314D LCR

Hydraulic Excavators

CATERPILLAR®

Engine	
Engine Model	Cat® C4.2 ACERT™
Gross Power	72 kW/95.6 hp
Net Power (SAE J1349)	67 kW/88.7 hp
Weights	
Operating Weight – Long Undercarriage	14 100 kg

314D LCR Features

Comfortable Operator Station
Quiet and spacious, this world class cab enables the operator to focus exclusively on performance and productivity.

Engine Power Combined with Low Emissions
Move more material while respecting the environment and consuming less fuel with the new Cat® C4.2 engine. The 314D LCR meets EU Stage IIIA emissions regulations, while delivering additional power and performance.

Maximum Versatility
Easily configure a large variety of work tools with the Cat® Tool Control System.

Proven Reliability
Caterpillar design and manufacturing techniques provide maximum uptime with outstanding durability and service life.

Compact Radius
The shorter tail swing and tighter front swing radius allow the operator to work more efficiently and in even safer conditions on space-restricted, congested or confined job sites, focusing more on the work at hand and less on counterweight clearance.

Complete Customer Support
Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine configuration to eventual replacement.

Contents

Achieve high productivity and lower operating costs with the Cat® 314D LCR Hydraulic Excavator. Unmatched versatility thanks to its compact design, improved controllability, easy operation and a comfortable cab make the 314D LCR the industry leading performer.

Operator Station

Enhanced comfort, operation and visibility.

Operator Comfort

Experience a spacious, quiet and comfortable operator station. The cab is pressurized to 0.5 bar in order to reduce the amount of dust that enters the cab, keeping the operator comfortable during the entire shift, while assuring high productivity.

- The comfortable seat adjusts to the operator's size and weight, and the armrests are also height adjustable.
- The new seat has been designed to feature air suspension and heating systems, which are optionally available.
- Low effort joystick controls are designed to match the operator's natural wrist and arm position. Joysticks can be manipulated with arms on the armrests. The horizontal and vertical strokes are designed to reduce fatigue.
- The front windshield is split 70 (upper)/30 (lower) in order to provide maximum visibility. The upper part slides, assisted by a mechanism which reduces operator effort.

Cab Exterior

The optional Falling Objects Guard System (FOGS) can be directly bolted onto the cab in order to keep the operator safe. The machine, therefore, has the capability to meet all specifications and job site requirements. Thicker, steel tubes made according to the solid drawn process contribute to the rigidity of the 314D LCR's operator station. The cab shell is attached to the frame and viscous rubber cab mounts that dampen vibrations and sound level to enhance operator comfort.

Pre-start Check and Monitor Display

Take advantage of the entirely rethought monitor, designed to simplify machine use by acting as an operator to machine interface. It features:

- Full color graphical display
- An on-board servicing scheduler (displays recommended actions such as oil and filter changes)
- 20 different available languages
- Video display capability

Hydraulics

Low effort and precise control for highly efficient performance.

Outstanding Performance

With two percent more hydraulic pressure, the 314D LCR's hydraulic system is designed for high efficiency and performance.

- Hydraulic snubbers at the rod end of the boom cylinder and both ends of the stick cylinder cushion shock, reduce sound and increase cylinder life.
- Flow is reduced to a minimum when controls are in neutral to reduce fuel consumption and extend component life. Electronic underspeed control electronically adjusts pump output so it does not exceed engine power, eliminating the need to reserve engine power to avoid engine stalls.
- Hydraulic cross sensing system contributes to improving productivity with faster implement speeds and quicker, stronger pivot turns.
- Two-pump combined function incorporated into the main control valve enables you to reduce costs and downtime while modifying in the field.

On Demand Power Supply (ODPS)

During lighter load conditions lasting more than five seconds in the hydraulic circuit, ODPS automatically reduces engine speed to an rpm level equal to dial nine in order to adjust the power to the load. Fuel consumption reduces when the machine does not require high power. Engine rpm increase almost immediately when a heavier load is detected. In lighter load conditions, engine rpm decrease but the overall hydraulic cycle speed remains unchanged. Conversely, when ODPS delivers high power, the operator may notice an increase in engine speed.

Boom and Stick Regeneration Circuits

The 314D LCR uses boom and stick regeneration circuits to save energy (fuel) during boom-down and stick-in operations. Boom-down operation is electronically assisted.

Easy Operation

The 314D LCR has an automatic boom and swing priority function that selects the best mode based on the amount of lever movement. Work and power mode switches have been eliminated to simplify operation and optimize performance.

Medium Pressure Circuit

Available as an attachment for work tools requiring moderate hydraulic flow such as rotating buckets or shears.

High Pressure Circuits

Available as an attachment for work tools requiring high hydraulic flow or pressure such as hammers, processors and shears.

Front Linkage

Reliable, durable and versatile.

Built for performance and long service life, Cat booms and sticks are welded, box section structures with thick, multi-plate, high strength steel fabrications. Service intervals are extended with self-lubricating pins that resist corrosion and galling for superior durability.

Reach Boom

The 4.3 m reach boom is designed for maximum digging capability and is robotic welded to ensure consistent quality. This allows excellent all around versatility and a large working envelope.

Optional Variable Angle Boom

A new, optional VA boom is available to suit all your applications in small space conditions and achieve greater versatility.

Sticks

Two lengths of sticks are available (2.5 m and 3.0 m) in order to offer maximum flexibility in machine configuration and, therefore, meet a wide range of applications. What is more, all the boom and stick linkages of the 314D LCR are compatible with those of the 314C.

Engine

Delivering the most work per liter of fuel consumed.

The Cat® C4.2 engine with ACERT™ Technology optimizes performance and meets EU Stage IIIA emissions regulations. Integrated electronics coupled with ACERT Technology reduces emissions during combustion by using advanced technology in the air and fuel systems. Delivering exceptional power, the C4.2 allows more hydraulic pressure to drive productivity and reduce the cost per ton of material moved.

Fuel Economy

- **Automatic Engine Control, Fuel Delivery and Manual Low Idle Function**

Two level control with one-touch command maximizes fuel efficiency and reduces sound levels. ADEM™ A4 engine controller manages fuel delivery for the best performance per liter of fuel used. With flexible fuel mapping, the engine responds quickly to various applications. Multiple injection fuel delivery involves a high level of precision, and consequently, the carefully shaped combustion cycle lowers combustion chamber temperatures and generates fewer emissions optimizing fuel consumption.

- **Economy Mode**

Standard function enables you to adapt machine performance to the application. You can switch Economy Mode ON/OFF and decide if you want to operate fuel efficiently or use the machine's full power to achieve maximum productivity.

- **On Demand Power Supply (ODPS)**

New feature constantly regulates engine power supply based on the power demanded by the hydraulic system to reduce fuel consumption and machine noise in light duty applications.

Electronic Control Module

"Brain" of the engine's control system, responds quickly to the operating variable to maximize engine efficiency. The ECM stores and relays data on conditions such as rpm, fuel consumption and diagnoses.

Crankshaft and Pistons

Forged one-piece induction hardened crankshaft enhances balance, decreases vibration and improves abrasion resistance. Heat resistant, aluminum alloy pistons have a short compression height for greater efficiency and longer life.

Undercarriage and Structures

Strong, stable and easy to maneuver.

Caterpillar uses advanced engineering and software to analyze all structures, creating a durable, reliable machine for the toughest applications. More than 70 percent of the structural welds are robotic and achieve over three times the penetration of manual welds. These structural components and undercarriage are the backbone of the machine's durability.

Long Undercarriage

The 314D LCR has a long undercarriage for you to enjoy great stability in all conditions.

Blades

There are three blades available for the 314D LCR.

Carbody Design

X-shaped, box section carbody provides excellent resistance to torsional bending. Robot-welded track roller frames are press-formed, pentagonal units that deliver exceptional strength and service life. Idler and center guards are standard to help maintain track alignment when traveling or working on slopes.

Travel Motors

Travel motors with automatic speed selection let the 314D LCR automatically change up and down from high and low speeds in a smooth and controlled manner.

Grease Lubricated Tracks

Grease lubricated track seals protect the track link and track pin and bushing inner wear and increase life by as much as 25 percent, when compared to dry seal undercarriages.

Versatility

More options for more work.

Compact Radius Design

The 314D LCR is ideal for works in confined areas such as urban constructions. Its design brings an optimized working envelop and a swing radius within track width for easy and safe operations even in extremely restricted sites.

Hydraulic and Pilot Configurations

High pressure systems, medium pressure systems and hydraulic controls are available as independent and combinable attachments so you can configure a machine perfectly adapted to your specific job needs.

Controls

An optional, two position (ON/OFF) foot switch without modulation is available. Alternatively, there is an optional pedal that provides foot pedal modulation.

Work Tools

Caterpillar offers a variety of work tools including hammers, grapples, multiprocessors, shears, pulverizers and vibratory compactors to fit your application needs. A wide range of buckets is available to optimize machine performance. Auxiliary hydraulic and electrical lines are routed to the boom foot for easier installation of auxiliary hydraulic circuits, reducing the time and cost to add a work tool. All pins are interchangeable between the Cat C-Series and the D-Series models.

Tool Control System

Standard system stores up to 10 flow and pressure settings for easier and quicker tool readiness. Combined with the hydraulic quick coupler, the Tool Control System lets you change from one hydraulic work tool to another without leaving the cab.

Quick Couplers

The hydraulic quick coupler increases machine versatility by making the change from one hydraulic work tool to another quick and easy. A universal quick coupler control accepts all hydraulic quick coupler systems with pressure ranging up to the full machine pressure of 350 bar.

Cat® K Series™ Tooth System

Provides reliable tip retention and easy tip installation and removal.

High Ambient Cooling Package

The 314D LCR can work in temperatures up to 48° C with this EU compliant package.

Serviceability

Simplified service and maintenance save time and money.

Designed with the service technician in mind, many service locations are at ground level so that critical maintenance can be done quickly and efficiently. Longer maintenance intervals reduce cost and increase machine availability.

- Oil level gauge, fuel filter and priming pump are conveniently located on the right side of the engine structure for easy maintenance.
- Optional electronic fuel water sensor is available to alert operator when the water level is high.
- Product Link assists with fleet management by tracking hours, fleet location and product health.
- New anti-skid plates over the top of the storage box and upper structure help prevent slipping and mud from falling into the upper structure.

Sampling Ports

Equipped with S•O•S^{SM} sampling ports and test ports for hydraulics, engine oil and coolant for diagnoses. A test connection for the Cat Electronic Technician (Cat ET) service tool is located in the cab.

Air Cleaner

A double layered filter core in the radial seal air filter gives more efficient filtration. A warning is displayed on the monitor when dust accumulates above a preset level. This filter is conveniently placed in the compartment behind the cab.

Capsule Filter

A capsule type hydraulic return filter is accessible from outside the tank and prevents contaminants from entering the system during hydraulic oil changes.

Water Separator with Indicator

An optional water separator with level indicator to alert the operator when the water level is high.

314D LCR Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C4.2 ACERT™
Gross Power	72 kW/95.6 hp
Net Power (SAE J1349)	67 kW/88.7 hp
SAE J1349	67 kW/88.7 hp
Bore	102 mm
Stroke	130 mm
Displacement	4.25 L

- All engine horsepower (hp) are metric, including cover.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No engine power derating required below 2300 m.
- The 314D LCR meets U.S. EPA Tier 3 and EU Stage IIIA Directive/97/68/EC emissions requirements.

Weights

Operating Weight – Long Undercarriage	14 100 kg

- Weight includes 500 mm shoe, 0.43 m^3 bucket, long stick (3.0 m) and standard counterweight.

Swing Mechanism

Swing Torque	30.9 kN·m
Swing Speed	11.5 rpm

Drive

Maximum Drawbar Pull	113 kN
Travel Speed	5.5 km/h

Hydraulic System

Maximum Pressure – Implements	305 bar
Maximum Pressure – Travel	350 bar
Maximum Pressure – Swing	230 bar
Pilot System – Maximum Flow	21.1 L/min
Pilot System – Maximum Pressure	41 bar
Blade – Maximum Flow	47 L/min
Blade System – Maximum Pressure	206 bar
Boom Cylinder – Bore	110 mm
Boom Cylinder – Stroke	1000 mm
Stick Cylinder – Bore	120 mm
Stick Cylinder – Stroke	1197 mm
Bucket Cylinder – Bore	100 mm
Bucket Cylinder – Stroke	939 mm

Service Refill Capacities

Fuel Tank	186 L
Cooling System	18 L
Engine Oil	19 L
Swing Drive (each)	3 L
Final Drive (each)	3 L
Hydraulic System (including Tank)	160 L
Hydraulic Tank	120 L

Standards

Cab/FOGS	SAE J1356 FEB88 ISO 10262

Sound

Operator Sound

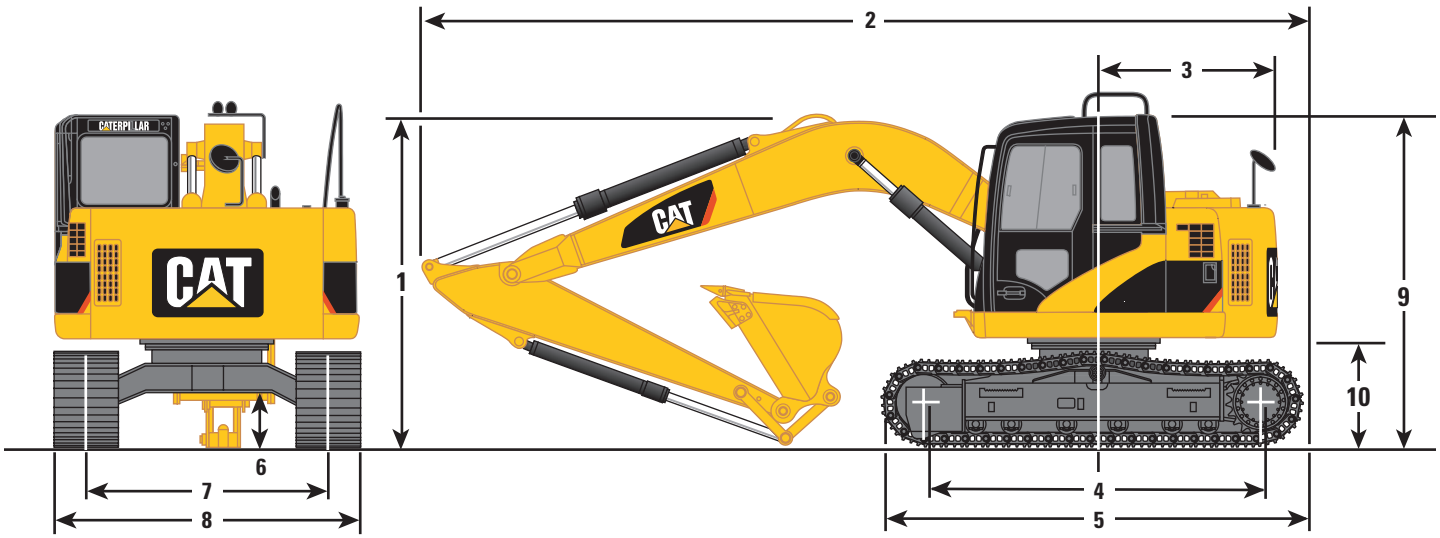
- The operator sound level measured according to the procedures specified in ISO 6396 is 74 dB(A) for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environment.

Exterior Sound

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EX is 100 dB(A).

Dimensions

All dimensions are approximate.



	Boom Options	Reach	Reach	Reach
	Stick Options	**2.5 m**	**2.8 m**	**3.0 m**
1	Shipping Height	2910 mm	3030 mm	2910 mm
2	Shipping Length	7270 mm	7390 mm	7410 mm
3	Tail Swing Radius (with standard counterweight)	1480 mm	1480 mm	1480 mm
4	Length to Center of Rollers			
	314D LCR	3040 mm	3040 mm	3040 mm
5	Track Length			
	314D LCR	3750 mm	3750 mm	3750 mm
6	Ground Clearance	430 mm	430 mm	430 mm
7	Track Gauge			
	314D LCR	1990 mm	1990 mm	1990 mm
8	Transport Width	500 mm Shoes	600 mm Shoes	700 mm Shoes
	314D LCR	2490 mm	2590 mm	2690 mm
9	Cab Height	2730 mm	2730 mm	2730 mm
10	Counterweight Clearance	895 mm	895 mm	895 mm

Operating Weights (with standard counterweight)

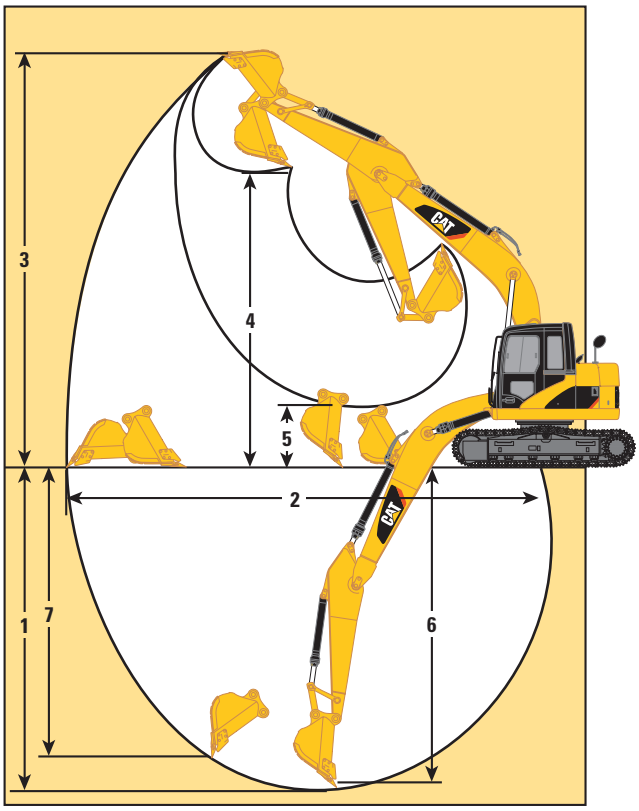
Caterpillar designed and built track-type undercarriage.

		Operating Weight			
Track Width		**2.1 Stick**	**2.5 m Stick**	**2.8 m Stick**	**3.0 m Stick**
314D LCR	500 mm triple grouser	–	14 100 kg	14 100 kg	14 100 kg
	600 mm triple grouser	–	14 300 kg	14 400 kg	14 400 kg
	700 mm triple grouser	–	14 600 kg	14 600 kg	14 600 kg
	500 mm triple grouser with blade	15 500 kg	14 900 kg	14 900 kg	14 900 kg
	600 mm triple grouser with blade	15 750 kg	15 200 kg	15 200 kg	15 200 kg
	700 mm triple grouser with blade	16 020 kg	15 400 kg	15 400 kg	15 500 kg
		0.40 m^3 bucket	0.52 m^3 bucket	0.40 m^3 bucket	0.40 m^3 bucket

314D LCR Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



	Boom	Reach 4.65 m	Reach 4.65 m	Reach 4.65 m
	Stick	**2.5 m***	**2.8 m***	**3.0 m***
	Bucket	**0.52 m^3**	**0.40 m^3**	**0.40 m^3**
1	Maximum Digging Depth	5440 mm	5740 mm	5940 mm
2	Maximum Reach at Ground Level	8180 mm	8440 mm	8630 mm
3	Maximum Cutting Height	9300 mm	9470 mm	9630 mm
4	Maximum Loading Height	6870 mm	7040 mm	7200 mm
5	Minimum Loading Height	2510 mm	2250 mm	2060 mm
6	Maximum Depth Cut for 2440 m Level Bottom	5240 mm	5550 mm	5760 mm
7	Maximum Vertical Wall Digging Depth	4910 mm	5080 mm	5280 mm
	Minimum Front Swing Radius	1980 mm	2160 mm	2230 mm
	Stick Digging Force (SAE)	64 kN	60 kN	57 kN
	Bucket Digging Force (SAE)	85 kN	85 kN	85 kN

* Measurements shown are for machines equipped with the 0.52 m^3 buckets.

Buckets

Buckets have tapered sides, angled corner teeth, dual radius curvature, horizontal wear strips and holes for optional side cutters.

		Recommended Maximum Material Density		
Width mm	**Capacity m^3**	**2.5 m Stick kg/m^3**	**2.8 m Stick kg/m^3**	**3.0 m Stick kg/m^3**
598	0.30	1800	1800	1800
748	0.40	1800	1800	1800
903	0.52	1800	1800	1500
1055	0.63	1500	1200	1200
1206	0.74	1200	1200	900

Material Densities

Material	**kg/m^3***	**Material**	**kg/m^3***
Clay, dry	1480	Gravel, pit run	1930
Clay, wet	1660	Rock/dirt, 50%	1720
Earth, dry	1510	Sand, dry	1420
Earth, wet	1600	Sand, wet	1840
Loam	1250	Sand & Clay	1600
Gravel, dry	1510	Stone, crushed	1600
Gravel, wet	2020	Top soil	950

* kilograms per loose cubic meter

For densities of other materials see Caterpillar Performance Handbook.

Undercarriage

Caterpillar designed and built track-type undercarriage.

Track Width	**Ground Pressure**
500 mm triple grouser	0.42 bar
600 mm triple grouser	0.36 bar
700 mm triple grouser	0.31 bar

With standard counterweight, 0.4 m^3 bucket.

Track Width	**Ground Pressure**
500 mm triple grouser	0.44 bar
600 mm triple grouser	0.37 bar
700 mm triple grouser	0.32 bar

With optional counterweight, 0.4 m^3 bucket.

314D LCR Hydraulic Excavator Specifications

314D LCR Reach Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 500 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3400	3300	2050	*2000	1800	6.44
1.5 m	kg			*4800	3050	3150	1900	*2250	1600	6.61
0 m	kg	*5100	*5100	4750	2800	3000	1800	*2700	1600	6.41
–1.5 m	kg	*5650	5200	*4250	2700			*3050	1850	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3450	*3350	2100	*2000	1850	6.44
1.5 m	kg			*4800	3100	3200	1950	*2250	1650	6.61
0 m	kg	*5100	*5100	4850	2850	3050	1850	*2700	1650	6.41
–1.5 m	kg	*5650	5350	*4250	2800			*3050	1900	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 700 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade up

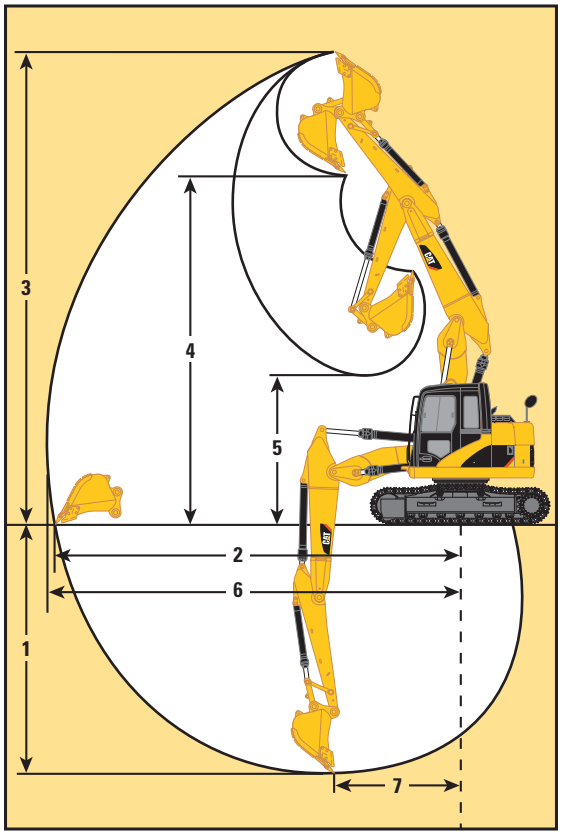
		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3550	*3350	2150	*2000	1900	6.44
1.5 m	kg			*4800	3150	3250	2000	*2250	1700	6.61
0 m	kg	*5100	*5100	*4850	2900	3150	1900	*2700	1700	6.41
–1.5 m	kg	*5650	5450	*4250	2850			*3050	1950	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

*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.

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

Working Ranges

All dimensions are approximate.



	Boom	Variable Angle
	Stick	**R2.3.312 (2250 mm)***
	Bucket	**0.40 m³**
1	Maximum Digging Depth	4840 mm
2	Maximum Radius at Ground Line	8030 mm
3	Maximum Bucket Teeth Height	9150 mm
4	Minimum Clearance of Bucket Teeth, with Bucket Pivot at Maximum Height	6750 mm
5	Minimum Clearance of Bucket Teeth at Maximum Boom Height	2890 mm
6	Maximum Radius of Working Equipment	8170 mm
7	Radius of Maximum Digging Depth	2490 mm
	Radius of Bucket Teeth at Maximum Height	2530 mm
	Minimum Working Equipment Radius with Boom at Maximum Height and Stick Fully Retracted	2210 mm
	Boom Cylinder Pivot to Axis of Rotation	599 mm
	Boom Pivot to Axis of Rotation	145 mm
	Boom Pivot to Ground Line	1516.2 mm
	Boom Cylinder Pivot to Ground Line	1181.2 mm

* Measurements shown are for machines equipped with the 0.4 m³ buckets.

314D LCR Hydraulic Excavator Specifications

314D LCR VA Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – R2.25
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 500 mm triple grouser

BOOM – Variable Angle
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
7.5 m	kg	*1150	*1150							
6.0 m	kg	*2700	*2700	*1900	*1900			*1500	*1500	5.82
4.5 m	kg	*3100	*3100	*3500	*3500	*2400	2250	*1450	*1450	6.68
3.0 m	kg			*5250	3400	3350	2150	*1450	*1450	7.18
1.5 m	kg			5100	3100	3200	2000	*1500	1400	7.37
0 m	kg			*4600	2950	3100	1900	*1650	1450	7.21
–1.5 m	kg	*2900	*2900	*3200	2900	*2300	1900	*1550	*1550	6.68
–3.0 m	kg			*2900	*2900			*1250	*1250	5.33

STICK – R2.25
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Variable Angle
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
7.5 m	kg	*1150	*1150							
6.0 m	kg	*2700	*2700	*1900	*1900			*1500	*1500	5.82
4.5 m	kg	*3100	*3100	*3500	*3500	*2400	2300	*1450	*1450	6.68
3.0 m	kg			*5250	3450	*3450	2200	*1450	*1450	7.18
1.5 m	kg			5200	3150	3300	2050	*1500	1450	7.37
0 m	kg			*4600	3000	3200	1950	*1650	1450	7.21
–1.5 m	kg	*2900	*2900	*3200	2950	*2300	1950	*1550	*1550	6.68
–3.0 m	kg			*2900	*2900			*1250	*1250	5.33

*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.

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

314D LCR VA Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – R2.25
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 700 mm triple grouser

BOOM – Variable Angle
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
7.5 m	kg	*1150	*1150							
6.0 m	kg	*2700	*2700	*1900	*1900			*1500	*1500	5.82
4.5 m	kg	*3100	*3100	*3500	*3500	*2400	2300	*1450	*1450	6.68
3.0 m	kg			*5250	3550	*3450	2200	*1450	*1450	7.18
1.5 m	kg			5300	3200	3350	2100	*1500	1500	7.37
0 m	kg			*4600	3050	3250	2000	*1650	1500	7.21
–1.5 m	kg	*2900	*2900	*3200	3000	*2300	1950	*1550	*1550	6.68
–3.0 m	kg			*2900	*2900			*1250	*1250	5.33

STICK – R2.25
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 500 mm triple grouser

BOOM – Variable Angle
BLADE – Blade down

		3.0 m		4.5 m		6.0 m				
										m
7.5 m	kg	*1150	*1150							
6.0 m	kg	*2700	*2700	*1900	*1900			*1500	*1500	5.82
4.5 m	kg	*3100	*3100	*3500	*3500	*2400	*2400	*1450	*1450	6.68
3.0 m	kg			*5250	3700	*3450	2350	*1450	*1450	7.18
1.5 m	kg			*5350	3400	3450	2200	*1500	*1500	7.37
0 m	kg			*4600	3200	*3350	2100	*1650	1600	7.21
–1.5 m	kg	*2900	*2900	*3200	3200	*2300	2100	*1550	*1550	6.68
–3.0 m	kg			*2900	*2900			*1250	*1250	5.33

*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.

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

314D LCR Hydraulic Excavator Specifications

314D LCR VA Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – R2.25
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Variable Angle
BLADE – Blade down

		3.0 m		4.5 m		6.0 m				
										m
7.5 m	kg	*1150	*1150							
6.0 m	kg	*2700	*2700	*1900	*1900			*1500	*1500	5.82
4.5 m	kg	*3100	*3100	*3500	*3500	*2400	*2400	*1450	*1450	6.68
3.0 m	kg			*5250	3750	*3450	2350	*1450	*1450	7.18
1.5 m	kg			*5350	3450	3550	2250	*1500	*1500	7.37
0 m	kg			*4600	3250	*3350	2150	*1650	1600	7.21
–1.5 m	kg	*2900	*2900	*3200	*3200	*2300	2100	*1550	*1550	6.68
–3.0 m	kg			*2900	*2900			*1250	*1250	5.33

STICK – R2.25
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 700 mm triple grouser

BOOM – Variable Angle
BLADE – Blade down

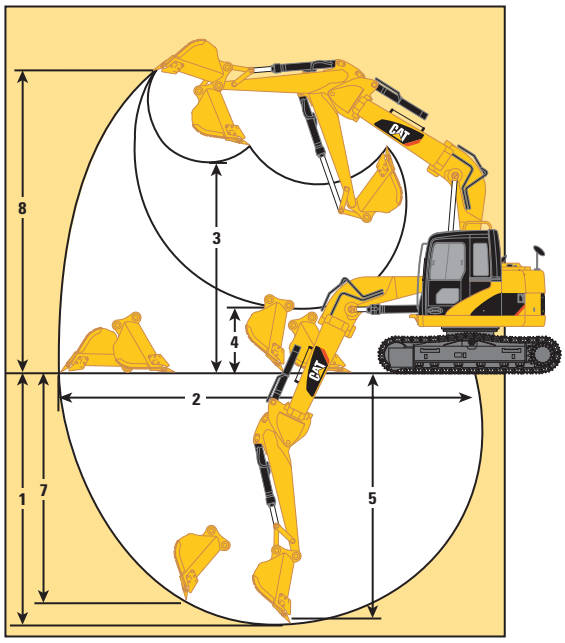
		3.0 m		4.5 m		6.0 m				
										m
7.5 m	kg	*1150	*1150							
6.0 m	kg	*2700	*2700	*1900	*1900			*1500	*1500	5.82
4.5 m	kg	*3100	*3100	*3500	*3500	*2400	*2400	*1450	*1450	6.68
3.0 m	kg			*5250	3800	*3450	2400	*1450	*1450	7.18
1.5 m	kg			*5350	3500	*3600	2300	*1500	*1500	7.37
0 m	kg			*4600	3350	*3350	2200	*1650	*1650	7.21
–1.5 m	kg	*2900	*2900	*3200	*3200	*2300	2150	*1550	*1550	6.68
–3.0 m	kg			*2900	*2900			*1250	*1250	5.33

*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.

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

Working Ranges

All dimensions are approximate.



	Boom	Power Offset 4.37 m
	Stick	**2.1 m***
	Bucket	**0.40 m³**
1	Maximum Digging Depth	4840 mm
2	Maximum Reach at Ground Level	7230 mm
3	Maximum Loading Height	5340 mm
4	Minimum Loading Height	2330 mm
5	Maximum Depth Cut for 2440 m Level Bottom	4470 mm
6	Minimum Front Swing Radius	2060 mm
7	Maximum Vertical Wall Digging Depth	3560 mm
8	Maximum Cutting Height	7640 mm
9	Left Hand Offset (from boom center)	1100 mm
10	Right Hand Offset (from boom center)	1150 mm
	Stick Digging Force (SAE)	61 kN
	Bucket Digging Force (SAE)	78 kN

* Measurements shown are for machines equipped with the 0.40 m³ buckets.

314D LCR Hydraulic Excavator Specifications

314D LCR Power Offset Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 500 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3400	3300	2050	*2000	1800	6.44
1.5 m	kg			*4800	3050	3150	1900	*2250	1600	6.61
0 m	kg	*5100	*5100	4750	2800	3000	1800	*2700	1600	6.41
–1.5 m	kg	*5650	5200	*4250	2700			*3050	1850	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3450	*3350	2100	*2000	1850	6.44
1.5 m	kg			*4800	3100	3200	1950	*2250	1650	6.61
0 m	kg	*5100	*5100	4850	2850	3050	1850	*2700	1650	6.41
–1.5 m	kg	*5650	5350	*4250	2800			*3050	1900	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 700 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade up

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3550	*3350	2150	*2000	1900	6.44
1.5 m	kg			*4800	3150	3250	2000	*2250	1700	6.61
0 m	kg	*5100	*5100	*4850	2900	3150	1900	*2700	1700	6.41
–1.5 m	kg	*5650	5450	*4250	2850			*3050	1950	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

*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.

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

314D LCR Power Offset Boom Lift Capacities

 Load Point Height

 Load at Maximum Reach

 Load Radius Over Front

 Load Radius Over Side

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 500 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade down

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3750	*3350	2300	*2000	*2000	6.44
1.5 m	kg			*4800	3350	*3500	2150	*2250	1800	6.61
0 m	kg	*5100	*5100	*4850	3100	*3450	2000	*2700	1800	6.41
–1.5 m	kg	*5650	*5650	*4250	3050			*3050	2100	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 600 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade down

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	3900	*3350	2400	*2000	*2000	6.44
1.5 m	kg			*4800	3500	*3500	2250	*2250	1900	6.61
0 m	kg	*5100	*5100	*4850	3250	*3450	2100	*2700	1900	6.41
–1.5 m	kg	*5650	*5650	*4250	3200			*3050	2200	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

STICK – 2.1 m
BUCKET – 0.40 m³

UNDERCARRIAGE – Long
SHOES – 700 mm triple grouser

BOOM – Offset-Boom (Center)
BLADE – Blade down

		3.0 m		4.5 m		6.0 m				
										m
6.0 m	kg			*2000	*2000			*1900	*1900	4.64
4.5 m	kg			*3600	*3600			*1900	*1900	5.85
3.0 m	kg	*6300	*6300	*4200	4100	*3350	2500	*2000	*2000	6.44
1.5 m	kg			*4800	3700	*3500	2350	*2250	2000	6.61
0 m	kg	*5100	*5100	*4850	3450	*3450	2200	*2700	2000	6.41
–1.5 m	kg	*5650	*5650	*4250	3350			*3050	2300	5.78
–3.0 m	kg	*3450	*3450					*2550	*2550	4.56

*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.

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314D LCR Standard Equipment

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

Alternator, 50 amp
Automatic engine speed control
Bolt-on Falling Object Guard System (FOGS) capability
Cab
- AM/FM radio, 24-volt
- Ashtray
- Coat hook
- Beverage holder
- Economy mode
- Horn
- Language display monitor (full graphic/full color display)
- Clock
- Filter/fluid change information
- Level check for hydraulic oil, engine oil and coolant
- Warning messages

Light, interior
Literature holder
Openable front windshield
Openable skylight with sun shade
Storage compartment
Travel control pedals with removable hand levers
Door locks and cap locks with one-key security system
Light, storage box mounted
Mirrors (frame and cab)
Power train
- Cat® C4.2 engine with ACERT™ Technology
- 24-volt electric starter
- Air intake heater
- Water separator

Radial seal air filter
Undercarriage
- Idler section track guiding guards
- Center section track guiding guards
- Track-type undercarriage with grease lubricated seals

314D LCR Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

Auxiliary hydraulics
Auxiliary hydraulic lines from boom and sticks
Bucket linkage
Cab mounted working lights
Cab mounted working lights with time delay function
Cold weather start
Counterweight
Fine swing control
Front windshield guard
Heavy-duty bottom guard
High ambient cooling system
Power supply 5A-12V
Rain protector
Right side boom lights
Secondary exit, rear window
Stick and boom configuration
- 3.0 m stick
- 2.5 m stick
- 4.3 m reach boom
- VA boom

Notes

314D LCR Hydraulic Excavator

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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