

320 Hydraulic Excavator

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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320 Hydraulic Excavator Specifications

Engine		
Engine Model	Cat [®] C7.1	
Net Power		
ISO 9249	117 kW	157 hp
ISO 9249 (DIN)	159 hp (me	tric)
Engine Power		
ISO 14396	118 kW	158 hp
ISO 14396 (DIN)	160 hp (me	tric)
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	1)

- Meets Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Engine speed at 1,800 rpm.
- ⁽¹⁾Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

**Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Swing Mechanism

Swing Speed	11.25 rpm	
Maximum Swing Torque	82 kN·m	60,300 lbf-ft

Weights

21 600 kg 47,600 lb

• Reach boom 5.7 m (18'8"), R2.9 (9'6") stick, 1.19 m³ (1.56 yd³) Heavy Duty (HD) bucket, 600 mm (24 in) triple grouser shoes, and 4.2 mt (9,260 lb) counterweight.

Track

Standard Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	700 mm	28 in
Number of Shoes (each side)	49	
Number of Track Rollers (each side)	8	
$\mathbf{N} = 1 + \mathbf{C} \mathbf{C} + \mathbf{D} + 1 + (1 + 1)$	2	

Number of Carrier Rollers (each side) 2

Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.7 km/h	3.5 mph
Maximum Drawbar Pull –	205 kN	45,996 lbf
Long Undercarriage		

Hydraulic System

Main System – Maximum Flow – Implement	429 L/min (215 ×	113 gal/min (57 ×
	2 pumps)	2 pumps)
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Heavy Lift Mode/Auto Dig Boost	38 000 kPa	5,510 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	27 500 kPa	3,998 psi
Boom Cylinder – Bore	120 mm	5 in
Boom Cylinder – Stroke	1260 mm	50 in
Stick Cylinder – Bore	140 mm	6 in
Stick Cylinder – Stroke	1504 mm	59 in
Bucket Cylinder – Bore	120 mm	5 in
Bucket Cylinder – Stroke	1104 mm	43 in

Service Refill Capacities

Fuel Tank Capacity	345 L	86.6 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	6 L	1.6 gal
Final Drive (each)	4 L	1.1 gal
Hydraulic System (including tank)	234 L	61.8 gal
Hydraulic Tank	115 L	30.4 gal

Standards

Brakes	ISO 10265:2008
Cab/Rollover Protective Structure (ROPS)	ISO 12117-2:2008
Operator Protective Guards (OPG) (optional)	ISO 10262:1998 Level II

Sound Performance

ISO 6395:2008 (external)	100 dB(A)
ISO 6396:2008 (inside cab)	70 dB(A)

• 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 a noisy environment.

Operating Weights and Ground Pressures

	600 mm (24 in) Trip	600 mm (24 in) Triple Grouser Shoes 70		e Grouser Shoes
	Weight	Ground Pressure	Weight	Ground Pressure
Base Machine Configurations				
Base Frame with Track Rollers and Carrier Rollers				
4.2 mt (9,260 lb) Counterweight + Long Undercarri	age Base Machine			
Reach Boom + R2.9 (9'6") Stick + 1.19 m ³ (1.56 yd ³) HD Bucket	21 600 kg 47,600 lb	44.9 kPa 6.5 psi	22 000 kg 48,500 lb	39.2 kPa 5.7 ps
All operating weights include a 90% fuel tank with 75 kg (165	5 lb) operator.			
Major Component Weights				
			kg	lb
Base Machine (with 4.2 mt [9,260 lb] counterweigh HD track rollers and standard carrier rollers for lo boom cylinders, stick cylinder, bucket cylinder, tra	ong undercarriage – does not in	nclude boom, stick,		32,050
Track Shoes:				
600 mm (24 in) Width, 10 mm (0.39 in) Thick 7	Friple Grouser Track Shoes		2690	5,930
700 mm (28 in) Width, 10 mm (0.39 in) Thick 7	Friple Grouser Track Shoes		3050	6,720
Two Boom Cylinders			340	750
Weight of 90% Fuel Tank and 75 kg (165 lb) Oper	ator		310	680
Counterweight:				
4.2 mt (9,260 lb) Counterweight			4200	9,260
Swing Frame:				
Semi-HD Swing Frame			1910	4,210
Undercarriage:				
Standard Base Frame with HD Track Rollers a	nd Standard Carrier Rollers		4390	9,680
Boom (including lines, pins, stick cylinder):				
Reach Boom 5.7 m (18'8")			1710	3,770
Stick (including lines, pins, bucket cylinder, bucket	t linkage):			
Reach Stick R2.9B1 (9'6")			1080	2,400
Bucket (without linkage):				
1.19 m ³ (1.56 yd ³) HD			940	2,080
Quick Couplers (QC):				
Universal QC			230	500
Pin Grabber QC			390	860

Dimensions

All dimensions are approximate and may vary depending on bucket selection.



Boom Options	Reach I 5.7 m (1		
Stick Options	Reach Stick R2.9B1 (9'6")		
1 Machine Height:			
Top of Cab Height	2960 mm	9'9"	
Top of GNSS Antenna Height (if installed)	3000 mm	9'10"	
Top of OPG Height	3100 mm	10'2"	
Handrail Height	2950 mm	9'8"	
With Boom/Stick/Bucket Installed	3160 mm	10'4"	
With Boom/Stick Installed	2910 mm	9'7"	
With Boom Installed	2480 mm	8'2"	
2 Machine Length:			
With Boom/Stick/Bucket Installed	9530 mm	31'3"	
With Boom/Stick Installed	9500 mm	31'2"	
With Boom Installed	8450 mm	27'9"	
3 Upperframe Width	2780 mm	9'1"	
4 Tail Swing Radius	2830 mm	9'3"	
5 Counterweight Clearance	1050 mm	3'5"	
6 Ground Clearance	470 mm	1'7"	
7 Track Length	4450 mm	14'7"	
8 Length to Center of Rollers	3650 mm	12'0"	
9 Track Gauge	2380 mm	7'9"	
10 Undercarriage Width:			
600 mm (24 in) Shoes	2980 mm	9'9"	
700 mm (28 in) Shoes	3080 mm	10'1"	
Bucket Type	HD		
Bucket Capacity	1.19 m ³	1.56 yd ³	
Bucket Tip Radius	1570 mm	5'2"	

Working Ranges

All dimensions are approximate and may vary depending on bucket selection.



Boom Option	Reach 5.7 m	
Stick Option	Reach R2.9B1	
1 Maximum Digging Depth	6720 mm	22'1"
2 Maximum Reach at Ground Line	9860 mm	32'4"
3 Maximum Cutting Height	9370 mm	30'9"
4 Maximum Loading Height	6490 mm	21'3"
5 Minimum Loading Height	2170 mm	7'1"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6550 mm	21'6"
7 Maximum Vertical Wall Digging Depth	5190 mm	17'0"
Bucket Digging Force (ISO)	150 kN	33,811 lbf
Stick Digging Force (ISO)	106 kN	23,911 lbf
Bucket Digging Force (ISO) – Auto Dig Boost	163 kN	36,709 lbf
Stick Digging Force (ISO) – Auto Dig Boost	115 kN	25,960 lbf
Bucket Type	Н	D
Bucket Capacity	1.19 m ³	1.56 yd ³
Bucket Tip Radius	1570 mm	5'2"

Reach Boom Lift Capacities – Counterweight: 4.2 mt (9,260 lb) – without Bucket

2.9 m (9	'6'') -	R2.9B1		5.7 m ←	(18'8")		→		0 mm (24") ple Grouser	Shoes			60 mm (12'0") 	
	₽	1500 m	m/60 in	3000 mi	m/120 in	4500 mi	m/180 in	6000 mi	m/240 in	7500 mi	m/300 in			1
	•					Ī								mm in
7500 mm 300 in	kg Ib							*4950	*4950			*4300 *9.500	*4300 * 9.500	6150 240
6000 mm	kg							*5450	5450			*3950	3950	7290
240 in	lb							*12,000	11,650			*8,750	*8,750	290
4500 mm	kg							*6000	5300	*5650	3750	*3900	3400	7990
180 in	lb							*13,050	11,350	12,250	8,050	*8,550	7,450	320
3000 mm	kg					*8750	7700	*6900	5050	5600	3650	*4000	3100	8360
120 in	lb					*18,900	16,550	*14,950	10,900	12,050	7,850	*8,750	6,800	330
1500 mm	kg					*10 650	7200	7650	4850	5500	3550	*4250	3000	8450
60 in	lb					*22,950	15,500	16,450	10,400	11,800	7,600	*9,300	6,550	340
0 mm	kg			*6600	*6600	*11 650	6950	7450	4650	5400	3450	*4700	3050	8260
0 in -1500 mm	lb	*7050	*7050	* 15,150 *11 400	*15,150 *11 400	* 25,200 11 700	14,950 6850	16,050 7400	10,050 4600	11,600 5350	7,450 3450	* 10,300 5100	6,650 3300	330 7780
-1500 mm -60 in	kg Ib	* 15,750	* 15,750	* 25,850	* 25,850	25,000	14,750	15,850	4600 9,900	5350 11,550	7,400	11,250	7.200	310
-3000 mm	kg	*12 100	*12 100	*15 600	13 350	*11 000	6900	7400	4650	11,330	1,100	6050	3850	6950
-120 in	lb	*27,100	*27,100	*33,800	28,550	*23,800	14,850	15,950	9,950			13,350	8,500	280
-4500 mm	kg			*12 500	*12 500	*9000	7100	,	-,			*6800	5250	5600
-180 in	lb			*26,700	*26,700	*19,100	15,300					*14,950	11,850	220
		*	┺┨				ISO 10567:2	2007				ſ		



*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Reach Boom Lift Capacities – Counterweight: 4.2 mt (9,260 lb) – without Bucket

2.9 m (9	'6'') -	R2.9B1		• – 5.7 m C	(18'8")		→		0 mm (28") ple Grouser	Shoes			0 mm (12'0")	
5	₽	1500 m	m/60 in	3000 mi	n/120 in	4500 mi	n/180 in	6000 mi	m/240 in	7500 mi	n/300 in		le la	- ⊅
	•													mm in
7500 mm 300 in	kg Ib							*4950	*4950			*4300 *9,500	*4300 * 9,500	6150 240
6000 mm 240 in	kg Ib							*5450 * 12,000	*5450 11,750			*3950 *8,750	*3950 * 8,750	7290 290
4500 mm 180 in	kg Ib							*6000 * 13,050	5350 11,450	*5650 12,400	3800 8,100	*3900 *8,550	3400 7,550	7990 320
3000 mm 120 in	kg Ib					*8750 * 18,900	7750 16,700	*6900 * 14,950	5100 11,000	5650 12,150	3700 7,900	*4000 *8,750	3150 6,900	8360 330
1500 mm 60 in	kg Ib					*10 650 * 22,950	7250 15,650	7750 16,600	4900 10,500	5550 11,900	3600 7,700	*4250 *9,300	3000 6,650	8450 340
0 mm 0 in	kg Ib			*6600 * 15,150	*6600 * 15,150	*11 650 * 25,200	7000 15,050	7550 16,200	4700 10,150	5450 11,700	3500 7,500	*4700 *10,300	3050 6,750	8260 330
–1500 mm –60 in	kg Ib	*7050 * 15,750	*7050 * 15,750	*11 400 *25,850	*11 400 * 25,850	*11 750 25,250	6950 14,900	7450 16,050	4650 10,000	5400 11,650	3450 7,450	5150 11,350	3300 7,300	7780 310
–3000 mm – 120 in	kg Ib	*12 100 * 27,100	*12 100 *27,100	*15 600 * 33,800	13 450 28,800	*11 000 * 23,800	7000 15,000	7500 16,100	4650 10,050			6100 13,500	3900 8,600	6950 280
–4500 mm –180 in	kg Ib			*12 500 * 26,700	*12 500 *26,700	*9000 *19,100	7200 15,450					*6800 * 14,950	5300 11,950	5600 220
		* .	┶╽				ISO 10567:2	2007				٦h	\Box h	

ISO 10567:2007



*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with $\pm 5\%$ for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Bucket Specifications and Compatibility

									4.2 mt (9,260 lb) Counterweight
		Wi	dth	Capa	acity	Wei	ight	Fill	Reach Boom
	Linkage	mm	in	m ³	yd3	kg	lb	%	R2.9 (9'6")
Pin-On (No Quick Coupler)									
Utility Duty	В	600	24	0.39	0.51	503	1,108	100	•
	В	900	36	0.65	0.84	613	1,351	100	•
	В	1200	48	0.95	1.24	733	1,615	100	•
General Duty	В	600	24	0.46	0.60	550	1,212	100	•
	В	750	30	0.64	0.84	621	1,368	100	•
	В	1000	39	0.93	1.22	717	1,580	100	•
	В	1050	42	1.00	1.31	737	1,624	100	•
	В	1050	42	1.00	1.31	737	1,624	100	•
	В	1200	48	1.19	1.56	807	1,778	100	۲
	В	1400	55	1.43	1.87	874	1,926	100	Х
Heavy Duty	В	600	24	0.46	0.61	635	1,400	100	•
	В	750	30	0.64	0.84	737	1,625	100	•
	В	900	36	0.81	1.06	818	1,804	100	•
	В	1050	42	1.00	1.31	872	1,923	100	•
	В	1200	48	1.19	1.56	929	2,048	100	۲
	В	1350	54	1.38	1.81	1036	2,284	100	Х
Cleanup	В	1800	72	1.60	2.09	979	2,157	100	0
	В	2000	78	1.76	2.31	1045	2,303	100	0
	В	2000	78	1.76	2.31	1045	2,303	100	0
Ditch Cleaning Tilt	В	1800	72	1.40	1.83	1105	2,437	100	0
						on (noviced	hugkat)	kg	3010
			IV	iaxiiiiuiii 108	iu witti plfi-	on (payload	+ DUCKEL)	lb	6,636

The above loads are in compliance with hydraulic excavator standard EN474-5:2006+A3:2013, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage

fully extended at ground line with bucket curled.

Capacity based on ISO 7451:2007.

Bucket weight with General Duty tips.

Maximum Material Density:

2100 kg/m³ (3,500 lb/yd³)

1800 kg/m³ (3,000 lb/yd³)

O 1200 kg/m³ (2,000 lb/yd³)

◇ 900 kg/m³ (1,500 lb/yd³)

X Not Recommended

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

(continued on next page)

Bucket Specifications and Compatibility (continued)

									4.2 mt (9,260 lb Counterweigh	
		Width		Capacity		Weight		Fill	Reach Boom	
	Linkage	mm	in	m ³	yd ³	kg	lb	%	R2.9 (9'6")	
With Cat Pin Grabber Coupler										
Utility Duty	В	600	24	0.39	0.51	503	1,108	100	•	
	В	900	36	0.65	0.84	613	1,351	100	•	
	В	1200	48	0.95	1.24	733	1,615	100	٠	
General Duty	В	600	24	0.46	0.60	550	1,212	100	٠	
	В	750	30	0.64	0.84	621	1,368	100	٠	
	В	1,000	39	0.93	1.22	717	1,580	100	٠	
	В	1,050	42	1.00	1.31	737	1,624	100	۲	
	В	1,050	42	1.00	1.31	737	1,624	100	۲	
	В	1,200	48	1.19	1.56	807	1,778	100	θ	
	В	1,400	55	1.43	1.87	874	1,926	100	0	
	В	1,500	60	1.58	2.06	914	2,014	100	\diamond	
Heavy Duty	В	600	24	0.46	0.61	635	1,400	100	٠	
	В	750	30	0.64	0.84	737	1,625	100	٠	
	В	900	36	0.81	1.06	818	1,804	100	•	
	В	1,050	42	1.00	1.31	872	1,923	100	۲	
	В	1,200	48	1.19	1.56	929	2,048	100	θ	
	В	1,350	54	1.38	1.81	1036	2,284	100	0	
	В	1,500	60	1.58	2.06	1094	2,412	100	\diamond	
Cleanup	В	1,800	72	1.60	2.09	979	2,157	100	\diamond	
	В	2,000	78	1.76	2.31	1045	2,303	100	\diamond	
	В	2,000	78	1.76	2.31	1045	2,303	100	\diamond	
	1	I				lar (nouls - d	hugkat)	kg	2636	
			N	iaximum loa	ia with coup	ler (payload	+ bucket) -	lb	5,811	

they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451:2007.

Bucket weight with General Duty tips.

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- O 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

320 Hydraulic Excavator Specifications

Attachments Offering Guide

Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

\checkmark	Match
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* Working range front only

† Allowed usage on machine less than 50%

Counterweight		4.2 mt (9,260 lb)
Boom Type		Reach
Stick Length		R2.9 (9'6")
Hydraulic Hammers	H115 S	\checkmark
	H120 GC	\checkmark
	H120 GC S	\checkmark
	H120 S	\checkmark
	H130 GC	\checkmark
	H130 S	à
Demolition and Sorting Grapples	G318	\checkmark
Mobile Scrap and Demolition Shears	S3025 Flat Top	\checkmark
Mulchers	HM4015	\checkmark
	HM4815	\checkmark
Compactors (Vibratory Plate)	CVP110	\checkmark
Rotary Cutters	RC20	\checkmark

Counterweight		4.2 mt (9,260 lb)
Boom Type		Reach
Stick Length		R2.9 (9'6")
Hydraulic Hammers	H115 S	\checkmark
	H120 GC	à
	H120 GC S	à
	H120 S	à
	H130 GC	à*
	H130 GC S	à
	H130 S	à
Demolition and Sorting Grapples	G318	\checkmark
Mobile Scrap and Demolition Shears	S3025 Flat Top	√*
Mulchers	HM4015	\checkmark
	HM4815	\checkmark
Compactors (Vibratory Plate)	CVP110	\checkmark
Rotary Cutters	RC20	\checkmark

(continued on next page)

320 Hydraulic Excavator Specifications

Attachments Offering Guide (continued)	Attachments	Offering	Guide	(continued)
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Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

🖌 Match

* Working range front only

t	Allowed	usage	on	machine	less	than	50%

TRS18 (PIN-ON TOP/S70 BOTTOM) ATTACHMENTS

Some attachments require more hydraulic flow and are best suited with a machine that has HP2 circuits and a tiltrotator with a high flow swivel. Check the hydraulic capability of your machine and tiltrotator and the requirements of your attachment to ensure a proper match.

Counterweight		4.2 mt (9,260 lb)	
Boom Type		Reach	
Stick Length		R2.9 (9'6")	
Hydraulic Hammers	H115 S	\checkmark	
	H120 GC S	√ †	
	H120 S	√ †	
Compactors (Vibratory Plate)	CVP75	\checkmark	
	CVP110	\checkmark	

NOTE: Use hammers on tiltrotators less than 10% of working hours per year or maximum 200 hours per year. Refer to your Operation and Maintenance Manual for recommended hydraulic flow requirements.

BOOM-MOUNT ATTACHMENTS		
Counterweight		4.2 mt (9,260 lb)
Boom Type		Reach
Mobile Scrap and Demolition Shears	S3035 Flat Top	\checkmark

Standard and Optional Equipment

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

	Standard	Optional		Standard	Option
BOOM, STICKS AND LINKAGES			CAT TECHNOLOGY		
5.7 m (18'8") Reach boom	\checkmark		VisionLink®	\checkmark	
2.9 m (9'6") Reach stick	\checkmark		VisionLink Productivity		\checkmark
Bucket linkage, B1-family with lifting eye	\checkmark		Remote Flash	\checkmark	
CAB			Remote Troubleshoot	\checkmark	
ROPS	\checkmark		Cat Grade Connectivity		\checkmark
High-resolution 203 mm (8") LCD touchscreen monitor	\checkmark		Compatibility with radios and base stations from Trimble, Topcon, and Leica	√	
High-resolution 254 mm (10") LCD touchscreen monitor		\checkmark	Capability to install 3D grade systems from Trimble, Topcon, and Leica	\checkmark	
Auto bi-level air conditioner	\checkmark		Cat Grade 2D		\checkmark
Jog dial and shortcut keys for monitor control	\checkmark		Cat Grade 2D with Attachment Ready Option (ARO)	\checkmark	
Keyless push-to-start engine control	\checkmark		Cat Grade 3D single GNSS		\checkmark
Height-adjustable console	\checkmark		Cat Grade 3D dual GNSS		\checkmark
Tilt-up left-side console	\checkmark		Laser catcher		\checkmark
Heated air-suspension seat	\checkmark		Cat Assist:	\checkmark	
51 mm (2") seat belt	\checkmark		– Grade Assist		
Monitor integrated Bluetooth [®] radio with USB/Auxiliary ports	\checkmark		– Boom Assist – Bucket Assist – Swing Assist		
12V DC outlets	\checkmark		– Swing Assist – Lift Assist		
Document storage	\checkmark		Cat Payload:	✓	
Overhead storage and rear storage with nets	\checkmark		 Static weigh Semiautomatic calibration 		
Beverage holder	\checkmark		– Payload/cycle information		
Cup holder	\checkmark		– USB reporting capability	✓	
Openable two-piece front window	\checkmark		Work tool recognition (PL161)	✓ ✓	
Rear window emergency exit	\checkmark		Work tool tracking (PL161)	✓	
Radial wiper with washer	\checkmark		Cat Tilt Rotator (TRS) Integration		√
Openable polycarbonate skylight hatch	\checkmark		Operator Coaching		~
LED dome light	\checkmark		ELECTRICAL SYSTEM	/	
Floor welcome light	\checkmark		1,000 CCA maintenance-free batteries (×2)	V	
Roof sunscreen	\checkmark		Centralized electrical disconnect switch	~	
Roller front sunscreen	√		Programmable time-delay LED	 ✓	
Roller rear sunscreen		\checkmark	working lights		
Washable floor mat	\checkmark		LED chassis light, left-hand and right-	\checkmark	
Beacon ready	\checkmark		hand boom lights, cab lights		
Cat Stick Steer		\checkmark	Premium surround lighting package		\checkmark

Contact your Cat dealer for availability.

(continued on next page)

Standard and Optional Equipment (continued)

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

	Standard	Optional
ENGINE		
Cat® C7.1 single turbo diesel engine	\checkmark	
Three selectable power modes	\checkmark	
Auto engine speed control	\checkmark	
Auto engine idle shutdown	\checkmark	
Work up to 3000 m (9,840 ft) above sea level without engine power de-rating	\checkmark	
52° C (125° F) high-ambient cooling capacity	\checkmark	
Starting capability for -18° C (0° F) with jump start receptacle	\checkmark	
Double element air filter with integrated pre-cleaner	\checkmark	
Electric fuel priming pump	\checkmark	
Electric cooling fans with auto-reverse function	\checkmark	
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	\checkmark	
Boom and stick lowering check valves	\checkmark	
Electronic main control valve	\checkmark	
Auto Dig Boost	\checkmark	
Auto heavy lift	\checkmark	
Auto warm up	\checkmark	
Auto two-speed travel	\checkmark	
Boom and stick drift reduction valve	\checkmark	
Element type main hydraulic filter	\checkmark	
Slider joysticks	\checkmark	
Tandem type electronic main pump	\checkmark	
Hammer return filter circuit		✓
Hydraulic efficiency monitoring		\checkmark
Tool Control (two pump, one/two way high-pressure flow)		~
Medium pressure auxiliary circuit		\checkmark
Quick coupler circuit for Cat Pin Grabber and CW Dedicated		\checkmark

	Standard	Optional
SAFETY AND SECURITY		
Cat Command (remote control)		\checkmark
2D E-Fence:	\checkmark	
– E-ceiling		
– E-floor – E-swing		
– E-wall		
- E-cab avoidance		
Auto hammer stop	\checkmark	
Rearview and right-hand- sideview cameras	\checkmark	
Neutral lever (lock out) for all controls	\checkmark	
Anti-skid plate and countersunk bolts on service platform	\checkmark	
Ground-level accessible secondary engine shutoff switch in cab	\checkmark	
Lockable disconnect switch	\checkmark	
Swing alarm		\checkmark
Right-hand handrail and handhold	\checkmark	
Travel alarm	\checkmark	
Inspection lighting		\checkmark
SERVICE AND MAINTENANCE		
Scheduled Oil Sampling (S \cdot O \cdot S SM) ports	\checkmark	
QuickEvac [™] maintenance ready		\checkmark
Grouped location for engine oil and fuel filters	\checkmark	
Ground-level second dipstick for engine oil	\checkmark	
Radiator screen		\checkmark
Integrated vehicle health	\checkmark	
management system		
UNDERCARRIAGE AND STRUCTURES		
600 mm (24") triple grouser track shoes	\checkmark	
700 mm (28") triple grouser track shoes		\checkmark
Tie-down points on base frame	\checkmark	
Segmented track guiding guards	\checkmark	
Full-length track guiding guards		\checkmark
Bottom guards	\checkmark	
HD bottom guards		\checkmark
Swivel guard	\checkmark	
Travel motor guards	\checkmark	
HD travel motor guards		\checkmark
Grease lubricated track links	\checkmark	
4.2 mt (9,260 lb) counterweight	\checkmark	

Dealer Installed Kit and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- Lower radial wiper
- Rain protector plus cab light cover
- Laminated P5A glass front windshield
- Left-hand/Right-hand electrical pedal for tool control
- Armrest kit
- Seat with 4-point seatbelt capability
- Dual exit rear window kit
- 75 mm (3") retractable seat belt
- Auxiliary relay

ELECTRICAL

• Premium surround working lights

GUARDS

- Swivel guard
- Side rubber bumper guard
- Operator Protective Guards
- Mesh guard full front
- Mesh guard half front
- Full protecting vandalism guard

MAINTENANCE

- Jump start wiring
- Duct ready kit

SAFETY AND SECURITY

- Cat Detect People Detection
- Cat Command Remote control kit
- Seat belt indicator
- Bluetooth receiver
- Bluetooth key fob

OTHER ATTACHMENTS

- Delayed engine shutdown kit
- Upper cover for antennae
- Removable mast for antennae
- Power clam kit
- Grease gun holder

320 Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

Engine

- The Cat® C7.1 engine meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to:
 - ✓ 100⁵/₂/₂ biodiesel FAME (fatty acid methyl ester)*
 ✓ 100⁶/₂ renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer. **Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Air Conditioning System

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg (1.9 lb) of refrigerant which has a CO_2 equivalent of 1.216 metric tonnes (1.340 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- Cadmium < 0.01%
- Chromium < 0.01%
- Lead < 0.01%

Sound Performance

ISO 6395:2008 (external) - 100 dB(A)

ISO 6396:2008 (inside cab) - 70 dB(A)

• 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 a noisy environment.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
- Advanced hydraulic systems balance power and efficiency
- Smart mode matches machine power to digging requirements automatically
- Increase operating efficiency up to 45% with standard Cat technologies
- Cut maintenance costs with extended service intervals
- The latest hydraulic oil filter provides longer life with a 3,000-hour replacement interval

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

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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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