

972M XE Wheel Loader

# **Technical Specifications**

Not all attachments available in all regions. Consult your Cat® dealer for specific configurations available in your region.

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Engine		
Engine Model	Cat C9.3	
Maximum Net Power (1,600 rpm)		
SAE J1349	232 kW	311 hp
ISO 9249	232 kW	311 hp
Peak Gross Torque (1,200 rpm)		
SAE J1995	1728 N·m	1,275 lbf-ft
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>

• Cat engine with ACERT<sup>™</sup> Technology – meets U.S. EPA Tier 4 Final/EU Stage V emission standards.

• 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- 9.94 m <sup>3</sup>	4.19- 13.00 yd <sup>3</sup>
Weight		

Operating Weight 24 897 kg 54,871 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<sup>™</sup>, manual diff lock/open axles (front/rear), power train guard, secondary steering, sound suppression and a 4.8 m<sup>3</sup> general purpose bucket with BOCE.

Operating	Specifications

Static Tipping Load – Full 37° Turn		
With Tire Deflection	16 164 kg	35,626 lb
No Tire Deflection	17 421 kg	38,396 lb
Breakout Force	196 kN	44,075 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.

#### **Brakes**

Brakes

Brakes meet ISO 3450:2011 standards

#### **Transmission Virtual Gears**

Forward 1	6.7 km/h	4.2 mph
Forward 2	12.6 km/h	7.8 mph
Forward 3	22.1 km/h	13.7 mph
Forward 4	39.5 km/h	24.5 mph
Reverse 1	6.7 km/h	4.2 mph
Reverse 2	12.6 km/h	7.8 mph
Reverse 3	28.0 km/h	17.4 mph

• 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	102 gal/min		
Maximum Operating Pressure	31 000 kPa	4,496 psi		
Maximum Flow – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function	240 L/min	63 gal/min		
Maximum Pressure – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function	21 780 kPa	3,159 psi		
Hydraulic Cycle Time with Rated Payload				
Raise from Carry Position	6.1	Sec.		
Dump, at Maximum Raise	1.5	Sec.		
Lower, Empty, Float Down	wer, Empty, Float Down 3.1 Sec.			
Total 10.7 Sec.		7 Sec.		

\*Engine speed.

Fixed
Oscillating ±13 degrees
502 mm 19.5 in
ROPS/FOPS meet
ISO 3471:2008 and
ISO 3449:2005 Level II
standards

### 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)	67 dB(A)			
Exterior sound power level (ISO 6395:2008)	107 dB(A)			
Exterior sound pressure level (SAE J88:2013)	76 dB(A)*			

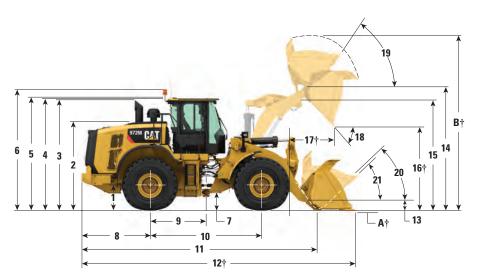
\*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

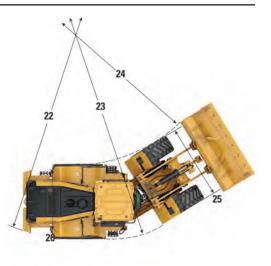
### **Service Refill Capacities**

Fuel Tank	302.0 L	79.8 gal
DEF Tank	16.8 L	4.4 gal
Cooling System	71.6 L	19.0 gal
Crankcase	24.5 L	6.5 gal
Transmission	63.0 L	16.6 gal
Differentials and Final Drives – Front	57.0 L	15.1 gal
Differentials and Final Drives – Rear	57.0 L	15.1 gal
Hydraulic Tank	125.0 L	33.0 gal

#### **Dimensions**

All dimensions are approximate.





		Standa	Standard Lift		High Lift		Capacity
	Height to Axle Centerline	799 mm	2'7"	2818 mm	9'3"	799 mm	2'7"
2	Height to Top of Hood	2818 mm	9'3"	2818 mm	9'3"	2818 mm	9'3"
3	Height to Top of Exhaust Pipe	3522 mm	11'7"	3522 mm	11'7"	3522 mm	11'7"
4	Height to Top of ROPS	3587 mm	11'9"	3587 mm	11'9"	3587 mm	11'9"
5	Height to Top of Product Link Antenna	3636 mm	11'11"	3636 mm	11'11"	3636 mm	11'11"
6	Height to Top of Warning Beacon	3859 mm	12'8"	3859 mm	12'8"	3859 mm	12'8"
7	Ground Clearance	434 mm	1'5"	434 mm	1'5"	434 mm	1'5"
8	Center Line of Rear Axle to Edge of Counterweight	2500 mm	8'2"	2500 mm	8'2"	2500 mm	8'2"
9	Center Line of Rear Axle to Hitch	1775 mm	5'10"	1775 mm	5'10"	1775 mm	5'10"
10	Wheelbase	3550 mm	11'8"	3550 mm	11'8"	3550 mm	11'8"
11	Overall Length (without bucket)	7774 mm	25'7"	8109 mm	26'8"	7609 mm	25'0"
12	Shipping Length (with bucket level on ground)*†	9315 mm	30'7"	9650 mm	31'8"	9164 mm	30'1"
13	Hinge Pin Height at Carry Height	680 mm	2'3"	778 mm	2'7"	631 mm	2'1"
14	Hinge Pin Height at Maximum Lift	4458 mm	14'8"	4793 mm	15'9"	4235 mm	13'11"
15	Lift Arm Clearance at Maximum Lift	3843 mm	12'7"	4140 mm	13'6"	3643 mm	11'11"
16	Dump Clearance at Maximum Lift and 45° Discharge*†	3154 mm	10'4"	3490 mm	11'5"	2920 mm	9'6"
17	Reach at Maximum Lift and 45° Discharge*†	1357 mm	4'5"	1380 mm	4'6"	1413 mm	4'7"
18	Dump Angle at Maximum Lift and Dump (on stops)*	48 deg	grees	48 deg	grees	48 deg	grees
19	Rack Back at Maximum Lift*	56 deg	grees	71 deg	grees	62 deg	grees
20	Rack Back at Carry Height*	50 deg	grees	49 deg	grees	50 deg	grees
21	Rack Back at Ground*	41 deg	grees	39 deg	grees	42 deg	grees
22	Turning Radius to Counterweight	6804 mm	22'4"	6804 mm	22'4"	6804 mm	22'4"
23	Turning Radius to Outside of Tires	6761 mm	22'3"	6761 mm	22'3"	6761 mm	22'3"
24	Turning Radius to Inside of Tires	3770 mm	12'4"	3770 mm	12'4"	3770 mm	12'4"
25	Width over Tires (unloaded)	2991 mm	9'10"	2991 mm	9'10"	2991 mm	9'10"
26	Tread Width	2230 mm	7'4"	2230 mm	7'4"	2230 mm	7'4"

\*Standard and High Lift are with 4.8 m<sup>3</sup> (6.3 yd<sup>3</sup>) general purpose pin on bucket with BOCE (see Operating Specifications for other buckets). Extended Capacity is with a 4.9 m<sup>3</sup> (6.4 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).

# **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	2986 mm	2970 mm	2982 mm	2874 mm	3080 mm
	9'10"	9'10"	9'9"	9'9"	9'5"	10'1"
Width over Tires – Maximum (loaded)*	3019 mm	3015 mm	2998 mm	3016 mm	2900 mm	3101 mm
	9'11"	9'11"	9'10"	9'11"	9'6"	10'2"
Change in Vertical Dimensions	44 mm	39 mm	53 mm	15 mm	50 mm	17 mm
(average of front and rear)	1.7"	1.5"	2.1"	0.6"	2"	0.7"
Change in Horizontal Reach	-36 mm	-34 mm	-32 mm	-3 mm	-29 mm	-5 mm
	-1.4"	-1.3"	-1.3"	-0.1"	-1.1"	-0.2"
Change in Clearance Circle (radius) to Outside of Tires	5 mm	1 mm	-7 mm	3 mm	-8 mm	-54 mm
	0.2"	0"	-0.3"	0.1"	-0.3"	-2.1"
Change in Clearance Circle (radius) to Inside of Tires	-5 mm	-1 mm	7 mm	-3 mm	8 mm	54 mm
	-0.2"	0"	0.3"	-0.1"	0.3"	2.1"
Change in Operating Weight (without Ballast)	420 kg	716 kg	1068 kg	164 kg	1136 kg	856 kg
	926 lb	1,578 lb	2,354 lb	361 lb	2,504 lb	1,886 lb
Change in Static Tipping Load – Straight	283 kg	482 kg	719 kg	110 kg	764 kg	576 kg
	623 lb	1,062 lb	1,584 lb	243 lb	1,685 lb	1,269 lb
Change in Static Tipping Load – Articulated	252 kg	429 kg	640 kg	98 kg	680 kg	513 kg
	555 lb	946 lb	1,411 lb	216 lb	1,499 lb	1,131 lb
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\*Width over bulge and includes tire growth.

### **Bucket Fill Factors and Selection Guide**

The bucket size must be chosen based on the density of the material and on the expected fill factor. The 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 rated capacity.

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

	Materi	al Density	kg/m³	700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500
			4.6 m³ (6.00 yd³)	5.3 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.6 m <sup>3</sup> (6.00 yd <sup>3</sup> )
kage	Pin On	General Purpose	4.8 m³ (6.25 yd³)	5.5 m <sup>3</sup> (7.22 yd <sup>3</sup> ) 4.8 m <sup>3</sup> (6.25 yd <sup>3</sup> )
Standard Linkage			5.0 m³ (6.50 yd³)	5.8 m <sup>3</sup> (7.52 yd <sup>3</sup> ) 5.0 m <sup>3</sup> (6.50 yd <sup>3</sup> )
Stan	Fusion QC	General Purpose	4.4 m³ (5.75 yd³)	5.1 m <sup>3</sup> (6.62 yd <sup>3</sup> ) 4.4 m <sup>3</sup> (5.75 yd <sup>3</sup> )
	Pin On	Flat Floor	4.6 m³ (6.00 yd³)	5.3 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.6 m <sup>3</sup> (6.00 yd <sup>3</sup> )
			4.6 m³ (6.00 yd³)	5.3 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.6 m <sup>3</sup> (6.00 yd <sup>3</sup> )
kage	Pin On	General Purpose	4.8 m³ (6.25 yd³)	5.5 m <sup>3</sup> (7.22 yd <sup>3</sup> ) 4.8 m <sup>3</sup> (6.25 yd <sup>3</sup> )
High Lift Linkage			5.0 m³ (6.50 yd³)	5.8 m <sup>3</sup> (7.52 yd <sup>3</sup> ) 5.0 m <sup>3</sup> (6.50 yd <sup>3</sup> )
Higl	Fusion OC	General Purpose	4.4 m³ (5.75 yd³)	5.1 m <sup>3</sup> (6.62 yd <sup>3</sup> )
	Pin On	Flat Floor	4.6 m³ (6.00 yd³)	5.3 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.6 m <sup>3</sup> (6.00 yd <sup>3</sup> )
Extended Linkage	Fusion QC	General Purpose	4.9 m³ (6.41 yd³)	5.6 m <sup>3</sup> (7.38 yd <sup>3</sup> ) 4.9 m <sup>3</sup> (6.41 yd <sup>3</sup> )
ackage			5.1 m³ (6.67 yd³)	5.9 m <sup>3</sup> (7.68 yd <sup>3</sup> ) 5.1 m <sup>3</sup> (6.67 yd <sup>3</sup> )
Aggregate Handler Package	Pin On	General Purpose	5.3 m³ (6.93 yd³)	6.1 m <sup>3</sup> (7.98 yd <sup>3</sup> ) 5.3 m <sup>3</sup> (6.93 yd <sup>3</sup> )
Aggregat			5.5 m³ (7.19 yd³)	6.3 m <sup>3</sup> (8.28 yd <sup>3</sup> ) 5.5 m <sup>3</sup> (7.19 yd <sup>3</sup> )
		al Density	lb/yd³	1,180 1,348 1,517 1,685 1,854 2,022 2,191 2,359 2,528 2,696 2,865 3,033 3,202 3,370 3,539 3,707 3,876 4,044 4,213
		Fill Factors 05% 100% 95%		

Note: All buckets are showing Bolt-On Edges.

QC = Quick Coupler

## **Operating Specifications – Buckets**

Linkage		St	andard Linka	ge	St	andard Linka	ge	_
Bucket Type			G	eneral Purp	ose – Pin (	Dn		-
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>	4.60	4.60	4.40	4.80	4.80	4.60	
	yd <sup>3</sup>	6.00	6.00	5.75	6.25	6.25	6.00	—
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	5.06	5.06	4.84	5.28	5.28	5.06	
	yd <sup>3</sup>	6.62	6.62	6.33	6.91	6.91	6.62	
Width	mm	3220	3271	3271	3220	3271	3271	
	ft/in	10'6"	10'8"	10'8"	10'6"	10'8"	10'8"	—
6† Dump Clearance at Maximum Lift	mm	3187	3033	3033	3154	2999	2999	336
and 45° Discharge	ft/in	10'5"	9'11"	9'11"	10'4"	9'10"	9'10"	1'1"
<b>17</b> <sup>+</sup> Reach at Maximum Lift and 45° Discharge	mm	1328	1465	1465	1357	1493	1493	23
	ft/in	4'4"	4'9"	4'9"	4'5"	4'10"	4'10"	0.9"
Reach at Level Lift Arm and Bucket Level	mm	2969	3174	3174	3014	3219	3219	274
	ft/in	9'8"	10'4"	10'4"	9'10"	10'6"	10'6"	11"
A† Digging Depth	mm	103	103	73	103	103	73	-5
	in	4.0"	4.0"	2.8"	4.0"	4.0"	2.8"	-0.2"
<b>12</b> <sup>+</sup> Shipping Length (with Bucket)	mm	9270	9494	9494	9315	9539	9539	335
	ft/in	30'5"	31'2"	31'2"	30'7"	31'4"	31'4"	1'1"
<b>B</b> <sup>+</sup> Overall Height with Bucket at Maximum Lift	mm	6195	6195	6195	6031	6031	6031	336
	ft/in	20'4"	20'4"	20'4"	19'10"	19'10"	19'10"	1'1"
Loader Clearance Circle Radius with Bucket	mm	7596	7685	7685	7608	7697	7697	162
at Carry Position	ft/in	25'0"	25'2"	25'2"	25'0"	25'2"	25'2"	6'0"
Static Tipping Load, Straight	kg	18 477	18 293	18 550	18 502	18 318	20 545	-1592
(With Tire Deflection)*	lb	40,723	40,319	40,884	40,779	40,372	45,281	-3,508
Static Tipping Load, Straight	kg	19 724	19 537	19 796	19 755	19 567	22 192	-1752
(No Tire Deflection)*	lb	43,473	43,061	43,631	43,542	43,127	48,912	-3,863
Static Tipping Load, Articulated	kg	16 135	15 950	16 188	16 164	15 978	17 927	-1423
(With Tire Deflection)*	lb	35,563	35,155	35,680	35,626	35,215	39,512	-3,137
Static Tipping Load, Articulated	kg	17 387	17 200	17 439	17 421	17 233	19 558	-1598
(No Tire Deflection)*	lb	38,322	37,910	38,437	38,396	37,982	43,107	-3,521
Breakout Force	kN	202	201	214	196	194	207	-6
	lbf	45,482	45,173	48,227	44,075	43,766	46,655	-1,368
Operating Weight*	kg	24 969	25 106	24 943	24 897	25 034	24 871	84
	lb	55,030	55,334	54,974	54,871	55,175	54,816	186

\*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.

## **Operating Specifications – Buckets**

Linkage		St	andard Linka	ge	St	andard Linka	ge	
Bucket Type	General Purpose – Pin		Pin On	General I	Purpose – Fus	sion™ QC	-	
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>	5.00	5.00	4.80	4.40	4.40	4.20	
	yd <sup>3</sup>	6.50	6.50	6.25	5.75	5.75	5.50	—
Capacity - Rated at 110% Fill Factor	m <sup>3</sup>	5.50	5.50	5.28	4.84	4.84	4.62	
	yd <sup>3</sup>	7.19	7.19	6.91	6.33	6.33	6.04	
Width	mm	3220	3271	3271	3220	3271	3271	—
	ft/in	10'6"	10'8"	10'8"	10'6"	10'8"	10'8"	
16† Dump Clearance at Maximum Lift	mm	3137	2982	2982	3200	3047	3047	336
and 45° Discharge	ft/in	10'3"	9'9"	9'9"	10'6"	9'11"	9'11"	1'1"
17† Reach at Maximum Lift and 45° Discharge	mm	1372	1508	1508	1327	1465	1465	23
	ft/in	4'6"	4'11"	4'11"	4'4"	4'9"	4'9"	0.9"
Reach at Level Lift Arm and Bucket Level	mm	3037	3242	3242	2958	3163	3163	274
	ft/in	9'11"	10'7"	10'7"	9'8"	10'4"	10'4"	11"
A† Digging Depth	mm	103	103	73	103	103	73	-5
	in	4.0"	4.0"	2.8"	4.0"	4.0"	2.8"	-0.2"
12† Shipping Length (with Bucket)	mm	9338	9562	9562	9259	9483	9483	335
	ft/in	30'8"	31'5"	31'5"	30'5"	31'2"	31'2"	1'1"
B <sup>†</sup> Overall Height with Bucket at Maximum Lift	mm	6284	6284	6284	6205	6205	6205	336
	ft/in	20'8"	20'8"	20'8"	20'5"	20'5"	20'5"	1'1"
Loader Clearance Circle Radius with Bucket	mm	7615	7704	7704	7590	7680	7680	162
at Carry Position	ft/in	25'0"	25'2"	25'2"	25'0"	25'0"	25'2"	6'0"
Static Tipping Load, Straight	kg	18 600	18 415	18 651	18 081	17 899	18 257	-1608
(With Tire Deflection)*	lb	40,996	40,588	41,108	39,851	39,450	40,240	-3,545
Static Tipping Load, Straight	kg	19 856	19 668	19 906	19 317	19 131	19 507	-1771
(No Tire Deflection)*	lb	43,764	43,348	43,873	42,576	42,166	42,993	-3,903
Static Tipping Load, Articulated	kg	16 264	16 076	16 297	15 749	15 565	15 907	-1444
(With Tire Deflection)*	lb	35,845	35,433	35,919	34,712	34,307	35,060	-3,181
Static Tipping Load, Articulated	kg	17 521	17 332	17 553	16 992	16 807	17 163	-1620
(No Tire Deflection)*	lb	38,617	38,200	38,687	37,452	37,043	37,828	-3,570
Breakout Force	kN	198	197	210	203	202	216	-6
	lbf	44,634	44,325	47,205	45,788	45,479	48,572	-1,378
Operating Weight*	kg	25 010	25 147	24 984	25 327	25 464	25 301	84
	lb	55,120	55,424	55,065	55,819	56,123	55,763	186

\*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.

QC = Quick Coupler

# **Operating Specifications – Buckets**

Linkage		St	andard Linka	ge	Ex	tended Linka	ge	
Bucket Type	Material Hand Bolt-On Cutting Teeth		al Handling –	· Pin On	General	Purpose – Fu	ision QC	-
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>	4.60	4.60	4.40	4.90	4.90	4.70	
	yd³	6.00	6.00	5.75	6.41	6.41	6.15	—
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	5.06	5.06	4.84	5.39	5.39	5.17	_
	yd <sup>3</sup>	6.62	6.62	6.33	7.05	7.05	6.76	—
Width	mm	3220	3271	3271	3220	3271	3271	_
	ft/in	10'6"	10'8"	10'8"	10'6"	10'8"	10'8"	—
16† Dump Clearance at Maximum Lift	mm	3120	2957	2957	2899	2744	2744	336
and 45° Discharge	ft/in	10'2"	9'8"	9'8"	9'6"	9'0"	9'0"	1'1"
17† Reach at Maximum Lift and 45° Discharge	mm	1251	1378	1378	1449	1586	1586	23
	ft/in	4'1"	4'6"	4'6"	4'9"	5'2"	5'2"	0.9"
Reach at Level Lift Arm and Bucket Level	mm	2979	3184	3184	2940	3145	3145	274
	ft/in	9'9"	10'5"	10'5"	9'7"	10'3"	10'3"	11"
A† Digging Depth	mm	103	103	73	115	115	85	-5
	in	4.0"	4.0"	2.8"	4.5"	4.5"	3.3"	-0.2"
12† Shipping Length (with Bucket)	mm	9280	9504	9504	9200	9425	9425	335
	ft/in	30'6"	31'3"	31'3"	30'3"	31'0"	31'0"	1'1"
B <sup>†</sup> Overall Height with Bucket at Maximum Lift	mm	6162	6162	6162	6126	6126	6126	336
	ft/in	20'3"	20'3"	20'3"	20'2"	20'2"	20'2"	1'1"
Loader Clearance Circle Radius with Bucket	mm	7599	7688	7688	751	7628	7628	167
at Carry Position	ft/in	25'0"	25'2"	25'2"	2'6"	25'0"	25'0"	6'0"
Static Tipping Load, Straight	kg	18 412	18 229	18 468	19 411	19 225	19 590	-1598
(With Tire Deflection)*	lb	40,580	40,177	40,704	42,781	42,372	43,177	-3,521
Static Tipping Load, Straight	kg	19 640	19 453	19 695	20 885	20 695	21 079	-1757
(No Tire Deflection)*	lb	43,286	42,875	43,409	46,032	45,612	46,460	-3,871
Static Tipping Load, Articulated	kg	16 081	15 896	16 119	16 920	16 732	17 082	-1429
(With Tire Deflection)*	1b	35,442	35,035	35,526	37,293	36,878	37,649	-3,149
Static Tipping Load, Articulated	kg	17 313	17 127	17 351	18 387	18 197	18 562	-1601
(No Tire Deflection)*	1b	38,159	37,749	38,242	40,526	40,106	40,912	-3,528
Breakout Force	kN	201	199	213	198	196	209	-7
	lbf	45,174	44,865	47,882	44,570	44,204	47,022	-1,647
Operating Weight*	kg	24 964	25 101	24 938	25 283	25 421	25 258	85
	lb	55,019	55,323	54,963	55,724	56,028	55,668	186

\*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.

QC = Quick Coupler

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

Package			Aggregate Handler	
Bucket Type			General Purpose – Pin On	
Edge Type		Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges
Capacity – Rated	m <sup>3</sup>	5.10	5.30	5.50
	yd³	6.67	6.93	7.19
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	5.61	5.83	6.05
	yd <sup>3</sup>	7.34	7.63	7.91
Width	mm	3357	3357	3357
	ft/in	11'0"	11'0"	11'0"
<b>16</b> † Dump Clearance at Maximum Lift	mm	3127	3100	3072
and 45° Discharge	ft/in	10'3"	10'2"	10'0"
17† Reach at Maximum Lift and 45° Discharge	mm	1375	1399	1424
	ft/in	4'6"	4'7"	4'8"
Reach at Level Lift Arm and Bucket Level	mm	3046	3083	3121
	ft/in	9'11"	10'1"	10'2"
A <sup>†</sup> Digging Depth	mm	108	108	108
	in	4.2"	4.2"	4.2"
12† Shipping Length (with Bucket)	mm	9037	9074	9112
	ft/in	29'8"	29'10"	29'11"
<b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift	mm	6235	6272	6293
	ft/in	20'6"	20'7"	20'8"
Loader Clearance Circle Radius with Bucket	mm	7681	7691	7702
at Carry Position	ft/in	25'2"	25'2"	25'4"
Static Tipping Load, Straight	kg	19 316	19 242	19 172
(With Tire Deflection)*	lb	42,574	42,409	42,255
Static Tipping Load, Straight	kg	20 669	20 600	20 537
(No Tire Deflection)*	lb	45,556	45,403	45,263
Static Tipping Load, Articulated	kg	16 799	16 726	16 658
(With Tire Deflection)*	lb	37,026	36,865	36,716
Static Tipping Load, Articulated	kg	18 165	18 098	18 036
(No Tire Deflection)*	lb	40,036	39,888	39,753
Breakout Force	kN	190	185	180
	lbf	42,755	41,650	40,573
Operating Weight*	kg	25 790	25 832	25 870
	lb	56,840	56,933	57,016

\*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.

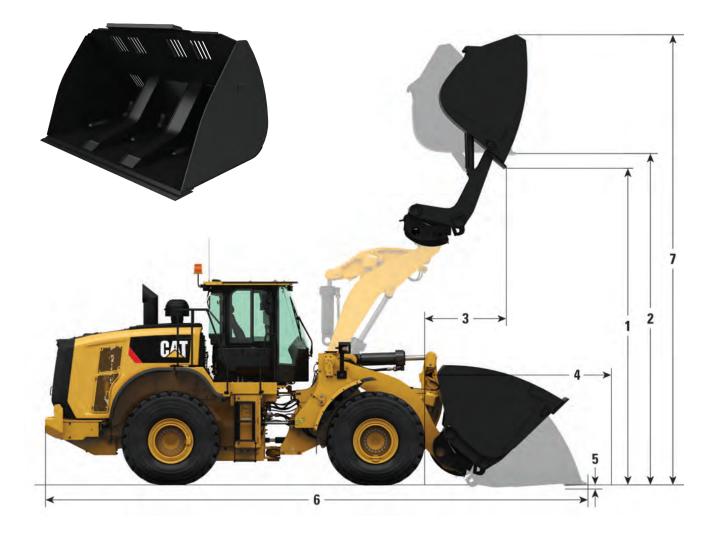
(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

# 972M XE Wheel Loader Standard and Optional Equipment

### **Light Material High Dump Buckets**

All dimensions are approximate.



## **Bucket Key Features**

- High Dump bucket increases dump height 2.8 m (9' 3") for largest size available on 972M XE
- High capacity available in Pin On, Fusion, or VCE coupler interface
- Ideal for low density and free flowing materials like wood chips and pellets
- Narrow tilt frame provides excellent cutting edge rigidity
- Adjustable windows provide a variety of configurations depending on the material being moved
- Requires 3rd valve hydraulics

#### **Operating Specifications – Light Material High Dump Bucket – Standard Counterweight**

Pa	ackage					972	M XE Stand	lard			
Βι	ucket Type			Pin On			Fusion			VCE-ISO	
Ed	lge Type		Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges						
	Capacity – Rated	m <sup>3</sup>	7.60	9.20	11.10	7.60	9.20	11.10	7.60	9.20	11.10
		yd <sup>3</sup>	(10.00)	(12.00)	(14.50)	(10.00)	(12.00)	(14.50)	(10.00)	(12.00)	(14.50)
	Capacity – Rated at 110% Fill Factor	$m^3$	8.40	10.10	12.20	8.40	10.10	12.20	8.40	10.10	12.20
		yd <sup>3</sup>	(11.00)	(13.25)	(16.00)	(11.00)	(13.25)	(16.00)	(11.00)	(13.25)	(16.00)
	Width	mm	3350	3656	3656	3350	3656	3656	3350	3656	3656
		ft/in	(10' 11")	(11' 11")	(11' 11")	(10' 11")	(11' 11")	(11' 11")	(10' 11")	(11' 11")	(11' 11")
1	Dump Clearance at Max Lift,	mm	5008	4951	4795	5025	4968	4811	5178	5121	4965
	Max Rack, Bucket Rolled out to 45° Discharge	ft/in	14'10"	14'8"	14'2"	15'1"	14'10"	14'4"	15'1"	14'10"	14'5"
2		mm	5477	5477	5477	5494	5494	5494	5647	5647	5647
	Max Rack, Bucket Rolled out to Level	ft/in	16'3"	16'3"	16'3"	16'5"	16'5"	16'5"	16'6"	16'6"	16'6"
3		mm	1725	1781	1936	1736	1792	1947	1839	1896	2051
	Bucket Rolled out to 45° Discharge	ft/in	5'11"	6'2"	6'8"	6'1"	6'4"	6'9"	6'1"	6'4"	6'9"
4	Reach at Level Lift Arm	mm	3658	3738	3958	3678	3758	3978	3863	3943	4163
	and Bucket Level	ft/in	11'0"	11'4"	12'0"	11'3"	11'7"	12'3"	11'3"	11'7"	12'3"
5	Digging Depth	mm	73	73	73	73	73	73	73	73	73
		ft/in	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"
6	Overall Length	mm	9959	10039	10259	9979	10059	10279	10164	10244	10464
		ft/in	29'2"	29'6"	30'2"	29'5"	29'9"	30'5"	29'5"	29'9"	30'5"
7	Overall Height with Bucket at	mm	7386	7446	7614	7403	7463	7631	7556	7616	7784
	Max Height and Max Rack	ft/in	22'5"	22'6"	23'0"	22'7"	22'9"	23'3"	22'8"	22'9"	23'3"
	Loader Clearance Circle Radius	mm	7880	8041	8112	7856	8016	8083	7908	8069	8141
	with Bucket at Carry Position	ft/in	25'10"	26'4"	26'7"	25'9"	26'3"	26'6"	25'11"	26'5"	26'8"
	Static Tipping Load, Straight	kg	16079	15796	15412	15629	15345	14968	14798	14520	14155
	(With Tire Deflection)*	lb	21,249	20,586	19,917	19,889	19,235	18,584	20,159	19,502	18,848
	Static Tipping Load, Straight	kg	17309	17031	16664	16848	16569	16208	15973	15699	15349
	(No Tire Deflection)*	lb	22,563	21,902	21,240	21,179	20,526	19,881	21,446	20,789	20,141
	Static Tipping Load, Articulated	kg	13872	13592	13223	13427	13147	12784	12671	12397	12045
	(With Tire Deflection)*	lb	17,752	17,109	16,474	16,440	15,806	15,188	16,721	16,083	15,463
	Static Tipping Load, Articulated	kg	15119	14846	14495	14667	14393	14048	13870	13602	13266
	(No Tire Deflection)*	lb	19,106	18,465	17,837	17,771	17,137	16,525	18,048	17,411	16,796
	Breakout Force	kN	135	129	114	134	127	113	119	114	102
		lbf	24,747	23,123	20,598	23,678	22,141	19,766	23,430	21,913	19,569
	Operating Weight*	kg	26018	26234	26441	26502	26718	26925	26661	26876	27084
	Sportuning froight	kg lb	46,273	46,778	47,159	47,520	48,027	48,406	47,033	47,540	47,922
		10	70,275	-10,770	т,157	т,,520	40,027	-0,-100	т,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	т <i>,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	71,722

\*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.

(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.

## **Operating Specifications – Light Material High Dump Bucket – Aggregate Counterweight**

Pa	ckage					972N	A XE Aggre	gate			
Βı	icket Type			Pin On			Fusion			VCE-ISO	
Ed	ge Type		Bolt-On Cutting Edges								
	Capacity – Rated	m <sup>3</sup>	7.60	9.20	11.10	7.60	9.20	11.10	7.60	9.20	11.10
		yd <sup>3</sup>	(10.00)	(12.00)	(14.50)	(10.00)	(12.00)	(14.50)	(10.00)	(12.00)	(14.50)
	Capacity – Rated at	m <sup>3</sup>	8.40	10.10	12.20	8.40	10.10	12.20	8.40	10.10	12.20
	110% Fill Factor	yd <sup>3</sup>	(11.00)	(13.25)	(16.00)	(11.00)	(13.25)	(16.00)	(11.00)	(13.25)	(16.00)
	Width	mm	3350	3656	3656	3350	3656	3656	3350	3656	3656
		ft/in	(10' 11")	(11' 11")	(11' 11")	(10' 11")	(11' 11")	(11' 11")	(10' 11")	(11' 11")	(11' 11")
1	Dump Clearance at Max Lift,	mm	5008	4951	4795	5025	4968	4811	5178	5121	4965
	Max Rack, Bucket Rolled out to 45° Discharge	ft/in	14'10"	14'8"	14'2"	15'1"	14'10"	14'4"	15'1"	14'10"	14'5"
2	Clearance at Max Lift,	mm	5477	5477	5477	5494	5494	5494	5647	5647	5647
	Max Rack, Bucket Rolled out to Level	ft/in	16'3"	16'3"	16'3"	16'5"	16'5"	16'5"	16'6"	16'6"	16'6"
3	Reach at Max Lift, Max Rack,	mm	1725	1781	1936	1736	1792	1947	1839	1896	2051
	Bucket Rolled out to 45° Discharge	ft/in	5'11"	6'2"	6'8"	6'1"	6'4"	6'9"	6'1"	6'4"	6'9"
4	Reach at Level Lift Arm	mm	3658	3738	3958	3678	3758	3978	3863	3943	4163
	and Bucket Level	ft/in	11'0"	11'4"	12'0"	11'3"	11'7"	12'3"	11'3"	11'7"	12'3"
5	Digging Depth	mm	73	73	73	73	73	73	73	73	73
		ft/in	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"
6	Overall Length	mm	9645	9725	9945	9665	9745	9965	9850	9930	10150
		ft/in	29'2"	29'6"	30'2"	29'5"	29'9"	30'5"	29'5"	29'9"	30'5"
7	Overall Height with Bucket at	mm	7386	7446	7614	7403	7463	7631	7556	7616	7784
	Max Height and Max Rack	ft/in	22'5"	22'6"	23'0"	22'7"	22'9"	23'3"	22'8"	22'9"	23'3"
	Loader Clearance Circle Radius	mm	7880	8041	8112	7856	8016	8084	7908	8069	8141
	with Bucket at Carry Position	ft/in	25'10"	26'4"	26'7"	25'9"	26'3"	26'6"	25'11"	26'5"	26'8"
	Static Tipping Load, Straight	kg	17196	16908	16513	16742	16454	16065	15870	15589	15214
	(With Tire Deflection)*	lb	21,249	20,586	19,917	19,889	19,235	18,584	20,159	19,502	18,848
	Static Tipping Load, Straight	kg	18534	18252	17877	18068	17785	17415	17149	16872	16513
	(No Tire Deflection)*	lb	22,563	21,902	21,240	21,179	20,526	19,881	21,446	20,789	20,141
	Static Tipping Load, Articulated	kg	14816	14533	14153	14368	14084	13710	13577	13299	12938
	(With Tire Deflection)*	lb	17,752	17,109	16,474	16,440	15,806	15,188	16,721	16,083	15,463
	Static Tipping Load, Articulated	kg	16178	15903	15544	15722	15445	15092	14887	14616	14273
	(No Tire Deflection)*	lb	19,106	18,465	17,837	17,771	17,137	16,525	18,048	17,411	16,796
	Breakout Force	kN	135	129	114	134	127	113	119	114	102
	Divanouri oive							10 54	00 400		
		lbf	24,747	23,123	20,598	23,678	22,141	19,766	23,430	21,913	19,569
	Operating Weight*	lbf kg	24,747 26603	23,123 26819	20,598 27026	23,678 27087	22,141 27303	27510	23,430	21,913	19,569 27669

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

#### **Operating Specifications – Light Material High Dump Bucket – High Lift Linkage**

Pa	ackage					972	M XE High	Lift			
Βι	ucket Type			Pin On			Fusion			VCE-ISO	
Ed	lge Type		Bolt-On Cutting Edges								
	Capacity – Rated	m <sup>3</sup>	7.60	9.20	11.10	7.60	9.20	11.10	7.60	9.20	11.10
		yd <sup>3</sup>	(10.00)	(12.00)	(14.50)	(10.00)	(12.00)	(14.50)	(10.00)	(12.00)	(14.50)
	Capacity – Rated at	m <sup>3</sup>	8.40	10.10	12.20	8.40	10.10	12.20	8.40	10.10	12.20
	110% Fill Factor	yd <sup>3</sup>	(11.00)	(13.25)	(16.00)	(11.00)	(13.25)	(16.00)	(11.00)	(13.25)	(16.00)
	Width	mm	3350	3656	3656	3350	3656	3656	3350	3656	3656
		ft/in	(10' 11")	(11' 11")	(11' 11")	(10' 11")	(11' 11")	(11' 11")	(10' 11")	(11' 11")	(11' 11")
1	Dump Clearance at Max Lift, Max Rack, Bucket Rolled out	mm ft/in	5638 14'10"	5592 14'8"	5468 14'2"	5656 15'1"	5611 14'10"	5487 14'4"	5831 15'1"	5786 14'10"	5662 14'5"
	to 45° Discharge										
2		mm	6022	6022	6022	6041	6041	6041	6216	6216	6216
	Max Rack, Bucket Rolled out to Level	ft/in	16'3"	16'3"	16'3"	16'5"	16'5"	16'5"	16'6"	16'6"	16'6"
3	Reach at Max Lift, Max Rack,	mm	1522	1588	1769	1529	1595	1776	1589	1655	1837
	Bucket Rolled out to 45° Discharge	ft/in	5'11"	6'2"	6'8"	6'1"	6'4"	6'9"	6'1"	6'4"	6'9"
4	Reach at Level Lift Arm	mm	3932	4012	4232	3952	4032	4252	4137	4217	4437
	and Bucket Level	ft/in	11'0"	11'4"	12'0"	11'3"	11'7"	12'3"	11'3"	11'7"	12'3"
5	Digging Depth	mm	68	68	68	68	68	68	68	68	68
		ft/in	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"	2'3"
6	Overall Length	mm	10294	10374	10594	10314	10394	10614	10499	10579	10799
		ft/in	29'2"	29'6"	30'2"	29'5"	29'9"	30'5"	29'5"	29'9"	30'5"
7		mm	7929	7989	8157	7948	8008	8176	8123	8183	8351
	Max Height and Max Rack	ft/in	22'5"	22'6"	23'0"	22'7"	22'9"	23'3"	22'8"	22'9"	23'3"
	Loader Clearance Circle Radius	mm	8063	8223	8300	8037	8196	8270	8096	8256	8334
	with Bucket at Carry Position	ft/in	26'5"	26'11"	27'2"	26'4"	26'10"	27'1"	26'6"	27'1"	27'4"
	Static Tipping Load, Straight	kg	14965	14719	14434	14510	14263	13982	13847	13603	13326
	(With Tire Deflection)*	lb	21,249	20,586	19,917	19,889	19,235	18,584	20,159	19,502	18,848
	Static Tipping Load, Straight	kg	16088	15850	15593	15620	15379	15124	14936	14698	14444
	(No Tire Deflection)*	lb	22,563	21,902	21,240	21,179	20,526	19,881	21,446	20,789	20,141
	Static Tipping Load, Articulated	kg	12878	12632	12352	12427	12179	11902	11821	11577	11303
	(With Tire Deflection)*	lb	17,752	17,109	16,474	16,440	15,806	15,188	16,721	16,083	15,463
	Static Tipping Load, Articulated	kg	13994	13757	13503	13532	13293	13040	12908	12670	12419
	(No Tire Deflection)*	lb	19,106	18,465	17,837	17,771	17,137	16,525	18,048	17,411	16,796
	Breakout Force	kN	131	124	111	129	123	109	115	110	98
		lbf	24,747	23,123	20,598	23,678	22,141	19,766	23,430	21,913	19,569
	Operating Weight*	kg	26103	26319	26526	26587	26803	27010	26746	26961	27169
	· · · · · · · · · · · · · · · · · · ·	lb	46,273	46,778	47,159	47,520	48,027	48,406	47,033	47,540	47,922
		10	10,275	10,770	.,,100	.,,520	10,027	10,100	.,,000	17,510	.,,,22

\*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.

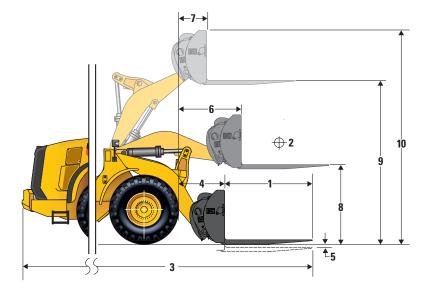
(With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing. (No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

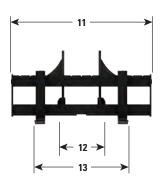
# Woodchip Buckets



	Package		Stan	ıdard	Aggr	egate
	Bucket Type		Pin-On	Fusion	Pin-On	Fusion
	Edge Type		Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges
	Capacity – Rated	m <sup>3</sup>	14.0	14.0	14.0	14.0
		yd <sup>3</sup>	18.25	18.25	18.25	18.25
	Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	15.4	15.4	15.4	15.4
		yd <sup>3</sup>	20.25	20.25	20.25	20.25
	Width	mm	3943	3943	3943	3943
		ft/in	12' 11"	12' 11"	12' 11"	12' 11"
16	Dump Clearance at Maximum Lift and 45° Discharge	mm	2514	2514	2514	2514
		ft/in	8' 2"	8' 3"	8' 2"	8' 3"
17	Reach at Maximum Lift and 45° Discharge	mm	1828	1868	1828	1868
		ft/in	6' 0''	6' 1''	6' 0''	6' 1"
	Reach at Level Lift Arm and Bucket Level	mm	3816	3844	3816	3844
		ft/in	12' 6"	12' 7"	12' 6"	12' 7"
<b>\</b> †	Digging Depth	mm	123	95	123	95
		ft/in	4.8"	3.7"	4.8"	3.7"
<b>2</b> †	Overall Length	mm	10 132	10 139	9818	9825
		ft/in	33' 3"	33' 4"	32' 3"	32' 3"
3†	Overall Height with Bucket at Maximum Lift	mm	7007	7040	7007	7040
		ft/in	22' 12"	23' 2"	22' 12"	23' 2"
	Loader Clearance Circle Radius with Bucket	mm	8167	8167	8167	8167
	at Carry Position	ft/in	26' 9"	26' 9"	26' 9"	26' 9"
	Static Tipping Load, Straight (ISO)	kg	16 456	16 126	17 618	17 304
		lb	36,270	35,543	38,831	38,139
	Static Tipping Load, Straight (Rigid Tire)	kg	17 778	17 414	19 059	18 700
		lb	39,182	38,381	42,007	41,215
	Static Tipping Load, Articulated (ISO)	kg	14 191	13 850	15 173	14 849
		lb	31,278	30,526	33,443	32,727
	Static Tipping Load, Articulated (Rigid Tire)	kg	15 523	15 153	16 632	16 265
		lb	34,213	33,397	36,657	35,849
	Breakout Force	kN	120	118	120	118
		lbf	27,046	26,540	27,046	26,540
	Operating Weight	kg	25 508	26 045	26 092	26 629
		lb	56,218	57,402	57,506	58,690

# Pallet and Construction Forks – ITA



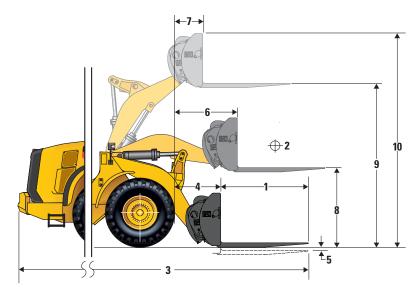


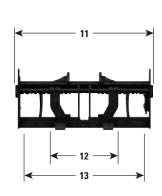
	ייח <u>א</u>	<b>Fines</b>	72" 1	Tines
		ft' in"		ft' in"
		-	mm	-
1 Fork Tine Length	1524	5' 0"	1830	6' 0"
2 Load Center	762	2' 6"	915	3' 0"
3 Overall Length	9735	31' 11"	10 041	32' 11'
4 Reach at Ground	1295	4' 3"	1295	4' 3"
5 Dig Depth	-90	-3.5"	-90	-3.5"
6 Reach with Level Arm	1827	6' 0''	1827	6' 0"
7 Reach at Full Lift	782	2' 7"	782	2' 7"
8 Clearance with Level Arm	1857	6' 1"	1857	6' 1"
9 Clearance at Full Lift	4162	13' 8"	4162	13' 8"
0 Overall Height	4385	14' 5"	4385	14' 5"
11 Carriage Width	2217	7' 3"	2217	7' 3"
12 Minimum Fork Spacing	470	1' 7"	470	1' 7"
13 Maximum Fork Spacing	2070	6' 10"	2070	6' 10"
Tine Width	150	6"	150	6"
Tine Thickness	65	2.5"	65	2.5"
	kg	lb	kg	lb
Load Capacity (per pair)	6300	13,892	5246	11,567
Tipping Load – Straight*	13 970	30,804	13 340	29,415
Tipping Load – Full Turn*	12 288	27,095	11 729	25,862
Operating Weight	23 949	52,808	23 990	52,898
Rated Load % of Full Turn Tip:				
50% of Tip**	6144	13,548	5865	12,932
60% of Tip (rough terrain)***	7373	16,257	7038	15,519
80% of Tip (firm and level)***	9830	21,675	9383	20,690

\*ISO 14397-1:2007

\*\*SAE J1197 – 50% of full turn static tipping load or hydraulic limit.

# **Operating Specifications – 96" Construction Fork**



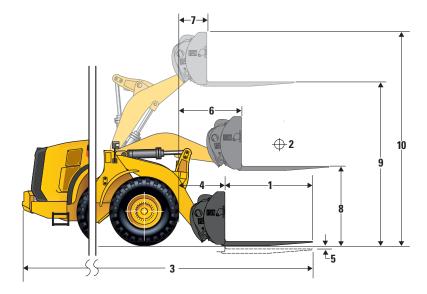


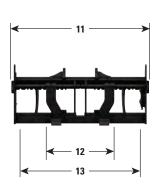
		Construe	ction Fork	- Fusion						
	48" 1	lines	60" 1	lines	72" 1	<b>Fines</b>	84" ]	<b>Fines</b>	96" 1	<b>Fines</b>
	mm	ft' in"	mm	ft' in"	mm	ft' in"	mm	ft' in"	mm	ft' in"
1 Fork Tine Length	1220	4' 0"	1524	5' 0"	1830	6' 0"	2134	7' 0"	2438	8' 0"
2 Load Center	610	2' 0"	762	2' 6"	915	3' 0"	1067	3' 6"	1220	4' 0"
<b>3</b> Overall Length	9384	30' 9"	9707	31' 10"	10 012	32' 10"	10 317	33' 10"	10 621	34' 10"
4 Reach at Ground	1248	4' 1"	1248	4' 1"	1248	4' 1"	1248	4' 1"	1248	4' 1"
5 Dig Depth	14	0.6"	14	0.6"	14	0.6"	14	0.6"	14	0.6"
6 Reach with Level Arm	1818	6' 0"	1818	6' 0"	1818	6' 0"	1818	6' 0"	1818	6' 0"
7 Reach at Full Lift	773	2' 6"	773	2' 6"	773	2' 6"	773	2' 6"	773	2' 6"
8 Clearance with Level Arm	1961	6' 5"	1961	6' 5"	1961	6' 5"	1961	6' 5"	1961	6' 5"
<b>9</b> Clearance at Full Lift	4266	14' 0"	4266	14' 0"	4266	14' 0"	4266	14' 0"	4266	14' 0"
<b>10</b> Overall Height	5307	17' 5"	5307	17' 5"	5307	17' 5"	5307	17' 5"	5307	17' 5"
<b>11</b> Carriage Width	2528	8' 4"	2528	8' 4"	2528	8' 4"	2528	8' 4"	2528	8' 4"
<b>12</b> Minimum Fork Spacing	576	1' 11"	576	1' 11"	576	1' 11"	576	1' 11"	576	1' 11"
<b>13</b> Maximum Fork Spacing	2178	7' 2"	2178	7' 2"	2178	7' 2"	2178	7' 2"	2178	7' 2"
Tine Width	180	7"	180	7"	180	7"	180	7"	180	7"
Tine Thickness	90	3.5"	90	3.5"	90	3.5"	90	3.5"	90	3.5"
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Load Capacity (per pair)	22 200	48,951	17 800	39,249	14 800	32,634	12 700	28,004	11 300	24,917
Tipping Load – Straight*	14 400	31,752	13 644	30,085	13 012	28,691	12 425	27,397	11 881	26,198
Tipping Load – Full Turn*	12 636	27,862	11 963	26,378	11 401	25,139	10 879	23,988	10 394	22,919
Operating Weight	24 252	53,476	24 316	53,617	24 378	53,753	24 441	53,892	24 503	54,029
Rated Load % of Full Turn Tip:										
50% of Tip**	6318	13,931	5981	13,188	5701	12,571	5439	11,993	5197	11,459
60% of Tip (rough terrain)***	7581	16,716	7178	15,827	6841	15,084	6527	14,392	6237	13,753
80% of Tip (firm and level)***	10 108	22,288	9570	21,102	9121	20,112	8703	19,190	8315	18,335

\*ISO 14397-1:2007

\*\*SAE J1197 – 50% of full turn static tipping load or hydraulic limit.

# **Operating Specifications – 108" Construction Fork**



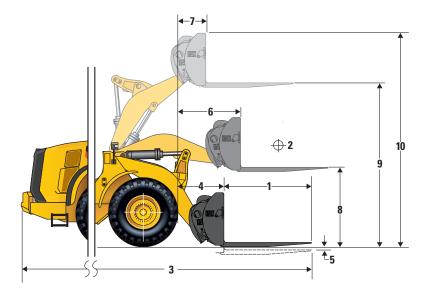


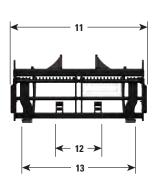
		Construc	ction Fork	- Fusion						
	48" 1	lines	60" 1	lines	72" 1	lines	84" 1	lines	96" 1	lines
	mm	ft' in"	mm	ft' in"	mm	ft' in"	mm	ft' in"	mm	ft' in"
1 Fork Tine Length	1220	4' 0"	1524	5' 0"	1830	6' 0"	2134	7' 0"	2438	7' 12"
<b>2</b> Load Center	610	2' 0"	762	2' 6"	915	3' 0"	1067	3' 6"	1220	4' 0"
<b>3</b> Overall Length	9384	30' 9"	9707	31' 10"	10 012	32' 10"	10 317	33' 10"	10 621	34' 10"
4 Reach at Ground	1248	4' 1"	1248	4' 1"	1248	4' 1"	1248	4' 1"	1248	4' 1"
5 Dig Depth	14	0.6"	14	0.6"	14	0.6"	14	0.6"	14	0.6"
6 Reach with Level Arm	1818	5' 12"	1818	5' 12"	1818	5' 12"	1818	5' 12"	1818	5' 12"
7 Reach at Full Lift	773	2' 6"	773	2' 6"	773	2' 6"	773	2' 6"	773	2' 6"
8 Clearance with Level Arm	1961	6' 5"	1961	6' 5"	1961	6' 5"	1961	6' 5"	1961	6' 5"
<b>9</b> Clearance at Full Lift	4266	13' 12"	4266	13' 12"	4266	13' 12"	4266	13' 12"	4266	13' 12"
<b>10</b> Overall Height	5307	17' 5"	5307	17' 5"	5307	17' 5"	5307	17' 5"	5307	17' 5"
11 Carriage Width	2528	8' 4"	2528	8' 4"	2528	8' 4"	2528	8' 4"	2528	8' 4"
<b>12</b> Minimum Fork Spacing	576	1' 11"	576	1' 11"	576	1' 11"	576	1' 11"	576	1' 11"
<b>13</b> Maximum Fork Spacing	2178	7' 2"	2178	7'2"	2178	7' 2"	2178	7' 2"	2178	7' 2"
Tine Width	180	7.1"	180	7.1"	180	7.1"	180	7.1"	180	7.1"
Tine Thickness	90	3.5"	90	3.5"	90	3.5"	90	3.5"	90	3.5"
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Load Capacity (per pair)	22 200	48,951	17 800	39,249	14 800	32,634	12 700	28,004	11 300	24,917
Tipping Load – Straight*	14 359	31,662	13 607	30,003	12 977	28,614	12 392	27,324	11 848	26,125
Tipping Load – Full Turn*	12 595	27,772	11 927	26,299	11 366	25,062	10 846	23,915	10 362	22,848
Operating Weight	24 305	53,593	24 366	53,727	24 428	53,864	24 490	54,000	24 553	54,139
Rated Load % of Full Turn Tip:										
50% of Tip**	6297	13,885	5963	13,148	5683	12,531	5423	11,958	5181	11,424
60% of Tip (rough terrain)***	7557	16,663	7156	15,779	6820	15,038	6508	14,350	6217	13,708
80% of Tip (firm and level)***	10 076	22,218	9541	21,038	9093	20,050	8677	19,133	8289	18,277

\*ISO 14397-1:2007

\*\*SAE J1197 – 50% of full turn static tipping load or hydraulic limit.

# **Operating Specifications – 87" Carriage Pallet Fork**





	Palle	t Fork - Fusion					
	48" 1	lines	60" 1	lines	72" Tines		
	mm	ft' in"	mm	ft' in"	mm	ft' in"	
1 Fork Tine Length	1220	4' 0"	1524	5' 0"	1830	6' 0"	
2 Load Center	610	2' 0"	762	2' 6"	915	3' 0"	
<b>3</b> Overall Length	9306	30' 6"	9611	31' 6"	9916	32' 6"	
4 Reach at Ground	1171	3' 10"	1171	3' 10"	1171	3' 10"	
5 Dig Depth	-72	-2.8"	-72	-2.8"	-72	-2.8"	
6 Reach with Level Arm	1716	5' 8"	1716	5' 8"	1716	5' 8"	
7 Reach at Full Lift	671	2' 2"	671	2' 2"	671	2' 2"	
8 Clearance with Level Arm	1874	6' 2"	1874	6' 2"	1874	6' 2"	
9 Clearance at Full Lift	4180	13' 9"	4180	13' 9"	4180	13' 9"	
0 Overall Height	5249	17' 3"	5249	17' 3"	5249	17' 3'	
1 Carriage Width	2235	7' 4''	2235	7' 4''	2235	7' 4"	
2 Minimum Fork Spacing	385	1' 3"	385	1' 3"	385	1' 3"	
3 Maximum Fork Spacing	1947	6' 5"	1947	6' 5"	1947	6' 5"	
Tine Width	150	6"	150	6"	150	6"	
Tine Thickness	65	2.5"	65	2.5"	65	2.5"	
	kg	lb	kg	lb	kg	lb	
Load Capacity (per pair)	8800	19,404	6590	14,531	5850	12,899	
Tipping Load – Straight*	15 248	33,622	14 527	32,032	13 866	30,57	
Tipping Load – Full Turn*	13 427	29,607	12 789	28,200	12 203	26,90	
Operating Weight	23 791	52,459	23 829	52,543	23 866	52,62	
Rated Load % of Full Turn Tip:							
50% of Tip**	6714	14,804	6395	14,101	6102	13,45	
60% of Tip (rough terrain)***	8056	17,763	7673	16,919	7322	16,14	
80% of Tip (firm and level)***	10 742	23,686	10 231	22,559	9763	21,52	

\*ISO 14397-1:2007

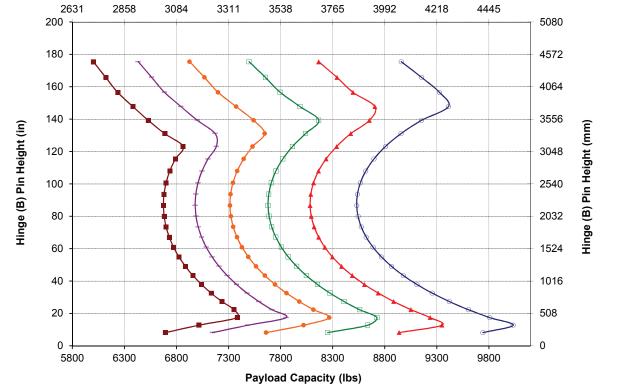
\*\*SAE J1197 – 50% of full turn static tipping load or hydraulic limit.

#### **Material Handling Arm – Standard Fusion**

MHA Specifications		Retracted	Extension 1	Extension 2	Extension 3	Extension 4	Extended
May Life Llook Deach (1, 0, 0, 4, 5, 6)	mm	2,067	2,207	2,347	2,488	2,628	2,769
Max Lift - Hook Reach (1, 2, 3, 4, 5, 6)	ft, in	6' 9"	7' 2"	7' 8"	8' 1"	8' 7"	9' 1"
	mm	7,275	7,545	7,816	8,086	8,357	8,627
Max Lift - Hook Height (7, 8, 9, 10, 11, 12)	ft, in	23' 10"	24' 9"	25' 7"	26' 6"	27' 5"	28' 3"
	mm	4,686	4,991	5,296	5,600	5,905	6,210
Level - Hook Reach (13, 14, 15, 16, 17, 18)	ft, in	15' 4"	16' 4"	17' 4"	18' 4"	19' 4"	20' 4"
	mm	1,928	1,928	1,928	1,928	1,928	1,928
Level - Hook Height (19)	ft, in	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"
	mm	1,890	2,020	2,149	2,278	2,407	2,537
Min Lift - Hook Reach (20, 21, 22, 23, 24, 25)	ft, in	6' 2"	6' 7"	7' 0"	7' 5"	7' 10"	8' 3"
	mm	(2,868)	(3,144)	(3,420)	(3,696)	(3,972)	(4,248)
Min Lift - Hook Height (26, 27, 28, 29, 30, 31)	ft, in	-9' 7"	-10' 8"	-11' 9"	-12' 10"	-13' 11"	-13' 0"
	kg	8,802	8,340	7,923	7,545	7,201	6,885
Static Tipping Load, Straight	lb	19,401	18,382	17,463	16,629	15,870	15,176
	kg	7,768	7,359	6,991	6,657	6,352	6,074
Static Tipping Load, Articulated	lb	17,120	16,220	15,408	14,671	14,000	13,386
	kg	23,701	23,701	23,701	23,701	23,701	23,701
Operating Weight	lb	52,237	52,237	52,237	52,237	52,237	52,237



#### Payload Capacity (kg) (Calculated Load at CG Point)



(Calculated Load at CG Point)

----Retracted

Extension 1

Extension 2
Extension 3

-Extension 4

-Extended

NOTE: Static tipping loads and operating weight are based on the following loader configuration: L-3 Michelin Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator.

Specifications and ratings conform to the following standards: SAE\* J1197, SAE J732

The rated operating load for a loader equipped with a material handling arm is determined by: SAE J1197: 50% of full turn static tipping load or hydraulic limit.

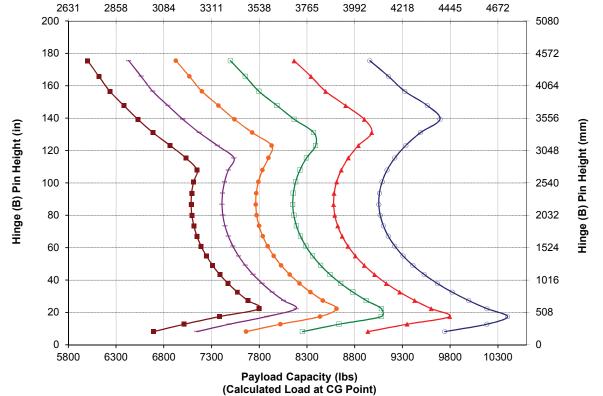
\*SAE - Society of Automotive Engineers

## **Material Handling Arm – Aggregate Fusion**

MHA Specifications		Retracted	Extension 1	Extension 2	Extension 3	Extension 4	Extended
May Life Lleek Decek (4, 2, 2, 4, 5, 6)	mm	2,067	2,207	2,347	2,488	2,628	2,769
Max Lift - Hook Reach (1, 2, 3, 4, 5, 6)	ft, in	6' 9"	7' 2"	7' 8"	8' 1"	8' 7"	9' 1"
	mm	7,275	7,545	7,816	8,086	8,357	8,627
Max Lift - Hook Height (7, 8, 9, 10, 11, 12)	ft, in	23' 10"	24' 9"	25' 7"	26' 6"	27' 5"	28' 3"
	mm	4,686	4,991	5,296	5,600	5,905	6,210
Level - Hook Reach (13, 14, 15, 16, 17, 18)	ft, in	15' 4"	16' 4"	17' 4"	18' 4"	19' 4"	20' 4"
	mm	1,928	1,928	1,928	1,928	1,928	1,928
Level - Hook Height (19)	ft, in	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"
	mm	1,890	2,020	2,149	2,278	2,407	2,537
Min Lift - Hook Reach (20, 21, 22, 23, 24, 25)	ft, in	6' 2"	6' 7"	7' 0"	7' 5"	7' 10"	8' 3"
	mm	(2,868)	(3,144)	(3,420)	(3,696)	(3,972)	(4,248
Min Lift - Hook Height (26, 27, 28, 29, 30, 31)	ft, in	-9' 7"	-10' 8"	-11' 9"	-12' 10"	-13' 11"	-13' 0"
	kg	9,360	8,869	8,426	8,024	7,659	7,324
Static Tipping Load, Straight	lb	20,629	19,547	18,571	17,686	16,880	16,142
	kg	8,245	7,812	7,422	7,068	6,745	6,450
Static Tipping Load, Articulated	lb	18,172	17,218	16,358	15,577	14,866	14,215
Operating Weight	kg	24,285	24,285	24,285	24,285	24,285	24,285
	lb	53,525	53,525	53,525	53,525	53,525	53,525



#### Payload Capacity (kg) (Calculated Load at CG Point)



Extension 2

--Extension 3

-Extension 4

----Extended

NOTE: Static tipping loads and operating weight are based on the following loader configuration: L-3 Michelin Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator.

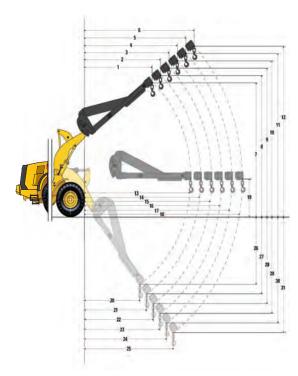
Specifications and ratings conform to the following standards: SAE\* J1197, SAE J732

The rated operating load for a loader equipped with a material handling arm is determined by: SAE J1197: 50% of full turn static tipping load or hydraulic limit.

\*SAE - Society of Automotive Engineers

#### **Material Handling Arm – High Lift Fusion**

MHA Specifications		Retracted	Extension 1	Extension 2	Extension 3	Extension 4	Extended
Max Lift - Hook Reach (1, 2, 3, 4, 5, 6)	mm	1,276	1,339	1,402	1,465	1,528	1,592
Max Lill - HOUK Reach (1, 2, 3, 4, 3, 0)	ft, in	4' 2"	4' 4"	4' 7"	4' 9"	5' 0"	5' 2"
March 16 - 11 - 11 - 11 - 11 - 11 - 11 - 11	mm	7,966	8,264	8,563	8,861	9,159	9,457
Max Lift - Hook Height (7, 8, 9, 10, 11, 12)	ft, in	26' 1"	27' 1"	28' 1"	29' 0"	30' 0"	31' 0"
Level Llock Deeph (42, 44, 45, 40, 47, 40)	mm	4,960	5,265	5,570	5,874	6,179	6,484
Level - Hook Reach (13, 14, 15, 16, 17, 18)	ft, in	16' 3"	17' 3"	18' 3"	19' 3"	20' 3"	21' 3'
	mm	1,928	1,928	1,928	1,928	1,928	1,928
Level - Hook Height (19)	ft, in	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"	6' 3.8"
	mm	(410)	(526)	(642)	(758)	(874)	(990
Min Lift - Hook Reach (20, 21, 22, 23, 24, 25)	ft, in	-1' 7"	-1' 3"	-2' 10"	-2' 6"	-2' 1"	-3' 9"
Min Lift Haak Height (26, 27, 29, 20, 20, 21)	mm	(2,746)	(3,028)	(3,310)	(3,592)	(3,873)	(4,155
Min Lift - Hook Height (26, 27, 28, 29, 30, 31)	ft, in	-9' 11"	-9' 0"	-10' 1"	-11' 2"	-12' 3"	-13' 4"
Obatha Timologia Lagadi Obashabi	kg	8,224	7,811	7,436	7,095	6,783	6,497
Static Tipping Load, Straight	lb	18,127	17,215	16,390	15,638	14,950	14,319
Chatta Tinning Land Anticulated	kg	7,238	6,873	6,543	6,242	5,967	5,715
Static Tipping Load, Articulated	lb	15,952	15,149	14,421	13,758	13,152	12,596
On another a William	kg	23,788	23,788	23,788	23,788	23,788	23,788
Operating Weight	lb	52,429	52,429	52,429	52,429	52,429	52,429



# ---Retracted

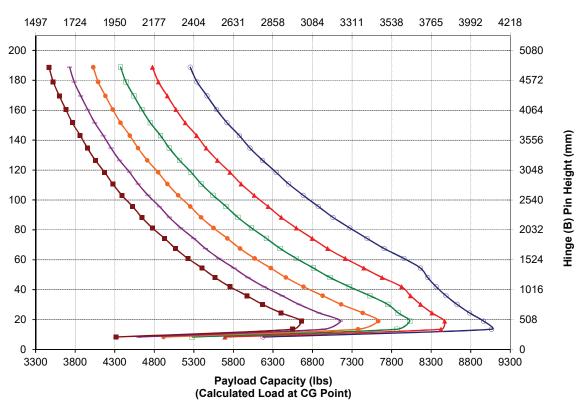
- Extension 1
- Extension 2
- --Extension 3
- -Extension 4
- -Extended

NOTE: Static tipping loads and operating weight are based on the following loader configuration: L-3 Michelin Tires, Air Conditioning, Ride Control, Powertrain Guard, Full Fluids, Fuel Tank, Coolant, Lubricants, and Operator. Hinge (B) Pin Height (in)

Specifications and ratings conform to the following standards: SAE\* J1197, SAE J732

The rated operating load for a loader equipped with a material handling arm is determined by: SAE J1197: 50% of full turn static tipping load or hydraulic limit.

\*SAE - Society of Automotive Engineers



#### Payload Capacity (kg) (Calculated Load at CG Point)

# **Standard and Optional Equipment**

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

	Standard	Optional		Standard	Optiona
POWER TRAIN			OPERATOR ENVIRONMENT		
Axles, ecology drains	✓ (		Air conditioner, heater, and defroster (auto temp and fan)	$\checkmark$	
Axles, manually actuated differential lock front axle, open differential rear axle	$\checkmark$		Beverage holders (2) with storage	$\checkmark$	
Axles – automatic front/rear differential locks, axle oil cooler, extreme		$\checkmark$	compartment for cell phone/MP3 player Bucket/work tool function lockout	✓	
temperature seals, seal guards			Cab air filter	√	
Brake wear indicators	$\checkmark$		Cab, pressurized and sound suppressed	✓	
Brakes, full hydraulic enclosed wet- disc with modulated neutralizer and	$\checkmark$		(ROPS/FOPS)		
integrated retarding			Cab tie-off		
Cat Clean Emissions Module (CEM)	✓		Coat hook (2)	✓	
with Diesel Particulate Filter (DPF) and			Cover, HVAC metallic		✓
Diesel Exhaust Fluid (DEF) tank and			Door, remote opening system		✓
pump Engine, Cat C9.3 – meets U.S. EPA Tier 4	✓		EH controls, SAL (single axis lever) lift and tilt function	$\checkmark$	
Final/EU Stage V emission standards Fan, radiator, electronically controlled, hydraulically driven, temperature sensing,	$\checkmark$		EH controls, joystick lift and tilt – additional integrated roller switches for 3 <sup>rd</sup> and 4 <sup>th</sup> functions		$\checkmark$
on demand Fan, VPF (variable pitch fan), automatic			EH controls, SAL 3 <sup>rd</sup> function – additional roller switch for 4 <sup>th</sup> function		~
and manual control			EH parking brake	$\checkmark$	
Fuel priming pump (electric)	<b>√</b>		Ergonomic cab access ladders and handrails	~	
Fuel/water separator	✓		Filter, carbon fresh air		✓
Parking brake, disc and caliper	✓			✓	•
Precleaner, engine air intake	✓		Horn, electric		
Secondary steering	✓		Light, two dome (cab)	$\checkmark$	
Radiator, high debris, wide fin spacing Right pedal lock, maximum rimpull	✓ ✓		Mirrors, heated rearview external with integrated spot mirrors		~
control and machine speed limit in the cab	v		Mirrors, rearview external with integrated spot mirrors	$\checkmark$	
Transmission, Cat continuously variable	✓		Multi-function 18 cm color LCD touch-	$\checkmark$	
CAT TECHNOLOGY			screen display for rear vision camera		
Detect technologies: Rear vision camera	/		image display (reverse travel activated) and machine status, setting and health		
Cat rear object detection	v	$\checkmark$	paramaters		
Link technologies:			Post mounted membrane 16 switch keypad	$\checkmark$	
Product Link VIMS™	$\checkmark$	$\checkmark$	Precleaner, HVAC		$\checkmark$
Payload technologies: Advanced			Precleaner, HVAC (RESPA)		$\checkmark$
Productivity subscription, Cat Production Measurement 2.0, Printer,		•	Radio, AM/FM/CD/USB/MP3 Bluetooth <sup>®</sup>		~
Aggregate Autodig			Radio, CB ready		~
Machine security system		$\checkmark$	Radio ready (entertainment) includes antenna, speakers and converter (12V, 10-amp)	√	
			··· · · · · · · · · · · · · · · · · ·		

Receptacles (2), 12V

(continued on next page)

 $\checkmark$ 

## Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard
<b>DPERATOR ENVIRONMENT</b> (continued)			ELECTRICAL AND LIGHTING (continued)	
Roof, metallic		$\checkmark$	Main disconnect switch	$\checkmark$
Seat, Cat Comfort (cloth) air suspension	$\checkmark$		Receptacle start (cables not included)	$\checkmark$
Seat belt, 51 mm (2 in) retractable,	$\checkmark$		Secondary steering	$\checkmark$
with indicator			Speed limiter – 20 km/h	
Seat belt, 4 point harness, with indicator		✓	Starter, electric, heavy duty	$\checkmark$
Seat, heated air suspension		$\checkmark$	Starting and charging system (24V)	✓
Steering, EH joystick, speed sensing with force feedback	$\checkmark$		<b>FLUIDS</b> Biodegradable oil, Cat HYDO™	
Sun visor, front	$\checkmark$		Premixed extended life coolant with	
Sun visor, rear		$\checkmark$	freeze protection to $-34^{\circ}C$ (-29°F)	v
Viscous mounts	$\checkmark$		Premixed extended life coolant with	
Wet-arm wipers/washers front and rear,	$\checkmark$		freeze protection to -50°C (-58°F)	
intermittent front wiper			HYDRAULICS	
Windows, rubber mounted		$\checkmark$	Autolube	
Window, sliding (left and right sides)	$\checkmark$		Couplings, Cat O-ring face seal	$\checkmark$
Windows, with front guard		$\checkmark$	Hoses, Cat XT <sup>TM</sup>	✓
Windows, with heavy duty front guard		$\checkmark$	Hydraulic oil cooler (swing out)	✓
Windows, with full guards front,		$\checkmark$	Hydraulic system, load sensing	✓
rear and sides		_	Oil sampling valves	√
LECTRICAL AND LIGHTING	,		3 <sup>rd</sup> function with Ride Control	
Alarm, back-up	✓ ✓		4 <sup>th</sup> function with Ride Control	
Alternator, 145-amp brushed	√		Remote diagnostic pressure taps	√
Auxiliary halogen cab-mounted work lights (four additional) or		$\checkmark$	Ride control, 2V	√
HID cab-mounted work lights (four		✓	Steering, load sensing	✓
additional)			LINKAGE	
Batteries (2), maintenance free	√		Extended capacity	
1,400 CCA			High lift	
Emergency engine shutdown switch	$\checkmark$		Kickout, lift and tilt, automatic	$\checkmark$
Ignition key; start/stop switch	$\checkmark$		(adjustable cab)	
LED front and rear roading lights		$\checkmark$	Quick coupler ready	
Lighting system: four halogen work lights	$\checkmark$		Z-bar, cast crosstube/tilt lever	✓
(cab mounted), two halogen roading lights (with signals), two halogen rear			STARTERS, BATTERIES, AND ALTERNATORS	
vision lights (hood mounted), two rear			Cold start – 240V	
LED position/stop/turn signal lights			WORK TOOLS	
			Forks, logging	
			Faulta mallat	

Hydraulic oil cooler (swing out)	✓	
Hydraulic system, load sensing	$\checkmark$	
Oil sampling valves	$\checkmark$	
3 <sup>rd</sup> function with Ride Control		$\checkmark$
4 <sup>th</sup> function with Ride Control		$\checkmark$
Remote diagnostic pressure taps	✓	
Ride control, 2V	✓	
Steering, load sensing	$\checkmark$	
LINKAGE		
Extended capacity		$\checkmark$
High lift		$\checkmark$
Kickout, lift and tilt, automatic (adjustable cab)	$\checkmark$	
Quick coupler ready		$\checkmark$
Z-bar, cast crosstube/tilt lever	$\checkmark$	
STARTERS, BATTERIES, AND ALTERNATOR	S	
Cold start – 240V		$\checkmark$
WORK TOOLS		
Forks, logging		$\checkmark$
Forks, pallet		$\checkmark$
Fusion quick coupler		√
Material handling arms		$\checkmark$
Performance Series buckets		✓
Snow products		✓
VCE quick coupler		$\checkmark$
	(continued on	next page)

Optional

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

# Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optiona
COMPUTERIZED MONITORING SYSTEM			<b>OTHER STANDARD AND OPTIONAL EQUIPME</b>	NT	
With following gauges:	$\checkmark$		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		$\checkmark$
Temperature: axle oil, engine intake manifold			Filters: fuel, engine air, engine oil, hydraulic oil, transmission	$\checkmark$	
Pressure: engine oil, fuel pressure hi/low, primary steering oil, service			Fuel cooler	$\checkmark$	
brake oil			Grease zerks	✓	
Battery voltage hi/low			Grill, airborne debris	$\checkmark$	
Engine air filter restriction			Guard, power train		~
Hydraulic oil filter restriction Hydraulic oil low			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	$\checkmark$	
			Toolbox	$\checkmark$	
			Vandalism protection caplocks	$\checkmark$	
			OTHER CONFIGURATIONS		
			Aggregate handler		~
			Corrosion resistance		~
			Industrial and waste handler		✓



# **972M XE** Industrial & Waste

In the harsh scrap, waste, and recycling environment, your operation requires a wheel loader to process material as efficiently and safely as possible with minimal downtime.

#### **Durability**

- Robotically welded frame design provides rigid structures that absorb torsional loads.
- M Series articulating hitch design provides increased bearing force capacity.
- Heavy-duty transmissions and axles are designed to handle extreme conditions inherent with scrap handling applications.

## **Achieve Greater Productivity**

- Continuously variable transmission delivers smooth shifts, fast acceleration and speed on grade.
- Deep system integration of the Cat continuously variable transmission, engine system, hydraulic system, transmission, and cooling system results in significantly increased performance and fuel efficiency.
- Lowering the rated engine speed and eliminating the torque converter results in speed that can be controlled independently of the engine speed.
- Easy-to-load Performance Series buckets improve material retention and reduce dig times, significantly improving productivity and fuel efficiency.
- Optional Cat Fusion quick coupler and 3rd/4th valve hydraulic functions allow for greater work tool and jobsite versatility.
- Automatic idle engine shutdown system significantly reduces idle time, overall operating hours, and fuel consumption.
- Standard and optional traction aids increase traction, diminish tire wear, and further reduce operating costs.
- Optional high lift linkage offers increased hinge pin height for improved stacking capability as well as easier load out of high side trucks and containers.
- Cat payload technologies provide accurate weighing\* of the materials you are loading and hauling. Payload data is displayed in real-time to improve productivity and reduce overloading.

\*Optional configurations and equipment may vary from region to region and require conformance to Caterpillar payload policy. Consult your dealer or Caterpillar representative for details. Not legal for trade.

#### **Safety Features**

- Cab access with wide door and stair-like steps adds solid stability.
- Floor-to-ceiling windshield, large mirrors with integrated spot mirrors, and rear vision camera provide industry-leading all-around visibility.
- Rear vision camera enhances visibility behind the machine, helping you work safely and confidently.

## Easy, Comfortable Operator Environment

- Sound-suppression, seals, and viscous cab mounts decrease noise and vibration for a quieter work environment.
- The seat-mounted electro-hydraulic joystick steering system provides precision control and dramatically reduces arm fatigue, resulting in excellent comfort and accuracy.
- Ergonomic controls are easy to use, intuitive, and user-friendly.
- Touchscreen multi-function color display keeps operators focused.
- Inclined steps and convenient grab handles ease accessibility to the operating space.

## **Reduced Maintenance Time and Costs**

- One-piece tilting hood makes engine access fast and easy.
- Electrical service centers enhance convenience and accessibility.
- Easy access to fuel fill and daily maintenance points means less servicing time is required.
- Extended service intervals, including:
  - Engine oil and engine oil filter change interval up to 1,000 hours
  - Hydraulic filter change interval up to 1,000 hours
  - Transmission oil change interval up to 2,000 hours
- Remote flash support.
- Longer tire life with on-the-go traction aids.
- Optional integrated Cat autolube system provides full lube system monitoring and diagnostic test visibility.
- Integrated window cleaning platform with tie-off point allows easy access to the front of the machine.

## Engine

•		
Engine Model	Cat C9.3	
Maximum Net Power (1,600 rpm)		
SAE J1349	232 kW	311 hp
ISO 9249	232 kW	311 hp
Peak Gross Torque (1,200 rpm)		
SAE J1995	1728 N·m	1,275 lbf-ft
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>

• Cat engine with ACERT Technology – meets U.S. EPA Tier 4 Final/ EU Stage V emission standards.

• 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.

#### Brakes

Brakes

Brakes meet ISO 3450:2011 standards

### **Transmission Virtual Gears**

Forward 1	6.7 km/h	4.2 mph
Forward 2	12.6 km/h	7.8 mph
Forward 3	22.1 km/h	13.7 mph
Forward 4	39.5 km/h	24.5 mph
Reverse 1	6.7 km/h	4.2 mph
Reverse 2	12.6 km/h	7.8 mph
Reverse 3	28.0 km/h	17.4 mph

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

#### **Hydraulic System**

Implement Pump Type	Variable Dis Piston	splacement	
Implement System			
Maximum Pump Output (1,600 rpm*)	385 L/min	102 gal/min	
Maximum Operating Pressure	31 000 kPa	4,496 psi	
Maximum Flow – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function	240 L/min	63 gal/min	
Maximum Pressure – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function	21 780 kPa	3,159 psi	
Hydraulic Cycle Time with Rated Payload			
Raise from Carry Position	6.1	Sec.	
Dump, at Maximum Raise	1.5	Sec.	
Lower, Empty, Float Down	3.1	Sec.	
Total	10.7 Sec.		

\*Engine speed.

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

#### 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)	67 dB(A)
Exterior sound power level (ISO 6395:2008)	107 dB(A)
Exterior sound pressure level (SAE J88:2013)	76 dB(A)*

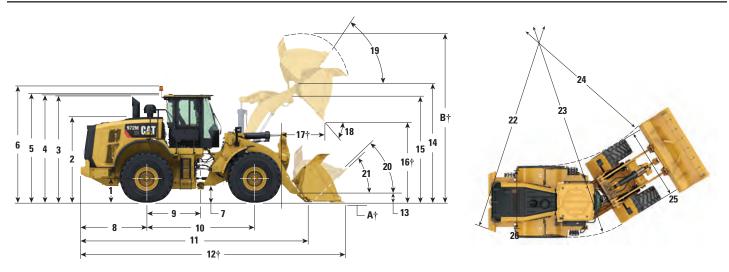
\*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

## **Service Refill Capacities**

Fuel Tank	302.0 L	79.8 gal
DEF Tank	16.8 L	4.4 gal
Cooling System	71.6 L	19.0 gal
Crankcase	24.5 L	6.5 gal
Transmission	63.0 L	16.6 gal
Differentials and Final Drives – Front	57.0 L	15.1 gal
Differentials and Final Drives – Rear	57.0 L	15.1 gal
Hydraulic Tank	125.0 L	33.0 gal

#### **Dimensions**

All dimensions are approximate.



	Standa	rd Lift	High Lift		
1 Height to Axle Centerline	835 mm	2'9"	835 mm	2'9"	
2 Height to Top of Hood	2854 mm	9'4"	2854 mm	9'4"	
<b>3</b> Height to Top of Exhaust Pipe	3558 mm	11'8"	3558 mm	11'8"	
4 Height to Top of ROPS	3623 mm	11'11"	3623 mm	11'11"	
<b>5</b> Height to Top of Product Link Antenna	3672 mm	12'1"	3672 mm	12'1"	
<b>6</b> Height to Top of Warning Beacon	3895 mm	12'9"	3895 mm	12'9"	
7 Ground Clearance	470 mm	1'7"	470 mm	1'7"	
8 Center Line of Rear Axle to Edge of Counterweight	2500 mm	8'2"	2500 mm	8'2"	
<b>9</b> 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"	
<b>11</b> Overall Length (without bucket)	9384 mm	30'10"	9720 mm	31'11"	
<b>12</b> Shipping Length (with bucket level on ground)*†	9060 mm	29'9"	9395 mm	30'10"	
<b>13</b> Hinge Pin Height at Carry Height	716 mm	2'4"	814 mm	2'8"	
14 Hinge Pin Height at Maximum Lift	4494 mm	14'9"	4829 mm	15'10"	
15 Lift Arm Clearance at Maximum Lift	3879 mm	12'8"	4176 mm	13'8"	
<b>16</b> Dump Clearance at Maximum Lift and 45° Discharge*†	2892 mm	9'5"	3227 mm	10'7"	
<b>17</b> Reach at Maximum Lift and 45° Discharge*†	1478 mm	4'10"	1501 mm	4'11"	
<b>18</b> Dump Angle at Maximum Lift and Dump (on stops)*	44.1 de	grees	44.1 de	egrees	
<b>19</b> Rack Back at Maximum Lift*	56 deg	grees	71 deg	grees	
20 Rack Back at Carry Height*	50 deg	grees	49 deg	grees	
21 Rack Back at Ground*	41 deg	grees	39 deg	grees	
<b>22</b> Clearance Circle (radius) to Counterweight	6872 mm	22'7"	6872 mm	22'7"	
<b>23</b> Clearance Circle (radius) to Outside of Tires	6717 mm	22'1"	6717 mm	22'1"	
24 Clearance Circle (radius) to Inside of Tires	3898 mm	12'10"	3898 mm	12'10"	
<b>25</b> Width over Tires – Maximum (unloaded)	2959 mm	9'9"	2959 mm	9'9"	
Width over Tires – Maximum (loaded)	2968 mm	9'9"	2968 mm	9'9"	
26 Tread Width	2230 mm	7'4''	2230 mm	7'4''	

\*With 7.4 m<sup>3</sup> (9.75 yd<sup>3</sup>) pin-on waste bucket with steel bolt-on cutting edges (see Operating Specifications for other Buckets) and rear guard counterweight. †Dimensions are listed in Operating Specification charts.

All height and tire related dimensions are with Brawler 26.5-25 HPS Solidflex Smooth tires (see Tire Option charts for other tires). "Width over Tires" dimensions are over the bulge and include growth.

# **Tire Options for Scrap and Waste**

Tire Brand	Brawler HPS	Brawler HPS	Michelin	Bridgestone	Yokohama	Titan
Tire Size	26.5-25	26.5-25	26.5R25	26.5R25	26.5R25	26.5R25
Tread Type			L-3	L-3	L-3	L-3
Tread Pattern	Solidflex Smooth	Solidflex Traction	XHA2	VJT	RB31	STL3
Width over Tires – Maximum (empty)*	2959 mm	2959 mm	2990 mm	2982 mm	2955 mm	2968 mm
	9'8"	9'8"	9'10"	9'9"	9'8"	9'9"
Width over Tires – Maximum (loaded)*	2968 mm	2968 mm	3012 mm	3016 mm	2981 mm	3009 mm
	9'9"	9'9"	9'11"	9'11"	9'9"	9'10"
Change in Vertical Dimensions	0 mm	0 mm	-36 mm	-22 mm	-24 mm	-22 mm
(average of front and rear)	0"	0"	-1"	-1"	-1"	-1"
Change in Horizontal Reach	0 mm	0 mm	-9 mm	-11 mm	-8 mm	-9 mm
	0"	0"	0"	0"	0"	0"
Change in Clearance Circle (radius) to Outside of Tires	0 mm	0 mm	45 mm	48 mm	14 mm	42 mm
	0"	0"	2"	2"	1"	2"
Change in Clearance Circle (radius) to Inside of Tires	0 mm	0 mm	-45 mm	-48 mm	-14 mm	-42 mm
	0"	0"	-2"	-2"	-1"	-2"
Change in Operating Weight (without Ballast)	0 kg	-222 kg	-4464 kg	-4300 kg	-4188 kg	-4344 kg
	0 lb	-489 lb	-9,839 lb	-9,477 lb	-9,230 lb	-9,574 lb
Change in Static Tipping Load – Straight	0 kg	-149 kg	-3004 kg	-2893 kg	-2818 kg	-2923 kg
	0 lb	-329 lb	-6,620 lb	-6,377 lb	-6,211 lb	-6,443 lb
Change in Static Tipping Load – Articulated	0 kg	-133 kg	-2674 kg	–2576 kg	–2509 kg	-2602 kg
	0 lb	-293 lb	-5,893 lb	–5,677 lb	–5,529 lb	-5,735 lb

\*Width over tire bulge and includes tire growth.

-

# **Operating Specifications – Waste Buckets**

Waste Load & Carry Bucket			Waste Tamp & Clamp Bucket		
Bucket Type		Pin-On Load & Carry	Pin-On Dozing	Pin-On Tamp & Clamp	
Edge Type		Steel Bolt-On Cutting Edges	Steel Bolt-On Cutting Edges	Steel Bolt-On Cutting Edges	- High Lift Delta*
Capacity – Rated	m <sup>3</sup>	7.40	6.50	5.00	
	yd <sup>3</sup>	9.75	8.50	6.50	
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	8.10	7.20	5.50	_
	yd <sup>3</sup>	10.50	9.50	7.25	—
Width	mm	3357	3357	3357	
	ft/in	11'0"	11'0"	11'0"	—
<b>16</b> <sup>†</sup> Dump Clearance at Maximum Lift and 45° Discharge	mm	2892	3172	2678	336

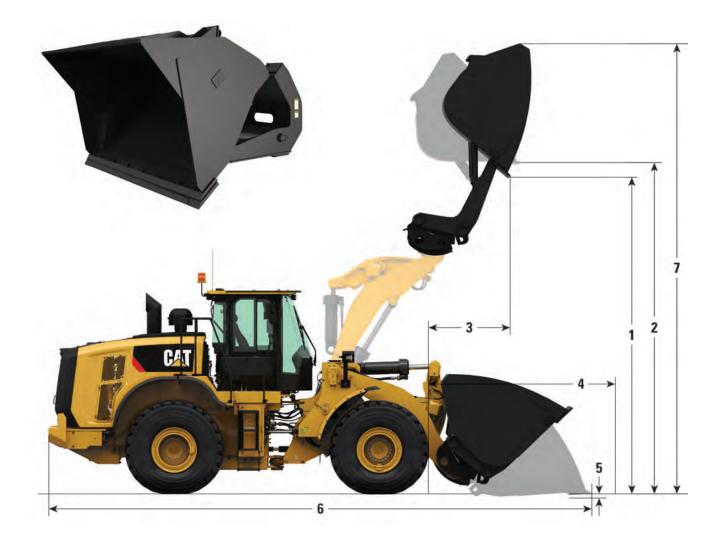
	ft/in	11'0"	11'0"	11'0"	
<b>16</b> <sup>†</sup> Dump Clearance at Maximum Lift and 45° Discharge	mm	2892	3172	2678	336
	ft/in	9'5"	10'4"	8'9"	1'1"
17† Reach at Maximum Lift and 45° Discharge	mm	1478	1198	1692	23
	ft/in	4'10"	3'11"	5'6"	0"
Reach at Level Lift Arm and Bucket Level	mm	3329	2932	3631	274
	ft/in	10'11"	9'7"	11'10"	10"
12† Overall Length	mm	9299	8902	9601	421
	ft/in	30'7"	29'3"	31'6"	1'4"
A† Overall Height with Bucket at Maximum Lift	mm	6598	6957	5738	336
	ft/in	21'8"	22'10"	18'10"	1'1"
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7767	7659	7853	179
	ft/in	25'6"	25'2"	25'10"	7"
Static Tipping Load, Straight (Rigid Tire)	kg	18 342	20 092	15 994	1366
	lb	40,427	44,283	35,251	3,010
Static Tipping Load, Articulated (Rigid Tire)	kg	16 208	17 804	14 009	1258
	lb	35,723	39,240	30,875	2,772
Breakout Force	kN	165	219	135	4
	lbf	37,205	49,418	30,552	898
Operating Weight	kg	29 175	28 968	30 198	85
	lb	64,302	63,846	66,557	187

†Illustration shown with Dimension charts.

\*Maximum values.

Static tipping loads and operating weights shown are based on machine configuration with Brawler HPS Solidflex Smooth tires, full fluids, operator, standard lift linkage, standard Waste Arrangement guarding, front window guard, rear guard counterweight, light guards, auto diff lock axles (front/rear) and two valve hydraulics.

## Waste High Dump Buckets



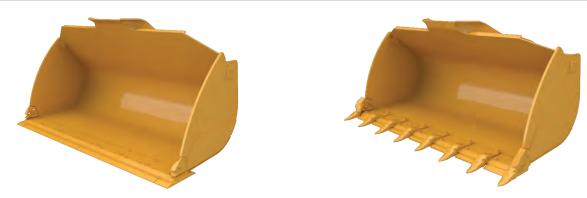
## **Bucket Key Features**

- Waste High Dump bucket increases dump height 2.2 m (7' 3") for largest size available on 972M XE
- Designed for waste transfer and recycling depots
- Wide bucket tilt cylinders enable material to flow easily with minimal carry back
- Four-piece steel cutting edge
- Requires 3rd valve hydraulics

Package		Standard
Bucket Type		Fusion
Edge Type		Steel Bolt-On Cutting Edges
Capacity – Rated	m <sup>3</sup>	5.40
	yd <sup>3</sup>	7.00
Capacity – Rated at 110% Fill Factor	m <sup>3</sup>	5.90
	yd <sup>3</sup>	7.75
Width	mm	3059
	ft/in	10'
1 Dump Clearance at Max Lift, Max Rack, Bucket Rolled out to 45° Discharge	mm	5001
	ft/in	16'4"
2 Clearance at Max Lift, Max Rack, Bucket Rolled out to Level	mm	5384
	ft/in	17'7"
3 Reach at Max Lift, Max Rack, Bucket Rolled out to 45° Discharge	mm	1656
	ft/in	5'5"
4 Reach at Level Lift Arm and Bucket Level	mm	3392
	ft/in	11'1"
5 Digging Depth	mm	79
	ft/in	3.1"
6 Overall Length	mm	9464
	ft/in	31'1"
7 Overall Height with Bucket at Max Height and Max Rack	mm	_
	ft/in	—
Loader Clearance Circle Radius with Bucket at Carry Position	mm	7656
	ft/in	25'2"
Static Tipping Load, Straight (Rigid Tire)	kg	17763
	lb	39,151
Static Tipping Load, Articulated (Rigid Tire)	kg	15669
	lb	34,536
Breakout Force	kN	159
	lbf	35,909
Operating Weight*	kg	29413
	lb	64,826

\*Static tipping loads and operating weights shown are based on machine configuration with Brawler HPS Solidflex Smooth tires, full fluids, operator, standard lift linkage, standard Waste Arrangement guarding, front window guard, rear guard counterweight, light guards, and auto diff lock axles (front/rear).

### **Scrap Bucket Chart**



Package	ckage 972M XE Scrap										
Bucket Type			Pin On	General F	Purpose			Fusion O	C General	Purpose	
Edge Type		Steel Bolt-On Cutting Edges						Steel Bo	lt-On Cutti	ng Edges	
Capacity – Rated	m <sup>3</sup>	4.2	4.4	4.6	4.8	5.0	4.2	4.4	4.6	4.8	5.0
	yd <sup>3</sup>	5.50	5.75	6.00	6.25	6.50	5.50	5.75	6.00	6.25	6.50
Capacity – Rated at	m <sup>3</sup>	4.6	4.8	5.1	5.3	5.5	4.6	4.8	5.1	5.3	5.5
110% Fill Factor	yd <sup>3</sup>	6.00	6.25	6.75	7.00	7.25	6.00	6.25	6.75	7.00	7.25
Width	mm	3220	3220	3220	3220	3220	3220	3220	3220	3220	3220
	ft/in	10' 6"	10' 6''	10' 6"	10' 6''	10' 6"	10' 6''	10' 6"	10' 6''	10' 6"	10' 6"
Dump Clearance at Maximum	mm	3261	3265	3223	3190	3173	3231	3236	3193	3166	3142
Lift and 45° Discharge	ft/in	10' 8"	10' 8''	10' 6"	10' 5"	10' 4"	10' 7"	10' 7"	10' 5"	10' 4"	10' 3"
Reach at Maximum Lift and 45° Discharge	mm	1305	1300	1336	1365	1380	1340	1335	1370	1392	1413
	ft/in	4' 3"	4' 3"	4' 4"	4' 5"	4' 6"	4' 4"	4' 4"	4' 5"	4' 6"	4' 7"
Reach at Level Lift Arm and	mm	2928	2921	2977	3022	3045	2973	2966	3023	3058	3090
Bucket Level	ft/in	9' 7"	9' 7"	9' 9"	9' 10''	9' 11"	9' 9"	9' 8"	9' 11"	10' 0"	10' 1"
Digging Depth	mm	67	67	67	67	67	67	67	67	67	67
	ft/in	2.6"	2.6"	2.6"	2.6"	2.6"	2.6"	2.6"	2.6"	2.6"	2.6"
Overall Length	mm	8965	8957	9014	9059	9082	9010	9003	9060	9095	9127
	ft/in	29' 5"	29' 5"	29' 7''	29' 9"	29' 10"	29' 7''	29' 7"	29' 9''	29' 11"	29' 12"
Overall Height with Bucket at	mm	5973	6266	6231	6067	6320	6072	6241	6247	6306	6332
Maximum Lift	ft/in	19' 8"	20' 7''	20' 6''	19' 11"	20' 9''	19' 12''	20' 6''	20' 6''	20' 9"	20' 10"
Loader Clearance Circle Radius	mm	7583	7581	7596	7608	7615	7592	7590	7606	7616	7625
with Bucket at Carry Position	ft/in	24' 11"	24' 11"	24' 12"	24' 12"	24' 12"	24' 11"	24' 11"	24' 12"	24' 12"	25' 1"
Static Tipping Load, Straight	kg	20 061	20 122	19 958	19 989	20 090	19 535	19 550	19 396	19 394	19 277
(Rigid Tire)	lb	44,216	44,349	43,989	44,057	44,280	43,055	43,089	42,749	42,744	42,487
Static Tipping Load, Articulated	kg	17 837	17 891	17 738	17 772	17 872	17 333	17 342	17 197	17 195	17 080
(Rigid Tire)	lb	39,314	39,432	39,096	39,170	39,390	38,202	38,222	37,903	37,899	37,645
Breakout Force	kN	209	210	202	196	198	202	203	195	190	186
	lbf	47,157	47,386	45,451	44,045	44,605	45,584	45,757	43,911	42,868	41,852
Operating Weight	kg	28 380	28 386	28 441	28 369	28 482	28 757	28 798	28 857	28 852	28 943
	lb	62,549	62,561	62,682	62,524	62,773	63,379	63,471	63,601	63,590	63,789

Static tipping loads and operating weights shown are based on machine configuration with Brawler HPS Solidflex Smooth tires, full fluids, operator, standard lift linkage, standard Waste Arrangement guarding, front window guard, rear guard counterweight, light guards, and auto diff lock axles (front/rear).

# **Standard and Optional Equipment**

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

	Standard	Optional		Standard	Optional
POWER TRAIN			OPERATOR ENVIRONMENT		
Axles, ecology drains Axles, manually actuated differential lock	✓ ✓		Air conditioner, heater, and defroster (auto temp and fan)	$\checkmark$	
front axle, open differential rear axle Axles – automatic front/rear differential	•		Beverage holders (2) with storage compartment for cell phone/MP3 player	√	
locks, axle oil cooler, extreme		v	Bucket/work tool function lockout	$\checkmark$	
temperature seals, seal guards	,		Cab air filter	$\checkmark$	
Brake wear indicators Brakes, full hydraulic enclosed wet-	✓ ✓		Cab, pressurized and sound suppressed (ROPS/FOPS)	$\checkmark$	
disc with modulated neutralizer and			Cab tie-off	$\checkmark$	
integrated retarding	✓		Coat hook (2)	$\checkmark$	
Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF) and	V		Cover, HVAC metallic		$\checkmark$
Diesel Exhaust Fluid (DEF) tank and			Door, remote opening system		~
pump Engine, Cat C9.3 – meets U.S. EPA Tier 4	✓		EH controls, SAL (single axis lever) lift and tilt function	$\checkmark$	
Final/EU Stage V emission standards Fan, radiator, electronically controlled, hydraulically driven, temperature sensing,	√		EH controls, joystick lift and tilt – additional integrated roller switches for 3 <sup>rd</sup> and 4 <sup>th</sup> functions		~
on demand Fan, VPF (variable pitch fan), automatic		✓	EH controls, SAL 3 <sup>rd</sup> function – additional roller switch for 4 <sup>th</sup> function		1
and manual control			EH parking brake	$\checkmark$	
Fuel priming pump (electric) Fuel/water separator	✓ ✓		Ergonomic cab access ladders and handrails	$\checkmark$	
Parking brake, disc and caliper	✓		Filter, carbon fresh air		✓
Precleaner, engine air intake	✓		Horn, electric	✓	
Secondary steering			Light, two dome (cab)	✓	
Radiator, high debris, wide fin spacing	√		Mirrors, heated rearview external		~
Right pedal lock, maximum rimpull control and machine speed limit in the cab	$\checkmark$		with integrated spot mirrors Mirrors, rearview external with integrated spot mirrors	~	
Transmission, Cat continuously variable	✓		Multi-function 18 cm color LCD touch-	$\checkmark$	
CAT TECHNOLOGY			screen display for rear vision camera		
Detect technologies: Rear vision camera	~		image display (reverse travel activated) and machine status, setting and health paramaters		
Cat rear object detection Link technologies:		✓	Post mounted membrane 16 switch keypad	$\checkmark$	
Product Link	$\checkmark$		Precleaner, HVAC		~
VIMS		<b>√</b>	Precleaner, HVAC (RESPA)		 ✓
Payload technologies: Advanced Productivity subscription, Cat Production Measurement 2.0, Printer,		$\checkmark$	Radio, AM/FM/CD/USB/MP3 Bluetooth <sup>®</sup>		✓
Aggregate Autodig			Radio, CB ready		√
Machine security system		√	Radio ready (entertainment) includes antenna, speakers and converter (12V, 10-amp)	✓	

Receptacles (2), 12V

(continued on next page)

 $\checkmark$ 

### **Standard and Optional Equipment** (continued)

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

	Standard	Optional		Standard	Optiona
OPERATOR ENVIRONMENT (continued)			ELECTRICAL AND LIGHTING (continued)		
Roof, metallic		$\checkmark$	Main disconnect switch	$\checkmark$	
Seat, Cat Comfort (cloth) air suspension	$\checkmark$		Receptacle start (cables not included)	$\checkmark$	
Seat belt, 51 mm (2 in) retractable,	$\checkmark$		Secondary steering	$\checkmark$	
with indicator			Speed limiter – 20 km/h		$\checkmark$
Seat belt, 4 point harness, with indicator		✓	Starter, electric, heavy duty	$\checkmark$	
Seat, heated air suspension		✓	Starting and charging system (24V)	$\checkmark$	
Steering, EH joystick, speed sensing with force feedback	$\checkmark$		FLUIDS Biodegradable oil, Cat HYDO		√
Sun visor, front	$\checkmark$		Premixed extended life coolant with	✓	v
Sun visor, rear		$\checkmark$	freeze protection to -34°C (-29°F)	V	
Viscous mounts	√		Premixed extended life coolant with		√
Wet-arm wipers/washers front and rear,	√		freeze protection to -50°C (-58°F)		
intermittent front wiper			HYDRAULICS		
Windows, rubber mounted		$\checkmark$	Autolube		$\checkmark$
Window, sliding (left and right sides)	$\checkmark$		Couplings, Cat O-ring face seal	$\checkmark$	
Windows, with front guard		$\checkmark$	Hoses, Cat XT	√	
Windows, with heavy duty front guard		$\checkmark$	Hydraulic oil cooler (swing out)	$\checkmark$	
Windows, with full guards front,		$\checkmark$	Hydraulic system, load sensing	✓	
rear and sides			Oil sampling valves	✓	
LECTRICAL AND LIGHTING			3 <sup>rd</sup> function with Ride Control		√
Alarm, back-up	✓		4 <sup>th</sup> function with Ride Control		√
Alternator, 145-amp brushed	$\checkmark$		Remote diagnostic pressure taps	✓	
Auxiliary halogen cab-mounted work lights (four additional) or		$\checkmark$	Ride control, 2V	✓	
HID cab-mounted work lights (four		✓	Steering, load sensing	✓	
additional)		·	LINKAGE		
Batteries (2), maintenance free	√		Extended capacity		~
1,400 CCA			High lift		√
Emergency engine shutdown switch	$\checkmark$		Kickout, lift and tilt, automatic	✓	
Ignition key; start/stop switch	$\checkmark$		(adjustable cab)		
LED front and rear roading lights		$\checkmark$	Quick coupler ready		$\checkmark$
Lighting system: four halogen work lights	$\checkmark$		Z-bar, cast crosstube/tilt lever	$\checkmark$	
(cab mounted), two halogen roading			STARTERS, BATTERIES, AND ALTERNATORS		
lights (with signals), two halogen rear vision lights (hood mounted), two rear			Cold start – 240V		$\checkmark$
LED position/stop/turn signal lights			WORK TOOLS		
			Forks, logging		$\checkmark$
			Forks, pallet		$\checkmark$

Fusion quick coupler Material handling arms

Snow products

VCE quick coupler

Performance Series buckets

(continued on next page)

 $\checkmark$ ✓ ~

√

√

✓

✓

# Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optiona
COMPUTERIZED MONITORING SYSTEM			<b>OTHER STANDARD AND OPTIONAL EQUIPME</b>	NT	
With following gauges:	$\checkmark$		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		$\checkmark$
Temperature: axle oil, engine intake manifold Pressure: engine oil, fuel pressure hi/low, primary steering oil, service brake oil Battery voltage hi/low Engine air filter restriction			Filters: fuel, engine air, engine oil, hydraulic oil, transmission	$\checkmark$	
			Fuel cooler	$\checkmark$	
			Grease zerks	✓	
			Grill, airborne debris	$\checkmark$	
			Guard, power train		~
Hydraulic oil filter restriction Hydraulic oil low			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	$\checkmark$	
			Toolbox	$\checkmark$	
			Vandalism protection caplocks	$\checkmark$	
			OTHER CONFIGURATIONS		
			Aggregate handler		~
			Corrosion resistance		~
			Industrial and waste handler		✓

# 972M XE Industrial & Waste Standard & Optional Equipment

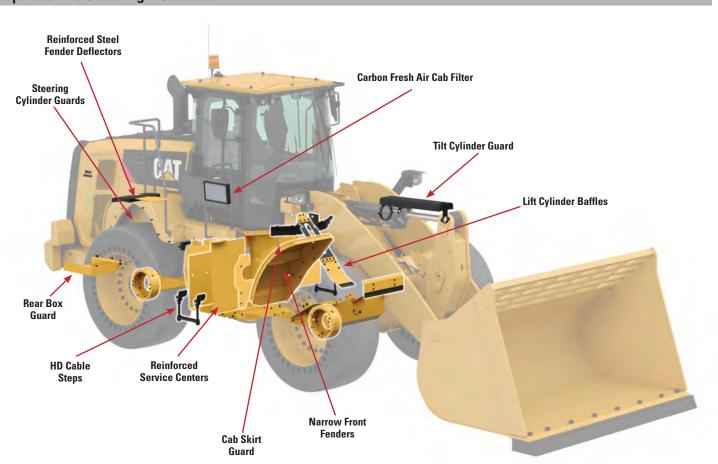
#### **Standard and Optional Equipment (continued)**

#### Standard

- Axle seal guards
- Steering cylinder guard
- Crankcase guard
- Power train guard
- Tilt cylinder guard
- Lower cab skirt
- Rear box reinforcement
- Reinforced service centers
- Heavy duty cable steps
- Lift cylinder baffles
- Narrow front fenders
- Steel reinforced rear fender deflectors
- Carbon fresh cab air filter
- Locking differential front axle
- Sound suppression cab

#### **Optional**

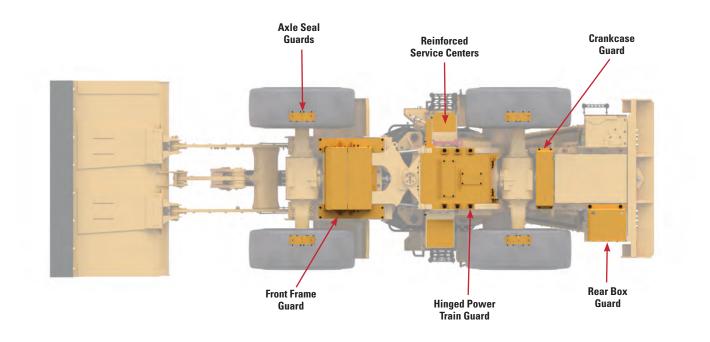
- High Lift linkage (additional 11" dump clearance)
- Auto locking differential front axle
- 3rd function hydraulics
- Premium LED lights
- Rubber mounted glass
- Windshield guard
- Joystick steering
- Deluxe seat with dynamic end dampening
- Joystick loader controls
- · Powered and filtered cab precleaner
- High debris cooling coolers
- Variable pitch fan
- Brawler HPS Solid tires (traction or smooth)
- Turbine engine air precleaner with trash screen
- Autolube
- Cat Integrated Object Detection
- Light guards



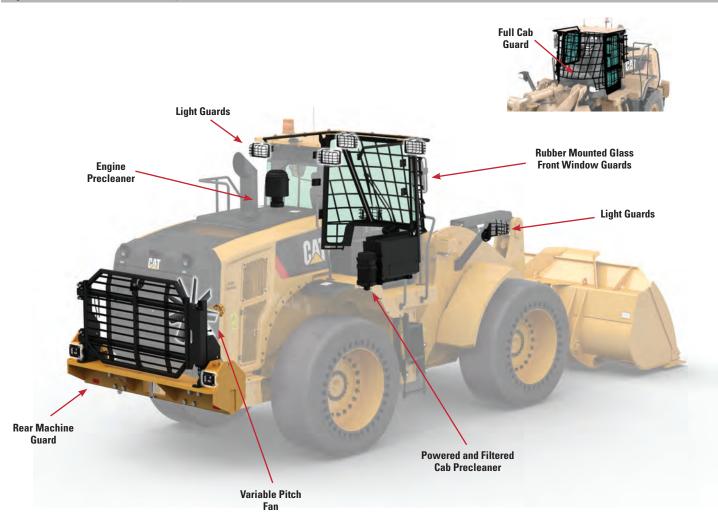
# **Top Machine Guarding – Standard**

# 972M XE Industrial & Waste Standard & Optional Equipment

## **Bottom Machine Guarding – Standard**



## **Optional Full Cab Guarding – Available**



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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