

EU Sound 2000/14/EC

Cat® 3054E ATAAC diesel engine

out ouste ATAAo ulosof oligilio	
Gross power	86 kW/117 hp
Net power (ISO 9249) at 2150 rpm	83 kW/113 hp
Operating weight range	16 730 to 17 450 kg
Travel speed	5.5 km/h
Drawbar pull	152 kN

315C L Hydraulic Excavators

Improved performance and rugged durability combine to maximize productivity.

Operator Station

Roomy and quiet with ergonomic control placement has excellent sightlines to the work area to help keep operator fatigue low and production up throughout the entire shift. Optional climate control maintains constant temperature in the cab in both hot and cold weather. **pg. 4**

Multipro Electronic Control System

An user friendly new monitor that shows a wide variety of useful information for machine operation and provides high efficient service data and diagnostic capabilities while maximizing fuel efficiency and performance. **pg. 5**

Hydraulics

The open-center, two-pump hydraulic system features pump flow control which improves fuel efficiency, ensures smooth controllability, reduces sound levels and extends component life, through an increased maximum flow. The unique tool control option offers the ability to optimise the machine performances according to 5 tool specifications, and to set priorities between tools and implements for maximized efficiency. **pg. 6**

Engine

The 315C L is powered by the 3054E ATAAC engine which complies with worldwide emissions requirements. This engine includes several design features which enhance performance, efficiency and reliability. Engine service intervals are increased to 500 hours. **pg. 7**

Improved speed, increased horsepower, drastically extended service intervals, a revolutionary Tool Control option and a redesigned operation station lead you to make the right choice.

Undercarriage and Structure

Rugged Caterpillar® undercarriage design and proven structural manufacturing techniques assure outstanding durability in the toughest applications, resulting in stability, durability and low maintenance. Standard grease-lubricated tracks extend the undercarriage life. **pg. 8**

Service and Maintenance

Longer service intervals and easier maintenance results in better machine availability and lower owning and operating costs. Electronic diagnostics means increased productivity. **pg. 9**

Booms and Sticks

Built for good performance and long service life, Caterpillar booms and sticks are large, welded box-section structures with thick, multi-plate fabrications that resist high stress. Designed-in flexibility to help bring higher production and efficiency to all jobs. **pg. 10**

Work Tools

Ex-factory available Buckets, Multiprocessors, Sorting and Demolition Grapples, Hammers and Quick Couplers provide a total solution package to the end-user. **pg. 11**

Buckets and Teeth

A wide variety of bucket types with aggressive bucket designs take advantage of the 315C L's higher power to improve productivity. **pg. 10**

Complete Customer Service

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 and attachment selection to replacement.



Operator Station

Designed for comfort and ease of operation.



Operator work station. This operator work station is quiet with ergonomic control placement and convenient adjustments, low lever and pedal effort, ergonomic seat design, and highly efficient ventilation.

Viewing area. Excellent viewing area through large, wide windows. A large skylight provides upward visibility. The upper front window features parallelogram wiper to provide unobstructed front viewing. The upper left side door window can slide open. The lower window provides visibility to the tracks and the ground next to the machine. The rear window offers a good view behind and to the left.

Greater control convenience. Each of the controls is positioned within easy reach of the operator.

Cab shell. The double wall, pressed cab shell is mounted to the swing frame using viscous mounts for reduced sound and vibrations.

Wiper. A standard large wiper for the upper and lower windows offers the selection between continuous and intermittent modes and provides a better visibility.

Dial throttle. Dial throttle with ten settings for simple, precise repeatable engine speed adjustment.

Automatic climate control. Optional automatic climate control maintains constant temperature in the cab in both hot and cold weather conditions and, at the touch of a switch, the operator can choose between fresh or recirculated air.

1 Multipro Electronic Control System. Caterpillar monitor panel includes fuel level, hydraulic oil temperature and engine temperature gauges, machine condition indicators, and operator controls, all combined in one single display.

- **2 Joysticks.** Joysticks control all implements and swing functions with minimal effort. This includes 4 switches on each joystick. The integrated joystick consoles adjust to operator preference. Joystick consoles are suspended as part of the seat arrangement. Special joystick for the tool control option feature modulated switches.
- **3 Travel controls.** Hand or foot actuated travel controls allow the operator to move the excavator while working the boom, stick and bucket. Hand levers are easily removable.
- **4** Activation control lever. Hydraulic activation control lever deactivates hydraulic functions and prevents start-up when the operator exits the cab.
- **5 Suspension seat.** The fully adjustable suspension seat includes an impressive range of comfort features. In addition to fore/aft height and weight adjustments, it also offers wide arm support, headrest and a retractable seat belt. The height adjustment system of the seat and console allows to adjust them together, while the console height can be also adjusted independently. Moreover, the armrest also has its owns height adjustment mechanism, providing good access to control levers.





Skylight. A unique large polycarbonate skylight provides very good upward visibility, especially useful in above ground applications.





Special joysticks for tool control options.

Multipro

The Multipro manages the engine and hydraulics for maximum performance and enhanced monitoring capabilities through a new user friendly interface.

Multipro. It controls state-of-the-art hydraulics and engine performance for maximized productivity, increased fuel efficiency, and lower emission and sound levels.

Compact monitor. The 315C uses a compact monitor that nevertheless shows a variety of information. The 315C monitor uses a liquid crystal display, and the dot matrix screen is capable of displaying a wide range of items, such as written messages. It consists of an 8-key keyboard that makes it user friendly to the operator.

Pump Flow and Pressure Settings.

The 315C monitor is capable of recording five hydraulic pump flow and hydraulic pressure settings for various tools. This function is very convenient because it eliminates the need to adjust the hydraulics every time a tool is changed and instantly provides the operator with the correct setting of flow and pressure for each tool. **Alert.** This monitor is capable of autodiagnostic and is designed to alert an impending problem to the operator.

Filter and Oil Warnings. The monitor provides the number of hours that filter and fluids have been used. It also displays filter and oil change warnings when the number of hours used reaches the maintenance interval.

Languages. In addition to icons, the 315C monitor displays languagebased information identifying various functions. 20 different display languages are available.

The 315C monitor consists of five areas:

- **1** Alert indicator
- 2 Engine speed dial indicator
- **3** Gauges
- 4 Message area
- **5** Key pad



Hydraulics

Fast cycle times and high bucket and stick forces combine to maximize your productivity in any job.



Easy to operate hydraulics.

Cat hydraulics give the 315C L exceptional efficiency and controllability unmatched in the industry for consistently high performance in all applications. The 315C L easy-to-use hydraulic system provides automatic infinite priority selections between swing and boom, maximizing performance and simplifying operation. Boom and swing priority is adjusted automatically depending on joystick input, eliminating the need to select the work-mode. This is a unique feature in the market.

Auxiliary Hydraulic Circuits.

The new auxiliary hydraulic circuits are electronically controlled, allowing essential parameters for frequently used hydro-mechanical worktools to be pre-recorded. This on-board electrohydraulic system eliminates the need for manual readjustments to the auxiliary hydraulics, each time a different tool is used.

Hydraulic Cylinder Snubbers.

The hydraulic cylinder snubbers at rod end of boom cylinders and both ends of stick cylinders cushion shocks, reduce sound and increase cylinder life, keeping the machine working longer.

Controllability. The hydraulic system offers precise control to the 315C L, reducing operator fatigue, improving operator effectiveness and efficiency, which ultimately translates into enhanced performance.

Boom and Stick Regeneration Circuits.

Boom and stick regeneration circuits increase efficiency and reduce cycle times for higher productivity and lower operating costs.

Integrated Tool Control system.

With the tool control (option), the machine is being provided with an electronic additional programmable stackable valve and the ability to optimize the machine performances according to 5 tool specifications (including settings for electrical relief valve for hammer circuit and flow). Flow distribution between implements is analyzed and optimized, with the ability to set priority on the tool or the implements. This option also includes special joysticks with modulated switches for medium and high pressure modulation.

Hydraulic Oil. Caterpillar hydraulic oil offers maximum protection against rusting, mechanical and corrosive wear in all hydraulic systems. Caterpillar biodegradable synthetic ester hydraulic oil is factory-installed as an option.

Scheduled Oil Sampling. It allows for scheduled replacement or repair of components before the machine is stopped because of a major breakdown.

Cat 3054E ATAAC Engine

The four-cylinder turbocharged engine is built for power, reliability and easy maintenance.

3054E ATAAC engine. The 315C is powered by a Cat 3054E ATAAC diesel engine, built for world-class performance and reliability, low maintenance, long life and excellent fuel economy for low operating costs.

- The 3054E ATAAC integrates all technical concepts in order to improve performance and reliability. The unit cylinder design allows to improve the oil consumption by 50% and divides oil carry over by 10 in the blow-by.
- The 3054E ATAAC engine complies with the EU sound regulation (2000/14/EC) using electronic control and air to air charge cooling.
- The 3054E ATAAC engine is cleaner and quieter. Cleaner, free from visible smoke throughout operational speed range. Quieter, with up to 3 dB(A) reduction in bare engine noise.

Reliability. The 3054E ATAAC engine is reliable, easy to maintain, with lower maintenance costs.

- One single oil filter and one single fuel filter accessible from the top for easy maintenance.
- No priming required after filter replacement, automatically done electric lift pump.
- Increased sump capacity, oil cartridge and fuel filter improved performance, improved combustion efficiency and allows an increase in the maintenance intervals from 250 h to 500 h.

Power, Economy and Low Emissions.

Cat 3054E ATAAC Engine four cylinder turbocharged engine built for power, reliability, economy and low emissions will keep the machine up and running. The engine is electronically controlled and air to air aftercooled for optimized combustion under different loads and temperature conditions. This results in better fuel control and reduced emissions, improving refinement and lowering fuel consumption.



Displacement. The displacement of the engine has been increased to 4.4 liter for better torque capability, reducing the engine speed drop during the load impact, which gives a good engine response during transient cycle.

Advanced electronic control module.

- Cold mode start-up strategy combined with glow plugs
- Accelerated engine warm up
- Reduced white smoke
- Automatic altitude compensation
- Engine speed regulation when overheating is sensed

Fuel system. Efficient direct injection fuel system means lower operating cost.

Automatic Engine Control. Automatic Engine Control (AEC) with convenient one-touch command. Three-stage control maximizes fuel efficiency and reduces sound levels.

- First stage AEC: Selected when the AEC indicator on the Multipro panel is "OFF". If a no-load or light-load condition continues for more than 3 seconds, the AEC reduces engine speed by 100 rpm.
- Second stage AEC: Selected when the AEC indicator on the Multipro panel is "ON". If a no-load or light-load condition continues for more than 3 seconds, the AEC reduces engine speed to 1300 rpm.
- Third stage AEC: Pressing the switch on the top of the right hand control joystick when the levers are in neutral position, reduces the engine speed to 1020 rpm. If the switch is pressed again or if a control lever is moved, the engine speed returns to its normal level.

Undercarriage and Structure

315C L structural components and undercarriage are the backbone of the machine's durability.





Structures. The 315C L structural components and undercarriage are the backbone of the machine's durability.

Carbody Design and Track Roller

Frames. X-shaped, box-section carbody provides excellent resistance to torsional bending. Track roller frames are pressformed, pentagonal units to deliver exceptional strength and service life. Base frames are robot welded. **Rollers and Idlers.** Sealed and lubricated track rollers, carrier rollers and idlers provide excellent service life, to keep the machine in the field longer.

Grease Lubricated Track. New grease lubricated seals protect the track link and deliver long track link pin and bushing inner wear life.

Travel Motors. Automatic speed selection enables the machine to automatically change up and down from high and low speeds in a smooth, controlled manner.

Idler Guard. An idler guard, which is integral to the track roller frame is standard. This guard helps maintain track alignment while traveling or working on slopes. **Upper frame.** Rugged main frame is designed for maximum durability and efficient use of materials.

- Upper frame utilizes curved side rails, which are die-formed, for excellent uniformity and strength throughout the length.
- Box section channels improve upper frame rigidity under the cab.
- Inverted U-channels span the width of the main frame and are formed, rather than fabricated, for superior strength and reduced weight.
- Boom tower and main rails are constructed of solid, high-tensile strength steel plates.
- Boom foot and engine mount areas reinforced for additional strength.

Long Undercarriage. The long undercarriage (L) maximizes stability and lift capacity. A long, wide and sturdy undercarriage offers a very stable work platform.

Maximum uptime – Service and Maintenance

Extended Service Intervals and Easy access reduce operating costs.

Extended Service Intervals.

315C L service and maintenance intervals have been extended to reduce machine service time and increase machine availability.

Air Filter Compartment. The air filter features a double-element construction for superior cleaning efficiency. When the air cleaner plugs, a warning is displayed on the monitor screen inside the cab.

Ground Level Service. The design and layout of the 315C L was made with the service technician in mind. Many service locations are easily accessible at ground level allowing critical maintenance to get done quickly and efficiently.

Pump Compartment. A service door on the right side of the upper structure allows ground-level access to the pump and pilot filter.

Capsule Filter. The hydraulic return filter, a capsule filter, is situated outside the hydraulic tank. This filter prevents contaminants from entering the system when hydraulic oil is changed and keeps the operation clean.

Anti skid Plate. Anti-skid punched-star plate covers the top of storage box and upper structure to prevent slipping during maintenance.

Engine Inspection. Engine can be accessed from the upper structure or from under the machine. The engine and pump compartment are separated by a partial steel wall.

Water Separator. Water separator removes water from fuel even when under pressure and is located in the battery compartment.



Handrails and Steps. Larger handrails and steps assist operator in climbing on and off machine.

Grease-lubricated Track. Grease lubricated seals protect the track link and deliver long track link pin and bushing inner wear life.

Fan Guard. Engine radiator fan is completely enclosed by fine wire mesh, reducing the risk of an accident.

Greasing Block. Remote greasing block on the boom and two grease points for the swing bearing deliver grease to hardto-reach locations.

Electronic Power Unit Control.

Monitor Electronic Power Unit Control has diagnostic capabilities for service technicians use. Dealer service technicians can quickly and easily diagnose and adjust machine component maximizing uptime. Filter change information available in 20 different languages. **Swing-Out Oil Cooler.** The oil cooler swings out horizontally for excellent cleaning (optional equipment).

Radiator Compartment. The left rear service door allows easy access to the engine radiator and the oil cooler. A reserve tank and drain cock are attached to the radiator for simplified maintenance.

Caterpillar Product Link system

attachment. It includes a transceiver module (on-board the machine), office application PC software, and a satellite communications network to track machine hours, location, and warnings. Product Link simplifies maintenance scheduling, fleet management, unauthorized machine usage or movement, and product problem event tracking and diagnosis.

Bearings. New boom and stick standard bearings only need greasing every 1000 hours.

Booms, Sticks, Buckets and Teeth

The 315C L has designed-in flexibility to help bring total solution for higher production and efficiency to your jobs.



The right combination for the job.

Select the right combination for the job with your Cat dealer and you'll help ensure top production from the start.

Booms and sticks. Caterpillar excavator booms and sticks are built for performance and long service life.

- Large, welded, box-section structures with thick, multi-plate fabrications in high-stress areas.
- Construction allows structures to flex and dissipate stresses.

Two standard booms and four sticks.

The choice of two standard application booms and four sticks plus a wide selection of buckets and attachments, means the 315C L offers several combinations of reach and digging forces for optimum versatility.

One-piece boom. One-piece boom for all standard applications.

Variable Angle Boom. A new variable angle boom (VA) with a significantly reduced weight, for vertical wall digging, working near obstacles or in tight quarters. The variable geometry boom offers flexibility and versatility in the working envelop. With full extension, the working range gives both maximum dig depth and reach above ground. Equally, when the VA boom is retracted, it can work closer to its tracks, increase lifting capacity and work in confined areas. All hydraulic adjustments to the VA boom angle can be made from the cab during a work cycle for true versatility.

Short stick. Short stick for mass excavation and maximum breakout force bucket up to 1.35 m³.

Medium stick. Medium stick for maximum versatility bucket up to 1.2 m³.

Long stick. Long stick for all standard applications bucket up to 1.05 m³.

Extra long stick. Extra long stick for maximum reach and digging depth. Bucket up to 0.80 m³.

Linkage Bearings. New bearing technology has extended the front linkage greasing intervals for all bearings, up to 1000 hours for the boom and stick and up to 100 hours for the bucket. **Pin-on version and Quick Couplers.**

All Cat buckets are available in both quick coupler and pin-on version.

- **1 Excavation Bucket.** Digs and loads soft to medium materials such as clay and earth. Features weld on tip adapters, hardened cutting edge and side bars.
- 2 Extreme Excavation Bucket. Digs and loads compact/abrasive materials like earth/rock, sand/clay, sand/gravel, coal, chalk and low abrasion ores. Features abrasion resistant steel for all wear parts.
- **3 Ditch Cleaning Bucket.** Wide, light bucket used mainly with long reach configurations to clean waterbeds and banks.

K Series Tip Selection. The new Caterpillar K Series Tooth System holds tighter, changes easier and stays sharper.

- **10** General Duty**11** Extra Duty
- **12** Penetration
- **13** Penetration Plus
- **14** Heavy Penetration
- **15** Heavy Abrasion
- 16 Wide
- 17 Spike
- **18** Double Spike

Work Tools Matching Guide

When choosing between various work tool models that can be installed onto the same machine configuration, consider work tool application, productivity requirements, and durability.

Refer to work tool specifications for application recommendations and productivity information.

			315C L											
Without quick coupler			500 mm shoes				600 mm shoes				700 mm shoes			
Without quick coupler		mm	1850	2250	2600	3100	1850	2250	2600	3100	1850	2250	2600	310
Hammers		H115s												
		H120Cs												
Mechanical Pulverizers		P115												
		VMC-30												
		MP15 CC			×	×			×	×			×	×
		MP15 CR			×	×			×	×			×	×
Multiprocessor		MP15 PP	×	×	×	×	×	×	×	×		×	×	×
		MP15 PS		×	×	×			×	×			×	>
		MP15 S			×	×			×	×			×	×
Crushers		VHC-30			×	×			×	×			×	×
Pulverizers		VHP-30				×				×				×
		S115												
Vechanical Shears		VCS-35												
		VWC-25												
		VWS-25												
360° rotatable Shears		S325*												
Mechanical Grapples		G112				×				×				
		G310B-D												
Vulti-Grapples		G315B-D				×				×				>
viuiti-drappies		G310B-R												
		G315B-R				×				×				>
	5 tines	GSH15-400												
	4 tines	GSH15-400												
	5 tines	GSH15-500				×				×				
	4 tines	GSH15-500												
Orange Peel Grapples	5 tines	GSH15-600				×				×				×
	4 tines	GSH15-600												
	5 tines	GSH15-800	×	×	×	×		×	×	×		×	×	×
	4 tines	GSH15-800			×	×			×	×				>
With quick coupler														
Quick Coupler		CW-30												
		CW-30s												
Hammers		H115s												
		H120Cs												
Pulverizers		VHP-30			×	×			×	×			×	×
		VCS-35												
Mechanical Shears		VWC-25												
		VWS-25												
Nechanical Grapples		G112			×	×			×	×				>
		G310B-D												
Multi Grannlas		G315B-D		×	×	×		×	×	×			×	>
Multi-Grapples		G310B-R												
		G315B-R		×	×	×		×	×	×		×	×	×
Boom Mounted				360° W	orking R	ange			Maxim	um Mate	erial den	sity 1800) kg/m³	
					e front o					um Mate				
				5.51 (1)		,				anniviale		510, 1200		

Available

×

Not recommended

Engine

Cat 3054E ATAAC				
turbocharged diesel engine				
Ratings	2150 rpm			
Gross Power	86 kW/117 hp			
Net Power				
ISO 9249	83 kW/113 hp			
EEC 80/1269	83 kW/113 hp			
Bore	105 mm			
Stroke	127 mm			
Displacement	4.4 liters			
Cylinders	4			

- All engine horsepower (hp) are metric including front page.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- No engine derating required below 2300 m altitude.
- Meets Stage II EU Emission Directive 97/68/EC.

Brakes

Meets ISO10265:1998

Service and parking brake features

- wet, multiple-disc brakes are used on the final drive input shafts
- spring-applied, hydraulically releasedactuating a travel control
- simultaneously releases the brakeswhen the controls are released,
- when the controls are released, the brakes automatically apply

Implement Controls

Two joysticks hand levers actuate boom, Stick, bucket and swing

Attachments

- Hammer is activated by auxiliary left pedal or switch on right side joystick.
- Auxiliary hydraulic lines are activated by aux. left pedal.
- Medium pressure hydraulic lines are activated by switch on left side joystick or right pedal.

Hydraulic System

Main Implement System	1
Maximum Flow (2 x)	150 l/min
Maximum pressure	
Implements	343 bar
Travel	343 bar
Swing	225 bar
Pilot System	
Maximum flow	23.7 l/min
Maximum pressure	4120 bar
Cylinders, Bore and Stro	oke
Boom (2)	110 x 1193 mm
Stick (1)	120 x 1331 mm
Bucket	
small/medium	
stick	110 x 1048 mm
long/extra long	
stick	100 x 1048 mm

Steering

Two rocker pedals with detachable hand levers control steering and travel functions.

Controls

- controls are pilot-operated for reduced efforts
- left pedal and lever control left track; right pedal and lever control right track
- when idlers are in front, pushing both pedals or levers forward moves the excavator straight ahead
- when the idlers are in front, rocking both pedals or pulling both levers backward moves the excavator straight back
- moving one pedal or lever more than the other, either forward or backward, results in a gradual turn
- moving one pedal or lever forward and the other pedal or lever backward counter-rotates the tracks for spot turns

Swing Mechanism

Hydrostatic with independent planetary reduction.

Swing Speed	9.8 rpm
Swing Torque	44.6 kNm

Cab/FOGS

Bolt-on Falling Object Guard System (FOGS) is available as an attachment.

Cab/FOGS meets ISO 10262.

Drive

Maximum Travel Speed	5.5 km/h
Maximum Drawbar Pull	152 kN

- each track is driven by one independent, automatic shifting, twospeed axial piston motor via integral planetary final drives
- each drive module is well integrated into the roller frame for total protection
- standard heavy-duty travel drive increase drawbar pull and provide a better turnability

Sound

Operator Sound

• The operator sound level measured according to the procedures specified in ISO 6396 is 76 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.

Exterior Sound

• The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EC is 101 dB(A).

Dimensions

All dimensions are approximate.





		mm
A	Shipping height (with bucket)*	
	Short stick	2817
	Medium stick	2760
	Long stick	2847
	Extra Long stick	2966
В	Shipping length	
	Short stick	8454
	Medium stick	8394
	Long stick	8411
	Extra Long stick	8870

		mm
C	Tail swing radius	2345
D	Swing ground clearance	1010
Ε	Length to centers of rollers	3170
F	Track length	3960
G	Shipping width	
	with 500 mm shoes	2490

	mm
H Track gauge	1990
J Ground clearance	460
K Cab height	3000
L Overall width with	
mirrors installed	2820
M Shipping width upper frame	2550

* may be limited by cab height (K)

Service Refill Capacities

	Liters
Fuel Tank	285
Cooling System	18
Engine Oil	15
Swing Drive	3
Final Drive (each)	2.5
Hydraulic system	
(including tank)	188
Hydraulic tank	106

Operating Weights

Machine is equipped with One-piece boom and 0.93 m³ bucket. Weights will depend on final machine configuration.

Sticks	Short	Medium	Long	Extra long
	1850 mm	2250 mm	2600 mm	3100 mm
500 mm triple grouser	kg 16 754	16 734	16 771	16 860
600 mm triple grouser	kg 16 995	16 975	17 012	17 101
700 mm triple grouser	kg 17 340	17 320	17 361	17 446

Undercarriage

Based on operating weights with 0.93 $m^3 \mbox{ bucket}$

Track width*	Ground Pressure
500 mm triple grouser	0.52 bar
600 mm triple grouser	0.44 bar
700 mm triple grouser	0.38 bar

* Custom product undercarriage are available. Contact your Caterpillar dealer for specifics.

Boom, Stick and Bucket Compatibility

One-piece boom	Bucket range
Extra long stick	0.41 to 0.80 m ³
Long stick	0.41 to 1.05 m ³
Medium stick	0.41 to 1.20 m ³
Short stick	0.41 to 1.35 m ³
Variable Angle Boom	
Extra long stick	0.41 to 0.80 m ³
Long stick	0.41 to 1.05 m ³
Medium stick	0.41 to 1.20 m ³
Short stick	0.41 to 1.35 m ³

Material Densities

	*kg/m³
Clay, dry	1500
Clay, wet	1660
Earth, dry	1510
Earth, wet	1600
Loam	1250
Gravel, dry	1510
Gravel, wet	2000
Gravel, pit run	1930
Rock/dirt, 50%	1720
Sand, dry	1425
Sand, wet	1700
Sand and Clay	1600
Stone, crushed	1600
Top soil	950

* Kilograms per loose cubic meter

Recommended Maximum Material Density

		Excava	ition					Extreme	e Excavat	ion		
Width	mm	600	750	850	1000	1200	1300	600	750	850	1000	1200
Weight	kg	0.35	0.47	0.56	0.68	0.86	0.93	0.35	0.47	0.56	0.68	0.86
Capacity	m ³	380	410	450	510	580	620	385	430	470	525	595
Short stick	kg/m ³	1800	1800	1800	1800	1800	1500	1800	1800	1800	1800	1800
Medium stick	kg/m ³	1800	1800	1800	1800	1800	1500	1800	1800	1800	1800	1800
Long stick	kg/m ³	1800	1800	1800	1800	1500	1200	1800	1800	1800	1800	1500
Extra long stick	kg/m ³	1800	1800	1800	1800	1200	1200	1800	1800	1800	1800	1200

Bucket Specifications

Contact your Caterpillar dealer for special bucket requirements.

		Excava	tion					Extreme	Excavat	ion		
A Bite width	mm	600	750	850	1000	1200	1300	600	750	850	1000	1200
B Tip radius	mm	1310	1310	1310	1310	1310	1340	1310	1310	1310	1310	1310
Capacity	m ³	0.35	0.47	0.56	0.68	0.86	0.93	0.35	0.47	0.56	0.68	0.86
Weight	kg	380	410	450	510	580	620	385	430	470	525	595



Working Ranges

With One-piece boom



		Short	Medium	Long	Extra long
		mm	mm	mm	mm
St	ick – Choice of four	1850	2250	2600	3100
A	Maximum Digging Depth	5273	5673	6023	6253
B	Maximum Reach				
	at Ground Level	8009	8388	8708	9109
C	Maximum				
	Cutting Height	8530	8762	8935	9004
D	Maximum				
	Loading Height	5963	6183	6349	6443
Ε	Minimum Loading Height	3122	2722	2372	1872
F	Maximum Digging				
	Depth 2440 mm Level Bottom	n 4975	5417	5788	5288
G	Maximum Vertical				
	Wall Digging Depth	4028	4564	5003	5190
Bı	ucket Tip Radius	1117	1117	1117	1117
Bı	ucket Forces (ISO 6015)	102 kN	90 kN	82 kN	74 kN
St	ick Forces (ISO 6015)	98 kN	80 kN	69 kN	62 kN

Working Ranges

With Variable Angle Boom (VA)



	Short	Medium	Long	Extra long
	mm	mm	mm	mm
Stick – Choice of four	1850	2250	2600	3100
A Maximum Digging Depth	4654	5057	5399	5845
B Maximum Reach				
at Ground Level	7973	8357	8683	9097
C Maximum				
Cutting Height	9493	9820	10 089	10 395
D Maximum				
Loading Height	6923	7264	7450	7809
E Minimum Loading Height	3668	3303	2973	2491
F Maximum Digging				
Depth 2440 mm Level Bottom	4588	4992	5341	5813
G Maximum Vertical				
Wall Digging Depth	3121	3523	3881	4357
Bucket Tip Radius	1117	1117	1117	1117
Bucket Forces (ISO 6015)	102 kN	90 kN	82 kN	74 kN
Stick Forces (ISO 6015)	98 kN	80 kN	69 kN	62 kN

Lift capacities with One-piece boom

All weights are in kg. Calculations are made without bucket, but with CW30 Quick Coupler.

Short stick – 1850 mm		1.5	im	3.0) m	4.5	im	6.0) m	7.5	im	4		1
Shoes – 500 mm	ال ا	F A		"			G		F		F			m
	6.0 m		_		_	*4250	*4250		_	<u> </u>		*3430	3390	5.5
	4.5 m					*4840	4740	*4390	2970			*3280	2580	6
	3.0 m					*6020	4400	4610	2850			*3350	2220	6.9
	1.5 m					6960	4080	4450	2700			3440	2090	7
	0 m					6750	3900	4340	2610			3540	2140	6
	-1.5 m			*9860	7280	6720	3870	4320	2590			4000	2410	6.
	-3.0 m			*9420	7450	*6610	3960					5290	3160	5.
Vedium stick – 2250 mm		1.5	m	20) m	4.5	m	6.0) m	7 6	im			-1
Shoes – 500 mm	1 North Contraction of the second sec					4.:				 []	F			لد m
	7.5 m	<u> </u>		1		*3470	*3470	-0		-0	ur-	*3190	*3190	4.
	6.0 m							*3020	*3020			*2760	*2760	6.
	4.5 m					*4460	*4460	*4110	3040			*2650	2370	6.
	3.0 m			*8730	8410	*5680	4520	*4610	2910			*2710	2080	7.
	1.5 m					*6950	4190	4510	2760			*2910	1960	7.
	0 m			*5710	*5710	6850	3990	4390	2650			3290	2000	7.
	-1.5 m	*5440	*5440	*8070	7330	6770	3920	4340	2610			3650	2210	6.
	-3.0 m	*7640	*7640	*9340	7460	6820	3970					4620	2790	ļ
	-4.5 m			*7160	*7160							*5110	4770	4.
.ong stick – 2600 mm		1.5	im	3.0) m	4.5	im	6.0) m	7.5	im	يم.		1
Shoes – 500 mm														<u>×</u>
		ľ	P	ľ	P	ŀ	F		P		F	4	F	m
	7.5 m							*0.400	0100			*2640	*2640	
	6.0 m					*4060	*4060	*3420 *3840	3130 3070			*2330 *2240	*2330 2190	6
	4.5 m 3.0 m			*7770	*7770	*5300	4060	*4370	2940	*3070	2020	*2290	1930	7.
	3.0 m			*7770 *5980	*5980	*6650	4590	4530	2940	3200	1950	*2450	1930	1.
	0 m			*6190	*6190	6860	3990	4390	2650	3130	1950	*2770	1850	7.
	-1.5 m	*5060	*5060	*8730	7270	6750	3900	4320	2580	5150	1300	*3370	2030	7.
	-3.0 m	*7940	*7930	*9970	7380	6770	3920	4350	2610			4140	2490	6.
	-4.5 m	7340	7550	*8150	7650	*5380	4090	+000	2010			*5040	3870	4.
utra lang stick 2100														
Extra long stick – 3100 mm Shoes – 500 mm	T	1.5) m	4.5		6.0) m	7.5		<u>-</u>		
		ť	P	ľ	P	ŀ	F	6	P					m
	7.5 m							*0400	*0400			*2160	*2160	5.
	6.0 m							*3160	*3160	*0050	0000	*1950	*1950	6.
	4.5 m			*0400	*0400	*1700	4070	*3420	3100	*2350	2080	*1910	*1910	7.
	3.0 m			*6420	*6420	*4700	4670	*4000	2950	3270	2020	*1960	1760	8. o
	1.5 m			*10020 *7220	7870 *7220	*6150	4280 3990	4540 4370	2770 2620	3180 3100	1940 1860	*2110 *2390	1660 1680	8.
	0 m -1.5 m	*4870	*4870	*8590	7170	6690	3990	4370	2620	3100	1860	*2390	1680	8. 7.
	-1.5 m -3.0 m	*7550	*7550	*9370	7170	6670	3840	4270	2530	3000	1030	3640	2170	6
	-3.0 m -4.5 m	*8570	*8570	*9220	7220	*6210	3820	4200	2020			*4970	3120	0
	I — 4 3 M	00/0	0370	3//0	14.00	0/10	JJ40				1	+3/U	JIZU	1 3



t Height



Load Radius Over Side

Load at Maximum Reach

* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

Short stick – 1850 mm		1.5	im	3.0	m	4.5	im	6.0	m	7.5	im	Ę		
Shoes – 600 mm	Ľ		F	Į,	F	Ęľ,	F	Į,	F	P	F		(F	m
	6.0 m					*4250	*4250					*3430	3430	5.5
	4.5 m					*4840	4800	*4390	3010			*3280	2610	6.
	3.0 m					*6020	4460	4680	2890			*3350	2260	6.9
	1.5 m					7060	4130	4520	2740			3490	2130	7
	0 m					6860	3960	4410	2650			3590	2170	6
	-1.5 m			*9860	7380	6820	3930	4390	2630			4060	2440	6.3
	-3.0 m			*9420	7560	*6610	4020					*5310	3210	5.3
Medium stick – 2250 mm		1.5	im	3.0	m	4.5	im	6.0	m	7.5	im	4		1
Shoes – 600 mm	Ž	"		Ęľ,		Į,	F		(F)			Ū.	<u> </u>	m
	7.5 m					*3470	*3470					*3190	*3190	4.
	6.0 m							*3020	*3020			*2760	*2760	6.
	4.5 m					*4460	*4460	*4110	3080			*2650	2410	6.
	3.0 m			*8730	8510	*5680	4580	*4610	2950			*2710	2110	7.
	1.5 m					*6950	4250	4580	2800			*2910	1990	7.
	0 m			*5710	*5710	6950	4040	4460	2690			*3300	2030	7.
	-1.5 m	*5440	*5440	*8070	7430	6870	3980	4410	2650			3710	2250	6.
	-3.0 m	*7640	*7640	*9340 *7160	7560 *7160	6920	4020					4690 *5110	2830 4840	5 4.
				7100	7100							0110		
Long stick – 2600 mm	~~~~	1.5	im	3.0	m		im	6.0	m	7.5	im	ŝ		_
Shoes – 600 mm	<u>Š</u>	ŀ	F	Ŀ	F	ŀ	F	ŀ	F	ŀ	F	ľ	F	m
	7.5 m											*2640	*2640	5
								*3420	3170			*2330	*2330	6.
	6.0 m													
	4.5 m					*4060	*4060	*3840	3110	*****		*2240	2220	
	4.5 m 3.0 m			*7770	*7770	*5300	4650	*4370	2980	*3070	2050	*2290	1960	7.
	4.5 m 3.0 m 1.5 m			*5980	*5980	*5300 *6650	4650 4290	*4370 4600	2980 2820	3250	1990	*2290 *2450	1960 1860	7.
	4.5 m 3.0 m 1.5 m 0 m	*5060	*5060	*5980 *6190	*5980 *6190	*5300 *6650 6960	4650 4290 4050	*4370 4600 4450	2980 2820 2690			*2290 *2450 *2770	1960 1860 1880	7. 7 7.
	4.5 m 3.0 m 1.5 m 0 m -1.5 m	*5060	*5060	*5980 *6190 *8730	*5980 *6190 7380	*5300 *6650 6960 6850	4650 4290 4050 3950	*4370 4600 4450 4380	2980 2820 2690 2620	3250	1990	*2290 *2450 *2770 *3370	1960 1860 1880 2060	7. 7 7. 7.
	4.5 m 3.0 m 1.5 m 0 m	*5060 *7940	*5060 *7930	*5980 *6190	*5980 *6190	*5300 *6650 6960	4650 4290 4050	*4370 4600 4450	2980 2820 2690	3250	1990	*2290 *2450 *2770	1960 1860 1880	7.1 7.0 7.0 7.0 6.1 4.0
	4.5 m 3.0 m 1.5 m 0 m -1.5 m			*5980 *6190 *8730 *9970	*5980 *6190 7380 7480	*5300 *6650 6960 6850 6870	4650 4290 4050 3950 3970	*4370 4600 4450 4380	2980 2820 2690 2620	3250	1990	*2290 *2450 *2770 *3370 4200	1960 1860 1880 2060 2530	7.0 7 7.0 7.0
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m		*7930	*5980 *6190 *8730 *9970	*5980 *6190 7380 7480 7750	*5300 *6650 6960 6850 6870	4650 4290 4050 3950 3970 4150	*4370 4600 4450 4380	2980 2820 2690 2620 2650	3250	1990 1930	*2290 *2450 *2770 *3370 4200	1960 1860 1880 2060 2530	7.0 7 7.0 7.0
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m	*7940	*7930 5 m	*5980 *6190 *8730 *9970 *8150 3.0	*5980 *6190 7380 7480 7750 m	*5300 *6650 6960 6850 6870 *5380	4650 4290 4050 3950 3970 4150	*4370 4600 4450 4380 4410 6.0	2980 2820 2690 2650 2650	3250 3180 7.5	1990 1930	*2290 *2450 *2770 *3370 4200 *5040	1960 1860 1880 2060 2530	7.0 7 7.0 7.0
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m -3.0 m	*7940	*7930	*5980 *6190 *8730 *9970 *8150	*5980 *6190 7380 7480 7750	*5300 *6650 6960 6850 6870 *5380	4650 4290 4050 3950 3970 4150	*4370 4600 4450 4380 4410 6.0	2980 2820 2690 2620 2650	3250 3180	1990 1930	*2290 *2450 *2770 *3370 4200	1960 1860 2060 2530 3930	7.1 7.1 7.1 6.1 4.1
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m -3.0 m	*7940	*7930 5 m	*5980 *6190 *8730 *9970 *8150 3.0	*5980 *6190 7380 7480 7750 m	*5300 *6650 6960 6850 6870 *5380	4650 4290 4050 3950 3970 4150	*4370 4600 4450 4380 4410 6.0	2980 2820 2690 2650 2650	3250 3180 7.5	1990 1930	*2290 *2450 *2770 *3370 4200 *5040	1960 1860 2060 2530 3930	7. 7. 7. 6. 4.
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m -3.0 m	*7940	*7930 5 m	*5980 *6190 *8730 *9970 *8150 3.0	*5980 *6190 7380 7480 7750 m	*5300 *6650 6960 6850 6870 *5380	4650 4290 4050 3950 3970 4150	*4370 4600 4450 4380 4410 6.0	2980 2820 2690 2650 m	3250 3180 7.5	1990 1930	*2290 *2450 *2770 *3370 *5040 *5040	1960 1860 2060 2530 3930	7. 7. 7. 6. 4. 7. 5. 6.
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m -3.0 m 7.5 m 6.0 m	*7940	*7930 5 m	*5980 *6190 *8730 *9970 *8150 3.0	*5980 *6190 7380 7480 7750 m	*5300 *6650 6960 6850 6870 *5380	4650 4290 4050 3950 3970 4150	*4370 4600 4450 4380 4410 6.0 6.0 *3160	2980 2820 2690 2650 	3250 3180 7.5	1990 1930 m C 	*2290 *2450 *2770 *3370 4200 *5040 *5040 *2160 *1950	1960 1860 2060 2530 3930 * * 2160 * 1950	7. 7. 7. 6. 4. m 5. 6. 7.
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m -3.0 m 7.5 m 6.0 m 4.5 m	*7940	*7930 5 m	*5980 *6190 *8730 *8150 3.0 3.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	*5980 *6190 7380 7480 7750 m	*5300 *6650 6960 6850 6870 *5380 4.5	4650 4290 3950 3970 4150	*4370 4600 4450 4380 4410 6.0 6.0 *3160 *3160	2980 2820 2690 2650 m 	3250 3180 7.5	1990 1930 5 m C	*2290 *2450 *2770 *3370 4200 *5040 *5040 *2160 *2160 *1950 *1910	1960 1880 2060 2530 3930 ********************************	7. 7. 7. 6. 4. 7. 5. 6. 6. 7. 8.
-	4.5 m 3.0 m 1.5 m 0 m -1.5 m -3.0 m 7.5 m 6.0 m 4.5 m 3.0 m	*7940	*7930	*5980 *6190 *8730 *8150 3.0 3.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	*5980 *6190 7380 7480 7750 m 	*5300 *6650 6960 6850 6870 *5380 4.5 4.5 4.5 *53800 *5380 *5380 *5380 *5	4650 4290 3950 3970 4150	*4370 4600 4450 4380 4410 6.0 6.0 5 5 6.0 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2980 2690 2650 2650 	3250 3180 7.5 *2350 3220 3230 3150	1990 1930 m C 	*2290 *2450 *2770 *3370 4200 *5040 *5040 *190 *1950 *1950 *1960 *1960 *2110 *2390	1960 1880 2060 2530 3930 *2160 *1950 *1910 1790 1690 1700	7. 7. 6. 4. 5. 6. 7. 8. 8. 8.
Extra long stick – 3100 mm Shoes – 600 mm	4.5 m 3.0 m 1.5 m 0 m -1.5 m -3.0 m -5.0	*7940	*7930 5 m	*5980 *6190 *8730 *8150 3.0 3.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	*5980 *6190 7380 7480 7750 *00 *00 *6420 7970	*5300 *6650 6960 6850 6870 *5380 4.5 4.5 *5380 *	4650 4290 3950 3970 4150	*4370 4600 4450 4380 4410 6.0 6.0 6.0 6.1 *3160 *3420 *3420 *4000 4600	2980 2820 2690 2650 m (***********************************	3250 3180 7.5 *2350 3320 3230	1990 1930 5 m 2110 2050 1970	*2290 *2450 *2770 *3370 4200 *5040 *5040 *190 *1950 *1950 *1960 *1960 *2110	1960 1880 2060 2530 3930 *2160 *1950 *1910 1790 1690	7. 7. 7. 6. 4. 5.



Load Point Height

Load Radius Over Front

Load Radius Over Side

7540 *6210

4000



*4970

3170

5.3

* Limited by hydraulic rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

*8570 *8570 *9220

Lift capacities with One-piece boom

All weights are in kg. Calculations are made without bucket, but with CW30 Quick Coupler.

Short stick – 1850 mm		1.5	m	3.0) m	4.5	ōm	6.0) m	7.5	ōm	4		
Shoes – 700 mm	<u>الا</u>			Ū,		Ū.		Ø		Ū.	C -	Ū.	F	m
	6.0 m				*4250	*4250					*3430	*3430	5.59	
	4.5 m				*4840	*4840	*4390	3070			*3280	2660	6.5	
	3.0 m				*6020	4540	4770	2940			*3350	2300	6.97	
	1.5 m				*7170	4220	4620	2800			3570	2170	7.1	
	0 m				7000	4040	4510	2700			3670	2220	6.9	
	–1.5 m		*9860	7530	6960	4010	4480	2680			4150	2500	6.34	
	—3.0 m		*9420	7700	*6610	4100					*5310	3270	5.31	
Vedium stick – 2250 mm														-1
Shoes – 700 mm	, w-	1.5	m) m		ōm) m		i m			1
Shoes – 700 mm	<u> </u>		F	ľ	F				F	R.	F	ľ	F	m
	7.5 m					*3470	*3470					*3190	*3190	4.
	6.0 m							*3020	*3020			*2760	*2760	6.
	4.5 m					*4460	*4460	*4110	3140			*2650	2450	6.
	3.0 m			*8730	8660	*5680	4660	*4610	3010			*2710	2150	7.
	1.5 m					*6950	4330	4680	2860			*2910	2040	7.
	0 m			*5710	*5710	7090	4120	4550	2750			*3300	2070	7
	-1.5 m	*5440	*5440	*8070	7580	7010	4060	4500	2700			3790	2300	6
	—3.0 m	*7640	*7640	*9340	7710	*7050	4110					4790	2890	
	-4.5 m			*7160	*7160							*5110	4930	4
.ong stick – 2600 mm		1.5	im	3() m	4 5	ōm	6() m	7 5	im	نم ا		1
Shoes – 700 mm	<u>Š</u>	F		, Cl		Ū,		Ū,	F	Q,	F	<u> </u>		n
	7.5 m											*2640	*2640	ļ
	6.0 m							*3420	3220			*2330	*2330	6
	4.5 m					*4060	*4060	*3840	3170			*2240	*2240	7
	3.0 m			*7770	*7770	*5300	4730	*4370	3030	*3070	2090	*2290	2000	7
	1.5 m			*5980	*5980	*6650	4380	4690	2870	3320	2030	*2450	1900	-
	0 m			*6190	*6190	7110	4130	4550	2740	3260	1970	*2770	1930	7.
	—1.5 m	*5060	*5060	*8730	7520	6990	4040	4480	2680			*3370	2110	7.
	-3.0 m	*7940	*7930	*9970	7620	7020	4060	4510	2710			4290	2590	6
	-4.5 m			*8150	7900	*5380	4230					*5040	4010	4
Extra long stick – 3100 mm		1.5	m	3 () m	1 6	ōm	60) m	7.5	m	نم ا		-1
Shoes – 700 mm			P							 		<u> </u>		l m
	7.5 m	5		10	Lie	10		10	Line	<u>ť</u>	Lie ^{re}	*2160	*2160	5.
	6.0 m							*3160	*3160			*1950	*1950	6.
	4.5 m							*3420	3200	*2350	2150	*1910	*1910	7.
	3.0 m			*6420	*6420	*4700	*4700	*4000	3050	*3360	2100	*1960	1830	8
	1.5 m			*10020	8120	*6150	4420	*4700	2870	3300	2010	*2110	1730	8
	0 m			*7220	*7220	7110	4120	4530	2720	3220	1940	*2390	1750	8
	-1.5 m	*4870	*4870	*8590	7420	6940	3980	4430	2630	*3090	1900	*2910	1890	7
	-3.0 m	*7550	*7550	*9370	7470	6920	3960	4420	2620	0000		3780	2260	6
		*8570	*8570	*9220	7680	*6210	4080	1720	2020			*4970	3240	0
	-4.5 m													



Load Radius Over Front

Load Radius Over Side



* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

Short stick

1850 mm **Shoes** 500 mm

	0	m	-	i m	3.0	m	4.5	m	6.0	m	7.5	m			
<u>S</u>	ľ			F	ŀ	F	ŀ	F	ľ		ŀ		ŀ	F	m
7.5 m					*4510	*4510							*4390	*4390	3.88
6.0 m					*5530	*5530	*4820	*4820					*3630	3380	5.55
4.5 m					*8080	*8080	*6510	4980	4770	2980			*3430	2550	6.47
3.0 m					*10910	8780	*7270	4880	4720	2930			*3470	2190	6.94
1.5 m					*11 400	8420	7210	4530	4600	2800			3450	2070	7.07
0 m			*8400	*8400	*12 020	7780	7200	4230	4440	2660			3550	2120	6.87
–1.5 m			*9780	*9780	*12 180	7570	7010	4070	4350	2580			*3860	2400	6.31
–3.0 m			*12 200	*12 200	*9480	7550	*5320	4000							

Medium stick

2250 mm **Shoes**

500 mm

	0	m	1.5	m	3.0	m	4.5	m	6.0	m	7.5	m			
<u> </u>	ľ		ľ				ľ		ŀ		ŀ				m
7.5 m					*3730	*3730	*3580	*3580					*3420	*3420	4.54
6.0 m					*4520	*4520	*4190	*4190	*3050	3020			*2920	*2920	6.03
4.5 m					*5700	*5700	*5750	5010	*4730	3100			*2780	2340	6.88
3.0 m					*10 830	*8870	*7070	4920	4820	3050			*2800	2040	7.33
1.5 m			*4450	*4450	*10 890	8740	7260	4650	4700	2910			*2980	1930	7.45
0 m			*7580	*7580	*11 490	7980	*7310	4330	4530	2740			3300	1970	7.26
–1.5 m	*7870	*7870	*7900	*7900	*12170	7670	7090	4140	4400	2630			3680	2200	6.73
–3.0 m			*9470	*9470	*11 260	7690	*6560	4030							

Long stick

2600 mm **Shoes** 500 mm

Extra long stick 3100 mm Shoes 500 mm

	0	m	1.5	m	3.0	m	4.5	m	6.0	m	7.5	m			
<u> </u>	ľ		ŀ				ŀ		ľ		ľ	F	ŀ		m
9.0 m													*4460	*4460	2.27
7.5 m							*3840	*3840					*2830	*2830	5.07
6.0 m							*4170	*4170	*3510	3110			*2460	*2460	6.43
4.5 m					*4400	*4400	*4810	*4810	*4450	3160			*2350	2160	7.23
3.0 m					*10 160	8900	*6810	4910	*4820	3100	*3090	1990	*2370	1900	7.66
1.5 m			*7470	*7470	*11 390	*8680	7240	4730	4740	2990	3190	1930	*2520	1800	7.78
0 m	*6710	*6710	*7820	*7820	*11670	8090	7250	4370	4580	2790	3120	1870	*2820	1830	7.59
–1.5 m	*7880	*7880	*8410	*8410	*12 240	7690	7100	4140	4420	2640			*3380	2020	7.09
-3.0 m	*8110	*8110	*9910	*9910	*11720	7620	6930	4010	*3650	2600			*3070	2500	6.19

	0 m		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
<u> </u>	ŀ			F			ľ		ŀ		ľ	F		F	m
9.0 m					*3660	*3660							*3110	*3110	3.42
7.5 m							*3430	*3430					*2300	*2300	5.66
6.0 m							*3480	*3480	*3260	3170			*2060	*2060	6.9
4.5 m							*3920	*3920	*3800	3210	*2430	2040	*1990	1950	7.66
3.0 m					*8590	*8590	*5880	4900	4770	3150	3270	2030	*2030	1720	8.06
1.5 m			*12730	*12730	*11 440	8690	*7230	4820	*4730	3020	3210	1950	*2160	1630	8.17
0 m	*5390	*5390	*8120	*8120	*11 330	8250	7160	4420	4600	2830	3120	1860	*2430	1640	8
–1.5 m	*7220	*7220	*8190	*8190	*11 960	7700	7100	4140	4420	2640	*3050	1800	*2910	1790	7.52
–3.0 m	*7620	*7620	*9140	*9140	*12040	7530	6920	3980	4310	2530			*3210	2160	6.68
-4.5 m			*10 500	*10 500	*8780	7570	*4390	3960							



Load Radius Over Front

Load Radius Over Side



* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

Lift capacities with Variable Angle boom

All weights are in kg. Calculations are made without bucket, but with CW30 Quick Coupler.

Short stick		0 m		1.5	i m	3.0) m	4.5	m	6.0	m	7.5	m			
1850 mm	2 T		F	"	F		F		F		F	Ū,	F		-	m
Shoes	<u> </u>					*4510	*4510	<u> </u>				<u> </u>		*4390	*4390	3.8
600 mm	6.0 m					*5530	*5530	*4820	*4820					*3630	3420	5.5
	4.5 m					*8080	*8080	*6510	*5020	4830	3020			*3430	2590	6.4
	4.5 m					*10910	*8860	*7270	4940	4790	2970			*3470	2330	6.9
	1.5 m					*11 400	8520	7290	4590	4670	2840			3500	2100	7.0
	0 m			*8400	*8400	*12 020	7880	7300	4290	4510	2700			3610	2150	6.8
	-1.5 m			*9780		*12 180	7670	7110	4130	4420	2620			*3860	2440	6.3
	-3.0 m			*12 200		*9480	7660	*5320	4060	4420	2020			5000	2770	0.0
	0.0 11			12 200	12 200	0400	7000	5020	4000							
Medium stick		0	m	1.5	īm	3.0) m	4.5	im	6.0	m	7.5	5 m		-	
2250 mm	- TK	Į,			F			- Fly			-	- Fly		Ę,		m
Shoes						\square		\cup		Ľ				$\downarrow \cup$		
600 mm	7.5 m					*3730	*3730	*3580	*3580					*3420	*3420	4.5
	6.0 m					*4520	*4520	*4190	*4190	*3050	*3050			*2920	*2920	6.0
	4.5 m					*5700	*5700	*5750	5070	*4730	3130			*2780	2380	6.8
	3.0 m			*****	****	*10830	8940	*7070	4970	4870	3090			*2800	2080	7.3
	1.5 m			*4450	*4450	*10 890	*8830	7330	4710	4760	2950			*2980	1960	7.4
	0 m			*7580	*7580	*11 490	8080	7370	4390	4600	2780			3350	2010	7.2
	-1.5 m	*7870	*7870	*7900		*12170	7770	7190	4200	4470	2670			3740	2240	6.7
	3.0 m			*9470	*9470	*11 260	7790	*6560	4090							
Long stick		0		1.5		0.0		4.5		0.0						
2600 mm	भित		m	_	im) m	4.5	1	6.0		7.5	-	F Ø		
Shoes	$ \ge $		P		F				F		F	ŀ	F		F	m
600 mm	9.0 m													*4460	*4460	2.2
000 11111	7.5 m							*3840	*3840					*2830	*2830	5.0
	6.0 m							*4170	*4170	*3510	3150			*2460	*2460	6.4
	4.5 m					*4400	*4400	*4810	*4810	*4450	3190			*2350	2190	7.2
	3.0 m					*10160	9010	*6810	4970	4870	3140	*3090	2020	*2370	1930	7.6
	1.5 m			*7470	*7470		8770	7320	4780	4810	3010	3240	1960	*2520	1830	7.7
	0 m	*6710	*6710	*7820	*7820	*11670	8200	7320	4430	4640	2830	3170	1900	*2820	1860	7.5
	—1.5 m	*7880	*7880	*8410	*8410	*12240	7790	7200	4200	4480	2680			*3380	2050	7.0
	–3.0 m	*8110	*8110	*9910	*9910	*11720	7730	7040	4060	*3650	2640			*3070	2530	6.1
F																
Extra long stick		0		1.5) m	4.5		6.0		7.5				
3100 mm	N N N N N N N N N N N N N N N N N N N		F		F				F		F	Ę٥,	F			m
Shoes	9.0 m					*3660	*3660							*3110	*3110	3.4
600 mm	7.5 m							*3430	*3430					*2300	*2300	5.6
	6.0 m							*3480	*3480	*3260	3200			*2060	*2060	6.
	4.5 m							*3920	*3920	*3800	*3240	*2430	2070	*1990	1980	7.6
	3.0 m					*8590	*8590	*5880	4950	4820	3190	3310	2060	*2030	1750	8.0
	1.5 m			*12730	*12730	*11440	*8760	*7310	*4860	4790	3060	3260	1980	*2160	1660	8.1
	0 m	*5390	*5390	*8120		*11330	8350	7230	4480	4670	2870	3170	1890	*2430	1670	
	-1.5 m	*7220	*7220	*8190		*11960	7800	7200	4190	4490	2680	*3050	1830	*2910	1820	7.5
	-3.0 m	*7620	*7620	*9140	*9140		7630	7020	4040	4370	2570			*3210	2190	6.6
	-4.5 m		-	*10500	*10500		7670	*4390	4020	-				1		-

Z

Load Radius Over Side

Load at Maximum Reach

* Limited by hydraulic rather than tipping load.

Load Point Height

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

Load Radius Over Front

Short stick

1850 mm **Shoes** 700 mm

0 m 1.5 m 7.5 m 3.0 m 4.5 m 6.0 m Ž F. F F F P P F P Ą μŊ ۴٩ ۴Ą ۴Ą m μŊ 7.5 m *4510 *4510 *4390 *4390 3.88 6.0 m *5530 *5530 *4820 *4820 *3630 3490 5.55 *8080 *8080 *6510 5100 *3430 2640 6.47 4.5 m 4920 3070 3.0 m *10910 8940 *7270 5020 4890 3030 *3470 2280 6.94 1.5 m *11 400 8670 7400 4670 4770 2900 3580 2150 7.07 0 m *8400 *12 020 8030 7450 4370 4610 2760 3690 2200 6.87 *8400 –1.5 m *9780 *3860 2490 *9780 *12 180 7820 7260 4210 4520 2680 6.31 –3.0 m *12 200 *12 200 *9480 7800 *5320 4140

Medium stick

2250 mm Shoes

700 mm

		0 m		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
<u> </u>	·]	ŀ		ľ				ľ		J		ľ				m
7	.5 m					*3730	*3730	*3580	*3580					*3420	*3420	4.54
6	i.0 m					*4520	*4520	*4190	*4190	*3050	*3050			*2920	*2920	6.03
4	.5 m					*5700	*5700	*5750	*5140	*4730	3190			*2780	2420	6.88
3	8.0 m					*10 830	9090	*7070	5030	4960	3140			*2800	2120	7.33
1	.5 m			*4450	*4450	*10 890	8890	7450	4790	4850	3010			*2980	2010	7.45
	0 m			*7580	*7580	*11 490	8230	7450	4470	4690	2840			*3350	2050	7.26
-1	.5 m	*7870	*7870	*7900	*7900	*12 170	7920	7330	4280	4570	2720			*3800	2290	6.73
-3	8.0 m			*9470	*9470	*11 260	7930	*6560	4170							

Long stick

2600 mm **Shoes** 700 mm

	0 m		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
Ž	ŀ	F	ŀ	F		F	ł	F		P	ŀ	P			m
9.0 m													*4460	*4460	2.27
7.5 m							*3840	*3840					*2830	*2830	5.07
6.0 m							*4170	*4170	*3510	3200			*2460	*2460	6.43
4.5 m					*4400	*4400	*4810	*4810	*4450	3250			*2350	2240	7.23
3.0 m					*10 160	9150	*6810	*5050	*4950	3200	*3090	2060	*2370	1970	7.66
1.5 m			*7470	*7470	*11 390	8920	7440	4870	4900	3070	3310	2010	*2520	1870	7.78
0 m	*6710	*6710	*7820	*7820	*11670	8340	7400	4510	4740	2890	3250	1940	*2820	1900	7.59
–1.5 m	*7880	*7880	*8410	*8410	*12 240	7940	7340	4280	4580	2730			*3380	2090	7.09
–3.0 m	*8110	*8110	*9910	*9910	*11720	7870	*7160	4150	*3650	2700			*3070	2590	6.19

	0 m		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
<u> </u>	ŀ			F		F	ŀ		ľ		ľ		ľ		m
9.0 m					*3660	*3660							*3110	*3110	3.42
7.5 m							*3430	*3430					*2300	*2300	5.66
6.0 m							*3480	*3480	*3260	3250			*2060	*2060	6.9
4.5 m							*3920	*3920	*3800	3290	*2430	2120	*1990	*1990	7.66
3.0 m					*8590	*8590	*5880	5030	*4830	3250	3380	2100	*2030	1790	8.06
1.5 m			*12730	*12730	*11 440	8860	*7310	4920	*4860	3120	3320	2030	*2160	1700	8.17
0 m	*5390	*5390	*8120	*8120	*11 330	8500	*7330	4560	4770	2930	3230	1930	*2430	1710	8
–1.5 m	*7220	*7220	*8190	*8190	*11 960	7950	7350	4280	4580	2730	*3050	1870	*2910	1860	7.52
–3.0 m	*7620	*7620	*9140	*9140	*12 040	7780	7160	4120	4470	2630			*3210	2240	6.68
-4.5 m			*10 500	*10 500	*8780	7820	*4390	4100							

Extra long stick 3100 mm

Shoes 700 mm

Load Point Height

Load Radius Over Front

Ø

Load Radius Over Side



* Limited by hydraulic rather than tipping load.

The above loads are in compliance with hydraulic excavator lift capacity ratings standard ISO 10567, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

Standard Equipment

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

Electrical

55 Ampere alternator Light, storage box mounted (one) Signaling / Warning horn Caterpillar batteries (750 CCA)

Guards

Bottom guard Track motor guards

Operator environment

Sound and vibration suppressed cab with double wall cab shell Bolt-on FOGS capability Washable floor mat Integrated joystick consoles and suspended as part of seat arrangement Each joystick with 3 auxiliary functions and electrical wiring protection Fully adjustable standard suspension seat: Ergonomic design Adjustable armrests and headrest Four way adjustable (up-down, front-rear) Weight adjustment and retractable seatbelt Language display Multipro monitor: Warning information Filter/Fluid change information Working hour information Machine condition Error code Tool mode setting information and prognostic Start up level check for oil and coolant Full time clock (2 weeks after shut off) Cab windows: Clear tinted tempered glass except upper windshield: laminated glass Front windshield split glass by 50/50 Openable front windshield upper and lower with assist device Rear window, emergency exit

Sliding upper door window

Polycarbonate skylight Single windshield parallel wiper and washer Neutral lever lock out for all controls Travel control pedals with removable hand levers Platform with provision for two attachment control pedals Dial-type throttle Highly efficient ventilation system Heater and defroster Positive filtered ventilation, pressurized cab Radio mounting (DIN) on upper rear, with wiring, antenna and provision for 2 stereo speakers Ashtray with lighter Beverage holder, coat hook Storage compartment suitable for lunch box and literature holder Utility space for magazines Interior lighting 12V-5A Power supply (Cigar lighter type socket) **Powertrain**

Cat 3054E ATAAC diesel engine with electronic control of the injection pump Low Emission, Low Noise version 24 volt electric starting and electrical start aid One touch low idle with AEC Water separator in fuel line Stage II emission package Two speed travel with automatic shift change Straight line travel Variable displacement, Negative Flow Control hydraulic system

Undercarriage

Greased Lubricated Track undercarriage: 500 mm triple grouser shoes Hydraulic track adjuster Step group to meet EU regulations

Other standard equipment

Hydraulic cross sensing system Auxiliary hydraulic valve (high pressure) Auto regeneration control for boom and stick Reverse swing damping valve Automatic swing parking brake Hydraulic cylinder snubbers Boom and stick drift reducing valves Caterpillar XT hoses O-ring face seal couplings Over heat prevention system Hydraulic oil cooler Partial firewall between pump compartment and engine Electronic Power Unit Control, with internal diagnostic capabilities Capability of auxiliary circuit Capability of stackable valves for main valve Separate no-oil-drip hydraulic capsule filter avoiding spills and contamination during replacement Scheduled Oil Sampling port Remote greasing block (boom, swing bearing) Caterpillar Radial Seal Air Filter Rearview mirrors, frame-right and cab-left Counterweight Machine lifting point plate on counterweight Door and cap locks plus Caterpillar one key security system CE Mark package Stage II package to meet EU Sound regulation.

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

Backhoe

Boom: One-piece, with light, left side: 5100 mm Variable Angle Boom Stick: 3100 mm 2600 mm 2250 mm 1850 mm Boom lowering check valve Stick lowering check valve Bucket linkage Buckets and tips **CWTS** Quick Coupler Hydraulic attachments Tear drop pin conversion Bucket adjuster, B family

Electrical

Light: boom, right side working, cab mounted (two) Travel alarm

Operator environment

Air conditioner, with automatic climate control Air suspension seat Headrest Heating seat Special comfort packages Sun protective visor, windshield Radio AM/FM, Tape recorder Optional fully adjustable suspension seat: higher back seat

adjustable integrated consoles heater

Undercarriage

Grease lubricated track with: 600 mm triple grouser shoes 700 mm triple grouser shoes Custom products: Rubber pads 500 mm HD track 600 mm LGP 900/1400mm

Hydraulics

High pressure auxiliary hydraulic arrangements: single function arrangement combined function arrangement (includes 2 pump flow capability) two pump flow arrangement High pressure auxiliary hydraulic lines for boom and stick Medium pressure hydraulic arrangement Medium pressure hydraulic lines for boom and stick Quick coupler hydraulic arrangement Quick coupler hydraulic lines for boom and stick Clamshell actuator

Bio hydraulic oil package

Guards

Swivel guard Falling objects guard Bottom guard, heavy duty

Other attachments

Track guiding guard Cold weather starting kit, -32°C Electric refueling pump High ambient cooling (52°C), meeting EU requirements Swing out oil cooler Caterpillar Product Link 201 Converter 24-12V Compartment storage with LID Special paint Services instructions Versatility package

315C L Hydraulic Excavator

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Caterpillar dealer for available options. www.CAT.com © 2005 Caterpillar All Rights Reserved

CATERPILLAR®

HEHH2825-1 (06/2006) hr