70×14×28 (26.5×25)	70×14×28 (26.5×25)
Tread Type	L-5	L-3	_	_
Tread Pattern	VSDL	VTS	OTR	SMOOTH
Width over Tires – Maximum (empty)*	2874 mm	3080 mm	2955 mm	2896 mm
Width over Tires – Maximum (loaded)*	2900 mm	3101 mm	2972 mm	2915 mm
Change in Vertical Dimensions (average of front and rear)	50 mm	17 mm	59 mm	52 mm
Change in Horizontal Reach	–29 mm	−5 mm	-23 mm	−13 mm
Change in Clearance Circle (radius) to Outside of Tires	−54 mm	46 mm	−19 mm	−47 mm
Change in Clearance Circle (radius) to Inside of Tires	54 mm	–46 mm	19 mm	47 mm
Change in Operating Weight (without Ballast)	1136 kg	856 kg	3287 kg	3764 kg
Change in Static Tipping Load – Straight	821 kg	618 kg	2375 kg	2719 kg
Change in Static Tipping Load – Articulated	732 kg	551 kg	2118 kg	2425 kg

 $<sup>\</sup>hbox{$^*$Width over bulge and includes tire growth.}\\$ 

**Note:** Changes compared to:

<sup>-</sup> With Michelin 26.5R25 XHA2 L3 radial tires.

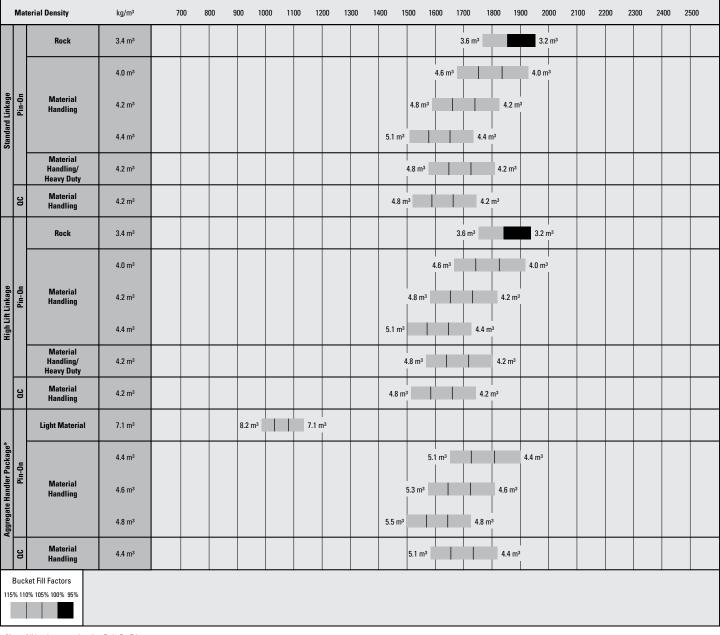
#### **Bucket Fill Factors and Selection Chart**

The bucket size must be chosen based on the density of the material and on the expected fill factor. The new Cat Performance Series Buckets with longer floor, larger bucket opening, increased repository angle, rounded side boards and integrated spill guard, demonstrate fill factors significantly higher than previous generation or non Cat buckets. The actual volume handled by the machine is thus often larger than the rated capacity.

Loose Material		Material Density	Fill Factor (%)*
Earth/Clay		1500-1700 kg/m³	115
Sand and Gravel		1500-1700 kg/m³	115
Aggregate:	25-76 mm (1 to 3 in)	1600-1700 kg/m³	110
	19 mm (0.75 in) and smaller	1800 kg/m³	105
Rock:	76 mm (3 in) and larger	1600 kg/m³	100

<sup>\*</sup>As a % of ISO 7546 rated capacity.

Note: Fill Factors achieved will also depend on whether the product is washed or not washed.



Note: All buckets are showing Bolt-On Edges.

QC = Quick Coupler

<sup>\*</sup>Not for use with L5 Tires, Teeth or Teeth and Segments.

#### **Operating Specifications with Buckets**

Machine		Standard Linkage						High Lift
Pin/Quick Coupler		Fusion™ Universa Pin-On QC QC						Linkage Change**
Bucket Type			terial Idling		Handling / Duty	Material Handling	Material Handling	
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	FMT	Bolt-On Cutting Edges	Bolt-On Cutting Edges	
Capacity – Rated	m <sup>3</sup>	4.20	4.20	4.20	4.20	4.20	4.20	_
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	4.62	4.62	4.62	4.62	4.62	3.80	_
Width	mm	3220	3271	3220	3201	3220	3220	_
<b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge	mm	2949	2787	2949	3001	2899	2787	559
17† Reach at Maximum Lift and 45° Discharge	mm	1245	1372	1245	1236	1296	1498	-25
Reach at Level Lift Arm and Bucket Level	mm	2774	2978	2774	2731	2845	3067	404
A† Digging Depth	mm	124	124	124	94	124	60	-25
12† Shipping Length (with Bucket)	mm	8721	8946	8721	8653	8792	8961	825
B† Overall Height with Bucket at Maximum Lift	mm	5901	5901	5901	5940	5943	6134	559
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7504	7589	7504	7473	7519	7561	242
Static Tipping Load, Straight (With Tire Deflection)*	kg	16 580	16 398	16 465	16 155	15 919	14 950	55
Static Tipping Load, Straight (No Tire Deflection)*	kg	17 731	17 546	17 615	17 312	17 052	16 058	-32
Static Tipping Load, Articulated (With Tire Deflection)*	kg	14 605	14 421	14 489	14 162	13 969	13 078	-128
Static Tipping Load, Articulated (No Tire Deflection)*	kg	15 740	15 555	15 623	15 307	15 091	14 177	-187
Breakout Force***	kN	177	175	176	180	167	141	-15
Operating Weight*	kg	23 217	23 355	23 336	23 706	23 678	23 889	1612

<sup>\*</sup>Static tipping loads and operating weights are 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 and sound suppression.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

(With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

FMT = Flush Mounted Teeth

QC = Quick Coupler

Additional buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

<sup>\*\*</sup>Maximum values.

<sup>\*\*\*</sup>Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

#### **Operating Specifications with Buckets**

Machine		Standard Linkage						High Lift
Pin/Quick Coupler		Pin-On						<ul><li>Linkage</li><li>Change**</li></ul>
Bucket Type			Material Handling (Roading)		Material Handling		Rock (V-Edge)	
Edge Type		Bolt-On Cutting Edges	FMT	Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments	
Capacity – Rated	$m^3$	4.20	4.20	4.40	4.40	3.40	3.40	_
Capacity – Rated at 110% Fill Factor	$m^3$	3.70	3.56	4.84	4.84	3.74	3.74	_
Width	mm	2995	3000	3220	3271	3252	3252	_
<b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge	mm	2969	3020	2921	2758	3124	3026	559
17† Reach at Maximum Lift and 45° Discharge	mm	1406	1393	1274	1401	1419	1541	-25
Reach at Level Lift Arm and Bucket Level	mm	2854	2811	2814	3018	2783	2939	405
A† Digging Depth	mm	124	94	124	124	68	68	-25
12† Shipping Length (with Bucket)	mm	8801	8733	8761	8986	8715	8876	829
<b>B</b> † Overall Height with Bucket at Maximum Lift	mm	5939	5939	5931	5931	5845	5845	559
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7421	7401	7514	7600	7529	7572	242/235
Static Tipping Load, Straight (With Tire Deflection)*	kg	16 858	16 957	16 501	16 318	17 075	17 006	-62/58
Static Tipping Load, Straight (No Tire Deflection)*	kg	18 022	18 129	17 657	17 471	18 262	18 191	-145/-7
Static Tipping Load, Articulated (With Tire Deflection)*	kg	14 889	14 979	14 527	14 343	15 033	14 963	-220/-111
Static Tipping Load, Articulated (No Tire Deflection)*	kg	16 034	16 132	15 668	15 481	16 204	16 133	-288/-163
Breakout Force***	kN	168	173	171	170	186	185	-15
Operating Weight*	kg	22 848	22 833	23 270	23 408	24 007	24 059	1612

<sup>\*</sup>Static tipping loads and operating weights are 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 and sound suppression.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

(With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

FMT = Flush Mounted Teeth

Additional buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

<sup>\*\*</sup>Maximum values (Rock/Other Buckets).

<sup>\*\*\*</sup>Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

#### **Operating Specifications with Buckets – Aggregate Handler**

Machine				Aggregate	Handler***		
Pin/Quick Coupler			Pin	-On		Fusion QC	Universal QC
Bucket Type			Material Handling		Light Material	Material Handling	Material Handling
Edge Type		Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges
Capacity – Rated	m <sup>3</sup>	4.40	4.60	4.80	7.10	4.40	4.40
Capacity – Rated at 110% Fill Factor	$m^3$	4.84	5.06	5.28	7.81	4.84	4.00
Width	mm	3220	3220	3220	3447	3220	3220
<b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge	mm	2921	2893	2865	2625	2872	2841
17† Reach at Maximum Lift and 45° Discharge	mm	1274	1302	1330	1548	1323	1622
Reach at Level Lift Arm and Bucket Level	mm	2814	2854	2894	3217	2884	3104
A† Digging Depth	mm	124	124	124	140	124	60
12† Shipping Length (with Bucket)	mm	8809	8849	8889	9224	8879	9046
<b>B</b> † Overall Height with Bucket at Maximum Lift	mm	5931	5982	6023	6071	5973	6183
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7514	7524	7534	7728	7529	7571
Static Tipping Load, Straight (With Tire Deflection)*	kg	18 077	18 013	17 938	17 508	17 397	16 505
Static Tipping Load, Straight (No Tire Deflection)*	kg	19 386	19 329	19 260	18 881	18 687	17 789
Static Tipping Load, Articulated (With Tire Deflection)*	kg	15 861	15 799	15 726	15 301	15 209	14 390
Static Tipping Load, Articulated (No Tire Deflection)*	kg	17 158	17 103	17 036	16 663	16 492	15 670
Breakout Force**	kN	171	166	161	129	162	138
Operating Weight*	kg	23 965	24 000	24 046	24 223	24 427	24 592

<sup>\*</sup>Static tipping loads and operating weights are based on a machine configuration with Michelin 26.5R25 XHA2 L3 radial tires, full fluids, operator, aggregate counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering and sound suppression. If a rock bucket is added, those values are with Michelin 26.5R25 XLDD2 L5 tires.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

(With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

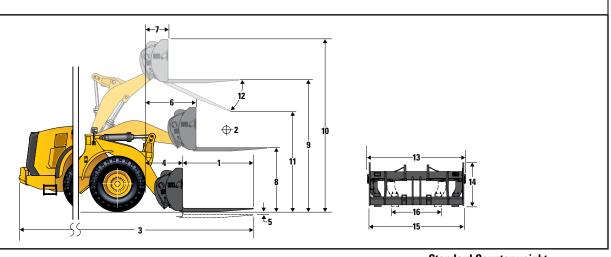
QC = Quick Coupler

Additional buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

<sup>\*\*</sup>Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

<sup>\*\*\*</sup>Aggregate Handler Configurations are NOT compatible with L5 Tires, Teeth, Teeth and Segments, and Spade Nose Rock Bucket.

#### **Operating Specifications with Pallet Fork**



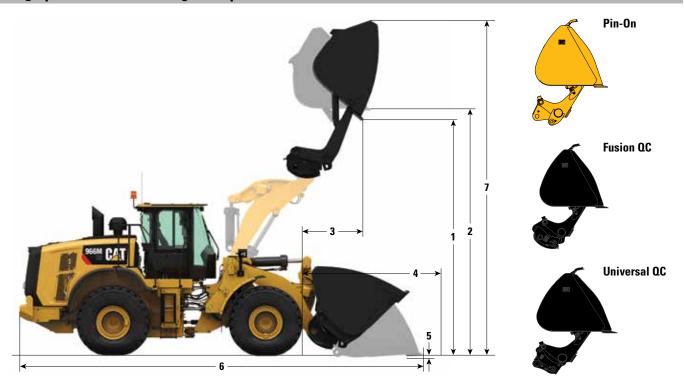
		Standard Counterweight
Interface		Fusion QC
1 Tine Length	mm	1829
2 Load Center	mm	915
3 Maximum Overall Length	mm	9531
4 Reach with Forks at Ground Level	mm	1106
5 Ground to Top of Tine at Minimum Height and Fork Level	mm	-11
6 Reach with Arms Horizontal and Forks Level	mm	1704
7 Reach with Fork at Maximum Height	mm	836
8 Ground to Top of Tine with Arms Horizontal and Fork Level	mm	1955
9 Ground to Top of Tine at Maximum Height and Fork Level	mm	4039
10 Overall Height of Fork at Full Lift (Top of Carriage to Ground)	mm	5079
11 Clearance at Full Lift and Maximum Dump	mm	2292
12 Maximum Discharge Angle from Horizontal	degrees	51
13 Overall Carriage Width	mm	2528
14 Overall Carriage Height	mm	1130
15 Outside Tine Width (Maximum Spread)	mm	2178
16 Outside Tine Width (Minimum Spread)	mm	576
Tine Width (Single Tine)	mm	180.0
Tine Thickness	mm	90.0
Tine Capacity	kg	14 800
Static Tipping Load – Straight (Forks Level)*	kg	11 345
Static Tipping Load – Articulated (Forks Level)*	kg	10 013
Rated Load (SAE J1197 – 50% FTSTL)**	kg	5007
Rated Load (CEN EN 474-3 Rough Terrain – 60% FTSTL)**	kg	6008
Rated Load (CEN EN 474-3 Firm and Level Ground – 80% FTSTL)**	kg	7807
Operating Weight*	kg	22 683

<sup>\*</sup>Static tipping loads and operating weights are based on L3 Michelin XHA tires, air conditioning, ride control, power train guard, full fluids, fuel tank, coolant, lubricants, and operator.

<sup>\*\*</sup>The rated operating load for a loader equipped with a pallet fork is determined by: SAE J1197: 50% of full turn static tipping load or hydraulic limit. CEN EN 474-3: 60% of full turn static tipping load on rough terrain or hydraulic limit. CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit. SAE – Society of Automotive Engineers. CEN – European Committee for Standardization. Refer to the Forks Product Bulletins for capacity load charts.

Additional forks are available and offerings vary by region. Consult your local Cat dealer for further details.

#### **Operating Specifications with High Dump Buckets**



Interface		Pin-On	Fusion QC	Universal QC
Edge Type		Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges
Capacity – Rated	m³	11.10	11.10	11.10
Capacity – Rated at 110% Fill Factor	m³	12.20	12.20	12.20
Width	mm	3656	3656	3656
Nominal Material Density – 110% Fill Factor	kg/m³	630	610	570
1 Dump Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge	mm	4680	4698	4861
2 Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to Level	mm	5348	5366	5529
3 Reach at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge	mm	1885	1894	1982
4 Reach at Level Lift Arm and Bucket Level	mm	3828	3848	4033
5 Digging Depth	mm	94	94	94
6 Overall Length	mm	9823	9843	10 028
7 Overall Height with Bucket at Maximum Height and Maximum Rack	mm	7483	7500	7663
Clearance Circle (Radius) with Bucket at Carry Position	mm	8023	7994	8049
Static Tipping Load, Straight (With Tire Deflection)*	kg	15 420	14 969	14 157
Static Tipping Load, Straight (No Tire Deflection)*	kg	16 762	16 300	15 441
Static Tipping Load, Articulated (With Tire Deflection)*	kg	13 288	12 845	12 106
Static Tipping Load, Articulated (No Tire Deflection)*	kg	14 645	14 191	13 407
Breakout Force	kN	93	92	82
Operating Weight*	kg	25 442	25 926	26 085

<sup>\*</sup>Static tipping loads and operating weights are based on a machine configuration with Michelin 23.5R25 XHA2 L3 radial tires, full fluids, operator, auxiliary counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering and sound suppression. (With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing. (No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

Additional high dump buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

#### **Standard and Optional Equipment**

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

	Standard	Optional
POWER TRAIN		
Axles, ecology drains	✓	
Axles, manually actuated differential lock front axle, open differential rear axle	✓	
Axles: automatic front/rear differential locks, axle oil cooler, extreme temperature seals, seal guards		✓
Brake wear indicators	✓	
Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS)	✓	
Cat Clean Emissions Module (CEM) with Diesel Exhaust Fluid (DEF) tank and pump	✓	
Cat continuously variable transmission	✓	
Engine, Cat C9.3 – meets Stage V or Stage IV emission standards	✓	
Fan, radiator, on demand	✓	
Fan, VPF (variable pitch fan), automatic and manual control		✓
Fuel priming pump (electric)	✓	
Fuel/water separator	✓	
Parking brake, disc and caliper	✓	
Precleaner, engine air intake	✓	
Radiator, high debris with wider fin spacing		✓
Right pedal lock, maximum rimpull control and machine speed limiter in the cab	✓	
CAT® CONNECT TECHNOLOGIES		
Detect technologies: Rear vision camera Cat rear object detection	✓	<b>√</b>
Link technologies: Product Link VIMS <sup>TM</sup>	✓	./
Payload technologies: Cat Production Measurement 2.0 (CPM), Printer, Cat Production Measurement, Aggregate Autodig		V
Advanced Productivity subscription		<b>√</b>
Machine security system		✓

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	Standard	Optional
OPERATOR ENVIRONMENT		
Air conditioner, heater, and defroster (auto temp and fan)	✓	
Beverage holders (2) with storage compartment for cell phone/MP3 player	✓	
Bucket/work tool function lockout	✓	
Cab air filter	✓	
Cab, pressurized and sound suppressed (ROPS/FOPS)	✓	
Cab tie-off	✓	
Cat seat cover, removable		✓
Coat hook (2)	✓	
Cover, HVAC metallic		✓
Door, remote opening system		✓
EH controls, SAL (single axis lever) lift and tilt function	✓	
EH controls, joystick lift and tilt:  – Additional integrated roller switches for 3 <sup>rd</sup> and 4 <sup>th</sup> functions		✓
EH controls, SAL 3 <sup>rd</sup> function:  – Additional roller switch for 4 <sup>th</sup> function		✓
EH parking brake	✓	
Ergonomic cab access ladders and handrails	✓	
Filter, carbon fresh air		✓
Horn, electric	✓	
Light, two dome (cab)	✓	
Mirrors, heated rearview external with integrated spot mirrors		✓
Mirrors, rearview external with integrated spot mirrors	✓	
Multi-function 18 cm color touchscreen display for rear vision camera, clock and machine parameters	✓	
Post mounted membrane 16 switch keypad	✓	
Precleaner, HVAC		✓
Precleaner, HVAC (RESPA)		✓
Radio, AM/FM, Bluetooth®, CD/USB/ MP3/Sirius XM, CB ready		<b>√</b>
Radio ready (entertainment) includes antenna, speakers and converter (12V, 10-amp)	✓	
Receptacles (2), 12V	✓	

(continued on next page)

# 966M XE Wheel Loader Standard and Optional Equipment

#### Standard and Optional Equipment (continued)

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

	Standard	Optional
OPERATOR ENVIRONMENT (continued)		
Roof, metallic		✓
Seat, cloth, air suspension	✓	
Seat, suede/cloth, air suspension, heated		✓
Seat, leather/cloth, air suspension, heated/cooled		✓
Seat belt, 51 mm retractable, with indicator	✓	
Seat belt, 4-point harness, with indicator		✓
Steering, EH joystick, speed sensing with force feedback	✓	
Sun visor, front	✓	
Sun visor, rear		✓
Viscous mounts	✓	
Wet-arm wipers/washers front and rear, intermittent front wiper	✓	
Windows, rubber mounted		✓
Window, sliding (left and right sides)	✓	
Windows, with front guard		✓
Windows, with heavy duty front guard		✓
Windows, with full guards front, rear and sides		✓
ELECTRICAL AND LIGHTING		
Alarm, back-up	✓	
Alternator, 145-amp brushed	✓	
Batteries (2), maintenance free 1,400 CCA	✓	
Emergency engine shutdown switch	✓	
External seat belt indicator light		✓
Ignition key: start/stop switch	✓	
Lighting system: four halogen work lights (cab-mounted), two halogen roading lights (with signals), two halogen rear vision lights (hood-mounted), two rear LED position/stop/turn	<b>✓</b>	
Work lights, four additional halogen cab-mounted or;		✓
Work lights, two additional auxiliary front HI LED and two additional auxiliary rear LED cab-mounted, two LED work lights in the radiator grill, LED front turn signals, replacement of the standard four halogen cab-mounted work lights with four LED work lights, LED roading lights		<b>V</b>

		0
	Standard	Optional
ELECTRICAL AND LIGHTING (continued)	,	
Main disconnect switch	<b>√</b>	
Receptacle start (cables not included)	✓	
Reversing strobes		<b>√</b>
Secondary steering	✓	
Speed limiter, adjustable	✓	
Speed limiter – 20 km/h		✓
Starter, electric, heavy duty	✓	
Starting and charging system (24V)	✓	
FLUIDS		
Bio-degradable oil, Cat HYDO™		✓
Premixed extended life coolant with freeze protection to -34°C	✓	
Premixed extended life coolant with freeze protection to -50°C		✓
HYDRAULICS		
Couplings, Cat O-ring face seal	✓	
Hoses, Cat XT <sup>TM</sup>	✓	
Hydraulic oil cooler (swing-out)	✓	
Hydraulic system, load sensing	✓	
Oil sampling valves	✓	
3 <sup>rd</sup> function with Ride Control		✓
4th function with Ride Control		✓
Remote diagnostic pressure taps	✓	
Ride control, 2V	<b>√</b>	
Steering, load sensing	✓	
LINKAGE		
Forestry		<b>√</b>
High lift		<b>√</b>
Kickout, lift and tilt, automatic	<b>✓</b>	
Quick coupler ready		<b>√</b>
Z-bar, cast crosstube/tilt lever	<b>✓</b>	
STARTERS, BATTERIES, AND ALTERNATORS		
Cold start – 240V		<b>√</b>
WORK TOOLS		
Forks, logging		<b>√</b>
Forks, pallet		·
Fusion quick coupler		· /
Performance Series buckets		
renormance Series buckets		<b>v</b>

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# 966M XE Wheel Loader Standard and Optional Equipment

#### Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
COMPUTERIZED MONITORING SYSTEM			OTHER STANDARD AND OPTIONAL EQUIPME	NT	
With following gauges:	✓		Auto idle shutdown	✓	
Speedometer/tachometer			Cat Autolube System		✓
Digital gear range indicator Diesel Exhaust Fluid (DEF) level Temperature: engine coolant, hydraulic			Ecology drains for engine, transmission, and hydraulics	✓	
oil, transmission oil			Ether aid ready	✓	
Fuel level			Fenders, steel front with mud-flap/rear	✓	
With following warning indicators:	✓		with extension		
Regeneration			Fenders, roading		✓
Temperature: axle oil, engine intake manifold Pressure: engine oil, fuel pressure			Filters: fuel, engine air, engine oil, hydraulic oil, transmission	✓	
hi/low, primary steering oil, service			Fuel cooler	✓	
brake oil			Grease zerks	✓	
Battery voltage hi/low			Grill, airborne debris	✓	
Engine air filter restriction Hydraulic oil filter restriction Hydraulic oil low			Guard, power train		✓
			Guard, rear radiator grill		✓
Parking brake			Hitch, drawbar with pin	✓	
DEF low level			Hood, non-metallic power tilting	✓	
Transmission filter bypass			Oil change, high-speed engine		✓
			Platform, window washing	✓	
			Precleaner, turbine		✓
			Precleaner, trash		✓
			Precleaner rain cap	✓	
			Service centers (electrical and hydraulic)	✓	
			Sight gauges: engine coolant, hydraulic oil, and transmission oil level	✓	
			Toolbox	✓	
			Vandalism protection caplocks	✓	
			Wheel chocks		✓
			OTHER CONFIGURATIONS		
			Aggregate handler		✓
			Industrial and waste handler		✓

Forestry

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

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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