



325

Hydraulic Excavator

Technical Specifications

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

Table of Contents

325 Hydraulic Excavator

Specifications	2	Major Component Weights	4
Engine	2	Dimensions	5
Swing Mechanism	2	Blade Dimensions	6
Weights	2	Working Ranges and Forces	7
Track	2	Bucket Specifications and Compatibility	8
Drive	2	Attachments Offering Guide	9
Hydraulic System	2	Standard and Optional Equipment	10
Service Refill Capacities	2	Cab Options	12
Standards	2	Dealer Installed Kits and Attachments	13
Sound Performance	2		
Operating Weights and Ground Pressures	3		

325 Tunneling Hydraulic Excavator Specialty Configurations

Key Features and Benefits	14	Air Conditioning System	15
Specifications	15	Operating Weights and Ground Pressures	16
Engine	15	Major Component Weights	16
Swing Mechanism	15	Dimensions	17
Weights	15	Working Ranges and Forces	18
Track	15	Hammer Working Range Charts – Short Reach	19
Drive	15	Bucket Specifications and Compatibility	20
Hydraulic System	15	Attachments Offering Guide	20
Service Refill Capacities	15	Standard and Optional Equipment	21
Standards	15	Dealer Installed Kits and Attachments	23



オフロード法2014年
基準適合

325 Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C4.4	
Net Power – ISO 9249:2007	129 kW	172 hp
Engine Power – ISO 14396:2002	129 kW	174 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Net power is tested per ISO 9249:2007. Standards in effect at the time of manufacture.
- Net power available at the flywheel when engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,200 rpm.
- Rated speed at 2,200 rpm.

⁽¹⁾Cat engines are compatible with the following renewable, alternative, and bio-fuels* with lower greenhouse gas emission impact:

- ✓ Up to B20 biodiesel (FAME)**
- ✓ Up to 100% HVO and GTL renewable fuels

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

**For use of higher blends, consult your Cat dealer.

Swing Mechanism

Swing Speed	11.1 rpm	
Maximum Swing Torque	82 kN·m	60,300 lbf·ft

Weights

Operating Weight	22 800 kg	50,300 lb
• Standard undercarriage, Reach boom, R2.9B1 (9'6") stick, HDX 0.90 m ³ (1.18 yd ³) bucket, 600 mm (24") triple grouser shoes and 4.9 mt (10,800 lb) counterweight.		
Operating Weight	27 600 kg	60,800 lb
• Long undercarriage, Reach boom, R2.9B1 (9'6") stick, HDX 0.90 m ³ (1.18 yd ³) bucket, 600 mm (24") HD triple grouser shoes and 8.3 mt (18,300 lb) counterweight.		

Track

Optional Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	700 mm	28 in
Optional Track Shoes Width	790 mm	31 in
Number of Shoes (each side) – for Standard Undercarriage	45	
Number of Track Rollers (each side) – for Standard Undercarriage	7	
Number of Shoes (each side) – for Long Undercarriage	49	
Number of Track Rollers (each side) – for Long Undercarriage	8	
Number of Carrier Rollers (each side)	2	

Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.7 km/h	3.5 mph
Maximum Drawbar Pull	201 kN	45,232 lbf

Hydraulic System

Main System – Maximum Flow – Implement	429 L/min	113 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	27 500 kPa	3,988 psi
Boom Cylinder – Bore	125 mm	5 in
Boom Cylinder – Stroke	1410 mm	56 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	313 L	82.7 gal
Cooling System	12 L	3.1 gal
Engine Oil (with filter)	15 L	4.0 gal
Swing Drive	12 L	3.2 gal
Final Drive (each)	4 L	1.1 gal
Hydraulic System (including tank)	230 L	60.8 gal
Hydraulic Tank (including suction pipe)	111 L	29.3 gal
DEF Tank	26 L	6.9 gal

Standards

Brakes	ISO 10265:2008
Cab/ROPS	ISO 12117-2:2008
FOGS (optional)	ISO 10262:1998 Level II

Sound Performance

ISO 6395:2008 (external)	97 dB(A)
ISO 6396:2008 (inside cab)	70 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- 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.

325 Hydraulic Excavator Specifications

Operating Weights and Ground Pressures

	600 mm (24 in) Triple Grouser Shoes		600 mm (24 in) HD Triple Grouser Shoes		700 mm (28 in) HD Triple Grouser Shoes		790 mm (31 in) Triple Grouser Shoes		790 mm (31 in) HD Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
Base Frame with Track Rollers and Carrier Rollers										
4.9 mt (10,800 lb) Counterweight + Standard Undercarriage Base Machine										
Reach Boom + R2.9B1 (9'6") Stick + 0.90 m ³ (1.18 yd ³) HDX Bucket	22 800 (50,300)	52.5 (7.6)	—	—	—	—	23 300 (51,400)	40.8 (5.9)	—	—
8.3 mt (18,300 lb) Counterweight + Long Undercarriage Base Machine										
Reach Boom + R2.9B1 (9'6") Stick + 0.90 m ³ (1.18 yd ³) HDX Bucket + AUX lines (HP + QC)	—	—	27 600 (60,800)	57.4 (8.3)	27 900 (61,500)	49.7 (7.2)	—	—	28 000 (61,700)	44.2 (6.3)

All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

325 Hydraulic Excavator Specifications

Major Component Weights

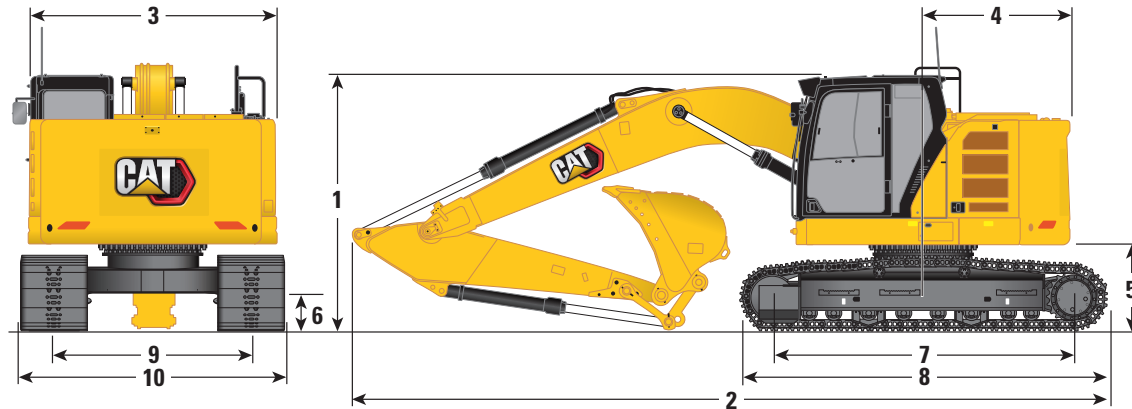
	kg	lb
Base Machine Weight (including upperframe, boom cylinders without boom, stick, bucket, stick cylinder, bucket cylinder, tracks, blade, fuel, operator)		
With 4.9 mt (10,800 lb) Counterweight and Standard Undercarriage	16 220	35,800
With 4.9 mt (10,800 lb) Counterweight and Long Undercarriage	16 630	36,700
With 4.9 mt (10,800 lb) Counterweight and Long Undercarriage (for use with Blade)	17 490	38,500
With 8.3 mt (18,300 lb) Counterweight and Long Undercarriage	20 250	44,600
Track Shoes:		
600 mm (24") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes for Standard Undercarriage	2600	5,700
600 mm (24") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes for Long Undercarriage	2830	6,200
600 mm (24") Width, 12.5 mm (0.49") Thick, HD Triple Grouser Track Shoes for Long Undercarriage	3190	7,000
700 mm (28") Width, 12.5 mm (0.49") Thick, HD Triple Grouser Track Shoes for Long Undercarriage	3520	7,800
790 mm (31") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes for Standard Undercarriage with Step Extension for ISO 2867:2011	3110	6,900
790 mm (31") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes for Long Undercarriage with Step Extension for ISO 2867:2011	3380	7,500
790 mm (31") Width, 12.5 mm (0.49") Thick, HD Triple Grouser Track Shoes for Long Undercarriage with Step Extension for ISO 2867:2011	3860	8,500
Two Boom Cylinders	430	900
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	700
Blades (including lines, cylinders, frame modifications):		
2980 mm (9'9") Width, suitable for use with 4.9 mt (10,800 lb) Counterweight and 600 mm (24") Width Track Shoes	1090	2,400
3170 mm (10'5") Width, suitable for use with 4.9 mt (10,800 lb) Counterweight and 700 mm (28") or 790 mm (31") Width Track Shoes	1130	2,500
Counterweights:		
4.9 mt (10,800 lb) Counterweight	4900	10,800
8.3 mt (18,300 lb) Counterweight	8300	18,300
Booms (including lines, pins, stick cylinder):		
Reach Boom (5.7 m/18'8")	1740	3,800
HD Reach Boom (5.7 m/18'8")	1910	4,200
AUX Lines (HP + QC)	130	300
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick (R2.9B1/9'6")	1030	2,300
HD Reach Stick (R2.9B1/9'6")	1150	2,500
AUX Lines (HP + QC)	60	100
Buckets (without linkage, with tips and side cutters):		
0.80 m ³ (1.05 yd ³) GDX B Linkage	690	1,500
0.90 m ³ (1.18 yd ³) GDX B Linkage	720	1,600
0.90 m ³ (1.18 yd ³) HDX B Linkage	850	1,900
1.19 m ³ (1.55 yd ³) HDX B Linkage	1000	2,200

Refer to page 8 for a complete list of bucket options.

325 Hydraulic Excavator Specifications

Dimensions

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

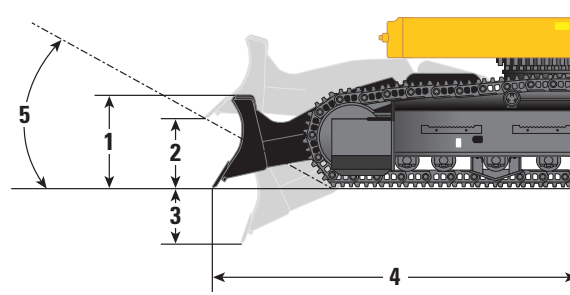


Boom Option	Reach Boom 5.7 m (18'8")			
Stick Option	Reach Stick R2.9B1 (9'6")			
Undercarriage Type	Standard		Long	
1 Machine Height:				
Top of Cab Height	3074 mm	10'1"	3078 mm	10'1"
Top of FOGS Height	3213 mm	10'6"	3217 mm	10'7"
Handrails Height	3183 mm	10'5"	3187 mm	10'5"
With Boom/Stick/Bucket Installed	3205 mm	10'6"	3209 mm	10'6"
With Boom/Stick Installed	2979 mm	9'9"	2984 mm	9'9"
With Boom Installed	2522 mm	8'3"	2526 mm	8'3"
2 Machine Length:				
With Boom/Stick/Bucket Installed	8677 mm	28'6"	8868 mm	29'1"
With Boom/Stick Installed	8660 mm	28'5"	8850 mm	29'0"
With Boom Installed	7592 mm	24'11"	7782 mm	25'6"
With Blade Installed	—	—	9565 mm	31'5"
3 Upperframe Width without Walkways	2987 mm	9'10"	2987 mm	9'10"
4 Tail Swing Radius	1780 mm	5'10"	1814 mm	5'11"
5 Counterweight Clearance	1018 mm	3'3"	978 mm	3'2"
6 Ground Clearance	441 mm	1'4"	441 mm	1'4"
7 Length to Center of Rollers	3265 mm	10'9"	3646 mm	12'0"
8 Track Length	4074 mm	13'4"	4455 mm	14'7"
9 Track Gauge	2200 mm	7'3"	2380 mm	7'10"
10 Undercarriage Width:				
600 mm (24") Shoes	2800 mm	9'2"	2980 mm	9'9"
700 mm (28") Shoes	—	—	3080 mm	10'1"
790 mm (31") Shoes	2990 mm	9'10"	3170 mm	10'5"
Bucket Type	HDX		HDX	
Bucket Capacity	0.90 m ³	1.18 yd ³	0.90 m ³	1.18 yd ³
Bucket Tip Radius	1489 mm	4'11"	1489 mm	4'11"

325 Hydraulic Excavator Specifications

Blade Dimensions (Long Undercarriage only)

All dimensions are approximate.

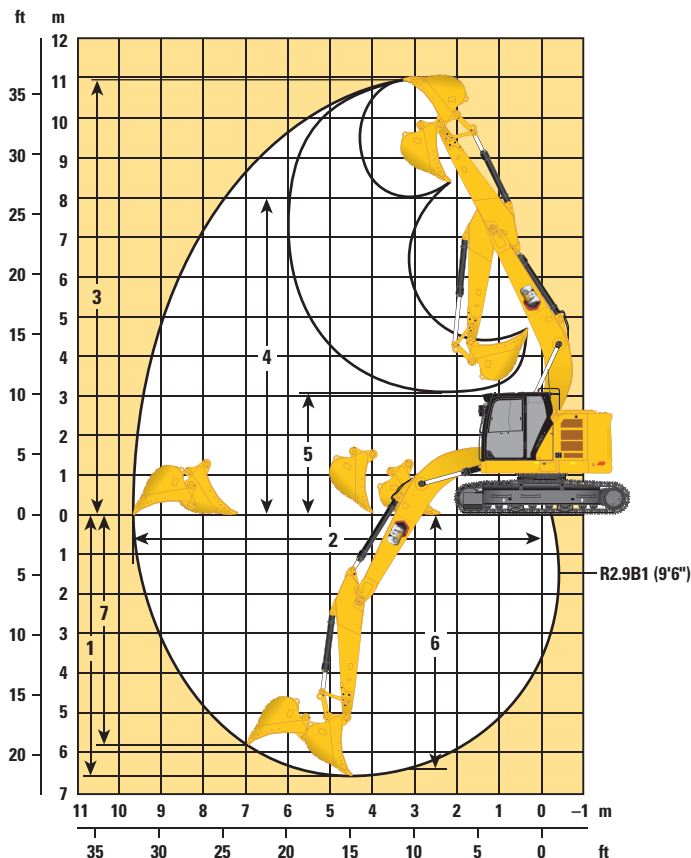


Track Shoe Width	600 mm (24")		700 mm (28")		790 mm (31")	
Blade Options	2980 mm (9'9")		3170 mm (10'5")			
1 Blade Moldboard Height	695 mm	2'3"	695 mm	2'3"	695 mm	2'3"
2 Blade Maximum Cutting Edge Rise	581 mm	1'11"	581 mm	1'11"	581 mm	1'11"
3 Blade Minimum Cutting Edge Depth	482 mm	1'7"	482 mm	1'7"	482 mm	1'7"
4 Blade Edge from Machine Center	2925 mm	9'7"	2925 mm	9'7"	2925 mm	9'7"
5 Ramp Angle	28.8 degrees		28.8 degrees			

325 Hydraulic Excavator Specifications

Working Ranges and Forces

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



Boom Option	Reach Boom 5.7 m (18'8")			
Stick Option	Reach Stick R2.9B1 (9'6")			
Undercarriage Type	Standard		Long	
1 Maximum Digging Depth	6600 mm	21'8"	6600 mm	21'8"
2 Maximum Reach at Ground Line	9670 mm	31'9"	9670 mm	31'9"
3 Maximum Cutting Height	10 930 mm	35'10"	10 930 mm	35'10"
4 Maximum Loading Height	8000 mm	26'3"	8000 mm	26'3"
5 Minimum Loading Height	3080 mm	10'1"	3080 mm	10'1"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6420 mm	21'1"	6420 mm	21'1"
7 Maximum Vertical Wall Digging Depth	5820 mm	19'1"	5820 mm	19'1"
Minimum Working Equipment Radius	2330 mm	7'8"	2330 mm	7'8"
Bucket Digging Force (ISO)	148 kN	33,272 lbf	148 kN	33,272 lbf
Stick Digging Force (ISO)	103 kN	23,155 lbf	103 kN	23,155 lbf
Bucket Type	HDX		HDX	
Bucket Capacity	0.90 m ³	1.18 yd ³	0.90 m ³	1.18 yd ³
Bucket Tip Radius	1489 mm	4'11"	1489 mm	4'11"

325 Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	Standard Undercarriage		Long Undercarriage						
									4.9 mt (10,800 lb) Counterweight		4.9 mt (10,800 lb) Counterweight				8.3 mt (18,300 lb) Counterweight		
									No Blade		No Blade		With Blade Up in Front		No Blade		
									Reach Boom	HD Reach Boom	Reach Boom	HD Reach Boom	Reach Boom	HD Reach Boom	Reach Boom	HD Reach Boom	
		mm	in	m ³	yd ³	kg	lb	%	R2.9 (9'6")	HD R2.9 (9'6")	R2.9 (9'6")	HD R2.9 (9'6")	R2.9 (9'6")	HD R2.9 (9'6")	R2.9 (9'6")	HD R2.9 (9'6")	
Pin-On (No Quick Coupler)																	
General Duty Excavation	B	950	37	0.80	1.05	686	1,511	100	●	⊙	●	●	●	●	●	●	●
	B	1050	41	0.90	1.18	719	1,584	100	⊙	⊖	●	●	●	●	●	●	●
	B	1150	45	1.00	1.31	751	1,655	100	⊖	○	⊙	⊙	●	●	●	●	●
Heavy Duty Excavation	B	950	37	0.80	1.05	796	1,755	100	⊙	⊙	●	●	●	●	●	●	●
	B	1050	41	0.90	1.17	835	1,841	100	⊖	⊖	●	⊙	●	●	●	●	●
Heavy Duty Excavation, Skeleton	B	1050	41	0.90	1.18	855	1,885	100	⊖	⊖	●	⊙	●	●	●	●	●
Tamping	B	2200	86	0.72	0.94	868	1,913	100	⊙	⊙	●	●	●	●	●	●	●
	B	2200	86	0.90	1.18	891	1,965	100	⊖	○	⊙	⊙	●	●	●	●	●
Maximum load with pin-on (payload + bucket)									kg	2290	2170	2655	2540	2900	2845	3780	3730
									lb	5,049	4,784	5,853	5,600	6,393	6,272	8,333	8,223
With Pin Grabber Coupler																	
General Duty Excavation	B	950	37	0.80	1.05	686	1,511	100	⊖	○	⊙	⊙	●	●	●	●	●
	B	1050	41	0.90	1.18	719	1,584	100	○	○	⊖	⊖	⊙	⊙	●	●	●
	B	1150	45	1.00	1.31	751	1,655	100	◇	◇	⊖	⊖	⊙	⊖	●	●	●
Heavy Duty Excavation	B	950	37	0.80	1.05	796	1,755	100	○	○	⊙	⊖	●	●	●	●	●
	B	1050	41	0.90	1.17	835	1,841	100	○	◇	⊖	⊖	⊙	⊙	●	●	●
Heavy Duty Excavation, Skeleton	B	1050	41	0.90	1.18	855	1,885	100	◇	◇	⊖	○	⊙	⊙	●	●	●
Tamping	B	2200	86	0.72	0.94	868	1,913	100	○	○	⊙	⊙	●	●	●	●	●
	B	2200	86	0.90	1.18	891	1,965	100	◇	◇	⊖	○	⊙	⊖	●	●	●
Maximum load with coupler (payload + bucket)									kg	1868	1748	2233	2118	2478	2423	3358	3308
									lb	4,119	3,854	4,924	4,670	5,463	5,343	7,404	7,294

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)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- 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.

325 Hydraulic Excavator Specifications

Attachments Offering Guide

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

Match
 * Working range front only
 † Allowed usage on machine less than 50%
 No Match

PIN-ON ATTACHMENTS

Undercarriage		Standard		Long		Long	
Counterweight		4.9 mt (10,800 lb)				8.3 mt (18,300 lb)	
Boom Type		Reach	Reach HD	Reach	Reach HD	Reach	Reach HD
Stick Size		2.92 m (9'7")	R2.92 m HD (9'7")	2.92 m (9'7")	R2.92 m HD (9'7")	2.9 m (9'6")	2.9 m HD (9'6")
Hydraulic Hammers	H120 GC Side Mount	✓	✓	✓	✓	✓	✓
	H120 S	✓	✓	✓	✓	✓	✓
	H130 S	✓†	✓*	✓†	✓	✓†	✓
Pulverizers	P218 Secondary Pulverizer			✓	✓*		
	P318 Primary Pulverizer			✓	✓*		

CAT PIN GRABBER COUPLER ATTACHMENTS

Undercarriage		Standard		Long		Long	
Counterweight		4.9 mt (10,800 lb)				8.3 mt (18,300 lb)	
Boom Type		Reach	Reach HD	Reach	Reach HD	Reach	Reach HD
Stick Size		R2.9 m (9'6")	R2.9 m HD (9'6")	R2.9 m (9'6")	R2.9 m HD (9'6")	2.9 m (9'6")	2.9 m HD (9'6")
Hydraulic Hammers	H120 GC Side Mount	✓†*		✓†	✓	✓	✓
	H120 S	✓†*	✓*	✓†	✓	✓†	✓
	H130 S			✓†	✓*	✓†	✓

325 Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAT TECHNOLOGY			ENGINE		
Cat Product Link™	✓		Three selectable modes: Power, Smart, Eco	✓	
Work tool recognition	✓		4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓	
Work tool tracking*	✓		50° C (122° F) high-ambient cooling capacity without derate	✓	
Laser catcher		✓	-18° C (0° F) cold start capability	✓	
Cat Grade with 2D and offset memory	✓		Sealed double element air filter with integrated precleaner	✓	
Cat Grade with Advanced 2D		✓	1 × 145 amp dual alternator	✓	
Cat Grade with 3D connectivity:	✓		Electric fuel priming pump	✓	
– Compatibility with radios and base stations from Trimble, Topcon, and Leica			Reversible electric cooling fans	✓	
– Capability to install 3D grade systems from Trimble, Topcon, and Leica			Two-stage fuel filtration system with water separator and indicator	✓	
Cat Assist:	✓		HYDRAULIC SYSTEM		
– Grade Assist			Electric main control valve	✓	
– Boom Assist			Boom and stick regeneration circuits	✓	
– Bucket Assist			Automatic hydraulic oil warm up	✓	
– Swing Assist			Automatic two-speed travel	✓	
Cat Payload:	✓		Boom and stick drift reduction valve	✓	
– Static weigh			CRN compliant accumulator	✓	
– Semiautomatic calibration			Tandem type electronic main pump	✓	
– Payload/cycle information			Element type main hydraulic filter	✓	
– USB reporting capability					
2D E-Fence:	✓				
– E-ceiling					
– E-floor					
– E-swing					
– E-wall					
– E-cab avoidance					
Auto hammer stop	✓				
Remote Services capability	✓				

(continued on next page)

*Paired with PL161 attachment locator.

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
UNDERCARRIAGE AND STRUCTURES			ELECTRICAL SYSTEM		
Base frame with standard track rollers and standard carrier rollers		✓	Maintenance free battery	✓	
Base frame with standard track rollers and standard carrier rollers for use with blade		✓	LED chassis light, left-hand/right-hand boom lights, cab lights – 1,800 lumens	✓	
Standard base frame with standard track rollers and standard carrier rollers for long undercarriage	✓		Centralized electrical disconnect switch	✓	
Standard base frame with standard track rollers and standard carrier rollers for long undercarriage for use with blade		✓	Programmable time-delay working lights	✓	
Tie-down points on base frame (ISO 15818:2017 compliant)	✓		Premium surround lighting package		✓
Grease lubricated track	✓		SERVICE AND MAINTENANCE		
Segmented track guiding guards	✓		Sampling ports for Scheduled Oil Sampling (S·O·S SM)	✓	
Center track guiding guards (standard undercarriage only)		✓	Grouped location for engine oil and fuel filters	✓	
Bottom guards	✓		Ground-level second dipstick for engine oil	✓	
Travel motor guards	✓		SAFETY AND SECURITY		
4.9 mt (10,800 lb) counterweight		✓	Rear and right-hand-sideview cameras	✓	
8.3 mt (18,300 lb) counterweight*		✓	360° visibility		✓
600 mm (24") triple grouser track shoes		✓	Right-hand handrail and hand hold (ISO 2867:2011 compliant)	✓	
700 mm (28") triple grouser track shoes		✓	Service platform with anti-skid plate and countersunk bolts	✓	
790 mm (31") triple grouser track shoes with step extension for ISO 2867		✓	Hydraulic lock out lever neutralizes all controls	✓	
2980 mm (9'9") blade		✓	Ground-level accessible secondary engine shutoff switch in cab	✓	
3170 mm (10'5") blade		✓	Signaling/warning horn	✓	
BOOMS, STICKS AND LINKAGES			Falling object guard system		✓
5.7 m (18'8") Reach boom		✓			
5.7 m (18'8") HD Reach boom		✓			
2.9 m (9'6") Reach stick		✓			
2.9 m (9'6") HD Reach stick		✓			
Bucket linkage, B1 family without lifting eye, Cat Grade		✓			
Bucket linkage, B1 family with lifting hook for shovel crane		✓			

*Not compatible with blade.

325 Cab Options

Cab Options

	Comfort	Deluxe	Premium
ROPS, standard sound suppression with viscous mounts	●	●	●
High-resolution 203 mm (8") LCD touchscreen monitor	●	X	X
High-resolution 254 mm (10") LCD touchscreen monitor*	○	●	●
Additional high-resolution LCD touchscreen monitor for Cat Grade Advanced 2D and 3D	○	○	○
Automatic bi-level air conditioner	●	●	●
Jog dial and shortcut keys for monitor control	●	●	●
Keyless push-to-start engine control	●	●	●
Height-adjustable console, three steps with tool	●	X	X
Height-adjustable infinite, with no tool	X	●	●
Fixed left-side console	●	X	X
Tilt-up left-side console	X	●	●
Cat Stick Steer	○	○	○
Mechanically adjustable seat suspension	●	X	X
Heated seat with air-adjustable suspension	X	●	X
Heated and cooled seat with automatic adjustable suspension	X	X	●
51 mm (2") orange seat belt	●	●	●
Bluetooth integrated radio (including USB, aux port and microphone)	●	●	●
2 × 12V DC outlets	●	●	●
Document storage	●	●	●
Rear head storage net and lunchbox storage net	X	●	●
Cup and bottle holders	●	●	●
One-piece windshield (with fixed glass skylight)	X	X	○
Openable two-piece front window	●	●	○
Upper radial wiper with washer	●	●	X
Parallel wiper with washer	X	X	●
Openable steel hatch	●	X	X
Openable polycarbonate skylight hatch	X	●	○
Fixed glass skylight (with one-piece windshield)	X	X	○
LED dome light	●	●	●
Floor welcome light	X	●	●
Roller front sunscreen	●	●	●
Roller rear sunscreen	○	○	●
Rear window emergency exit	●	●	●
Washable floor mat	●	●	●
Beacon ready	●	●	●

● Standard

○ Optional

X Not available

*Only for use with 360° visibility.

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- LH/RH electric pedal for tool control
- Dual exit rear window kit
- Rain protector plus cab light cover
- Polycarbonate roof hatch (for Comfort cab only)
- Front windshield laminated glass (P5A glass)
- Bluetooth® key fob

SAFETY AND SECURITY

- 76 mm (3") retractable seat belt

GUARDS

- Mesh guard full front
- Mesh guard lower half front
- Cab vandalism guard



325

Tunneling Hydraulic Excavator

The Cat® 325 Tunneling excavator is a specially modified design to meet the harsh conditions of underground applications. The machine features a reinforced upper and lower frame as well as a choice of two specially designed sets of front parts: Mass Excavation and Short Reach for tunneling. Other modifications include silicone sealing for each electrical component, a simplified cab, and specific safety features. The machine can be equipped with a variety of tools, from extreme service buckets to hammers and rotary grinders rotary grinders. A shovel crane system is available to help operators work safely by knowing the load on hand.

Machine Modifications to meet Harsh Working Conditions

- Choice of Tunneling Mass excavation or Short reach front parts to provide high digging forces or work in tight areas.
- Reinforced upper and lower frames to match the toughest conditions found underground.
- All electrical harnesses connections are protected by extra silicone to avoid water entry.
- Simplified cab. Mounting points for fire extinguisher are offered from factory.
- Regulatory features such as extra flashlight for visibility and shovel crane for mass excavation to know load on hand.
- Safety features such as an optional 360° camera and 360° lighting.
- Machine protection including boom light covers and bucket cylinder guard sleeve.
- Standard hammer return filter protects the machine hydraulics in case of hammer seal failure.

325 Tunneling Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C4.4	
Net Power – ISO 9249:2007	129 kW	172 hp
Engine Power – ISO 14396:2002	129 kW	174 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.40 L	269 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Net power is tested per ISO 9249:2007. Standards in effect at the time of manufacture.
- Net power available at the flywheel when engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,200 rpm.
- Rated speed at 2,200 rpm

⁽¹⁾Cat engines are compatible with the following renewable, alternative, and bio-fuels* with lower greenhouse gas emission impact:

- ✓ Up to B20 biodiesel (FAME)**
- ✓ Up to 100% HVO and GTL renewable fuels

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

**For use of higher blends, consult your Cat dealer.

Swing Mechanism

Swing Speed	11.12 rpm	
Maximum Swing Torque	82 kN·m	60,360 lbf·ft

Weights

Operating Weight	25 000 kg	55,100 lb
• Long undercarriage, Mass boom, M2.4 (7'10") stick, XSP 0.80 m ³ (1.05 yd ³) bucket, 600 mm (24") triple grouser shoes and 4.9 mt (10,800 lb) counterweight.		
Operating Weight	25 100 kg	55,100 lb
• Long undercarriage, Short Reach boom, M3.2 (10'5") stick, HDX 0.90 m ³ (1.2 yd ³) bucket, 600 mm (24") triple grouser shoes and 4.9 mt (10,800 lb) counterweight.		

Track

Optional Track Shoes Width	600 mm	24 in
Number of Shoes (each side)	49	
Number of Track Rollers (each side)	8	
Number of Carrier Rollers (each side)	2	

Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.7 km/h	3.5 mph
Maximum Drawbar Pull	201 kN	45,232 lbf

Hydraulic System

Main System – Maximum Flow (Implement)	429 L/min (2 × pumps)	113 gal/min (2 × pumps)
Maximum Pressure – Equipment – Implement	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	27 508 kPa	3,989 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	1518 mm	60 in
Bucket Cylinder – Bore	135 mm	5 in
Bucket Cylinder – Stroke	1156 mm	46 in

Service Refill Capacities

Fuel Tank Capacity	313 L	82.7 gal
Cooling System	12 L	3.1 gal
Engine Oil (with filter)	15 L	4.0 gal
Swing Drive (each)	12 L	3.2 gal
Final Drive (each)	5 L	1.2 gal
Hydraulic System (including tank)	230 L	60.8 gal
Hydraulic Tank	111 L	29.4 gal
DEF Tank	26 L	6.9 gal

Standards

Brakes	ISO 10265:2008
FOGS (optional)	ISO 10262:1998 Level II

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.8 kg of refrigerant which has a CO₂ equivalent of 1.144 metric tonnes.

325 Tunneling Hydraulic Excavator Specifications

Operating Weights and Ground Pressures

	600 mm (24 in) Triple Grouser Shoes	
	Weight	Ground Pressure
	kg (lb)	kPa (psi)
Base Frame with Track Rollers and Carrier Rollers		
4.9 mt (10,800 lb) Counterweight + Long Undercarriage Base Machine		
Mass Boom + M2.4 (7'10") Stick + 0.80 m ³ (1.05 yd ³) XSP Bucket	25 000 kg (55,100 lb)	52 kPa (7.5 psi)
Short Reach Boom + M3.2 (10'5") Stick + 0.90 m ³ (1.18 yd ³) HDX Bucket	25 100 kg (55,300 lb)	52.2 kPa (7.6 psi)

All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

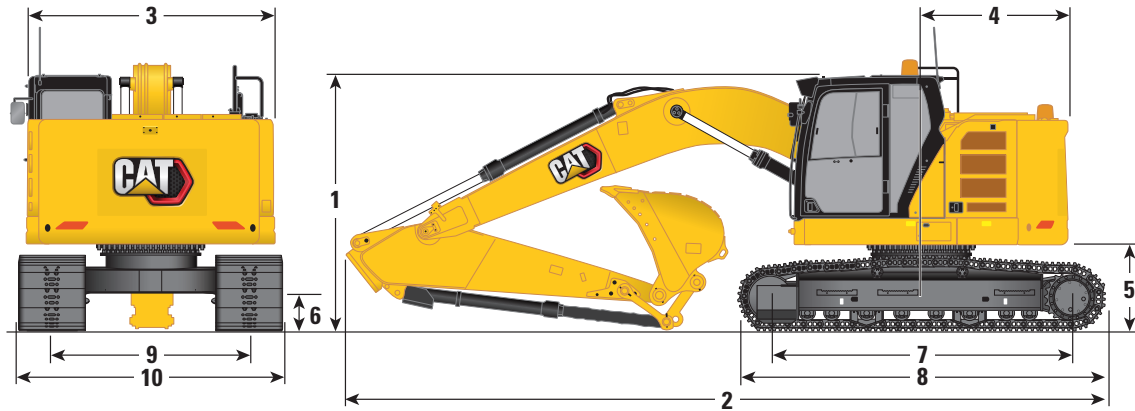
Major Component Weights

	kg	lb
Base Machine Weight (including upperframe, long undercarriage, counterweight, boom cylinders, without boom, stick, bucket, stick cylinder, bucket cylinder, tracks, fuel, operator)		
With Mass Front	17 000	37,500
With Short Reach Front	16 970	37,400
Track Shoes:		
600 mm (24") Width, 12 mm (0.49") Thick, Triple Grouser Track Shoes	3200	7,000
Two Boom Cylinders for Mass Front	360	800
Two Boom Cylinders for Short Reach Front	340	800
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	330	700
Counterweight:		
4.9 mt Counterweight	4900	10,800
Boom (including lines, pins, stick cylinder):		
Mass Boom 5.2 m (7'1")	1940	4,300
Short Reach Boom 4.25 m (13'11")	2140	4,700
Stick (including lines, pins, bucket cylinder, bucket linkage):		
Mass Stick M2.4CB2 (7'10")	1490	3,300
Short Reach Stick M3.2B1 (10'5")	1600	3,500
Bucket (without linkage, with tips and side cutters):		
0.80 m ³ (1.05 yd ³) XSP CB2 Linkage	1010	2,200
0.90 m ³ (1.18 yd ³) HDX B Linkage	850	1,900

325 Tunneling Hydraulic Excavator Specifications

Dimensions

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

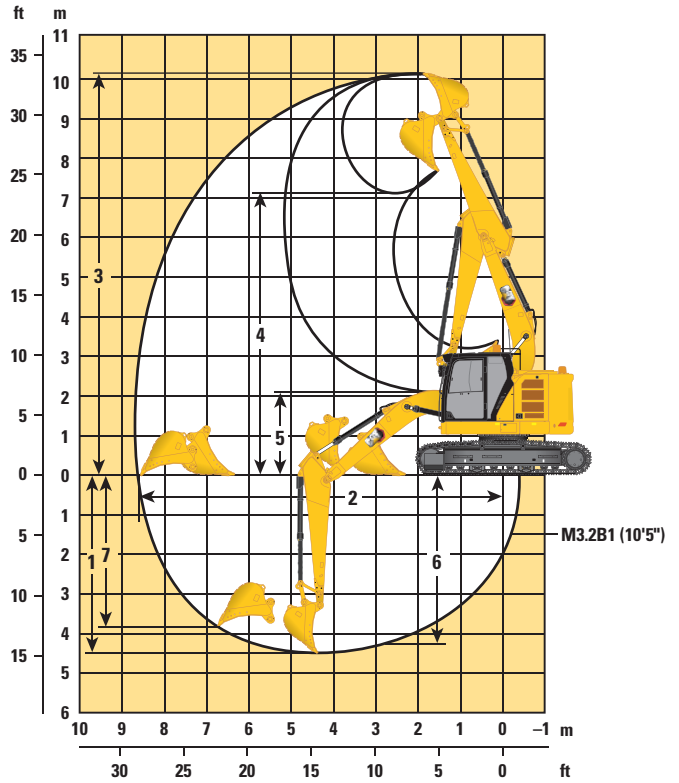
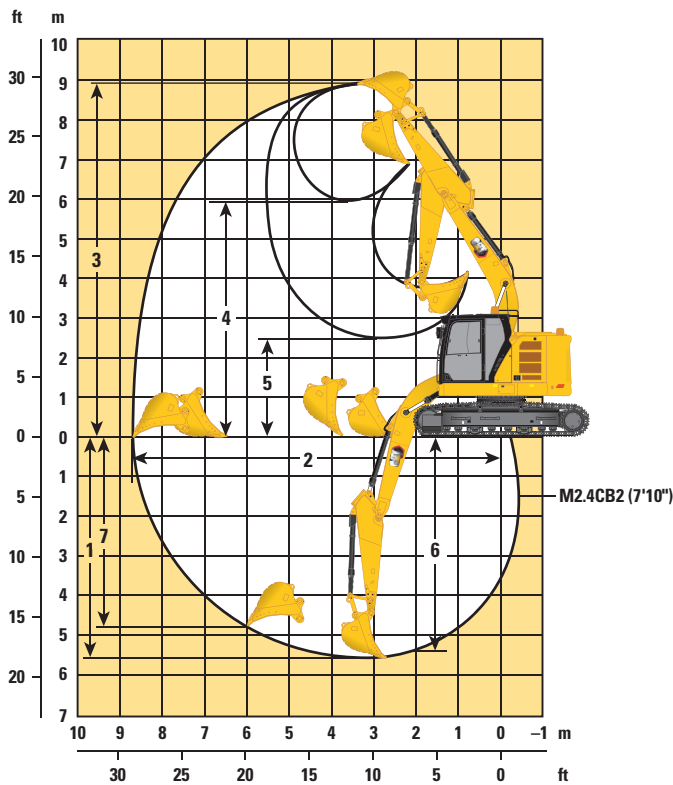


Boom Option	Mass Boom 5.2 m (17'1")		Short Reach 4.25 m (13'11")	
Stick Option	Mass Stick M2.4CB2 (7'10")		Short Reach M3.2B1 (10'5")	
1 Machine Height (excludes flash beacon):				
Top of Cab Height	3078 mm	10'1"	3078 mm	10'1"
Top of FOGS Height	3217 mm	10'6"	3217 mm	10'6"
Handrails Height	3187 mm	10'5"	3187 mm	10'5"
With Boom/Stick/Bucket Installed	3318 mm	10'11"	3625 mm	11'9"
With Boom/Stick Installed	3149 mm	10'4"	3298 mm	10'8"
With Boom Installed	2742 mm	9'0"	NA	NA
2 Machine Length:				
With Boom/Stick/Bucket Installed	8539 mm	28'0"	6856 mm	22'5"
With Boom/Stick Installed	8493 mm	27'9"	6892 mm	22'6"
With Boom Installed	7265 mm	23'8"	6303 mm	20'7"
3 Upperframe Width without Walkways	2987 mm	9'8"	2987 mm	9'8"
4 Tail Swing Radius	1780 mm	5'8"	1780 mm	5'8"
5 Counterweight Clearance	1018 mm	3'3"	1018 mm	3'3"
6 Ground Clearance	441 mm	1'5"	441 mm	1'5"
7 Length to Center of Rollers	3646 mm	12'0"	3646 mm	12'0"
8 Track Length	4455 mm	14'6"	4455 mm	14'6"
9 Track Gauge	2380 mm	7'9"	2380 mm	7'9"
10 Undercarriage Width:				
600 mm (24") Shoe	2980 mm	9'8"	2980 mm	9'8"
Bucket Type	XSP		XSP	
Bucket Capacity	0.80 m ³	1.05 yd ³	0.90 m ³	1.18 yd ³
Bucket Tip Radius	1577 mm	5'2"	1489 mm	4'9"

325 Tunneling Hydraulic Excavator Specifications

Working Ranges and Forces

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

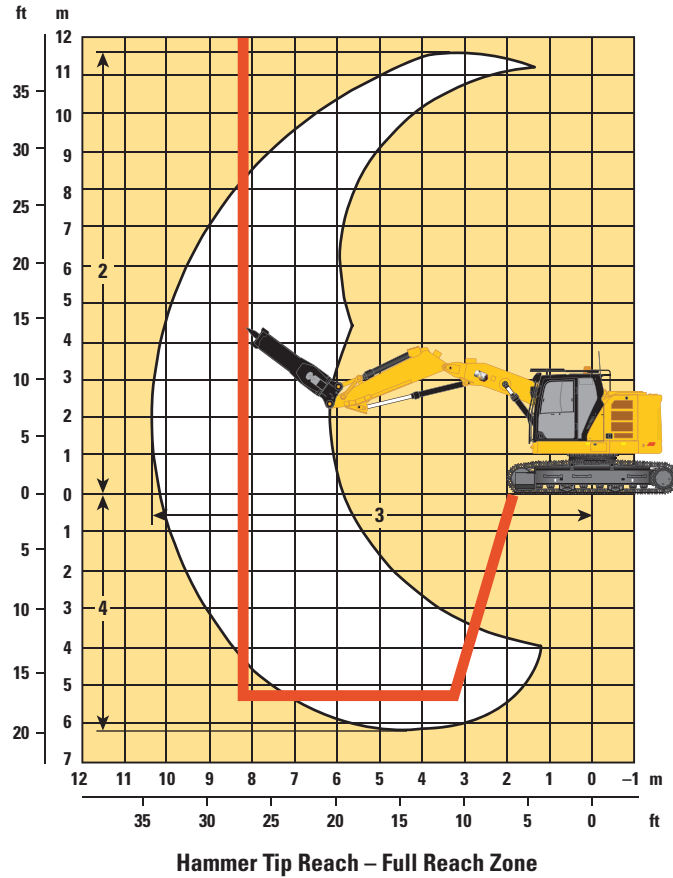
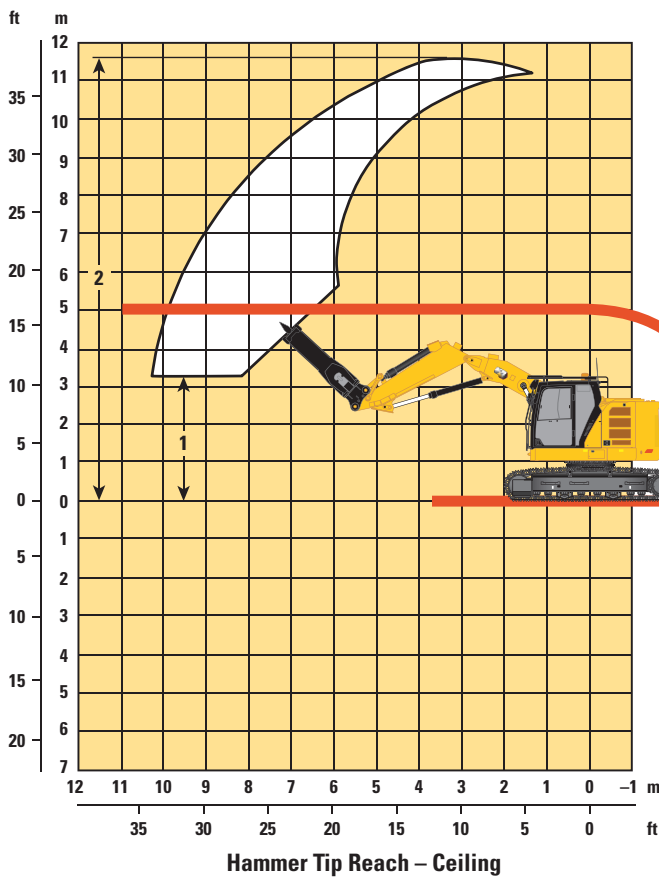


Boom Option	Mass Boom 5.2 m (17'1")		Short Reach 4.25 m (13'11")	
Stick Option	Mass Stick M2.4CB2 (7'10")		Short Reach M3.2B1 (10'5")	
1 Maximum Digging Depth	5600 mm	18'4"	4470 mm	14'7"
2 Maximum Reach at Ground Line	8760 mm	28'7"	8600 mm	28'2"
3 Maximum Cutting Height	8910 mm	29'2"	10 130 mm	33'2"
4 Maximum Loading Height	5940 mm	19'5"	7150 mm	23'5"
5 Minimum Loading Height	2490 mm	8'2"	2100 mm	6'9"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5400 mm	17'7"	4310 mm	14'1"
7 Maximum Vertical Wall Digging Depth	4820 mm	15'8"	3790 mm	12'4"
Minimum Working Equipment Radius	3440 mm	11'3"	3230 mm	10'6"
Bucket Digging Force (ISO)	188 kN	42 270 lbf	175 kN	39 295 lbf
Stick Digging Force (ISO)	130 kN	29 269 lbf	88 kN	19 693 lbf
Bucket Type	XSP		XSP	
Bucket Capacity	0.80 m ³	1.05 yd ³	0.90 m ³	1.18 yd ³
Bucket Tip Radius	1577 mm	5'2"	1489 mm	4'9"

325 Tunneling Hydraulic Excavator Specifications

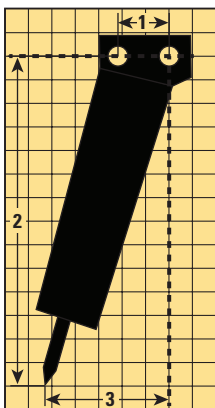
Hammer Working Range Charts – Short Reach

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



1 Cab Height with FOGS	3217 mm	10'6"
2 Maximum Upward Reach	11 550 mm	37'10"
3 Maximum Horizontal Reach	10 360 mm	33'11"
4 Maximum Downward Reach	6100 mm	20'

Note: Actual reach zones will vary depending on hammer dimensions.



Hammer Dimensions

1 Pin Spread	445.1 mm	1'5"
2 Vertical Offset from Stick Nose Pin	2751.4 mm	9'
3 Horizontal Offset from Stick Nose Pin	1050.7 mm	3'5"

325 Tunneling Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	4.9 mt (10,800 lb) Counterweight	
		mm	in	m ³	yd ³	kg	lb		Mass Boom	Short Reach Boom
				m ³	yd ³	kg	lb		M2.4 (7'10")	M3.2 (10'5")
Pin On (No Coupler)										
Heavy Duty Excavation	CB	1060	42	0.80	1.00	1013	2,233	100	●	
	B	1050	41	0.90	1.18	850	1,874	100		●
Maximum load with pin-on (payload + bucket)								kg	3098	2810
								lb	6,830	6,195

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)

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.

Attachments Offering Guide

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

PIN-ON ATTACHMENTS

	Counterweight	4.9 mt (10,800 lb)	
		Mass	Short Reach
		M2.4 m (7'10")	M3.2B1 (10'5")
Hydraulic Hammers	H120 S	✓	✓
	H130 S	✓	✓
	H140 S	✓	✓

CAT PIN GRABBER COUPLER ATTACHMENTS

	Counterweight	4.9 mt (10,800 lb)	
		Mass	Short Reach
		M2.4 m (7'10")	M3.2B1 (10'5")
Hydraulic Hammers	H120 S	✓	✓
	H130 S	✓	✓

325 Tunneling Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAB			TECHNOLOGY		
Sound suppressed cab with viscous mounts	✓		Cat Product Link™	✓	
High-resolution 203 mm (8") LCD touch screen monitor	✓		Work tool recognition	✓	
High-resolution 254 mm (10") LCD touch screen monitor*		✓	Remote Services capability	✓	
Automatic bi-level air conditioner	✓		ENGINE		
Jog dial and shortcut keys for monitor control	✓		Three selectable modes: Power, Smart, Eco	✓	
Keyless push-to-start engine control	✓		4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓	
Height-adjustable console, three steps with tool	✓		50° C (122° F) high-ambient cooling capacity without derate	✓	
Fixed left-side console	✓		-18° C (0° F) cold start capability	✓	
Cat Stick Steer		✓	Sealed double element air filter with integrated precleaner	✓	
Mechanically adjustable seat suspension	✓		1 × 145 amp dual alternator	✓	
51 mm (2") orange seat belt	✓		Electric fuel priming pump	✓	
Cab and machine harness connectors sealed with silicone	✓		Reversible electric cooling fans	✓	
Flash light harness	✓		Two-stage fuel filtration system with water separator and indicator	✓	
2 × 12V DC outlets	✓		HYDRAULIC SYSTEM		
Document storage	✓		Electric main control valve	✓	
Cup and bottle holders	✓		Tool control with selectable one or two way and one or two pumps	✓	
Lunch box storage	✓		Boom and stick regeneration circuits	✓	
Dome and lower LED interior lights	✓		Automatic hydraulic oil warm up	✓	
Openable two-piece front window	✓		Automatic two-speed travel	✓	
Upper radial wiper with washer	✓		Boom and stick drift reduction valve	✓	
Openable steel hatch	✓		Tandem type electronic main pump	✓	
FOGS installation capability	✓		Element type main hydraulic filter	✓	
Roller front sunscreen	✓		Hammer return filter	✓	
Rear window emergency exit	✓		High pressure tool control lines	✓	
Washable floor mat	✓				
Beacon ready	✓				

(continued on next page)

*Only for use with 360° visibility.

325 Tunneling Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
UNDERCARRIAGE AND STRUCTURES			SERVICE AND MAINTENANCE		
Reinforced long base frame for tunneling, with standard track rollers and standard carrier rollers	✓		Sampling ports for Scheduled Oil Sampling (S·O·S SM)	✓	
ISO 15818:2017 tie-down points on base frame	✓		Grouped location for engine oil and fuel filters	✓	
Grease lubricated track	✓		Ground-level second dipstick for engine oil	✓	
Segmented track guiding guards	✓		SAFETY AND SECURITY		
HD bottom guards	✓		Rear and right-hand-sideview cameras for tunneling	✓	
HD travel motor guards	✓		360° visibility for tunneling*		✓
4.9 mt (10,800 lb) counterweight	✓		360° visibility for FOGS, for tunneling**		✓
600 mm (24") triple grouser track shoes	✓		ISO 2867:2011 right-hand handrail and hand hold	✓	
Reinforced 325 upper frame for tunneling	✓		Service platform with anti-skid plate and countersunk bolts	✓	
BOOMS, STICKS AND LINKAGES			Hydraulic lock out lever neutralizes all controls	✓	
5.2 m (7'1") Mass boom		✓	Secondary engine shutoff switch in cab	✓	
2.4 m (7'10") Mass stick		✓	Signaling/warning horn	✓	
4.25 m (13'11") Short Reach boom		✓	Shovel crane (Mass boom and Stick only)	✓	
3.2 m (10'5") Mass stick		✓	Flash beacon on counterweight	✓	
Bucket linkage, CB2 family with lifting hook for Mass boom		✓	Falling object guard system		✓
ELECTRICAL SYSTEM			*Must be used with 254 mm (10") monitor and cab light with cover.		
LED chassis light, left-hand/right-hand boom lights, cab lights – 1,800 lumens	✓		**Must be used with FOGS guard, 254 mm (10") monitor and cab light with cover.		
Centralized electrical disconnect switch	✓				
Programmable time delay working lights after engine shutdown	✓				
Premium surround lighting package		✓			

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- LH/RH electrical pedal for tool control
- Dual exit rear window kit
- Rain protector plus cab light cover
- Polycarbonate roof hatch
- Front windshield laminated glass (P5A glass)
- Bluetooth® key fob

SAFETY AND SECURITY

- 76 mm (3") retractable seat belt

GUARDS

- Mesh guard full front
- Mesh guard lower half front
- Cab vandalism guard

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

© 2021 Caterpillar
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

Based on the Labor, Safety and Health Laws in Japan, employer of small construction equipment are required to provide specific training for all operators on machines with ship weight less than 3 metric ton. For machines greater than 3 metric ton, operator needs to obtain operator license certification from a Government approved registered training school.

AEXQ2733-04 (08-2021)
Replaces AEXQ2733-03
Build Number: 07C
(Japan)

