

Engine

Engine Model	Cat® 6.6 ACERT™	
Gross Power – SAE J1995	147 kW	197 hp
Net Power – ISO 9249	134 kW	180 hp
Net Power – SAE J1349	128 kW	172 hp
Net Power – 80/1269/EEC	134 kW	180 hp
Peak Torque (Net) @ 1,400 rpm	840 N·m	620 ft·lb
Total Torque Rise	38 %	
Bore	105 mm	4.1 in
Stroke	127 mm	5 in
Displacement	6.6 L	402.8 in ³

- Caterpillar engine with ACERT™ Technology – EPA Tier III, EU Stage III Compliant.
- These ratings apply at 2,100 rpm when tested under the specified standard conditions.
- Rating for net power advertised based on power available when the engine is equipped with alternator, air cleaner, muffler and on-demand hydraulic fan drive at maximum fan speed.

Weights

Operating Weight	15 059 kg	33,190 lb
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- For 2.8 m³ (3.65 yd³) general purpose bucket with standard 20.5-R25 tires.

Buckets

Bucket Capacities	2.3 - 3.0 m ³	3.0 - 4.0 yd ³
Max Bucket Capacity	3 m ³	4 yd ³

Operating Specifications

Static Tipping Load, Full Turn	10 076 kg	22,207 lb
Breakout Force	123 kN	27,576 lb

- For 2.8 m³ (3.65 yd³) general purpose bucket with standard 20.5-R25 tires.

Transmission

Forward 1	8.1 km/h	5 mph
Forward 2	14.6 km/h	9.1 mph
Forward 3	25.5 km/h	15.8 mph
Forward 4	43.2 km/h	26.8 mph
Reverse 1	8.1 km/h	5 mph
Reverse 2	14.6 km/h	9.1 mph
Reverse 3	25.5 km/h	15.8 mph

- Maximum travel speeds with empty bucket and 20.5-R25 tires.

Hydraulic System

Steering System Pump Type	Piston	
Hydraulic Cycle Time – Raise	5.4 Seconds	
Hydraulic Cycle Time – Dump	1.4 Seconds	
Hydraulic Cycle Time – Lower, Empty, Float Down	2.7 Seconds	
Hydraulic Cycle Time – Total	9.5 Seconds	
Pilot System – Pump Output	295 L/min	77.9 gal/min

- Implement System (Standard), Piston Pump – Rated at 2,100 rpm and 1,000 psi (6900 kPa).
- Cycle time with rated payload.

Brakes

Brakes	Meets required standards
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- Meet OSHA, SAE J1473 Oct90 and ISO 3450-1985 standards.

Axles

Front	Fixed front	
Rear	Oscillating ±12°	
Maximum Single-Wheel Rise and Fall	420 mm	17 in

Tires

Tires Choose from a variety of tires to match your application.

- Choice of:
 - 20.5R25 XTLA L2 Radial
 - 20.5R25 XHA L3 Radial
 - 20.5R25 GP2B L3 Radial
 - 20.5R25 HRL L3 Radial
 - 20.5R25 RL-2+ L3 Radial
 - 650/65R-25 XLD L3 Radial (Low Profile)
 - 20.5-25 SRG LD L3 Bias (16 PLY)
 - 20.5-25 SRG LD L3 Bias (20 PLY)
 - 20.5-25 RM 99 L3 Bias
- NOTE: In certain applications (such as load and carry) the loader's productive capabilities might exceed the tires' tonnes-km/h (ton-mph) capabilities. Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model. Other special tires are available on request.

Cab

ROPS/FOPS Meets SAE and ISO standards

- Caterpillar cab with Integrated Rollover Protective Structure (ROPS) is standard in North America and Europe.
- ROPS meets SAE J1040 APR88 and ISO 3471:1994 criteria.
- Falling Objects Protective Structure (FOPS) meets SAE J231 Jan81 and ISO 3449:1992 Level II criteria.
- The operator sound pressure level measured according to the procedures specified in ISO 6394:1998 is 75 dB(A) for the cab offered by Caterpillar when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.
- The sound power level is 108 dB(A) measured according to the dynamic test procedure and conditions specified in ISO 6395:1998 for a standard machine configuration.

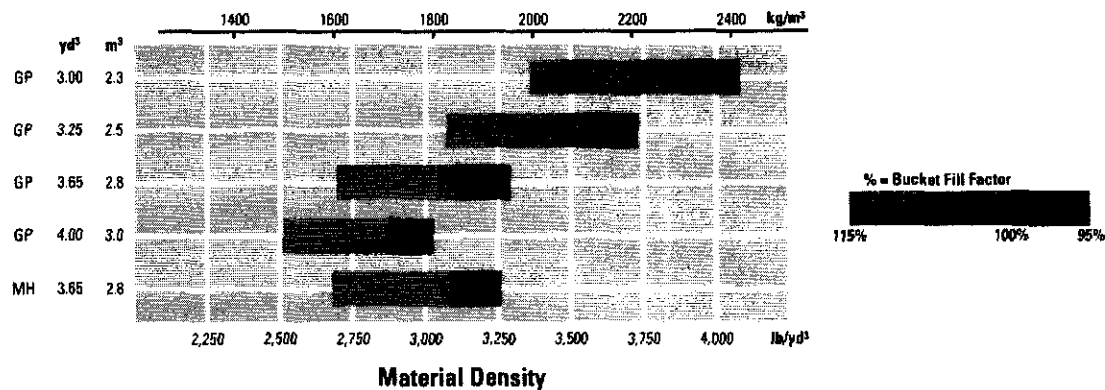
Service Refill Capacities

Fuel Tank – Standard	247 L	65.3 gal
Cooling System	36 L	9.5 gal
Crankcase	17.4 L	4.6 gal
Transmission	43 L	11.4 gal
Differentials and Final Drives – Front	57 L	15.1 gal
Differentials and Final Drives – Rear	53 L	14 gal
Hydraulic Tank	89 L	23.5 gal

Operation Specifications

		General Purpose Buckets					
		Bolt-on edges	Teeth and segments	Teeth	Bolt-on edges	Teeth and segments	Teeth
Rated capacity	m ³	2.30	2.30	2.10	2.50	2.50	2.30
	yd ³	3.00	3.00	2.75	3.25	3.25	3.00
Struck capacity	m ³	1.97	1.97	1.87	2.11	2.11	2.01
	yd ³	2.58	2.58	2.45	2.76	2.76	2.63
Width	mm	2700	2777	2777	2700	2777	2777
	ft/in	8'10"	9'1"	9'1"	8'10"	9'1"	9'1"
Dump clearance at full lift and 45° discharge	mm	2890	2786	2786	2849	2744	2744
	ft/in	9'5"	9'1"	9'1"	9'4"	9'0"	9'0"
Reach at full lift and 45° discharge	mm	993	1098	1098	1019	1123	1123
	ft/in	3'3"	3'7"	3'7"	3'4"	3'8"	3'8"
Reach with lift arms horizontal and bucket level	mm	2189	2336	2336	2239	2386	2386
	ft/in	7'2"	7'7"	7'7"	7'4"	7'9"	7'9"
Digging depth	mm	50	50	25	50	50	25
	in	1.9	1.9	0.9	1.9	1.9	0.9
Overall length	mm	7193	7351	7351	7243	7401	7401
	ft/in	23'7"	24'1"	24'1"	23'9"	24'3"	24'3"
Overall height with bucket at full raise	mm	5140	5140	5140	5188	5188	5188
	ft/in	16'10"	16'10"	16'10"	17'0"	17'0"	17'0"
Loader clearance circle with bucket in carry position	mm	11 946	12 105	12 105	11 971	12 131	12 131
	ft/in	39'2"	39'8"	39'8"	39'3"	39'9"	39'9"
Static tipping load, straight	kg	11 834	11 737	11 959	11 755	11 658	11 878
	lb	26,081	25,867	26,357	25,909	25,694	26,179
Static tipping load, articulated at full 40° turn	kg	10 302	10 205	10 415	10 229	10 131	10 339
	lb	22,706	22,492	22,954	22,544	22,329	22,787
Breakout force	kN	141.9	141.1	152.7	134.9	134.2	144.7
	lb	31,877	31,703	34,297	30,317	30,143	32,508
Operating weight	kg	14 952	15 027	14 932	14 986	15 061	14 966
	lb	32,955	33,120	32,911	33,028	33,194	32,984
Reach at 2134 mm (7'0") height, 45° dumped	mm	1508	1563	1563	1516	1567	1567
	ft/in	4'11"	5'1"	5'1"	4'11"	5'1"	5'1"
Clearance at full raise and dump, on stops	mm	2821	2706	2706	2786	2671	2671
	ft/in	9'3"	8'10"	8'10"	9'1"	8'9"	8'9"
Dump angle at full raise and dump, on stops	degrees	51.2	51.2	51.2	50.5	50.5	50.5

Pin-On Bucket Selection Guide



						Material Handling Buckets			General Purpose Buckets - Quick Coupler		
Bolt-on edges	Teeth and segments	Teeth	Bolt-on edges	Teeth and segments	Teeth	Bolt-on edges	Teeth and segments	Teeth	Bolt-on edges	Teeth and segments	Teeth
2.80	2.80	2.70	3.00	3.00	2.85	2.80	2.80	2.70	2.40	2.40	2.30
3.65	3.65	3.50	4.00	4.00	2.75	3.65	3.65	3.50	3.15	3.15	3.00
2.41	2.41	2.30	2.66	2.66	2.55	2.42	2.42	2.32	2.02	2.02	1.92
3.15	3.15	3.01	3.48	3.48	3.34	3.17	3.17	3.03	2.64	2.64	2.51
2700	2777	2777	2700	2777	2777	2700	2777	2777	2700	2777	2777
8'10"	9'1"	9'1"	8'10"	9'1"	9'1"	8'10"	9'1"	9'1"	8'10"	9'1"	9'1"
2771	2664	2664	2702	2597	2597	2720	2607	2607	2774	2669	2669
9'1"	8'8"	8'8"	8'10"	8'6"	8'6"	8'11"	8'6"	8'6"	9'1"	8'9"	8'9"
1077	1179	1179	1102	1206	1206	1001	1096	1096	1017	1120	1120
3'6"	3'10"	3'10"	3'7"	3'11"	3'11"	3'3"	3'7"	3'7"	3'4"	3'8"	3'8"
2339	2486	2486	2397	2544	2544	2339	2486	2486	2285	2432	2432
7'8"	8'1"	8'1"	7'10"	8'4"	8'4"	7'8"	8'1"	8'1"	7'5"	7'11"	7'11"
50	50	25	110	110	85	50	50	25	109	109	84
1.9	1.9	0.9	4.3	4.3	3.3	1.9	1.9	0.9	4.3	4.3	3.3
7343	7501	7501	7450	7608	7608	7343	7502	7502	7337	7496	7496
24'1"	24'7"	24'7"	24'5"	24'11"	24'11"	24'1"	24'7"	24'7"	24'0"	24'7"	24'7"
5284	5284	5284	5195	5195	5195	5272	5272	5272	5075	5075	5075
17'4"	17'4"	17'4"	17'0"	17'0"	17'0"	17'3"	17'3"	17'3"	16'7"	16'7"	16'7"
12 024	12 185	12 185	12 106	12 267	12 267	12 024	12 185	12 185	12 009	12 165	12 165
39'5"	39'11"	39'11"	39'8"	40'2"	40'2"	39'5"	39'11"	39'11"	39'4"	39'10"	39'10"
11 593	11 494	11 711	11 488	11 388	11 602	11 514	11 416	11 627	11 655	11 558	11 773
25,551	25,333	25,811	25,320	25,100	25,571	25,376	25,160	25,625	25,688	25,474	25,947
10 076	9977	10 182	10 000	9901	10 103	10 008	9909	10 109	10 122	10 025	10 228
22,207	21,989	22,441	22,041	21,821	22,267	22,057	21,841	22,281	22,310	22,095	22,543
122.7	122.0	130.8	117.2	116.3	124.5	122.7	122.0	130.8	129.4	128.5	138.2
27,576	27,402	29,395	26,320	26,133	27,959	27,576	27,402	29,394	29,063	28,875	31,060
15 059	15 134	15 039	14 898	14 973	14 878	15 048	15 123	15 028	15 165	15 240	15 145
33,190	33,355	33,146	32,835	33,000	32,791	33,165	33,331	33,121	33,424	33,589	33,379
1535	1579	1579	1523	1566	1566	1433	1462	1462	1477	1523	1523
5'0"	5'2"	5'2"	4'11"	5'1"	5'1"	4'8"	4'9"	4'9"	4'10"	4'11"	4'11"
2714	2599	2599	2631	2516	2516	2714	2599	2599	2710	2596	2596
8'10"	8'6"	8'6"	8'7"	8'3"	8'3"	8'10"	8'6"	8'6"	8'10"	8'6"	8'6"
49.5	49.5	49.5	50.5	50.5	50.5	45.5	45.5	45.5	50.6	50.6	50.6

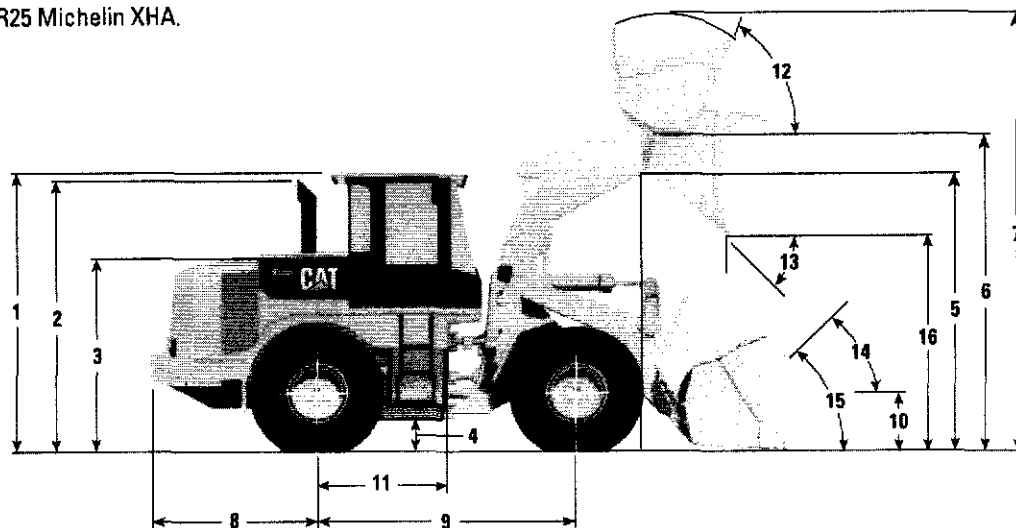
Operation Specifications

		General Purpose Buckets - Quick Coupler						Refuse Bucket
		Bolt-on edges	Teeth and segments	Teeth	Bolt-on edges	Teeth and segments	Teeth	Bolt-on edges
Rated capacity	m ³	2.70	2.70	2.60	2.80	2.80	2.70	4.25
	yd ³	3.50	3.50	3.40	3.65	3.65	3.50	5.50
Struck capacity	m ³	2.35	2.35	2.25	2.46	2.46	2.36	3.73
	yd ³	3.07	3.07	2.94	3.22	3.22	3.09	4.88
Width	mm	2700	2777	2777	2700	2777	2777	2738
	ft/in	8'10"	9'1"	9'1"	8'10"	9'1"	9'1"	8'11"
Dump clearance at full lift and 45° discharge	mm	2708	2603	2603	2681	2575	2575	2501
	ft/in	8'10"	8'6"	8'6"	8'9"	8'5"	8'5"	8'2"
Reach at full lift and 45° discharge	mm	1077	1180	1180	1106	1210	1210	1142
	ft/in	3'6"	3'10"	3'10"	3'7"	3'11"	3'11"	3'8"
Reach with lift arms horizontal and bucket level	mm	2374	2521	2521	2414	2561	2561	2594
	ft/in	7'9"	8'3"	8'3"	7'11"	8'4"	8'4"	8'6"
Digging depth	mm	122	122	97	124	124	99	106
	in	4.7	4.7	3.8	4.8	4.8	3.8	4.1
Overall length	mm	7436	7594	7594	7478	7636	7636	7643
	ft/in	24'4"	24'10"	24'10"	24'6"	25'0"	25'0"	25'0"
Overall height with bucket at full raise	mm	5149	5149	5149	5149	5149	5149	5541
	ft/in	16'10"	16'10"	16'10"	16'10"	16'10"	16'10"	18'2"
Loader clearance circle with bucket in carry position	mm	12 063	12 219	12 219	12 085	12 242	12 242	12 244
	ft/in	39'6"	40'1"	40'1"	39'7"	40'1"	40'1"	40'2"
Static tipping load, straight	kg	11 400	11 302	11 513	11 455	11 356	11 566	9910
	lb	25,126	24,909	25,375	25,246	25,028	25,493	21,841
Static tipping load, articulated at full 40° turn	kg	9879	9780	9980	9937	9838	10 038	8526
	lb	21,773	21,556	21,996	21,901	21,682	22,123	18,792
Breakout force	kN	118.9	118.0	126.4	115.2	114.4	122.3	95.8
	lb	26,702	26,512	28,394	25,891	25,700	27,478	21,512
Operating weight	kg	15 326	15 401	15 306	15 227	15 302	15 207	15 725
	lb	33,779	33,944	33,734	33,560	33,725	33,516	34,657
Reach at 2134 mm (7'0") height, 45° dumped	mm	1501	1544	1544	1516	1557	1557	1441
	ft/in	4'11"	5'0"	5'0"	4'11"	5'1"	5'1"	4'8"
Clearance at full raise and dump, on stops	mm	2640	2525	2525	2610	2495	2495	2493
	ft/in	8'7"	8'3"	8'3"	8'6"	8'2"	8'2"	8'2"
Dump angle at full raise and dump, on stops	degrees	50.5	50.5	50.5	50.5	50.5	50.5	45.5

Dimensions

All dimensions are approximate and may vary with work tool.

Tires are 20.5R25 Michelin XHA.



1	Height to top of ROPS	3356 mm	11'0"
2	Height to top of exhaust pipe	3099 mm	10'2"
3	Height to top of hood	2415 mm	7'11"
4	Ground clearance/Standard tire See Chart below for other tires	397 mm	1'3"
5	Lift arm clearance @ maximum lift	3435 mm	11'3"
6	Bucket pin height @ maximum lift	3843 mm	12'7"
	Bucket pin height, optional high lift	4266 mm	13'11"
7	Overall height – bucket raised	5284 mm	17'4"
8	Center line of rear axle to edge of counterweight	1869 mm	6'1"

9	Wheelbase	3020 mm	9'10"
10	Height to center line of axle	688 mm	2'3"
11	Center line of rear axle to hitch	1510 mm	4'11"
12	Rack back @ maximum lift	65°	
13	Dump angle @ maximum lift	50°	
14	Rack back @ carry	50°	
15	Rack back @ ground	42°	
16	Dump clearance @ maximum lift and 45° dump	2771 mm	9'1"

Tires

		Width over tires – maximum (loaded)		Change in vertical dimensions		Change in operating weight without ballast		Change in static tipping load – straight		Change in static tipping load – articulated	
		mm	inches	mm	inches	kg	lb	kg	lb	kg	lb
20.5-R25 XTLA L2	Radial	2603	102	-16	-1	-170	-376	-120	-264	-104	-230
20.5-R25 XHA L3	Radial	2674	105	0	0	0	0	0	0	0	0
20.5 R25 GP2B L3	Radial	2619	103	+6	0	-53	-116	-37	-81	-32	-71
20.5 R25 HRL L3	Radial	2618	103	+23	+1	-48	-107	-34	-75	-30	-65
20.5 R25 RL-2+ L3	Radial	2609	103	+12	0	+13	+28	+9	+20	+8	+17
650/65R-25 XLD L3	Radial (Low Profile)	2733	108	0	0	+519	+1145	+364	+803	+318	+701
20.5-25 SRG LD L3	Bias (16 PLY)	2558*	101*	+8	0	-242	-533	-170	-374	-148	-326
20.5-25 SRG LD L3	Bias (20 PLY)	2556*	101*	+11	0	-174	-384	-122	-270	-107	-235
20.5-25 RM 99 L3	Bias	2540*	100*	+8	0	-58	-129	-41	-90	-36	-79

*Without bulge.

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for details.

ELECTRICAL

- Alarm, back-up, adjustable
- Alternator, 24V/65A
- Battery disconnect switch with removable key
- Lighting:
 - Turn signals with flashing hazard function
 - Two halogen headlights with high/low beam
 - Parking lights
 - LED brake and tail lights
 - Two front and rear halogen work lights, cab mounted
- Jumpstart receptacle

OPERATOR ENVIRONMENT

- Air Conditioning
- Bucket/Work tool lever lockout feature
- Cab, ROPS/FOPS, pressurized and sound suppressed
- Coat hook
- Controls, lift and tilt functions
- Radio ready including antenna, speakers, two 12V/5A power outlets, includes cigar lighter
- Electric horn, dual actuation (steering wheel, implement pod)
- Sun Visor, Front
- Cab heating with fresh air inlet and defrosting function
- Messenger System
 - Monitoring and logging of machine data
 - Clock
 - Operator keypad
 - Axle oil temperature
- Product Link Ready (optional in some regions)
- Operator display, Gauges:
 - Engine coolant temperature
 - Fuel level
 - Hydraulic oil temperature
 - Speedometer
 - Gear indicator
 - Tachometer
 - Transmission oil temperature
- Operator display, Warning Indicators:
 - Glow Plugs
 - Electrical, alternator output
 - Engine inlet manifold temperature
 - Engine oil pressure
 - Fuel pressure
 - Hydraulic oil temperature
 - Parking brake
 - Primary steering oil pressure
 - Service brake oil pressure
 - Transmission filter bypass
 - Axle oil temperature

- Dual interior rearview mirrors
- Dual exterior rearview mirrors
- Interior operator lighting
- Storage compartments
- Lunchbox compartments
- Beverage holder
- Seat, KAB, cloth, adjustable
- Seat belt, retractable, 51 mm (2") wide
- Adjustable steering column/wheel
- Forward/Neutral/Reverse switch by implement controls
- LH door with sliding window
- RH sliding window and emergency exit
- Windshield wipers, front and rear
- Interval function for front and rear wipers
- Windshield washers, front and rear

POWER TRAIN

- Brakes, full hydraulic enclosed wet-disc
- Brake wear indicators with Integrated Braking System (IBS)
- Front axle with locking differential
- Drive line, extreme service
- Engine, Cat C6.6 ACERT and ATAAC technology, electronically controlled.
- Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand.
- Filters, fuel, primary/secondary
- Fuel priming pump (Electric)
- Fuel/Water separator
- Monitoring System, Axle Oil Temp.
- Muffler, sound suppressed
- Radiator, unit core (6 fpi) with ATAAC
- Starting aid (Glow Plugs)
- Trans, neutralizer lockout in messenger
- Torque converter
- Transmission, countershaft, automatic power shift (4F/3R)
- Variable Shift Control (VSC), messenger