

**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
Engine
Swing Mechanism2
Weights2
Track
Drive
Hydraulic System2
Service Refill Capacities2
Standards
Sound Performance3
Operating Weights and Ground Pressures

Major Component Weights4
Dimensions
Blade Dimensions (Long Undercarriage only)6
Working Ranges and Forces7
Bucket Specifications and Compatibility8
Attachments Offering Guide9
Standard and Optional Equipment10
Cab Options
Dealer Installed Kits and Attachments
325 Environmental Declaration

## **325 Tunneling Hydraulic Excavator Specialty Configurations**

Key Features and Benefits15
Specifications
Engine
Swing Mechanism16
Weights
Track
Drive
Hydraulic System16
Service Refill Capacities16
Standards16

Air Conditioning System.	16
Operating Weights and Ground Pressures	17
Major Component Weights	17
Dimensions	18
Working Ranges and Forces	19
Hammer Working Range Charts – Short Reach	20
Bucket Specifications and Compatibility	
Attachments Offering Guide	21
Standard and Optional Equipment	22
Dealer Installed Kits and Attachments	24



# **325 Hydraulic Excavator Specifications**

Engine		
Engine Model	Cat® C4.4	
Net Power		
ISO 9249	128.5 kW	172 hp
ISO 9249 (DIN)	175 hp (met	ric)
Engine Power		
ISO 14396	129.4 kW	174 hp
ISO 14396 (DIN)	176 hp (met	ric)
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in <sup>3</sup>
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).
- 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 2,200 rpm.
- <sup>(1)</sup>Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*
  - ✓ 100% renewable diesel, HVO (hydrotreated 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.

\*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

## **Swing Mechanism**

Swing Speed	11.12 rpm	
Maximum Swing Torque	82 kN∙m	60,480 lbf-ft

## Weights

Operating Weight	22 400 kg	49,400 lb
• Standard undercarriage, Reach boom 0.90 m <sup>3</sup> (1.18 yd <sup>3</sup> ) bucket, 600 mm (2 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<sup>3</sup> (1.18 yd<sup>3</sup>) bucket, 600 mm (24") HD triple grouser shoes and 8.3 mt (18,300 lb) counterweight.

Optional Track Shoes Width	600 mm	24 in
1		
Optional Track Shoes Width	700 mm	28 in
Optional Track Shoes Width	790 mm	31 in
Number of Shoes (each side) –	45	
or Standard Undercarriage		
Number of Track Rollers (each side) –	7	
or Standard Undercarriage		
Number of Shoes (each side) –	49	
or Long Undercarriage		
Number of Track Rollers (each side) –	8	
or Long Undercarriage		
Sumber 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	11.8 L	3.1 gal
Engine Oil (with filter)	15 L	4.0 gal
Swing Drive	12 L	3.2 gal
Final Drive (each)	4.5 L	1.2 gal
Hydraulic System (including tank)	230 L	60.8 gal
Hydraulic Tank (including suction pipe)	111 L	29.3 gal
Diesel Exhaust Fluid (DEF) Tank	26 L	6.9 gal

## **325 Hydraulic Excavator Specifications**

Standards	
Brakes	ISO 10265:2008

Cab/Rollover Protective Structure (ROPS)	ISO 12117-2:2008
Falling Object Guard System (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.

## **Operating Weights and Ground Pressures**

	600 mm (24 in) Triple Grouser Shoes		rouser Triple Grouser		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
Base Machine Configurations	kg (lb)	kPa (psi)	kg (Ib)	kPa (psi)	kg (Ib)	kPa (psi)	kg (lb)	kPa (psi)	kg (Ib)	kPa (psi)
Base Frame with Track Rollers and Carrier Ro	ollers									
4.9 mt (10,800 lb) Counterweight + Standar	d Underca	rriage Bas	e Machine	e						
Reach Boom + R2.9B1 (9'6") Stick + 0.90 m <sup>3</sup> (1.18 yd <sup>3</sup> ) GDX Bucket	22 400 (49,400)	51.6 (7.5)					22 900 (50,500)	40.1 (5.8)		
8.3 mt (18,300 lb) Counterweight + Long Un	dercarriag	je Base Ma	achine							
Reach Boom + R2.9B1 (9'6") Stick + 0.90 m <sup>3</sup> (1.18 yd <sup>3</sup> ) HDX Bucket + AUX lines (HP + QC)		_	27 600 (60,800)	57.4 (8.3)	27 900 (61,500)	49.7 (7.2)		_	28 300 (62,400)	44 (6.5)

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

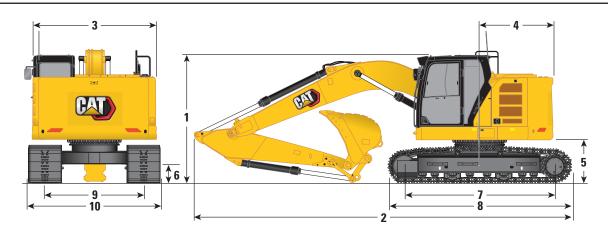
## **Major Component Weights**

	kg	lb
Base Machine Weight (with counterweight, upper frame, undercarriage with track rollers and two boom cylinders – does not include boom, stick, bucket, blade, stick cylinder, bucket cylinder, tracks, 90% fuel tank and 75 kg [165 lb] operator).		
With 4.9 mt (10,800 lb) Counterweight and Standard Undercarriage	15 800	34,830
With 4.9 mt (10,800 lb) Counterweight and Long Undercarriage	16 630	36,660
With 4.9 mt (10,800 lb) Counterweight and Long Undercarriage (for use with Blade)	17 490	38,560
With 8.3 mt (18,300 lb) Counterweight and Long Undercarriage	20 250	44,640
Track Shoes for Standard Undercarriage:		
600 mm (24") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes	2600	5,730
790 mm (31") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes with Step Extension	3110	6,850
Track Shoes for Long Undercarriage:		
600 mm (24") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes	2830	6,230
600 mm (24") Width, 12.5 mm (0.49") Thick, HD Triple Grouser Track Shoes	3190	7,040
700 mm (28") Width, 12.5 mm (0.49") Thick, HD Triple Grouser Track Shoes	3520	7,770
790 mm (31") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes with Step Extension	3380	7,460
790 mm (31") Width, 12.5 mm (0.49") Thick, HD Triple Grouser Track Shoes with Step Extension	3860	8,500
Two Boom Cylinders	420	940
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	690
Blades (including lines, cylinders, frame modifications):		
2980 mm (9'9") Blade (for use with 4.9 mt [10,800 lb] counterweight and 600 mm [24"] track shoes)	1090	2,410
3170 mm (10'5") Blade (for use with 4.9 mt [10,800 lb] counterweight and 700 mm [28"] or 790 mm [31"] track shoes)	1130	2,480
Counterweights:		
4.9 mt (10,800 lb) Counterweight	4900	10,800
8.3 mt (18,300 lb) Counterweight	8300	18,300
Swing Frames:		
Swing Frame with Standard Base Frame and HD Track Rollers for 4.9 mt (10,800 lb) Counterweight – without Blade	6800	15,000
Swing Frame with Standard Base Frame and SD Track Rollers for 4.9 mt (10,800 lb) Counterweight – for use with Blade	7050	15,530
Swing Frame with Standard Base Frame and SD Track Rollers for 8.3 mt (18,300 lb) Counterweight – without Blade	6960	15,350
Undercarriages:		
Standard Undercarriage	4100	9,030
Long Undercarriage	4560	10,050
Booms (including lines, pins, stick cylinder):		
Reach Boom 5.7 m (18'8")	1740	3,830
HD Reach Boom 5.7 m (18'8")	1910	4,220
AUX Lines $(HP + QC)$	130	290
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R2.9B1 (9'6")	1030	2,270
HD Reach Stick R2.9B1 (9'6")	1140	2,520
AUX Lines (HP + QC)	60	130
Buckets (without linkage, with tips and side cutters):		
0.80 m <sup>3</sup> (1.05 yd <sup>3</sup> ) GDX B Linkage	700	1,530
0.90 m <sup>3</sup> (1.18 yd <sup>3</sup> ) GDX B Linkage	730	1,610
0.90 m <sup>3</sup> (1.18 yd <sup>3</sup> ) HDX B Linkage	850	1,870
1.19 m <sup>3</sup> (1.55 yd <sup>3</sup> ) HDX B Linkage	1000	2,210

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

## Dimensions

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

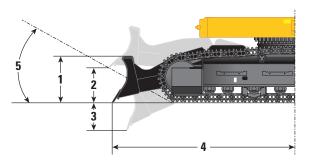


Boom Option		Reach Boon	n 5.7 m (18'8")	
Stick Option		Reach Stick	R2.9B1 (9'6")	
Undercarriage Type	Stan	dard	Loi	ng
1 Machine Height:				
Top of Cab Height	3070 mm	10'1"	3080 mm	10'1"
Top of FOGS Height	3210 mm	10'6"	3220 mm	10'7"
Shipping Height without FOGS	3210 mm	10'6"	3210 mm	10'6"
Handrail Height	3180 mm	10'5"	3190 mm	10'5"
Top of GNSS Antenna Height (if installed)	2620 mm	8'7"	2620 mm	8'7"
With Boom/Stick/Bucket Installed	3210 mm	10'6"	3210 mm	10'6"
With Boom/Stick Installed	2980 mm	9'9"	2980 mm	9'9"
With Boom Installed	2520 mm	8'3"	2530 mm	8'3"
With Boom/Stick/Bucket Installed (with auxiliary lines)	3210 mm	10'6"	3210 mm	10'6"
With Boom/Stick Installed (with auxiliary lines)	3210 mm	10'6"	3210 mm	10'6"
With Boom Installed (with auxiliary lines)	2980 mm	9'9"	2980 mm	9'9"
2 Machine Length:				
With Boom/Stick/Bucket Installed (with/without auxiliary lines)	8680 mm	28'6"	8870 mm	29'1"
With Boom/Stick Installed (with/without auxiliary lines)	8660 mm	28'5"	8850 mm	29'0"
With Boom Installed (with/without auxiliary lines)	7590 mm	24'11"	7780 mm	25'6"
With Blade Installed (with auxiliary lines)			9570 mm	31'5"
3 Upperframe Width	2990 mm	9'10"	2990 mm	9'10"
4 Tail Swing Radius	1780 mm	5'10"	1810 mm	5'11"
5 Counterweight Clearance	1020 mm	3'3"	980 mm	3'2"
6 Ground Clearance	440 mm	1'4"	440 mm	1'4"
7 Length to Center of Rollers	3270 mm	10'9"	3650 mm	12'0"
8 Track Length	4070 mm	13'4"	4460 mm	14'7"
9 Track Gauge	2200 mm	7'3"	2380 mm	7'10"
0 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	GE	ЭХ	HE	DX
Bucket Capacity	0.90 m <sup>3</sup>	1.18 yd <sup>3</sup>	0.90 m <sup>3</sup>	1.18 yd <sup>3</sup>
Bucket Tip Radius	1490 mm	4'11"	1490 mm	4'11"

# **325 Hydraulic Excavator Specifications**

## Blade Dimensions (Long Undercarriage only)

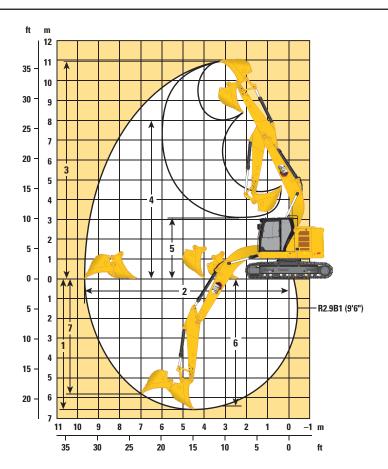
All dimensions are approximate.



Track Shoe Width	600 (24		700 mm (28")	790 mm (31")
Blade Options	2980 (9'		3170 (10	
1 Blade Moldboard Height	696 mm	2'3"	696 mm	2'3"
2 Blade Maximum Cutting Edge Rise	585 mm	1'11"	585 mm	1'11"
<b>3</b> Blade Minimum Cutting Edge Depth	467 mm	1'6"	467 mm	1'6"
4 Blade Edge from Machine Center	2930 mm	9'7"	2930 mm	9'7"
5 Ramp Angle	28.8 d	egrees	28.8 d	egrees
Blade Down Force				
Ground Level	151.4 kN	34 kLbf	151.4 kN	34 kLbf
Maximum	170.6 kN	38.4 kLbf	170.6 kN	38.4 kLbf

## **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	Stan	Standard							
1 Maximum Digging Depth	6600 mm	21'8"	6600 mm	21'8"					
2 Maximum Reach at Ground Line	9670 mm	31'9"	9680 mm	31'9"					
<b>3</b> 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	HI	DX	HI	DX					
Bucket Capacity	0.90 m <sup>3</sup>	1.18 yd <sup>3</sup>	0.90 m <sup>3</sup>	1.18 yd <sup>3</sup>					
Bucket Tip Radius	1489 mm	4'11"	1489 mm	4'11"					

## **Bucket Specifications and Compatibility**

									Underg	idard arriage			Under	ong carriage		
										0,800 lb) rweight		4.9 mt (1 Counter				18,300 lb) erweight
									No E	Blade	No E	Blade		lade Up Front	No E	Blade
		Wi	dth	Cap	acity	We	ight	Fill	Reach Boom	HD Reach Boom	Reach Boom	HD Reach Boom	Reach Boom	HD Reach Boom	Reach Boom	HD Reach Boom
	Linkage	mm	in	m <sup>3</sup>	yd³	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	В	950	37	0.80	1.05	686	1,511	100		۲			۲			
	В	1050	41	0.90	1.18	719	1,584	100	۲	θ						
	В	1150	45	1.00	1.31	751	1,655	100	θ	0	۲	۲				
Heavy Duty Excavation	В	950	37	0.80	1.05	796	1,755	100	۲	۲					•	
	В	1050	41	0.90	1.17	835	1,841	100	θ	θ		۲				
Heavy Duty Excavation, Skeleton	В	1050	41	0.90	1.18	855	1,885	100	θ	θ		۲				
Tamping	В	2200	86	0.72	0.94	868	1,913	100	۲	۲						
	В	2200	86	0.90	1.18	891	1,965	100	θ	0	۲	۲				
		Max	Maximum load with pin-on (payload + bucket			bucket)	kg Ib	2290 5,049	2170 4,784	2655 5,853	2540 5,600	2900 6,393	2845 6,272	3780 8,333	3730 8,223	
With Pin Grabber Coupler																
General Duty Excavation	В	950	37	0.80	1.05	686	1,511	100	θ	0	۲	۲				
	В	1050	41	0.90	1.18	719	1,584	100	0	0	$\Theta$	θ	۲	۲		
	В	1150	45	1.00	1.31	751	1,655	100	$\diamond$	$\diamond$	θ	0	۲	θ		
Heavy Duty Excavation	В	950	37	0.80	1.05	796	1,755	100	0	0	۲	θ				
	В	1050	41	0.90	1.17	835	1,841	100	0	$\diamond$	θ	θ	۲	۲		
Heavy Duty Excavation, Skeleton	В	1050	41	0.90	1.18	855	1,885	100	$\diamond$	$\diamond$	θ	0	۲	۲		
Tamping	В	2200	86	0.72	0.94	868	1,913	100	0	0	۲	۲				
	В	2200	86	0.90	1.18	891	1,965	100	$\diamond$	$\diamond$	$\Theta$	0	۲	θ		
		Maxi	num loa	d with co	oupler (pa	ayload +	bucket)	kg Ib	1868 4,119	1748 3,854	2233 4,924	2118 4,670	2478 5,463	2423 5,343	3358 7,404	3308 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/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>)

- 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- O 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)
- 900 kg/m<sup>3</sup> (1,500 lb/yd<sup>3</sup>)

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.

$\checkmark$	Match
--------------	-------

\* Working range front only

† Allowed usage on machine less than 50%

No Match

Undercarriage		Sta	ndard	L	ong	L	ong
Counterweight		4.9 mt (10	),800 lb)		8.3 mt (18,300 lb)		
Boom Type		Reach	HD Reach	Reach	HD Reach	Reach	HD Reach
Stick Size		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")
Hydraulic Hammers	H120 GC Side Mount	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	H120 S	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	H130 S	à	√*	<b>√</b> †	$\checkmark$	<b>√</b> †	√

Undercarriage Counterweight		Sta	ndard	L	ong	Long		
		4.9 mt (	10,800 lb)	4.9 mt (	10,800 lb)	8.3 mt (18,300 lb)		
Boom Type		Reach	HD Reach	Reach	HD Reach	Reach	HD Reach	
Stick Size	ck Size		HD R2.9 (9'6")	R2.9 (9'6'')	HD R2.9 (9'6")	R2.9 (9'6")	HD R2.9 (9'6")	
Hydraulic Hammers	H120 GC Side Mount	à*		à	$\checkmark$	$\checkmark$	$\checkmark$	
	H120 S	à*	√*	à	$\checkmark$	à	$\checkmark$	
	H130 S			à	√*	<b>√</b> †	✓	

## **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 <sup>™</sup>	✓		Cat <sup>®</sup> C4.4 single turbo diesel engine	$\checkmark$	
Remote Flash	$\checkmark$		Three selectable modes: Power,	$\checkmark$	
Remote Troubleshoot	$\checkmark$		Smart, Eco		
Cat Grade Connectivity		$\checkmark$	4500 m (14,760 ft) altitude capability	$\checkmark$	
Compatibility with radios and base stations from Trimble, Topcon, and Leica	$\checkmark$		with engine power derate above 3000 m (9,840 ft)		
Capability to install 3D grade systems from Trimble, Topcon, and Leica	~		50° C (122° F) high-ambient cooling capacity without derate	$\checkmark$	
Cat Grade with 2D and offset memory	√		–18° C (0° F) cold start capability	✓	
Cat Grade with Advanced 2D		✓	-32° C (-25° F) cold start capability		$\checkmark$
Cat Grade with 3D single GNSS		✓	Sealed double element air filter with integrated precleaner	$\checkmark$	
Cat Grade with 3D dual GNSS		✓	$1 \times 145$ amp dual alternator	$\checkmark$	
Cat Assist:	$\checkmark$		Electric fuel priming pump	$\checkmark$	
– Grade Assist – Boom Assist			Reversible electric cooling fans	✓	
– Bucket Assist – Swing Assist			Two-stage fuel filtration system with water separator and indicator	$\checkmark$	
Cat Payload:	✓		HYDRAULIC SYSTEM		
- Static weigh			Electric main control valve	$\checkmark$	
<ul> <li>Semiautomatic calibration</li> <li>Payload/cycle information</li> </ul>			Boom and stick regeneration circuits	$\checkmark$	
– USB reporting capability			Automatic hydraulic oil warm up	$\checkmark$	
2D E-Fence:	✓		Automatic two-speed travel	$\checkmark$	
– E-ceiling			Boom and stick drift reduction valve	$\checkmark$	
- E-floor			CRN compliant accumulator	$\checkmark$	
– E-swing – E-wall			Tandem type electronic main pump	$\checkmark$	
– E-cab avoidance			Element type main hydraulic filter	$\checkmark$	
Auto hammer stop	$\checkmark$			(continued on	next page,
Laser catcher		$\checkmark$			
Work tool recognition	$\checkmark$				
Work tool tracking*	$\checkmark$				

\*Requires PL161 attachment locator on work tool and Bluetooth® receiver on machine.

10

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

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

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

\*\*Not compatible with blade.

# **325 Cab Options**

## **Cab Options**

	Comfort	Deluxe	Premium
ROPS	•	•	
High-resolution 203 mm (8") LCD touchscreen monitor	•	Х	Х
High-resolution 254 mm (10") LCD touchscreen monitor	0		
Auto bi-level air conditioner	•		
Jog dial and shortcut keys for monitor control			
Keyless push-to-start engine control	•		
Height-adjustable console	Х		
Height-adjustable console, three steps with tool	•	Х	Х
Tilt-up left-side console	Х	•	
Fixed left-side console	•	Х	Х
Mechanical-suspension seat	•	Х	Х
Heated air-suspension seat	Х	•	Х
Heated and ventilated air-suspension seat	Х	Х	
51 mm (2") seat belt	•	•	
Monitor integrated Bluetooth radio with USB/Aux ports	•		
12V DC outlets	•	•	
Document storage	•	•	
Overhead storage and rear storage with nets	Х	•	
Beverage holder	•	•	
Cup holder	•	•	
Openable two-piece front window	•	•	
One piece front windshield	Х	Х	0
Rear window emergency exit			
Radial wiper with washer			Х
Parallel wiper	Х	Х	
Openable polycarbonate skylight hatch	Х		
Openable steel hatch	•	Х	Х
Dome and lower LED interior lights	•		
Floor welcome light	•	•	
Roof sunscreen	Х	•	
Roller front sunscreen		•	•
Roller rear sunscreen	0	0	
Washable floor mat	•	•	•
Beacon ready	•	•	•
Cat Stick Steer	0	0	0
Auxiliary relay	Х	0	0

Standard

O Optional

X Not available

## **Dealer Installed Kits and Attachments**

Attachments may vary. Consult your Cat dealer for details.

#### CAB

#### SAFETY AND SECURITY

- 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

• 76 mm (3") retractable seat belt

#### GUARDS

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

## **325 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<sup>®</sup> C4.4 engine meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*
  - ✓ 100% renewable diesel, HVO (hydrotreated 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.

\*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

#### 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 (1.8 lb) of refrigerant which has a CO<sub>2</sub> equivalent of 1.144 metric tonnes (1.261 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 (external) - 97 dB(A)

ISO 6396 (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.

#### **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<sup>™</sup> 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
- Eco mode minimizes fuel consumption for light applications
- Increase operating efficiency up to 45% with standard Cat technologies
- Cut maintenance costs with extended service intervals
- New hydraulic oil filter provides longer life with a 3,000-hour replacement interval

#### Recycling

• The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage		
Steel	82.67%		
Iron	5.61%		
Nonferrous Metal	2.68%		
Mixed Metal	1.28%		
Mixed-Metal and Nonmetal	1.07%		
Plastic	1.35%		
Rubber	0.08%		
Mixed Nonmetallic	0.23%		
Fluid	3.33%		
Other	1.70%		
Uncategorized	0.00%		
Total	100%		

• A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714 (Earthmoving machinery – Recyclability and recoverability –Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused, or both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following value in the table may vary.

Recyclability - 98%



# **325** Tunneling Hydraulic Excavator

The Cat<sup>®</sup> 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 <sup>®</sup> C4.4	
Net Power		
ISO 9249	128.5 kW	172 hp
ISO 9249 (DIN)	175 hp (met	ric)
Engine Power		
ISO 14396	129.4 kW	174 hp
ISO 14396 (DIN)	176 hp (met	ric)
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.40 L	269 in <sup>3</sup>
Biodiesel Capability	Up to B20 <sup>(1)</sup>	)

• 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).

- 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 2,200 rpm
- <sup>(1)</sup>Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*
  - ✓ 100% renewable diesel, HVO (hydrotreated 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.

\*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

# Swing MechanismSwing Speed11.12 rpmMaximum Swing Torque82 kN·m60,480 lbf-ft

#### Weights

Operating Weight	25 000 kg	55,100 lb
• Long undercarriage, Mass boom, (1.05 yd <sup>3</sup> ) bucket, 600 mm (24") tr (10,800 lb) counterweight.		

Operating Weight

25 100 kg

• Long undercarriage, Short Reach boom, M3.2 (10'5") stick, HDX 0.90 m<sup>3</sup> (1.2 yd<sup>3</sup>) 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**

429 L/min	113 gal/min
$(2 \times pumps)$	$(2 \times pumps)$
35 000 kPa	5,075 psi
35 000 kPa	5,075 psi
27 508 kPa	3,990 psi
120 mm	5 in
1260 mm	50 in
140 mm	6 in
1518 mm	60 in
135 mm	5 in
1156 mm	46 in
	(2 × pumps) 35 000 kPa 35 000 kPa 27 508 kPa 120 mm 1260 mm 140 mm 1518 mm 135 mm

#### **Service Refill Capacities**

Fuel Tank Capacity	313 L	82.7 gal
Cooling System	11.8 L	3.1 gal
Engine Oil (with filter)	15 L	4.0 gal
Swing Drive (each)	12 L	3.2 gal
Final Drive (each)	4.5 L	1.2 gal
Hydraulic System (including tank)	230 L	60.8 gal
Hydraulic Tank	111 L	29.3 gal
DEF Tank	26 L	6.9 gal

#### **Standards**

55,300 lb

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  $CO_2$  equivalent of 1.144 metric tonnes.

## **Operating Weights and Ground Pressures**

	600 mm (24 in) Triple Grouser Shoes	
-	Weight	Ground Pressure
ase Machine Configurations	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 <sup>3</sup> (1.05 yd <sup>3</sup> ) XSP Bucket	25 000 kg (55,100 lb)	52 kPa (7.5 psi)
Short Reach Boom + M3.2 (10'5") Stick + 0.90 m <sup>3</sup> (1.18 yd <sup>3</sup> ) HDX Bucket	25 100 kg (55,300 lb)	52.2 kPa (7.6 psi)

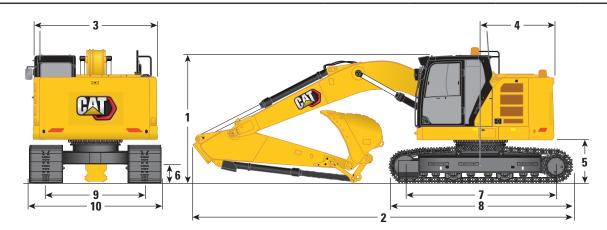
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

## **Major Component Weights**

	kg	lb
Base Machine Weight (with counterweight, upper frame, undercarriage with track rollers and two boom cylinders – does not include boom, stick, bucket, stick cylinder, bucket cylinder, tracks, 90% fuel tank and 75 kg [165 lb] operator).		
For Mass Front	17 000	37,500
For 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 (10,800 lb) 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 <sup>3</sup> (1.05 yd <sup>3</sup> ) XSP CB2 Linkage	1010	2,200
0.90 m <sup>3</sup> (1.18 yd <sup>3</sup> ) HDX B Linkage	850	1,900

## Dimensions

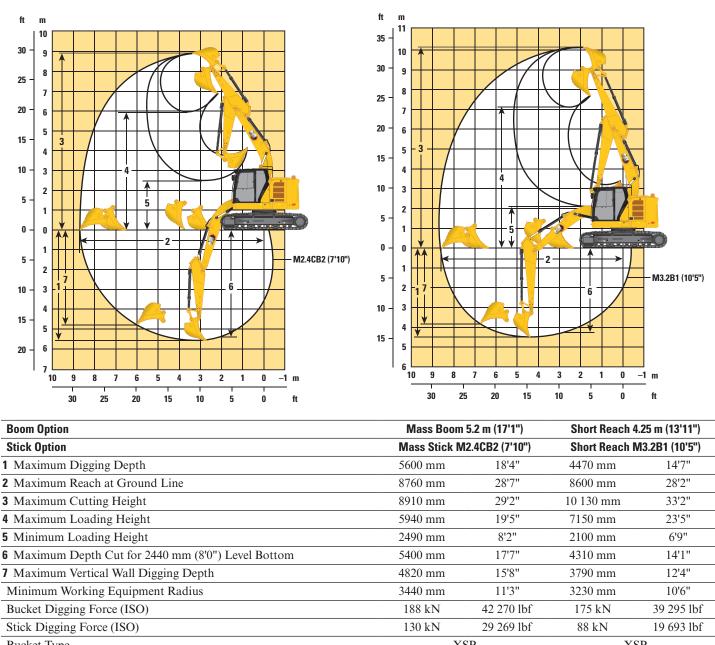
All dimensions are approximate and may vary depending on bucket selection.



Boom Option	Mass Boom	Mass Boom 5.2 m (17'1")		
Stick Option	Mass Stick Ma	2.4CB2 (7'10")	Short Reach M3.2B1 (10'5	
1 Machine Height (excludes flash beacon):				
Top of Cab Height	3080 mm	10'1"	3080 mm	10'1"
Top of FOGS Height	3220 mm	10'6"	3220 mm	10'6"
Handrail Height	3190 mm	10'5"	3190 mm	10'5"
With Boom/Stick/Bucket Installed	3320 mm	10'11"	3630 mm	11'9"
With Boom/Stick Installed	3150 mm	10'4"	3300 mm	10'8"
With Boom Installed	2740 mm	9'0"	NA	NA
2 Machine Length:				
With Boom/Stick/Bucket Installed	8540 mm	28'0"	6860 mm	22'5"
With Boom/Stick Installed	8500 mm	27'9"	6900 mm	22'6"
With Boom Installed	7270 mm	23'8"	6300 mm	20'7"
<b>3</b> Upperframe Width	2990 mm	9'8"	2990 mm	9'8"
4 Tail Swing Radius	1780 mm	5'8"	1780 mm	5'8"
<b>5</b> Counterweight Clearance	1020 mm	3'3"	1020 mm	3'3"
<b>6</b> Ground Clearance	440 mm	1'5"	440 mm	1'5"
7 Length to Center of Rollers	3650 mm	12'0"	3650 mm	12'0"
8 Track Length	4460 mm	14'6"	4460 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	XS	SP	XS	SP
Bucket Capacity	0.80 m <sup>3</sup>	1.05 yd <sup>3</sup>	0.90 m <sup>3</sup>	1.18 yd <sup>3</sup>
Bucket Tip Radius	1577 mm	5'2"	1489 mm	4'9"

#### **Working Ranges and Forces**

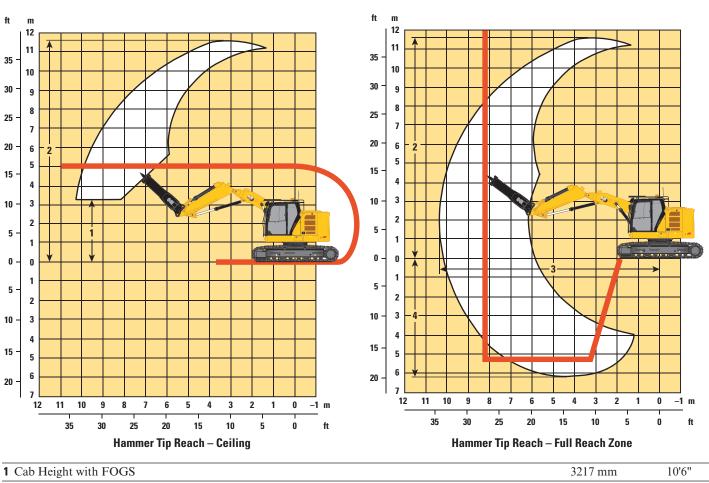
All dimensions are approximate and may vary depending on bucket selection.



Stick Digging Force (186)	150 KIN	27 207 101	00 KI	17 075 101
Bucket Type	X	XSP		SP
Bucket Capacity	0.80 m <sup>3</sup>	1.05 yd <sup>3</sup>	0.90 m <sup>3</sup>	1.18 yd <sup>3</sup>
Bucket Tip Radius	1577 mm	5'2"	1489 mm	4'9"

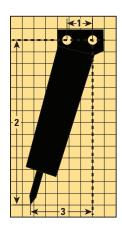
## Hammer Working Range Charts – Short Reach

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'
<b>3</b> Horizontal Offset from Stick Nose Pin	1050.7 mm	3'5"

## **Bucket Specifications and Compatibility**

									4.9 mt (10,800	lb) Counterweight
		Wi	dth	Cap	acity	We	ight	Fill	Mass Boom	Short Reach Boom
	Linkage	mm	in	m <sup>3</sup>	yd3	kg	lb	%	M2.4 (7'10")	M3.2 (10'5")
Pin On (No Coupler)										
Heavy Duty Excavation	СВ	1060	42	0.80	1.00	1013	2,233	100		
	В	1050	41	0.90	1.18	850	1,874	100		•
				Movimu	n lood with n	in-on (payloa	d - bucket)	kg	3098	2810
				IVIdXIIIIUI	n ioau with p	iii-oii (payioa	u + Duckel)	lb	6,830	6,195
The above loads are in compli of hydraulic lifting capacity or									Maximum Material Do 2100 kg/m <sup>3</sup> (3,500 l	

Capacity based on ISO 7451:2007.

Bucket weight with General Duty tips.

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.

Counterweight		4.9 mt (1	0,800 lb)
Boom Type		Mass	Short Reach
Stick Length		M2.4CB2 (7'10")	M3.2B1 (10'5")
Hydraulic Hammers	H120 S	$\checkmark$	✓
	H130 S	$\checkmark$	$\checkmark$
	H140 S	$\checkmark$	

CAT PIN GRABBER COUPLER ATTACHN	IENTS		
Counterweight		4.9 mt (1	0,800 lb)
Boom Type		Mass	Short Reach
Stick Length		M2.4CB2 (7'10")	M3.2B1 (10'5")
Hydraulic Hammers	H120 S	$\checkmark$	✓
	H130 S	$\checkmark$	√

## **Standard and Optional Equipment**

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

	Standard	Optional		Standard	Optio
AB			TECHNOLOGY		-
High-resolution 203 mm (8") LCD touch	✓		Cat Product Link <sup>™</sup>	$\checkmark$	
screen monitor			Remote Flash	$\checkmark$	
High-resolution 254 mm (10") LCD touch screen monitor*		$\checkmark$	Remote Troubleshoot	<b>√</b>	
Automatic bi-level air conditioner	✓		Work tool recognition	✓	
Jog dial and shortcut keys for monitor control	√		<b>ENGINE</b> Cat <sup>®</sup> C4.4 single turbo diesel engine	√	
Keyless push-to-start engine control	√		Three selectable modes: Power, Smart, Eco	$\checkmark$	
Height-adjustable console	$\checkmark$		4500 m (14,760 ft) altitude capability	✓	
Fixed left-side console	$\checkmark$		with engine power derate above 3000 m		
Mechanical-suspension seat	$\checkmark$		(9,840 ft)		
51 mm (2") seat belt	$\checkmark$		50° C (122° F) high-ambient cooling	$\checkmark$	
Cab and machine harness connectors sealed with silicone	$\checkmark$		capacity without derate -18° C (0° F) cold start capability	✓	
Flash light harness	✓		-32° C (-25° F) cold start capability		~
12V DC outlets	$\checkmark$		Sealed double element air filter with	√	
Document storage	$\checkmark$		integrated precleaner		
Beverage holder	$\checkmark$		$1 \times 145$ amp dual alternator	$\checkmark$	
Cup holder	$\checkmark$		Electric fuel priming pump	$\checkmark$	
Lunch box storage	✓		Reversible electric cooling fans	$\checkmark$	
LED dome light	$\checkmark$		Two-stage fuel filtration system with	$\checkmark$	
Openable two-piece front window	$\checkmark$		water separator and indicator HYDRAULIC SYSTEM		
Radial wiper with washer	$\checkmark$		Electric main control valve	✓	
Openable steel hatch	$\checkmark$		Tool control with selectable one or two	 ✓	
FOGS installation capability	$\checkmark$		way and one or two pumps	v	
Roller front sunscreen	$\checkmark$		Boom and stick regeneration circuits	√	
Rear window emergency exit	✓		Automatic hydraulic oil warm up	√	
Washable floor mat	$\checkmark$		Automatic two-speed travel	√	
Beacon ready	$\checkmark$		Boom and stick drift reduction valve	√	
			To a first the state of the sta	1	

\*Only for use with 360° visibility.

(continued on next page)

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

✓

Tandem type electronic main pump

Element type main hydraulic filter

High pressure tool control lines

Hammer return filter

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

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

	Standard	Optional
UNDERCARRIAGE AND STRUCTURES		
Reinforced long base frame for tunneling, with standard track rollers and standard carrier rollers	$\checkmark$	
ISO 15818:2017 tie-down points on base frame	$\checkmark$	
Grease lubricated track	$\checkmark$	
Segmented track guiding guards	$\checkmark$	
HD bottom guards	$\checkmark$	
HD travel motor guards	$\checkmark$	
4.9 mt (10,800 lb) counterweight	$\checkmark$	
600 mm (24") triple grouser track shoes	$\checkmark$	
Reinforced 325 upper frame for tunneling	$\checkmark$	
BOOMS, STICKS AND LINKAGES		
5.2 m (7'1") Mass boom		$\checkmark$
2.4 m (7'10") Mass stick		$\checkmark$
4.25 m (13'11") Short Reach boom		$\checkmark$
3.2 m (10'5") Mass stick		$\checkmark$
Bucket linkage, CB2 family with lifting hook for Mass boom		$\checkmark$
ELECTRICAL SYSTEM		
LED chassis light, left-hand/right-hand boom lights, cab lights – 1,800 lumens	$\checkmark$	
Centralized electrical disconnect switch	√	
Programmable time delay working lights after engine shutdown	√	
Premium surround lighting package		$\checkmark$

	Standard	Optional
SERVICE AND MAINTENANCE		
Scheduled Oil Sampling (S·O·S <sup>SM</sup> ) ports	$\checkmark$	
Grouped location for engine oil and fuel filters	$\checkmark$	
Ground-level second dipstick for engine oil	$\checkmark$	
SAFETY AND SECURITY		
Rear and right-hand-sideview cameras for tunneling	$\checkmark$	
360° visibility for tunneling*		$\checkmark$
360° visibility for FOGS, for tunneling**		$\checkmark$
ISO 2867:2011 right-hand handrail and hand hold	$\checkmark$	
Service platform with anti-skid plate and countersunk bolts	$\checkmark$	
Hydraulic lock out lever neutralizes all controls	$\checkmark$	
Secondary engine shutoff switch in cab	$\checkmark$	
Signaling/warning horn	$\checkmark$	
Shovel crane (Mass boom and stick only)	$\checkmark$	
Flash beacon on counterweight	$\checkmark$	
Falling object guard system		$\checkmark$

\*Must be used with 254 mm (10") monitor and cab light with cover.

\*\*Must be used with FOGS guard, 254 mm (10") monitor and cab light with cover.

#### **Dealer Installed Kits and Attachments**

Attachments may vary. Consult your Cat dealer for details.

#### CAB

#### SAFETY AND SECURITY

• 76 mm (3") retractable seat belt

- 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<sup>®</sup> key fob

#### 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** 

© 2022 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. VisionLink is a trademark of Caterpillar Inc., registered in the United States and in other countries.

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 machine 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.

AEX02733-05 (10-2022) Replaces AEX02733-04 Build Number: 07D (Japan)

