



# 966M

## Wheel Loader

# Technical Specifications

### Engine – (Tier 3/Stage IIIA equivalent)<sup>1</sup>

Engine Model	Cat® C9.3	
Maximum Power @ 1,800 rpm		
SAE J1995	230 kW	308 hp
Maximum Power @ 1,800 rpm		
ISO 14396	227 kW	304 hp
Maximum Net Power @ 1,700 rpm		
SAE J1349	207 kW	278 hp
Maximum Net Power @ 1,700 rpm		
ISO 9249	207 kW	278 hp
Peak Gross Torque (1,200 rpm)		
SAE J1995	1600 N·m	1,180 lbf-ft
Peak Gross Torque (1,200 rpm)		
ISO 14396	1581 N·m	1,166 lbf-ft
Maximum Net Torque (1,000 rpm)	1507 N·m	1,112 lbf-ft
Displacement	9.3 L	568 in <sup>3</sup>

<sup>1</sup> Meets Brazil MAR-1, UN ECE R96 Stage IIIA, and China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.

### Buckets

Bucket Capacities	3.20-7.40 m <sup>3</sup>	4.19-9.68 yd <sup>3</sup>
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### Weight

Operating Weight	23 220 kg	51,176 lb
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- 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> (5.5 yd<sup>3</sup>) general purpose bucket with BOCE

### Operating Specifications

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

- 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.

### Engine – (Tier 4 Final/Stage V)<sup>2</sup>

Engine Model	Cat C9.3	
Maximum Power @ 1,800 rpm		
SAE J1995	232 kW	311 hp
Maximum Power @ 1,800 rpm		
ISO 14396	229 kW	307 hp
Maximum Net Power @ 1,700 rpm		
SAE J1349	206 kW	276 hp
Maximum Net Power @ 1,700 rpm		
ISO 9249	206 kW	276 hp
Peak Gross Torque (1,200 rpm)		
SAE J1995	1599 N·m	1,179 lbf-ft
Peak Gross Torque (1,200 rpm)		
ISO 14396	1581 N·m	1,166 lbf-ft
Maximum Net Torque (1,000 rpm)	1527 N·m	1,126 lbf-ft
Displacement	9.3 L	568 in <sup>3</sup>

<sup>2</sup> Meets U.S. EPA Tier 4 Final, either EU Stage V or EU Stage IV\*, Japan 2014, and Korea Tier 4 Final emission standards.

- \* Stage IV engines comply with the transition provisions of the EU nonroad emission regulation
- 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 CO<sub>2</sub> equivalent of 2.288 metric tonnes.

### Transmission

Forward 1	6.5 km/h	4.0 mph
Forward 2	13.0 km/h	8.1 mph
Forward 3	23.5 km/h	14.6 mph
Forward 4	39.5 km/h	24.5 mph
Reverse 1	7.1 km/h	4.4 mph
Reverse 2	14.4 km/h	8.9 mph
Reverse 3	25.9 km/h	16.1 mph
Reverse 4	39.5 km/h	24.5 mph

- Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm (32.5 in) roll radius.



# 966M Wheel Loader Specifications

## Brakes

Brakes	Brakes meet ISO 3450:2011 standards
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## Hydraulic System

Implement Pump Type	Variable Displacement Piston
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### Implement System

Maximum Pump Output (2,200 rpm)	360 L/min	95 gal/min
Maximum Operating Pressure	31 000 kPa	4,496 psi
Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function Maximum Flow	240 L/min	63 gal/min
Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function Maximum Pressure	21 780 kPa	3,159 psi

### 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.

## Axles

Front	Fixed
Rear	Oscillating ±13 degrees
Maximum Single-Wheel Rise and Fall	502 mm      19.5 in

## Cab

ROPS/FOPS	ROPS/FOPS meet ISO 3471:2008 and ISO 3449:2005 Level II standards
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## 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.

### With Cooling Fan Speed at Maximum Value:

Operator Sound Pressure Level (ISO 6396:2008)	70 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 (49.2 ft), 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	108 L <sub>WA</sub> ***

\*\*For machines in European Union countries and in countries that adopt the “EU Directives.”

\*\*\*European Union Directive “2000/14/EC” as amended by “2005/88/EC.”

## Service Refill Capacities

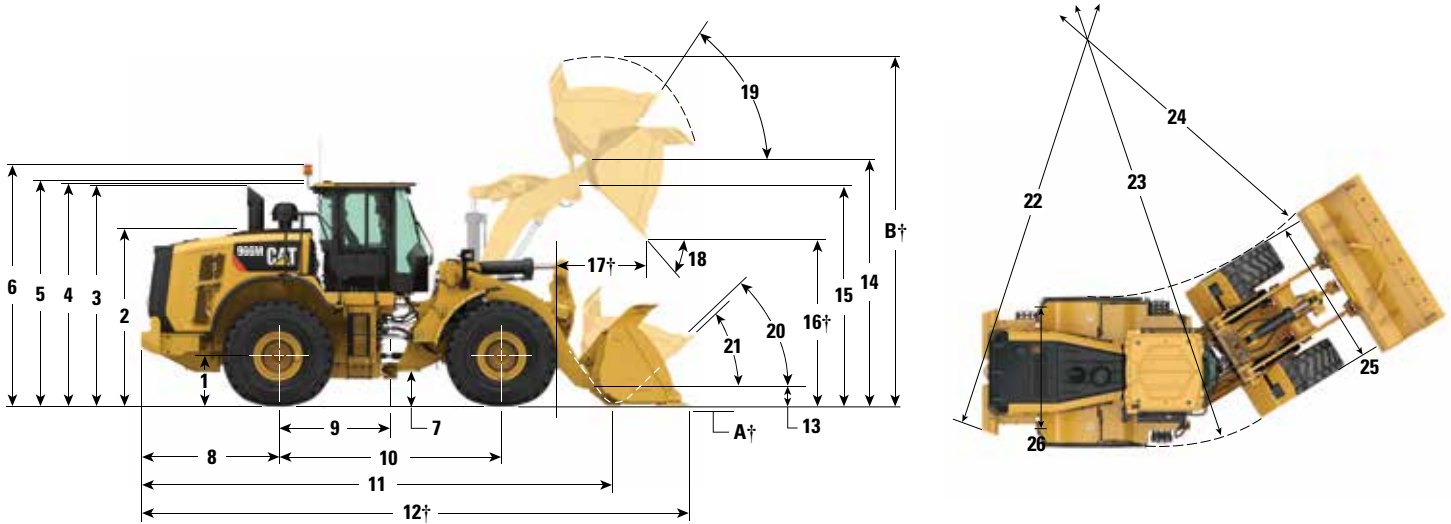
Fuel Tank	302 L	79.8 gal
DEF Tank*	16.8 L	4.4 gal
Cooling System	71.6 L	18.9 gal
Crankcase	24.5 L	6.5 gal
Transmission	58.5 L	15.5 gal
Differentials and Final Drives – Front	57 L	15.1 gal
Differentials and Final Drives – Rear	57 L	15.1 gal
Hydraulic Tank	125 L	33 gal

\*Must meet the requirements outlined in ISO 22241-1 for Tier 4 Final/Stage V models.

# 966M Wheel Loader Specifications

## Dimensions

All dimensions are approximate.



	Standard Lift		High Lift	
1 Height to Axle Centerline	799 mm	2'7"	799 mm	2'7"
2 Height to Top of Hood	2818 mm	9'3"	2818 mm	9'3"
3 Height to Top of Exhaust Pipe	3522 mm	11'7"	3522 mm	11'7"
4 Height to Top of ROPS	3587 mm	11'9"	3587 mm	11'9"
5 Height to Top of Product Link Antenna	3636 mm	11'11"	3636 mm	11'11"
6 Height to Top of Warning Beacon	3859 mm	12'8"	3859 mm	12'8"
7 Ground Clearance	434 mm	1'5"	434 mm	1'5"
8 Center Line of Rear Axle to Edge of Counterweight	2180 mm	7'2"	2500 mm	8'2"
9 Center Line of Rear Axle to Hitch	1775 mm	5'10"	1775 mm	5'10"
10 Wheelbase	3550 mm	11'8"	3550 mm	11'8"
11 Overall Length (without bucket)	7289 mm	23'11"	8109 mm	26'8"
12 Shipping Length (with bucket level on ground)*†	8750 mm	28'9"	9570 mm	31'5"
13 Hinge Pin Height at Carry Height	630 mm	2'1"	778 mm	2'7"
14 Hinge Pin Height at Maximum Lift	4235 mm	13'11"	4793 mm	15'9"
15 Lift Arm Clearance at Maximum Lift	3643 mm	11'11"	4140 mm	13'6"
16 Dump Clearance at Maximum Lift and 45° Discharge*†	2991 mm	9'9"	3549 mm	11'7"
17 Reach at Maximum Lift and 45° Discharge*†	1353 mm	4'5"	1328 mm	4'4"
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 (diameter) to Counterweight	13 608 mm	44'8"	13 608 mm	44'8"
23 Clearance Circle (diameter) to Outside of Tires	13 522 mm	44'5"	13 522 mm	44'5"
24 Clearance Circle (diameter) to Inside of Tires	7706 mm	25'4"	7706 mm	25'4"
25 Width over Tires (unloaded)	2991 mm	9'10"	2991 mm	9'10"
26 Tread Width	2230 mm	7'4"	2230 mm	7'4"

\*With 4.2 m<sup>3</sup> (5.5 yd<sup>3</sup>) 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 Tire Option Chart for other tires).

# 966M Wheel Loader Specifications

## Dimension Changes – Tires

Tire Brand	Michelin	Michelin	Michelin	Bridgestone	Bridgestone	Bridgestone
Tire Size	26.5R25	26.5R25	26.5R25	26.5R25	26.5R25	775/65R29
Tread Type	L-4	L-5	L-5	L-3	L-5	L-3
Tread Pattern	XLDD1	XLDD2	XMINED2	VJT	VSDL	VTS
Width over Tires – Maximum (empty)*	2987 mm 9'10"	2986 mm 9'10"	2970 mm 9'9"	2982 mm 9'9"	2874 mm 9'5"	3080 mm 10'1"
Width over Tires – Maximum (loaded)*	3019 mm 9'11"	3011 mm 9'11"	2994 mm 9'10"	3016 mm 9'11"	2900 mm 9'6"	3101 mm 10'2"
Change in Vertical Dimensions (average of front and rear)	44 mm 1.7"	39 mm 1.5"	53 mm 2.1"	15 mm 0.6"	50 mm 2"	17 mm 0.7"
Change in Horizontal Reach	-36 mm -1.4"	-34 mm -1.3"	-32 mm -1.3"	-3 mm -0.1"	-29 mm -1.1"	-5 mm -0.2"
Change in Clearance Circle (radius) to Outside of Tires	5 mm 0.2"	1 mm 0"	-7 mm -0.3"	3 mm 0.1"	-54 mm -2.1"	46 mm 1.8"
Change in Clearance Circle (radius) to Inside of Tires	-5 mm -0.2"	-1 mm 0"	7 mm 0.3"	-3 mm -0.1"	54 mm 2.1"	-46 mm -1.8"
Change in Operating Weight (without Ballast)	420 kg 926 lb	716 kg 1,578 lb	1068 kg 2,354 lb	164 kg 361 lb	1136 kg 2,504 lb	856 kg 1,886 lb
Change in Static Tipping Load – Straight	303 kg 669 lb	517 kg 1,140 lb	771 kg 1,700 lb	118 kg 261 lb	821 kg 1,809 lb	618 kg 1,362 lb
Change in Static Tipping Load – Articulated	271 kg 596 lb	461 kg 1,017 lb	688 kg 1,516 lb	106 kg 233 lb	732 kg 1,613 lb	551 kg 1,215 lb

\*Width over bulge and includes tire growth.

# 966M Wheel Loader Specifications

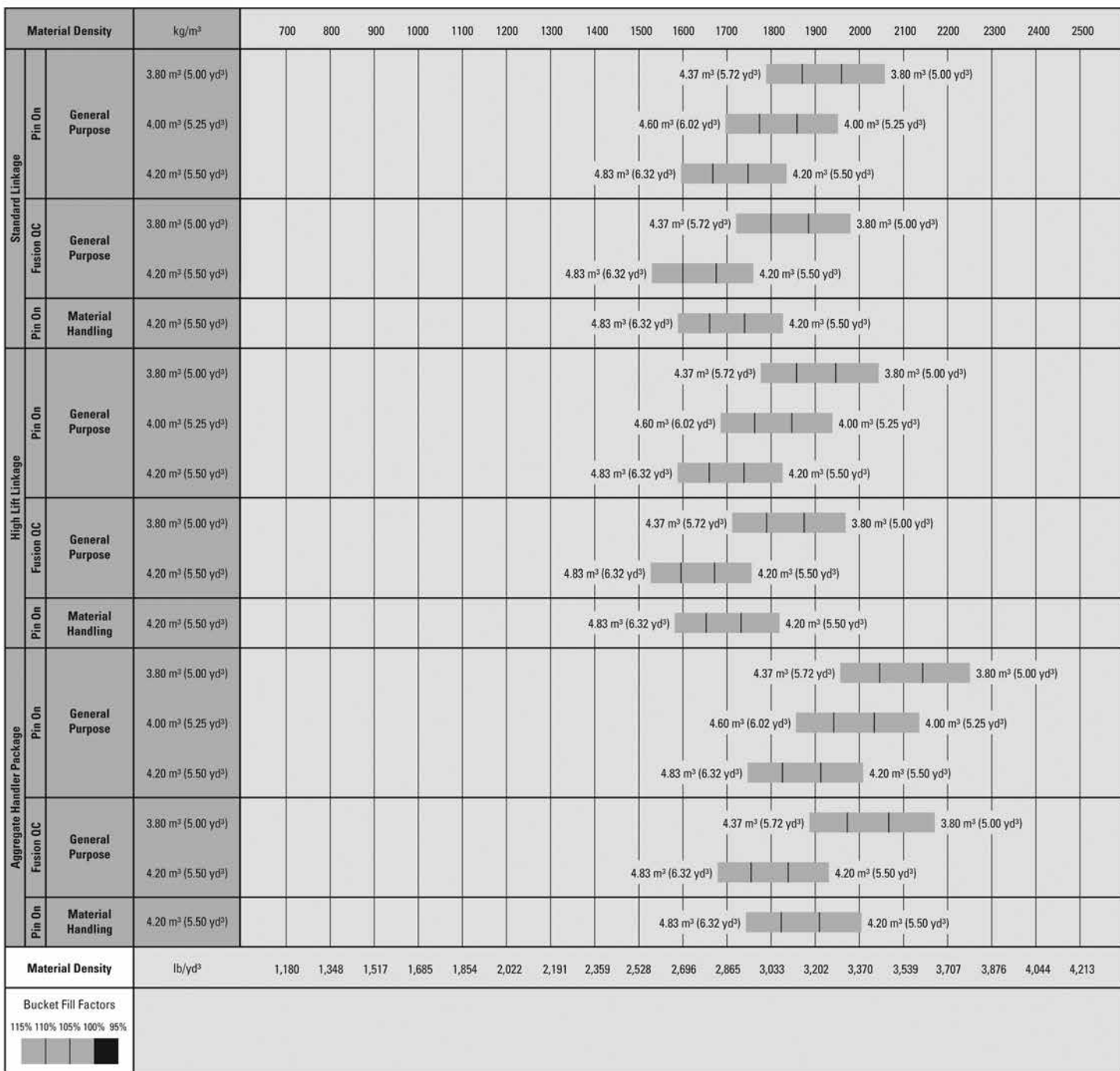
## Bucket Fill Factors and Selection Chart

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/m <sup>3</sup> (2,528-2,865 lb/yd <sup>3</sup> )	115
Sand and Gravel		1500-1700 kg/m <sup>3</sup> (2,528-2,865 lb/yd <sup>3</sup> )	115
Aggregate:	25-76 mm (1 to 3 in)	1600-1700 kg/m <sup>3</sup> (2,696-2,865 lb/yd <sup>3</sup> )	110
	19 mm (0.75 in) and smaller	1800 kg/m <sup>3</sup> (3,033 lb/yd <sup>3</sup> )	105
Rock:	76 mm (3 in) and larger	1600 kg/m <sup>3</sup> (2,696 lb/yd <sup>3</sup> )	100

\*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

# 966M Wheel Loader Specifications

## Operating Specifications with Buckets

Linkage		Standard Linkage			Standard Linkage			
Bucket Type		General Purpose – Pin On						
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Teeth and Segments	Tips	High Lift Linkage Change**
Capacity – Rated	m <sup>3</sup>	3.80	3.80	3.60	4.00	4.00	3.80	—
	yd <sup>3</sup>	5.00	5.00	4.75	5.25	5.25	5.00	—
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	4.18	4.18	3.96	4.40	4.40	4.18	—
	yd <sup>3</sup>	5.47	5.47	5.18	5.75	5.75	5.47	—
Width	mm	3220	3271	3271	3220	3271	3271	—
	ft/in	10'6"	10'8"	10'8"	10'6"	10'8"	10'8"	—
<b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge	mm	3067	2915	2915	3058	2905	2905	558
	ft/in	10'0"	9'6"	9'6"	10'0"	9'6"	9'6"	1'10"
<b>17</b> † Reach at Maximum Lift and 45° Discharge	mm	1292	1432	1432	1299	1438	1438	-24
	ft/in	4'2"	4'8"	4'8"	4'3"	4'8"	4'8"	-0.9"
Reach at Level Lift Arm and Bucket Level	mm	2704	2908	2908	2715	2920	2920	405
	ft/in	8'10"	9'6"	9'6"	8'10"	9'6"	9'6"	1'4"
<b>A</b> † Digging Depth	mm	124	124	94	124	124	94	-25
	in	4.9"	4.9"	3.7"	4.9"	4.9"	3.7"	-1"
<b>12</b> † Shipping Length (with Bucket)	mm	8651	8876	8876	8663	8888	8888	820
	ft/in	28'5"	29'2"	29'2"	28'6"	29'2"	29'2"	2'8"
<b>B</b> † Overall Height with Bucket at Maximum Lift	mm	5788	5788	5788	5902	5902	5902	558
	ft/in	19'0"	19'0"	19'0"	19'5"	19'5"	19'5"	1'10"
Loader Clearance Circle with Bucket at Carry Position	mm	14 973	15 142	15 142	14 979	15 148	15 148	479
	ft/in	49'2"	49'9"	49'9"	49'2"	49'9"	49'9"	1'7"
Static Tipping Load, Straight (With Tire Deflection)*	kg	16 874	16 693	16 891	16 856	16 674	16 908	22
	lb	37,192	36,791	37,229	37,152	36,750	37,266	48
Static Tipping Load, Straight (No Tire Deflection)*	kg	18 045	17 860	18 048	18 037	17 851	18 088	-75
	lb	39,772	39,364	39,777	39,754	39,344	39,867	-165
Static Tipping Load, Articulated (With Tire Deflection)*	kg	14 876	14 693	14 883	14 855	14 671	14 890	-163
	lb	32,788	32,384	32,804	32,741	32,335	32,818	-359
Static Tipping Load, Articulated (No Tire Deflection)*	kg	16 029	15 844	16 023	16 017	15 831	16 052	-225
	lb	35,329	34,921	35,315	35,303	34,893	35,379	-496
Breakout Force	kN	187	185	199	185	183	197	-17
	lbf	42,151	41,781	44,901	41,695	41,326	44,390	-37
Operating Weight*	kg	23 112	23 250	23 087	23 164	23 302	23 139	1612
	lb	50,938	51,242	50,883	51,053	51,357	50,997	3,553

\*Static tipping loads and operating weights shown 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.

\*\*Maximum values.

(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.

# 966M Wheel Loader Specifications

## Operating Specifications with Buckets

Linkage	Bucket Type	Standard Linkage			Standard Linkage			High Lift Linkage Change**
		General Purpose – Pin On			General Purpose – Fusion™ QC			
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Teeth and Segments	Tips	
Capacity – Rated	m <sup>3</sup>	4.20	4.20	4.00	3.80	3.80	3.60	—
	yd <sup>3</sup>	5.50	5.50	5.25	5.00	5.00	4.75	—
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	4.62	4.62	4.40	4.18	4.18	3.96	—
	yd <sup>3</sup>	6.04	6.04	5.75	5.47	5.47	5.18	—
Width	mm	3220	3271	3271	3220	3271	3271	—
	ft/in	10'6"	10'8"	10'8"	10'6"	10'8"	10'8"	—
<b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge	mm	2991	2837	2837	3038	2886	2886	558
	ft/in	9'9"	9'3"	9'3"	9'11"	9'5"	9'5"	1'10"
<b>17†</b> Reach at Maximum Lift and 45° Discharge	mm	1353	1490	1490	1327	1466	1466	-25
	ft/in	4'5"	4'10"	4'10"	4'4"	4'9"	4'9"	-1"
Reach at Level Lift Arm and Bucket Level	mm	2803	3008	3008	2748	2953	2953	404
	ft/in	9'2"	9'10"	9'10"	9'0"	9'8"	9'8"	1'4"
<b>A†</b> Digging Depth	mm	124	124	94	124	124	94	-25
	in	4.9"	4.9"	3.7"	4.9"	4.9"	3.7"	-1"
<b>12†</b> Shipping Length (with Bucket)	mm	8750	8975	8975	8696	8921	8921	820
	ft/in	28'9"	29'6"	29'6"	28'7"	29'4"	29'4"	2'8"
<b>B†</b> Overall Height with Bucket at Maximum Lift	mm	5902	5902	5902	5803	5803	5803	558
	ft/in	19'5"	19'5"	19'5"	19'1"	19'1"	19'1"	1'10"
Loader Clearance Circle with Bucket at Carry Position	mm	15 022	15 193	15 193	14 988	15 160	15 160	487
	ft/in	49'4"	49'11"	49'11"	49'3"	49'9"	49'9"	1'7"
Static Tipping Load, Straight (With Tire Deflection)*	kg	16 656	16 473	16 714	16 299	16 118	16 461	51
	lb	36,711	36,307	36,839	35,923	35,524	36,281	112
Static Tipping Load, Straight (No Tire Deflection)*	kg	17 828	17 641	17 886	17 442	17 258	17 617	-44
	lb	39,293	38,881	39,421	38,444	38,038	38,828	-97
Static Tipping Load, Articulated (With Tire Deflection)*	kg	14 668	14 483	14 709	14 323	14 140	14 470	-137
	lb	32,329	31,921	32,420	31,568	31,166	31,892	-302
Static Tipping Load, Articulated (No Tire Deflection)*	kg	15 822	15 636	15 864	15 453	15 269	15 611	-196
	lb	34,873	34,461	34,964	34,059	33,653	34,408	-432
Breakout Force	kN	173	171	184	180	179	192	-16
	lbf	38,984	38,618	41,343	40,632	40,264	43,192	-35
Operating Weight*	kg	23 220	23 358	23 195	23 529	23 667	23 504	1612
	lb	51,176	51,480	51,121	51,857	52,161	51,802	3,553

\*Static tipping loads and operating weights shown 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.

\*\*Maximum values.

(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.

QC = Quick Coupler

†Illustration shown with Dimension charts.

# 966M Wheel Loader Specifications

## Operating Specifications with Buckets

Linkage	Standard Linkage				Standard Linkage			High Lift Linkage Change**
	Bucket Type	General Purpose – Fusion QC			Material Handling – Pin On			
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Teeth and Segments	Tips	
Capacity – Rated	m <sup>3</sup>	4.20	4.20	4.00	4.20	4.20	4.04	—
	yd <sup>3</sup>	5.50	5.50	5.25	5.50	5.50	5.30	—
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	4.62	4.62	4.40	4.62	4.62	4.44	—
	yd <sup>3</sup>	6.04	6.04	5.75	6.04	6.04	5.81	—
Width	mm	3220	3271	3271	3220	3271	3271	—
	ft/in	10'6"	10'8"	10'8"	10'6"	10'8"	10'8"	—
<b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge	mm	2960	2806	2806	2949	2787	2787	559
	ft/in	9'8"	9'2"	9'2"	9'8"	9'1"	9'1"	1'10"
<b>17</b> † Reach at Maximum Lift and 45° Discharge	mm	1398	1536	1536	1245	1372	1372	-24
	ft/in	4'7"	5'0"	5'0"	4'1"	4'6"	4'6"	-0.9"
Reach at Level Lift Arm and Bucket Level	mm	2858	3062	3062	2774	2978	2978	405
	ft/in	9'4"	10'0"	10'0"	9'1"	9'9"	9'9"	1'4"
<b>A</b> † Digging Depth	mm	116	116	86	124	124	94	-25
	in	4.5"	4.5"	3.4"	4.9"	4.9"	3.7"	-1"
<b>12</b> † Shipping Length (with Bucket)	mm	8798	9024	9024	8721	8946	8946	822
	ft/in	28'11"	29'8"	29'8"	28'8"	29'5"	29'5"	2'8"
<b>B</b> † Overall Height with Bucket at Maximum Lift	mm	5960	5960	5960	5901	5901	5901	558
	ft/in	19'7"	19'7"	19'7"	19'5"	19'5"	19'5"	1'10"
Loader Clearance Circle with Bucket at Carry Position	mm	15 038	15 212	15 212	15 008	15 178	15 178	493
	ft/in	49'5"	49'11"	49'11"	49'3"	49'10"	49'10"	1'7"
Static Tipping Load, Straight (With Tire Deflection)*	kg	16 031	15 850	16 186	16 580	16 398	16 729	95
	lb	35,334	34,933	35,675	36,544	36,143	36,871	209
Static Tipping Load, Straight (No Tire Deflection)*	kg	17 173	16 988	17 339	17 731	17 546	17 890	34
	lb	37,850	37,442	38,216	39,080	38,672	39,430	75
Static Tipping Load, Articulated (With Tire Deflection)*	kg	14 075	13 892	14 216	14 605	14 421	14 738	-106
	lb	31,022	30,618	31,332	32,190	31,786	32,483	-234
Static Tipping Load, Articulated (No Tire Deflection)*	kg	15 204	15 019	15 355	15 740	15 555	15 883	-158
	lb	33,510	33,102	33,843	34,691	34,283	35,006	-348
Breakout Force	kN	166	164	176	177	175	188	-15
	lbf	37,382	37,023	39,561	39,834	39,468	42,297	-33
Operating Weight*	kg	23 592	23 730	23 567	23 217	23 355	23 192	1612
	lb	51,997	52,301	51,941	51,170	51,474	51,114	3,553

\*Static tipping loads and operating weights shown 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.

\*\*Maximum values.

(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.

QC = Quick Coupler

†Illustration shown with Dimension charts.



# 966M Wheel Loader Specifications

## Operating Specifications with Buckets – Aggregate Handler

Package		Aggregate Handler			Aggregate Handler		Aggregate Handler
Bucket Type		General Purpose – Pin On			General Purpose – Fusion QC		Material Handling – Pin On
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>	3.80	4.00	4.20	3.80	4.20	4.20
	yd <sup>3</sup>	5.00	5.25	5.50	5.00	5.50	5.50
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	4.18	4.40	4.62	4.18	4.62	4.62
	yd <sup>3</sup>	5.47	5.75	6.04	5.47	6.04	6.04
Width	mm	3220	3220	3220	3220	3220	3220
	ft/in	10'6"	10'6"	10'6"	10'6"	10'6"	10'6"
<b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge	mm	3067	3058	2991	3038	2960	2967
	ft/in	10'0"	10'0"	9'9"	9'11"	9'8"	9'8"
<b>17</b> † Reach at Maximum Lift and 45° Discharge	mm	1292	1299	1353	1327	1398	1228
	ft/in	4'2"	4'3"	4'5"	4'4"	4'7"	4'0"
Reach at Level Lift Arm and Bucket Level	mm	2704	2715	2803	2748	2858	2749
	ft/in	8'10"	8'10"	9'2"	9'0"	9'4"	9'0"
<b>A</b> † Digging Depth	mm	124	124	124	124	116	124
	in	4.9"	4.9"	4.9"	4.9"	4.5"	4.9"
<b>12</b> † Shipping Length (with Bucket)	mm	8657	8669	8756	8702	8804	8702
	ft/in	28'5"	28'6"	28'9"	28'7"	28'11"	28'7"
<b>B</b> † Overall Height with Bucket at Maximum Lift	mm	5788	5902	5902	5803	5960	5874
	ft/in	19'0"	19'5"	19'5"	19'1"	19'7"	19'4"
Loader Clearance Circle with Bucket at Carry Position	mm	14 973	14 979	15 022	14 988	15 038	14 995
	ft/in	49'2"	49'2"	49'4"	49'3"	49'5"	49'3"
Static Tipping Load, Straight (With Tire Deflection)*	kg	18 475	18 459	18 247	17 880	17 595	18 199
	lb	40,719	40,684	40,217	39,408	38,780	40,111
Static Tipping Load, Straight (No Tire Deflection)*	kg	19 797	19 792	19 570	19 171	18 884	19 496
	lb	43,634	43,623	43,134	42,254	41,622	42,969
Static Tipping Load, Articulated (With Tire Deflection)*	kg	16 232	16 212	16 015	15 662	15 399	15 982
	lb	35,777	35,732	35,299	34,519	33,940	35,225
Static Tipping Load, Articulated (No Tire Deflection)*	kg	17 540	17 531	17 325	16 944	16 680	17 266
	lb	38,658	38,638	38,185	37,345	36,762	38,056
Breakout Force	kN	187	185	173	180	166	180
	lbf	42,151	41,695	38,984	40,632	37,382	40,629
Operating Weight*	kg	23 807	23 859	23 915	24 224	24 287	23 869
	lb	52,470	52,584	52,708	53,389	53,528	52,606

\*Static tipping loads and operating weights shown 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.

(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.

QC = Quick Coupler

†Illustration shown with Dimension charts.

# 966M Wheel Loader Standard and Optional Equipment

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>POWER TRAIN</b>			<b>OPERATOR ENVIRONMENT</b>		
Axles, ecology drains	✓		Air conditioner, heater, and defroster (auto temp and fan)	✓	
Axles, manually actuated differential lock front axle, open differential rear axle	✓		Beverage holders (2) with storage compartment for cell phone/MP3 player	✓	
Axles – automatic front/rear differential locks, axle oil cooler, extreme temperature seals, seal guards		✓	Bucket/work tool function lockout	✓	
Brake wear indicators	✓		Cab air filter	✓	
Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS)	✓		Cab, pressurized and sound suppressed (ROPS/FOPS)	✓	
Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF) and Diesel Exhaust Fluid (DEF) tank and pump (Tier 4 Final/Stage V models)	✓		Cab tie-off	✓	
Economy mode (selectable)	✓		Coat hook (2)	✓	
Engine, Cat C9.3 – meets Tier 3/ Stage IIIA equivalent or Tier 4 Final/ Stage V emission standards	✓		Cover, HVAC metallic		✓
Fan, radiator, on demand	✓		Door, remote opening system		✓
Fan, VPF (variable pitch fan), automatic and manual control		✓	EH controls, SAL (single axis lever) lift and tilt function	✓	
Fuel priming pump (electric)	✓		EH controls, joystick lift and tilt – additional integrated roller switches for 3 <sup>rd</sup> and 4 <sup>th</sup> functions		✓
Fuel/water separator	✓		EH controls, SAL 3 <sup>rd</sup> function – additional roller switch for 4 <sup>th</sup> function		✓
Parking brake, disc and caliper	✓		EH parking brake	✓	
Precleaner, engine air intake	✓		Ergonomic cab access ladders and handrails	✓	
Radiator, high debris with wider fin spacing		✓	Filter, carbon fresh air		✓
Switch, transmission neutralizer lockout	✓		Horn, electric	✓	
Torque converter, locking clutch with free wheel stator	✓		Light, two dome (cab)	✓	
Transmission, automatic planetary power shift (4F/4R)	✓		Mirrors, heated rearview external with integrated spot mirrors		✓
<b>CAT® CONNECT TECHNOLOGY</b>			Mirrors, rearview external with integrated spot mirrors	✓	
Detect technologies:			Multi-function 18 cm (7 in) color touch-screen display for rear vision camera, clock and machine parameters	✓	
Rear vision camera	✓		Post mounted membrane 16 switch keypad	✓	
Cat rear object detection		✓	Precleaner, HVAC		✓
Link technologies:			Precleaner, HVAC (RESPA)		✓
Product Link	✓		Radio, AM/FM/USB/MP3 Bluetooth		✓
VIMS™		✓	Radio, AM/FM/CD/USB/MP3 Bluetooth		✓
Payload technologies: Advanced Productivity subscription, Cat Production Measurement 2.0, Printer, Aggregate Autodig		✓	Radio, AM/FM/CD/USB/MP3 Bluetooth with Satellite Sirius and XM		✓
Machine security system		✓	Radio, CB ready		✓
			Radio ready (entertainment) includes antenna, speakers and converter (12V, 10-amp)	✓	
			Receptacles (2), 12V	✓	

(continued on next page)

# 966M 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
<b>OPERATOR ENVIRONMENT (continued)</b>		
Roof, metallic		✓
Seat, cloth, air suspension	✓	
Seat, suede/cloth, air suspension, heated		✓
Seat, leather/cloth, air suspension, heated/cooled		✓
Seat belt, 51 mm (2 in) retractable, with indicator	✓	
Seat belt, 76 mm (3 in) retractable, with indicator		✓
Steering, EH joystick, speed sensing with force feedback	✓	
Steering, EH wheel with directional FNR shifter and gear selector – additional FNR with implement controls		✓
Steering, secondary		✓
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		✓
<b>ELECTRICAL AND LIGHTING</b>		
Alarm, back-up	✓	
Alternator, 145-amp brushed	✓	
Auxiliary halogen cab-mounted work lights (four additional) or		✓
Auxiliary front HI LED (two additional) and two additional auxiliary rear LED cab mounted work lights with 2 LED work lights in the radiator grill and LED front turn signals. Also includes replacement of the standard four halogen cab-mounted work lights with four LED work lights (the standard offering and only roading light available is the halogen roading light)		✓
Batteries (2), maintenance free 1,400 CCA	✓	
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)	✓	

	Standard	Optional
<b>ELECTRICAL AND LIGHTING (continued)</b>		
Main disconnect switch	✓	
Receptacle start (cables not included)	✓	
Reversing strobes		✓
Speed limiter – 20 km/h (Europe only)		✓
Starter, electric, heavy duty	✓	
Starting and charging system (24V)	✓	
Warning amber strobe beacon		✓
<b>FLUIDS</b>		
Premixed extended life coolant with freeze protection to -34°C (-29°F)	✓	
Premixed extended life coolant with freeze protection to -50°C (-58°F)		✓
<b>HYDRAULICS</b>		
Hoses, Cat XT™	✓	
Hydraulic system, load sensing	✓	
Oil sampling valves	✓	
3 <sup>rd</sup> function with Ride Control – standard linkage, high lift linkage, forestry linkage		✓
4 <sup>th</sup> function with Ride Control – standard linkage, high lift linkage, forestry linkage		✓
Remote diagnostic pressure taps	✓	
Ride control, 2V	✓	
Steering, load sensing	✓	
<b>LINKAGE</b>		
Forestry		✓
High lift		✓
Kickout, lift and tilt, automatic	✓	
Quick coupler ready		✓
Z-bar, cast crosstube/tilt lever	✓	
<b>STARTERS, BATTERIES, AND ALTERNATORS</b>		
Cold start – 120V		✓
Cold start – 240V		✓
<b>WORK TOOLS</b>		
Forks, logging		✓
Forks, pallet		✓
Fusion quick coupler		✓
Performance Series buckets		✓

(continued on next page)

# 966M 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
<b>COMPUTERIZED MONITORING SYSTEM</b>			<b>OTHER STANDARD AND OPTIONAL EQUIPMENT</b>		
With following gauges:	✓		Auto idle shutdown	✓	
Speedometer/tachometer			Cat Autolube System		✓
Digital gear range indicator			Ecology drains for engine, transmission, and hydraulics	✓	
Diesel Exhaust Fluid (DEF) level (Tier 4 Final/Stage V models)			Ether aid ready	✓	
Temperature: engine coolant, hydraulic oil, transmission oil			Fenders, front with mud-flap/rear with extension	✓	
Fuel level			Fenders, roading		✓
With following warning indicators:	✓		Filters: fuel, engine air, engine oil, hydraulic oil, transmission	✓	
Regeneration			Fuel cooler	✓	
Temperature: axle oil, engine intake manifold			Grease zerks	✓	
Pressure: engine oil, fuel pressure hi/low, primary steering oil, service brake oil			Grill, airborne debris	✓	
Battery voltage hi/low			Guard, power train		✓
Engine air filter restriction			Hitch, drawbar with pin	✓	
Hydraulic oil filter restriction			Hood, non-metallic power tilting	✓	
Hydraulic oil low			Oil change, high speed engine		✓
Parking brake			Platform, window washing	✓	
DEF low level (Tier 4 Final/Stage V models)			Precleaner, turbine		✓
Transmission filter bypass			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		✓
			<b>OTHER CONFIGURATIONS</b>		
			Aggregate handler		✓
			Industrial and waste handler		✓
			Forestry		✓



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