

# 312D/312D L

Hydraulic Excavator

**CATERPILLAR**<sup>®</sup>



#### **Cat<sup>®</sup> C4.2 Engine with ACERT™ Technology**

Net Power (ISO 9249) at 2200 rpm 67 kW/91 hp

#### **Operating Weights**

312D L (long undercarriage) 13 670 kg

*Long undercarriage, 500 mm shoes,  
3000 mm stick, 0.52 m<sup>3</sup> bucket.*

## 312D/312D L Features

### Comfortable Operator Station

*Spacious and quiet, this world class ROPS cab lets the operator focus on performance and productivity.*

### Engine Power Combined with Low Emissions

*Move more material and respect the environment while using less fuel with the Cat C4.2 ACERT engine. The 312D meets EU Stage IIIA emissions regulations while providing additional power and performance.*

### Efficient Hydraulics

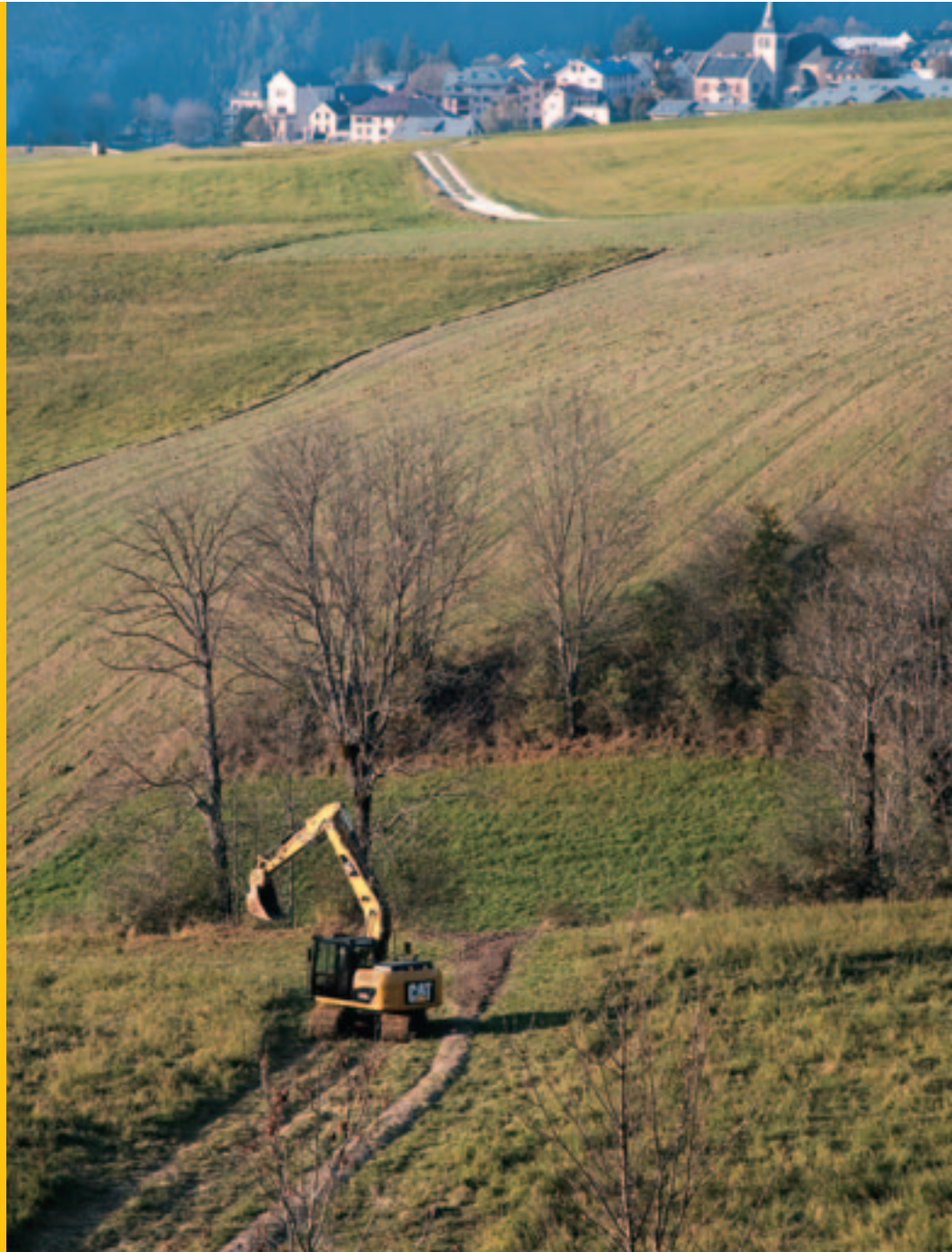
*The performant hydraulic system delivers more power for increased digging force, lifting ability and overall productivity.*

### 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.*



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**Achieve high productivity and lower operating costs with the Cat 312D and 312D L hydraulic excavators. Unmatched versatility, improved controllability, easy operation and a comfortable redesigned cab make the 312D 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 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. Both these attachments are optionally available.
- Low effort joystick controls are designed to match the operator's natural wrist and arm position. Joysticks can be operated with arms on the armrests. The horizontal and vertical strokes are designed to reduce fatigue.
  - To best suit your needs, two windshield options are available:  
70/30 split: the front windshield is split 70 (upper)/30 (lower) in order to provide maximum visibility. The upper part is slidable, assisted by a mechanism which reduces operator effort.
  - One piece highly resistant windshield (10 mm thick).

## Cab Exterior (ROPS)

The Falling Object Guard System (FOGS) can be directly bolted to the cab, enabling the machine to meet all specifications and job site requirements. Thicker steel tubes made according to the solid drawn process contribute to the rigidity of the 312D operator station.

A ROPS cab (Roll Over Protective Structure) is standard on CE-compliant units and provides 10% more glass area than the previous non-ROPS cab.

## Pre-start Check and Monitor Display

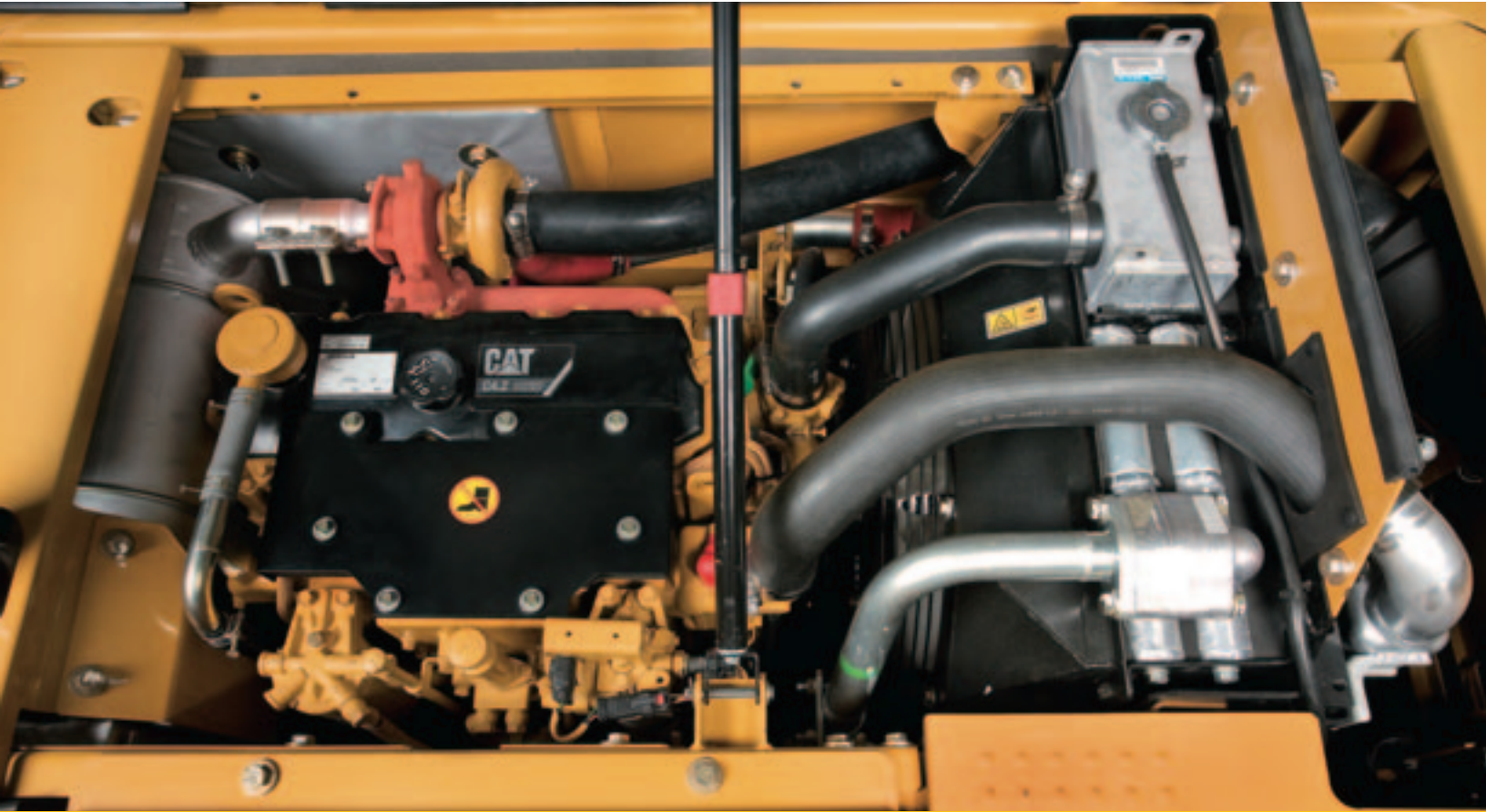
Take advantage of the entirely rethought monitor, designed to simplify machine use by acting as an operator-to-machine interface. It features:

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

## Cat Machine Security System

An optional Machine Security System (MSS) utilizes a programmable key, deterring theft, vandalism and unauthorized usage. MSS uses electronically coded keys selected by the customer to limit usage by individuals or time parameters.





# Engine

A clean, quiet and powerful engine helps to deliver 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. In conjunction with integrated electronics, ACERT Technology reduces emissions during the combustion process by using advanced technology in the air and fuel systems. The Cat C4.2 engine delivers exceptional power, allowing more hydraulic pressure to drive productivity and reduce your cost per ton of material moved.

## Fuel Economy

- **Automatic Engine Control, Fuel Delivery and Manual Low Idle Function.** A two-level control with one-touch command maximizes fuel efficiency and reduces sound levels during no-load or lighter-load applications. Fuel delivery is managed by the ADEM A4 Engine Controller for the best performance per liter of fuel used. Flexible fuel mapping allows the engine to respond quickly to varying application needs. Electronic controls govern the fuel injection system. Multiple injection fuel delivery involves a high level of precision. Consequently, the carefully shaped combustion cycle lowers the combustion chamber temperatures, generates fewer emissions and thus optimizes fuel consumption. For you, this means more work output for the same amount of fuel consumed.

- **Economy Mode.** A new Economy Mode function is now available: thanks to this device, you can adapt the performance of the machine to the work that needs to be done. By using a menu in the monitor, decide, whether you want to switch the Economy Mode on or off, and thus choose whether you want to operate fuel-efficiently or whether you want to use the full power of the machine, in order to boost productivity.
- **ODPS.** On Demand Power Supply is a new feature, constantly regulating engine power supply, based on the power demanded by the machine hydraulic system. This machine reduces fuel consumption and machine noise in light duty applications.

## Crankshaft and Pistons

A 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.

## Electronic Control Module (ECM)

The ECM works as the “brain” of the engine’s control system, responding quickly to the operating variables to maximize engine efficiency. Fully integrated with sensors in the engine’s fuel, air, coolant and exhaust systems, the ECM stores and relays data on conditions such as rpms, fuel consumption and diagnostics.

# Hydraulics

Low effort and precise control for highly efficient performance.



## Outstanding Performance

With two percent more hydraulic pressure for additional lift and breakout forces, the 312D's hydraulic system is designed for high efficiency and performance. The new compact design utilizes shorter tubes and lines, reducing friction and pressure drops, resulting in a more efficient use of power.

- Hydraulic snubbers at the rod end of the boom cylinders 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 under speed control electronically adjusts pump output so that it doesn't exceed engine power, preventing the need to reserve engine power to avoid engine stalls.
- Hydraulic cross sensing system uses two more hydraulic pumps up to 100 percent of engine power under all operating conditions, improving productivity with faster implement speeds and quicker, stronger pivot turns.

## Boom and Stick Regeneration Circuit

The boom and stick regeneration circuit saves energy during boom-down and stick-in operation, increasing efficiency and lowering operating costs. What is more, regeneration during boom down operations is electronically assisted. This system increases hydraulic flow regeneration, which leads to faster operations and reduced pressure loss, and hence improved fuel efficiency.

## Easy Operation

Work mode and power mode switches are eliminated making full power mode available at all times. Operators do not need to learn different modes, an automatic boom and swing priority function automatically selects the best mode based on joystick movement.

## Two Pump Flow

The two pump combined option, available with the single action control circuit option, allows for increased productivity in single action applications.

# 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.

## Standard or Long Undercarriage

The 312D will continue to be available in two different undercarriage versions: according to your needs, choose between:

- The 312D (standard undercarriage), which has a track length of 3490 mm
- The 312D L (long undercarriage) which has a track length of 3750 mm

## Blades

Two blades (2490 mm and 2780 mm) are optionally available with the 312D and 312D L for improved stability and lifting ability

## Improved Drawbar Pull

Drawbar pull has increased by 5%, which results in higher system pressure tolerance, so that you can enjoy improved maneuverability on slopes and in muddy underfoot conditions.

## 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 available to help maintain track alignment when traveling or working on slopes.

## Travel Motors

Travel Motors with automatic speed selection let the 312D automatically change up and down from high and low speeds in a smooth controlled manner.

## Grease Lubricated Tracks

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

## 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 4650 mm 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

An optional VA boom will continue to be available for the 312D, to suit all your applications in small space conditions, and thus achieve greater versatility.

### Stick

Three stick lengths are available (2100 mm, 2500 mm and 3000 mm), in order to offer maximum flexibility in machine configuration and therefore to meet a wide range of applications. What is more, all the boom and stick linkages of the 312D are compatible with those of the 312C.



# Versatility

More options for more work.

## Hydraulic and Pilot Configurations

High pressure systems, medium pressure systems and hydraulic controls are available as independent and combinable attachments to configure the most adapted machine to your specific job needs.

## Control Levers

An optional foot switch is available. This switch has two positions: ON/OFF, and does not provide modulation. Alternatively, an optional pedal 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. Additionally, a wide range of buckets are available to optimize machine performance. Auxiliary hydraulic and electrical lines are routed to the boom foot for easier installation of auxiliary hydraulic circuits, therefore reducing time, part and cost required to add a work tool. Furthermore, all pins are interchangeable between the C and the D series models.

## Tool Control

The Tool Control attachment is standard and offers up to 10 flow and pressure pre-settings, for easier and quicker tool readiness. Combined with the Quick Coupler, the tool control system allows you to change from one hydraulic work tool to the next without having to leave the cab.

## Quick Coupler

This hydraulic tool holder increases machine versatility by making the change from one hydraulic work tool to another quick and easy. Moreover, a Universal Quick Coupler control now accepts all hydraulic Quick Coupler systems with pressures ranging up to full machine pressure (350 bar).

## Medium Pressure Circuit

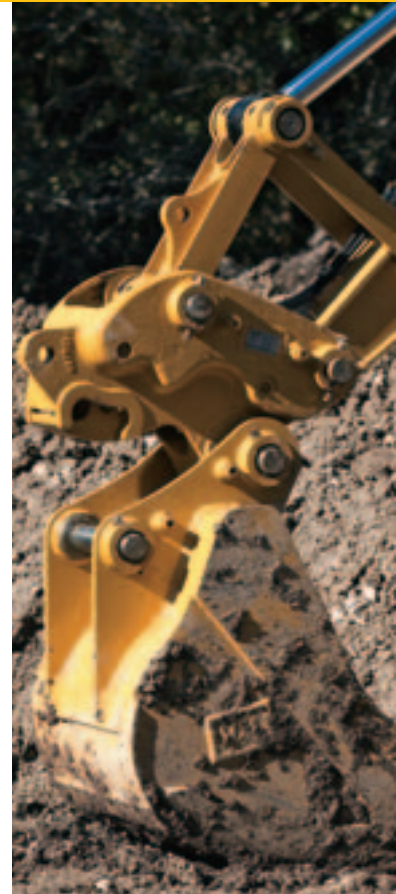
The Medium Pressure Circuit is available as an attachment for work tools requiring moderate hydraulic flow, such as rotating buckets or shears.

## Cat Product Link

The 312D is pre-wired to accept Product Link systems to install in the field or to order from the factory. Product Link assists with fleet management by tracking hours, location and machine health.

## High Ambient Cooling Package

Thanks to the new EU compliant High Ambient Cooling Package, take the machine to work in temperatures up to 48 °C.



# Serviceability

Simplified service and maintenance saves time and money.

Designed with the service technician in mind, many service locations are at ground level so 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.
- An optional electronic fuel water sensor is available to alert the operator when the water level is high.
- The Product Link assists with fleet management by tracking hours, 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.
- ROPS cab air filter accessible at ground level.

## Water Separator with Indicator

An optional water Separator with level indicator is optionally available, to alert the operator when the water level is high.

## Sampling Ports

Equipped with S•O•S sampling ports and test ports for hydraulics, engine oil and coolant for quick diagnostics. A test connection for the Cat Electronic technician (Cat ET) service tool is now 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 located in the compartment behind the cab.

## Capsule Filter

Capsule-type, hydraulic return oil filter is accessible from outside the tank and prevents contaminants from entering the system during hydraulic oil changes.



# Customer Support

Unmatched support makes the difference.

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Make detailed comparisons of the machines you are considering before you buy with estimates of component life, preventive maintenance and the true cost of production
- Customize the machine that is right for you by using Build and Quote applications on your dealer's website or [www.cat.com](http://www.cat.com)
- Get the latest training literature and trained staff
- Repair option programs guarantee the cost of repairs upfront
- Nearly all parts are available at dealer parts counters
- Financing packages are flexible to meet your needs
- Your Cat dealer can evaluate the cost involved in repairing, rebuilding and replacing your machine so you can make the right choice.



## Cat Product Link

Efficient feature to follow and support your machine anywhere.

The 312D/312D L can be equipped with Product Link PL321SR as optional feature.

This system provides permanent location, operating hours and machine health information through GPS ways and Internet tools.

Product Link improves machine availability and lowers operating costs.



# 312D/312D L Hydraulic Excavator Specifications

## Engine

Engine Model	Cat® C4.2 ACERT™
Gross Power	72 kW/98 hp
Net Power	
ISO 9249	67 kW/91 hp
80/1269/EEC	67 kW/91 hp
Bore	102 mm
Stroke	130 mm
Displacement	4.25 liter

- 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.
- The 312D/312D L meet EU Stage IIIA Directive 97/68/EC emissions requirements.

## Hydraulic System

Main Implement System	
Maximum Flow (2x)	127 l/min
Maximum Pressure	
Implements	305 bar
Travel	350 bar
Swing	230 bar
Pilot System	
Maximum Flow	22 l/min
Maximum Pressure	41 bar
Boom Cylinders	
Bore	110 mm
Stroke	1015 mm
Stick Cylinder	
Bore	120 mm
Stroke	1197 mm
Bucket Cylinder	
Bore	100 mm
Stroke	939 mm

## Sound

### Operator Sound

- The operator sound pressure level measured according to the procedures specified in ISO 6396:1992 is 72 dB(A), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.

### Exterior Sound

- The European Union 2000/14/EC labeled exterior sound power level is 98 dB(A) for the machines certified to that requirement.

## Operating Weights

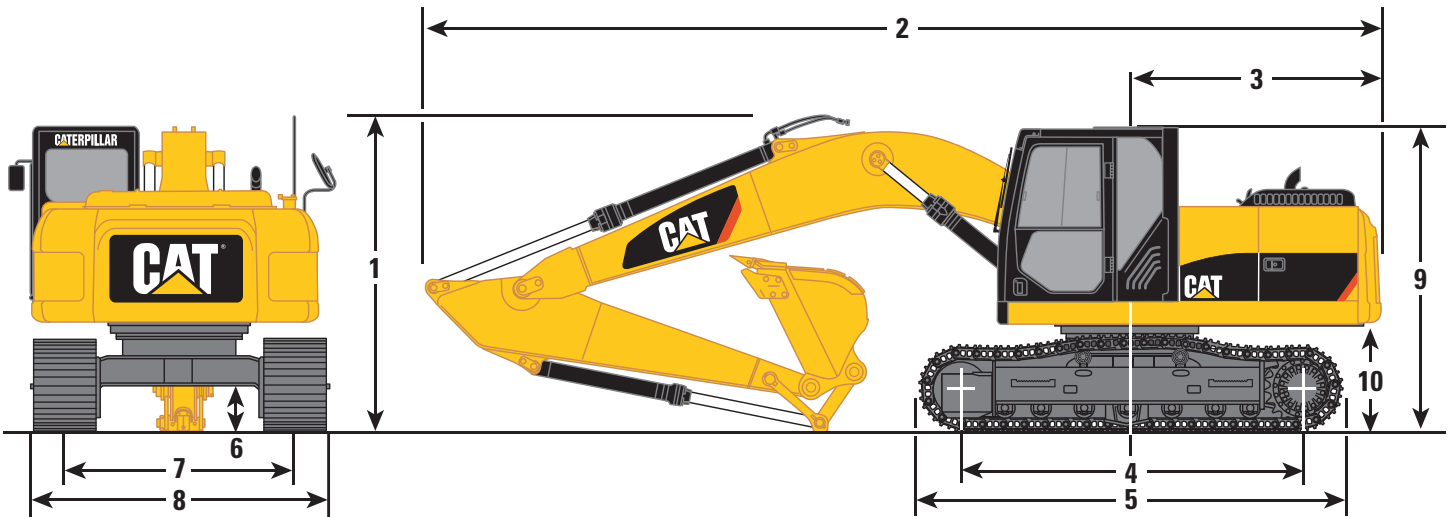
Weights will depend on final machine configuration.

### Reach Boom

Stick	Short	Medium	Long	Short	Medium	Long
	2100 mm	2500 mm	3000 mm	2100 mm	2500 mm	3000 mm
	Without Blade			With Blade		
	kg	kg	kg	kg	kg	kg
<b>312D</b>						
500 mm triple grouser shoes	13 060	13 100	13 120	13 850	13 890	13 920
600 mm triple grouser shoes	13 290	13 330	13 350	17 090	14 130	14 150
700 mm triple grouser shoes	13 540	13 580	13 610	14 350	14 390	14 420
770 mm triple grouser shoes	13 680	13 720	13 740	14 490	14 530	14 550
<b>312D L</b>						
500 mm triple grouser shoes	13 610	13 380	13 400	14 130	14 170	14 200
600 mm triple grouser shoes	13 590	13 630	13 650	14 380	14 420	14 450
700 mm triple grouser shoes	13 860	13 900	13 920	14 670	14 710	14 730
770 mm triple grouser shoes	14 000	14 040	14 070	14 810	14 850	14 880

## Dimensions with Reach Boom and VA Boom

All dimensions are approximate.



Boom	Reach Boom			VA Boom			
	mm	2100	2500	3000	2100	2500	3000
<b>1</b> Shipping height	mm	2830	2970	2830	2830	2970	2830
<b>2</b> Shipping length	mm	7610	7590	7610	7610	7590	7610
<b>3</b> Tail swing radius	mm	2140	2140	2140	2140	2140	2140
<b>4</b> Length to centers of idler and sprocket							
312D	mm	2780	2780	2780	2780	2780	2780
312D L	mm	3040	3040	3040	3040	3040	3040
<b>5</b> Track length							
312D	mm	3490	3490	3490	3490	3490	3490
312D L	mm	3750	3750	3750	3750	3750	3750
<b>6</b> Ground clearance	mm	430	430	430	430	430	430
<b>7</b> Track gauge	mm	1990	1990	1990	1990	1990	1990
<b>8</b> Transport width (500 mm shoes)	mm	500	600	700	500	600	700
312D	mm	2490	2590	2690	2490	2590	2690
312D L	mm	2490	2590	2690	2490	2590	2690
<b>9</b> Cab height	mm	2760	2760	2760	2760	2760	2760
<b>10</b> Counterweight clearance	mm	915	915	915	915	915	915

### Swing Mechanism

Maximum Swing Torque	31 kNm
Maximum Swing Speed	12.4 rpm

### Drive

Maximum Drawbar Pull	114 kN
Maximum Travel Speed	5.5 km/h

### Service Refill Capacities

	liter
Fuel Tank	250
Cooling System	18
Engine Oil	20
Swing Drive	3
Final Drive (each)	3
Hydraulic System (including tank)	162
Hydraulic Tank	150

### Cab/ROPS/FOGS

- Caterpillar cab with integrated Roll Over Protective Structure (ROPS) meets ISO 12117-2:2008 criteria.
- Bolt-on Falling Object Guard System (FOGS) is available as an attachment. Optional Falling Object Guard System is designed to protect the operator from falling objects, and is certified under ISO 3449-1984 specifications.

# 312D/312D L Hydraulic Excavator Specifications

## Bucket Specifications

Without Quick Coupler	Width	Capacity (ISO)	Weight*	312D			312D L		
	mm	m <sup>3</sup>	kg	2100 mm	2500 mm	3000 mm	2100 mm	2500 mm	3000 mm
Excavation	600	0.28	316						
	750	0.38	336						
	900	0.49	375						
	1000	0.56	397						
	1100	0.64	430						
	1200	0.72	453						
Extreme Excavation	500	0.21	314						
	1200	0.72	463						
Maximum load in kg (payload plus bucket)				1720	1592	1402	1764	1633	1439
<b>With Quick Coupler</b>									
Excavation	450	0.18	301						
	500	0.21	310						
	600	0.28	330						
	750	0.38	340						
	900	0.49	375						
	1000	0.56	398						
	1100	0.64	432						
	1200	0.72	455			N			N
Extreme Excavation	500	0.21	312						
	600	0.28	334						
	1200	0.72	465			N			N
Maximum load in kg (payload plus bucket)				1720	1592	1402	1764	1633	1439

- Max. Material Density 1200 kg/m<sup>3</sup>
- Max. Material Density 1500 kg/m<sup>3</sup>
- Material Density 1800 kg/m<sup>3</sup> and more
- N Not recommended

\* Bucket weight including penetration plus tips

## Typical Material Densities


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


\* Kilograms per loose cubic meter


## 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.

Without quick coupler		312D			312D L		
		mm	2100	2500	3000	2100	2500
Hammers	H90C						
	H100C						
	H115 S						
Hydraulic Shear (boom mounted)		S320					
Multi-Grapples		G310B-D					
		G310B-R					
Vibratory Plate Compactor		CVP75					
Orange Peel Grapples	5 tines	GSH9B-300					
	4 tines	GSH9B-300					
	5 tines	GSH9B-400					
	4 tines	GSH9B-400					
	5 tines	GSH15B-400		×	×		
	4 tines	GSH15B-400			×		
	5 tines	GSH15B-500	×	×	×		
	4 tines	GSH15B-500		×	×		
	5 tines	GSH15B-600	×	×	×		×
	4 tines	GSH15B-600	×	×	×		
	5 tines	GSH15B-800	×	×	×		×
	4 tines	GSH15B-800	×	×	×		×
Rehandling Clamshell Buckets	GOS20-220						
	GOS20-260						
	GOS20-300						
	GOS20-400						
	GOS20-560						
	GOS20-680						
	GOS20-730						
	GOS25-460						
	GOS25-520						
	GOS25-580						
	GOS25-750				×		
	GOS25-900		×	×	×		
	GOS25-990		×	×	×		
GOS25-1140		×	×	×		×	
<b>With quick coupler</b>							
Quick Coupler	CW-20						
	CW-20s						
Hammers	H90C						
	H100C						
	H115 S						
Multi-Grapples		G310B-D		×	×		×
		G310B-R		×	×		×
Vibratory Plate Compactor		CVP75					

 Maximum Material density 3000 kg/m<sup>3</sup>

 Maximum Material density 1800 kg/m<sup>3</sup>

 Maximum Material density 1200 kg/m<sup>3</sup>

 Not Compatible

 360° Working Range

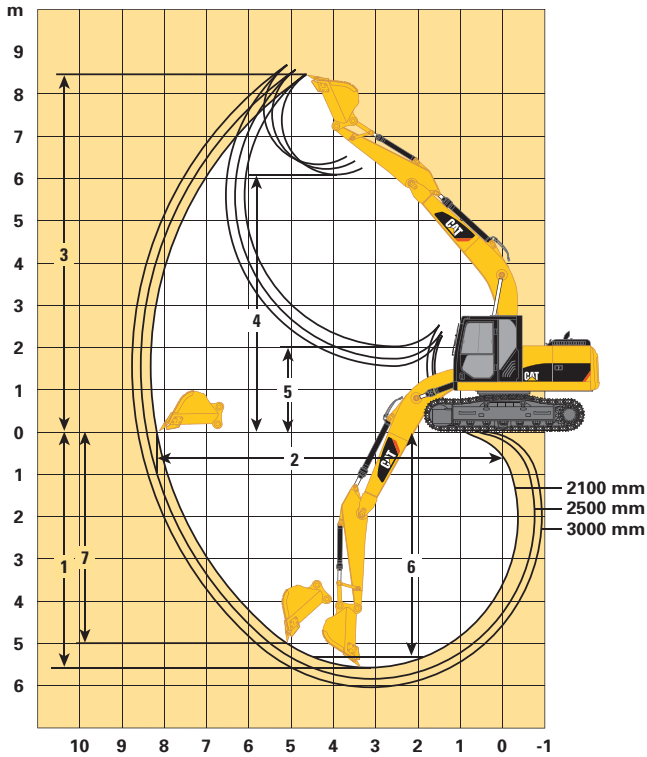
 Over the front only

 Available

# 312D/312D L Hydraulic Excavator Specifications

## Working Ranges with Reach Boom

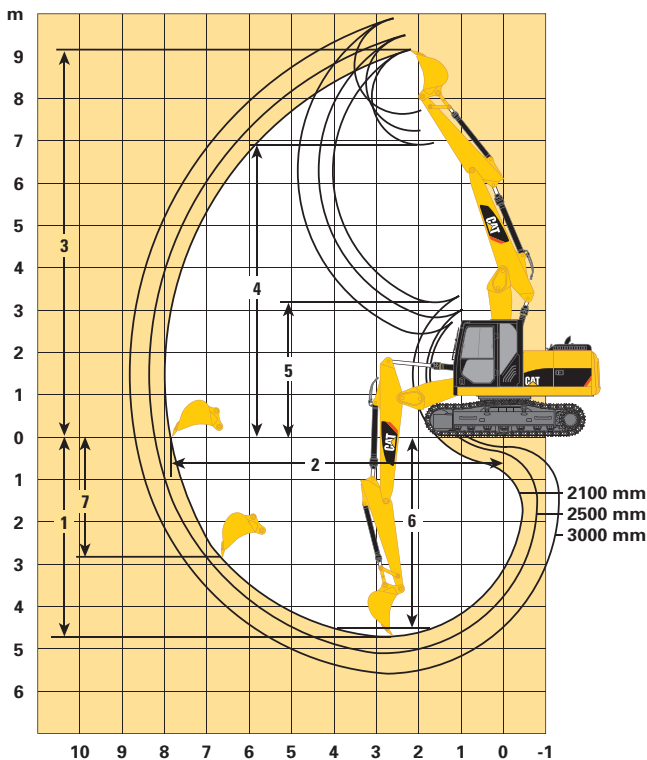
All measurements are approximate



Stick Options	mm	2100	2500	3000
<b>Bucket</b>	<b>m<sup>3</sup></b>	<b>0.52</b>	<b>0.52</b>	<b>0.52</b>
1 Maximum Digging Depth	mm	5540	5840	6040
2 Maximum Reach at Ground Level	mm	8170	8430	8620
3 Maximum Cutting Height	mm	8480	8580	8700
4 Maximum Loading Height	mm	6100	6210	6340
5 Minimum Loading Height	mm	2020	1730	1530
6 Maximum Depth Cut for 2.5 m Level Bottom	mm	5330	5640	5850
7 Maximum Vertical Wall Digging Depth	mm	4980	5160	5360
Stick Digging Force (ISO 6015)	kN	66	62	59
Bucket Digging Force (ISO 6015)	kN	96	96	96

## Working Ranges with VA Boom

All measurements are approximate

















Stick Options	mm	2100	2500	3000
<b>Bucket</b>	<b>m<sup>3</sup></b>	<b>0.68</b>	<b>0.68</b>	<b>0.68</b>
1 Maximum Digging Depth	mm	4731	5128	5612
2 Maximum Reach at Ground Level	mm	7836	8223	8677
3 Maximum Cutting Height	mm	9140	9489	9887
4 Maximum Loading Height	mm	6914	7268	7649
5 Minimum Loading Height	mm	3188	2835	2439
6 Maximum Depth Cut for 2.5 m Level Bottom	mm	4538	4904	5341
7 Maximum Vertical Wall Digging Depth	mm	2844	3160	3643















## Lift Capacities with Reach Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.















**312D**  
**Short stick – 2100 mm**  
**Shoes – 600 mm**  
**Standard counterweight – 2450 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m					*1500	*1500					*1350	*1350	5.19
4.5 m					*3150	*3150	*1750	*1750			*1600	*1600	6.21
3.0 m			*5450	*5450	*4100	3500	3100	2200			*2100	1800	6.76
1.5 m			*2700	*2700	4650	3200	3000	2100			*2300	1700	6.94
Ground Line			*2500	*2500	*3600	3000	2900	2000			2450	1700	6.78
-1.5 m	*2900	*2900	*2500	*2500	*3450	2950	2850	2000			2700	1850	6.27
-3.0 m	*2500	*2500	*2650	*2650	*4050	3000					3450	2400	5.29















**312D**  
**Medium stick – 2500 mm**  
**Shoes – 600 mm**  
**Standard counterweight – 2450 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m											*1350	*1350	5.70
4.5 m							*2000	*2000			*1600	*1600	6.64
3.0 m			*4750	*4750	*3750	3550	3150	2250			*1750	1700	7.15
1.5 m			*2900	*2900	4700	3300	3050	2150			*1850	1550	7.32
Ground Line			*2450	*2450	*3600	3050	2900	2050			*2100	1550	7.18
-1.5 m	*2650	*2650	*2450	*2450	*3300	2950	2850	2000			2450	1700	6.70
-3.0 m	*2400	*2400	*2550	*2550	*3600	2950					3050	2100	5.79
-4.5 m			*2950	*2950							*4300	3450	4.20

**312D**  
**Long stick – 3000 mm**  
**Shoes – 600 mm**  
**Standard counterweight – 2450 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m							*1400	*1400			*1350	*1350	6.26
4.5 m							*2250	*2250			*1550	*1550	7.13
3.0 m					*3300	*3300	*3000	2250	*1850	1550	*1550	1500	7.61
1.5 m			*3300	*3300	*4350	3300	3050	2150	2150	1500	*1650	1400	7.77
Ground Line	*2600	*2600	*2550	*2550	*3750	3050	2900	2000	2050	1450	*1850	1400	7.63
-1.5 m	*2450	*2450	*2450	*2450	*3250	2900	2800	1950			2150	1500	7.18
-3.0 m	*2350	*2350	*2500	*2500	*3350	2900	2800	1950			2600	1800	6.35
-4.5 m	*2400	*2400	*2750	*2750	*4150	3000					3850	2650	4.94

**312D**  
**Short stick – 2100 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m					*1500	*1500					*1350	*1350	5.19
4.5 m					*3150	*3150	*1750	*1750			*1600	*1600	6.21
3.0 m			*5450	*5450	*4100	3600	3200	2300			*2100	1900	6.76
1.5 m			*2700	*2700	4800	3350	3100	2200			*2300	1750	6.94
Ground Line			*2500	*2500	*3600	3150	3000	2100			2500	1750	6.78
-1.5 m	*2900	*2900	*2500	*2500	*3450	3050	2950	2050			2800	1950	6.27
-3.0 m	*2500	*2500	*2650	*2650	*4050	3100					3600	2500	5.29



Load Point Height



Load Radius Over Front



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.















# 312D/312D L Hydraulic Excavator Specifications

## Lift Capacities with Reach Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.















### 312D

**Medium stick – 2500 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m						
													m		
6.0 m												*1350	*1350	5.70	
4.5 m							*2000	*2000				*1600	*1600	6.64	
3.0 m					*4750	*4750	*3750	3700	3250	2350			*1750	*1750	7.15
1.5 m					*2900	*2900	*4800	3400	3150	2250			*1850	1650	7.32
Ground Line					*2450	*2450	*3600	3200	3000	2100			*2100	1650	7.18
-1.5 m	*2650	*2650	*2450	*2450	*3300	3100	2950	2050					2550	1800	6.70
-3.0 m	*2400	*2400	*2550	*2550	*3600	3100							3150	2200	5.79
-4.5 m			*2950	*2950									*4300	3600	4.20















### 312D

**Long stick – 3000 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m						
													m		
6.0 m							*1400	*1400				*1350	*1350	6.26	
4.5 m							*2250	*2250				*1550	*1550	7.13	
3.0 m					*3300	*3300	*3000	2350	*1850	1600		*1550	*1550	7.61	
1.5 m					*3300	*3300	*4350	3450	3150	2250	2200	1550	*1650	1450	7.77
Ground Line	*2600	*2600	*2550	*2550	*3750	3200	3000	2100	2150	1500		*1850	1450	7.63	
-1.5 m	*2450	*2450	*2450	*2450	*3250	3050	2900	2000				2250	1550	7.18	
-3.0 m	*2350	*2350	*2500	*2500	*3350	3000	2900	2000				2700	1850	6.35	
-4.5 m	*2400	*2400	*2750	*2750	*4150	3100						3950	2750	4.94	















### 312D L

**Short stick – 2100 mm**  
**Shoes – 600 mm**  
**Standard counterweight – 2450 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m					
													m	
6.0 m					*1500	*1500						*1350	*1350	5.19
4.5 m					*3150	*3150	*1750	*1750				*1600	*1600	6.21
3.0 m					*5450	*5450	*4100	3550	*3550	2250		*2100	1850	6.76
1.5 m					*2700	*2700	*5050	3300	3450	2150		*2300	1750	6.94
Ground Line					*2500	*2500	*3600	3100	3350	2050		*2650	1750	6.78
-1.5 m	*2900	*2900	*2500	*2500	*3450	3000	3300	2050				3100	1900	6.27
-3.0 m	*2500	*2500	*2650	*2650	*4050	3050						4000	2450	5.29

### 312D L

**Medium stick – 2500 mm**  
**Shoes – 600 mm**  
**Standard counterweight – 2450 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m					
													m	
6.0 m												*1350	*1350	5.70
4.5 m							*2000	*2000				*1600	*1600	6.64
3.0 m					*4750	*4750	*3750	3600	*3350	2300		*1750	1700	7.15
1.5 m					*2900	*2900	*4800	3350	3450	2200		*1850	1600	7.32
Ground Line					*2450	*2450	*3600	3150	3350	2100		*2100	1600	7.18
-1.5 m	*2650	*2650	*2450	*2450	*3300	3050	3300	2050				*2600	1750	6.70
-3.0 m	*2400	*2400	*2550	*2550	*3600	3050						3500	2150	5.79
-4.5 m			*2950	*2950								*4300	3500	4.20



Load Point Height



Load Radius Over Front



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.

## Lift Capacities with Reach Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.














### 312D L

Long stick – 3000 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

No Blade

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
												m	
6.0 m							*1400	*1400			*1350	*1350	6.26
4.5 m							*2250	*2250			*1550	*1550	7.13
3.0 m					*3300	*3300	*3000	2300	*1850	1600	*1550	1550	7.61
1.5 m			*3300	*3300	*4350	3400	3450	2200	2450	1550	*1650	1450	7.77
Ground Line	*2600	*2600	*2550	*2550	*3750	3150	3350	2050	*2400	1450	*1850	1450	7.63
-1.5 m	*2450	*2450	*2450	*2450	*3250	3000	3250	2000			*2250	1550	7.18
-3.0 m	*2350	*2350	*2500	*2500	*3350	2950	3250	2000			3000	1850	6.35
-4.5 m	*2400	*2400	*2750	*2750	*4150	3050					*4050	2700	4.94














### 312D L

Short stick – 2100 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
												m	
6.0 m					*1500	*1500					*1350	*1350	5.19
4.5 m					*3150	*3150	*1750	*1750			*1600	*1600	6.21
3.0 m			*5450	*5450	*4100	*4100	*3550	2650			*2100	*2100	6.76
1.5 m			*2700	*2700	*5050	3850	*3950	2550			*2300	2050	6.94
Ground Line			*2500	*2500	*3600	*3600	*4250	2450			*2650	2050	6.78
-1.5 m	*2900	*2900	*2500	*2500	*3450	*3450	*4300	2400			*3400	2300	6.27
-3.0 m	*2500	*2500	*2650	*2650	*4050	3650					*4300	2900	5.29














### 312D L

Medium stick – 2500 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
												m	
6.0 m											*1350	*1350	5.70
4.5 m							*2000	*2000			*1600	*1600	6.64
3.0 m			*4750	*4750	*3750	*3750	*3350	2700			*1750	*1750	7.15
1.5 m			*2900	*2900	*4800	3950	*3800	2550			*1850	*1850	7.32
Ground Line			*2450	*2450	*3600	*3600	*4200	2450			*2100	1900	7.18
-1.5 m	*2650	*2650	*2450	*2450	*3300	*3300	*4350	2400			*2600	2100	6.70
-3.0 m	*2400	*2400	*2550	*2550	*3600	*3600					*3850	2550	5.79
-4.5 m			*2950	*2950							*4300	4200	4.20














### 312D L

Long stick – 3000 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
												m	
6.0 m							*1400	*1400			*1350	*1350	6.26
4.5 m							*2250	*2250			*1550	*1550	7.13
3.0 m					*3300	*3300	*3000	2700	*1850	*1850	*1550	*1550	7.61
1.5 m			*3300	*3300	*4350	4000	*3500	2550	*2450	1800	*1650	*1650	7.77
Ground Line	*2600	*2600	*2550	*2550	*3750	3700	*4000	2450	*2400	1750	*1850	1700	7.63
-1.5 m	*2450	*2450	*2450	*2450	*3250	*3250	*4250	2350			*2250	1850	7.18
-3.0 m	*2350	*2350	*2500	*2500	*3350	*3350	*4100	2350			*3100	2200	6.35
-4.5 m	*2400	*2400	*2750	*2750	*4150	3650					*4050	3200	4.94















# 312D/312D L Hydraulic Excavator Specifications

## Lift Capacities with Reach Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.















### 312D L

**Short stick – 2100 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m					*1500	*1500					*1350	*1350	5.19
4.5 m					*3150	*3150	*1750	*1750			*1600	*1600	6.21
3.0 m			*5450	*5450	*4100	3700	*3550	2350			*2100	1950	6.76
1.5 m			*2700	*2700	*5050	3400	3550	2250			*2300	1800	6.94
Ground Line			*2500	*2500	*3600	3200	3450	2150			*2650	1800	6.78
-1.5 m	*2900	*2900	*2500	*2500	*3450	3150	3400	2100			3200	2000	6.27
-3.0 m	*2500	*2500	*2650	*2650	*4050	3200					4150	2550	5.29















### 312D L

**Medium stick – 2500 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m											*1350	*1350	5.70
4.5 m							*2000	*2000			*1600	*1600	6.64
3.0 m			*4750	*4750	*3750	3750	*3350	2400			*1750	*1750	7.15
1.5 m			*2900	*2900	*4800	3500	3600	2300			*1850	1650	7.32
Ground Line			*2450	*2450	*3600	3250	3450	2150			*2100	1700	7.18
-1.5 m	*2650	*2650	*2450	*2450	*3300	3150	3400	2100			*2600	1850	6.70
-3.0 m	*2400	*2400	*2550	*2550	*3600	3150					3600	2250	5.79
-4.5 m			*2950	*2950							*4300	3650	4.20















### 312D L

**Long stick – 3000 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m							*1400	*1400			*1350	*1350	6.26
4.5 m							*2250	*2250			*1550	*1550	7.13
3.0 m					*3300	*3300	*3000	2400	*1850	1650	*1550	*1550	7.61
1.5 m			*3300	*3300	*4350	3500	*3500	2250	*2450	1600	*1650	1500	7.77
Ground Line	*2600	*2600	*2550	*2550	*3750	3250	3450	2150	*2400	1550	*1850	1500	7.63
-1.5 m	*2450	*2450	*2450	*2450	*3250	3100	3350	2050			*2250	1600	7.18
-3.0 m	*2350	*2350	*2500	*2500	*3350	3100	3350	2050			3100	1900	6.35
-4.5 m	*2400	*2400	*2750	*2750	*4150	3200					*4050	2800	4.94

### 312D L

**Short stick – 2100 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**Blade down**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
6.0 m					*1500	*1500					*1350	*1350	5.19
4.5 m					*3150	*3150	*1750	*1750			*1600	*1600	6.21
3.0 m			*5450	*5450	*4100	*4100	*3550	2750			*2100	*2100	6.76
1.5 m			*2700	*2700	*5050	4000	*3950	2650			*2300	2100	6.94
Ground Line			*2500	*2500	*3600	*3600	*4250	2550			*2650	2150	6.78
-1.5 m	*2900	*2900	*2500	*2500	*3450	*3450	*4300	2500			*3400	2350	6.27
-3.0 m	*2500	*2500	*2650	*2650	*4050	3750					*4300	3000	5.29



Load Point Height



Load Radius Over Front



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.

## Lift Capacities with Reach Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.















### 312D L

Medium stick – 2500 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m					
													m	
6.0 m												*1350	*1350	5.70
4.5 m							*2000	*2000				*1600	*1600	6.64
3.0 m			*4750	*4750	*3750	*3750	*3350	2800				*1750	*1750	7.15
1.5 m			*2900	*2900	*4800	4100	*3800	2650				*1850	*1850	7.32
Ground Line			*2450	*2450	*3600	*3600	*4200	2550				*2100	2000	7.18
-1.5 m	*2650	*2650	*2450	*2450	*3300	*3300	*4350	2500				*2600	2150	6.70
-3.0 m	*2400	*2400	*2550	*2550	*3600	*3600						*3850	2650	5.79
-4.5 m			*2950	*2950								*4300	*4300	4.20















### 312D L

Long stick – 3000 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m					
													m	
6.0 m							*1400	*1400				*1350	*1350	6.26
4.5 m							*2250	*2250				*1550	*1550	7.13
3.0 m					*3300	*3300	*3000	2800	*1850	*1850		*1550	*1550	7.61
1.5 m			*3300	*3300	*4350	4100	*3500	2650	*2450	1900		*1650	*1650	7.77
Ground Line	*2600	*2600	*2550	*2550	*3750	*3750	*4000	2550	*2400	1850		*1850	1800	7.63
-1.5 m	*2450	*2450	*2450	*2450	*3250	*3250	*4250	2450				*2250	1900	7.18
-3.0 m	*2350	*2350	*2500	*2500	*3350	*3350	*4100	2450				*3100	2300	6.35
-4.5 m	*2400	*2400	*2750	*2750	*4150	3800						*4050	3300	4.94

# 312D/312D L Hydraulic Excavator Specifications

## Lift Capacities with VA Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.















### 312D

**Short stick** – 2100 mm

**Shoes** – 600 mm

**Standard counterweight** – 2450 kg

**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	3.56
6.0 m			*1700	*1700	*1350	*1350					*1350	*1350	5.39
4.5 m			*4800	*4800	*1800	*1800	*1650	*1650			*1600	*1600	6.38
3.0 m	*3000	*3000	*4950	*4950	*3400	*3400	*2000	*2000			*1850	1700	6.91
1.5 m	*2450	*2450	*2600	*2600	*4000	3150	*2400	2050			*1950	1600	7.09
Ground Line	*2500	*2500	*2450	*2450	*3450	2900	2850	1950			*2250	1600	6.93
-1.5 m	*2450	*2450	*2500	*2500	*3350	2850	2800	1900			2550	1750	6.43
-3.0 m	*2450	*2450	*2650	*2650	*3350	2900					*2750	2300	5.34















### 312D

**Medium stick** – 2500 mm

**Shoes** – 600 mm

**Standard counterweight** – 2450 kg

**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	4.29
6.0 m					*1350	*1350					*1300	*1300	5.89
4.5 m			*3750	*3750	*2300	*2300	*1500	*1500			*1500	*1500	6.81
3.0 m	*3900	*3900	*5050	*5050	*3100	*3100	*1650	*1650			*1500	*1500	7.31
1.5 m	*2400	*2400	*2800	*2800	*3700	3200	*1900	*1900			*1600	1450	7.48
Ground Line	*2400	*2400	*2450	*2450	*3500	2950	*2350	1950			*1800	1450	7.33
-1.5 m	*2400	*2400	*2450	*2450	*3200	2850	2800	1900			*2200	1600	6.86
-3.0 m	*2400	*2400	*2550	*2550	*3450	2850					*2400	1950	5.98















### 312D

**Long stick** – 3000 mm

**Shoes** – 600 mm

**Standard counterweight** – 2450 kg

**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m					*1200	*1200					*1200	*1200	5.04
6.0 m					*1550	*1550	*1350	*1350			*1350	*1350	6.45
4.5 m					*2700	*2700	*1400	*1400			*1350	*1350	7.30
3.0 m			*4500	*4500	*3100	*3100	*1500	*1500	*1400	*1400	*1400	*1400	7.77
1.5 m	*2400	*2400	*3200	*3200	*3350	3250	*1750	*1750	*1550	1450	*1450	1300	7.92
Ground Line	*2350	*2350	*2500	*2500	*3600	3000	*2100	1950	*1800	1400	*1600	1300	7.79
-1.5 m	*2350	*2350	*2450	*2450	*3200	2800	2750	1850			*1950	1400	7.35
-3.0 m	*2350	*2350	*2500	*2500	*3250	2800	2750	1850			*2450	1650	6.54
-4.5 m	*2500	*2500	*2900	*2900							*3500	3100	4.35















### 312D

**Short stick** – 2100 mm

**Shoes** – 600 mm

**Heavy counterweight** – 2650 kg

**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	3.56
6.0 m			*1700	*1700	*1350	*1350					*1350	*1350	5.39
4.5 m			*4800	*4800	*1800	*1800	*1650	*1650			*1600	*1600	6.38
3.0 m	*3000	*3000	*4950	*4950	*3400	*3400	*2000	*2000			*1850	1800	6.91
1.5 m	*2450	*2450	*2600	*2600	*4000	3250	*2400	2150			*1950	1650	7.09
Ground Line	*2500	*2500	*2450	*2450	*3450	3050	*2850	2050			*2250	1650	6.93
-1.5 m	*2450	*2450	*2500	*2500	*3350	2950	2900	2000			2650	1800	6.43
-3.0 m	*2450	*2450	*2650	*2650	*3350	3000					*2750	2400	5.34



Load Point Height



Load Radius Over Front



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.

# 312D/312D L Hydraulic Excavator Specifications















## Lift Capacities with VA Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.















**312D**  
**Medium stick – 2500 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	4.29
6.0 m					*1350	*1350					*1300	*1300	5.89
4.5 m			*3750	*3750	*2300	*2300	*1500	*1500			*1500	*1500	6.81
3.0 m	*3900	*3900	*5050	*5050	*3100	*3100	*1650	*1650			*1500	*1500	7.31
1.5 m	*2400	*2400	*2800	*2800	*3700	3350	*1900	*1900			*1600	1550	7.48
Ground Line	*2400	*2400	*2450	*2450	*3500	3100	*2350	2050			*1800	1550	7.33
-1.5 m	*2400	*2400	*2450	*2450	*3200	3000	2900	2000			*2200	1650	6.86
-3.0 m	*2400	*2400	*2550	*2550	*3450	3000					*2400	2050	5.98















**312D**  
**Long stick – 3000 mm**  
**Shoes – 600 mm**  
**Heavy counterweight – 2650 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m					*1200	*1200					*1200	*1200	5.04
6.0 m					*1550	*1550	*1350	*1350			*1350	*1350	6.45
4.5 m					*2700	*2700	*1400	*1400			*1350	*1350	7.30
3.0 m			*4500	*4500	*3100	*3100	*1500	*1500	*1400	*1400	*1400	*1400	7.77
1.5 m	*2400	*2400	*3200	*3200	*3350	*3350	*1750	*1750	*1550	1500	*1450	1350	7.92
Ground Line	*2350	*2350	*2500	*2500	*3600	3100	*2100	2050	*1800	1450	*1600	1350	7.79
-1.5 m	*2350	*2350	*2450	*2450	*3200	2950	2850	1950			*1950	1450	7.35
-3.0 m	*2350	*2350	*2500	*2500	*3250	2900	2850	1950			*2450	1750	6.54
-4.5 m	*2500	*2500	*2900	*2900							*3500	3200	4.35

**312D L**  
**Short stick – 2100 mm**  
**Shoes – 600 mm**  
**Standard counterweight – 2450 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	3.56
6.0 m			*1700	*1700	*1350	*1350					*1350	*1350	5.39
4.5 m			*4800	*4800	*1800	*1800	*1650	*1650			*1600	*1600	6.38
3.0 m	*3000	*3000	*4950	*4950	*3400	*3400	*2000	*2000			*1850	1750	6.91
1.5 m	*2450	*2450	*2600	*2600	*4000	3200	*2400	2100			*1950	1600	7.09
Ground Line	*2500	*2500	*2450	*2450	*3450	3000	*2850	2000			*2250	1600	6.93
-1.5 m	*2450	*2450	*2500	*2500	*3350	2900	3250	1950			*2800	1800	6.43
-3.0 m	*2450	*2450	*2650	*2650	*3350	2950					*2750	2350	5.34

**312D L**  
**Medium stick – 2500 mm**  
**Shoes – 600 mm**  
**Standard counterweight – 2450 kg**  
**No Blade**

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	4.29
6.0 m					*1350	*1350					*1300	*1300	5.89
4.5 m			*3750	*3750	*2300	*2300	*1500	*1500			*1500	*1500	6.81
3.0 m	*3900	*3900	*5050	*5050	*3100	*3100	*1650	*1650			*1500	*1500	7.31
1.5 m	*2400	*2400	*2800	*2800	*3700	3300	*1900	*1900			*1600	1500	7.48
Ground Line	*2400	*2400	*2450	*2450	*3500	3050	*2350	2000			*1800	1500	7.33
-1.5 m	*2400	*2400	*2450	*2450	*3200	2950	*3000	1950			*2200	1650	6.86
-3.0 m	*2400	*2400	*2550	*2550	*3450	2950					*2400	2000	5.98

# 312D/312D L Hydraulic Excavator Specifications

## Lift Capacities with VA Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.















### 312D L

Long stick – 3000 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

No Blade

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m					*1200	*1200					*1200	*1200	5.04
6.0 m					*1550	*1550	*1350	*1350			*1350	*1350	6.45
4.5 m					*2700	*2700	*1400	*1400			*1350	*1350	7.30
3.0 m			*4500	*4500	*3100	*3100	*1500	*1500	*1400	*1400	*1400	*1400	7.77
1.5 m	*2400	*2400	*3200	*3200	*3350	3350	*1750	*1750	*1550	1500	*1450	1350	7.92
Ground Line	*2350	*2350	*2500	*2500	*3600	3050	*2100	2000	*1800	1400	*1600	1350	7.79
-1.5 m	*2350	*2350	*2450	*2450	*3200	2900	*2900	1900			*1950	1450	7.35
-3.0 m	*2350	*2350	*2500	*2500	*3250	2850	*3000	1900			*2450	1700	6.54
-4.5 m	*2500	*2500	*2900	*2900							*3500	3150	4.35















### 312D L

Short stick – 2100 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	3.56
6.0 m			*1700	*1700	*1350	*1350					*1350	*1350	5.39
4.5 m			*4800	*4800	*1800	*1800	*1650	*1650			*1600	*1600	6.38
3.0 m	*3000	*3000	*4950	*4950	*3400	*3400	*2000	*2000			*1850	*1850	6.91
1.5 m	*2450	*2450	*2600	*2600	*4000	3800	*2400	*2400			*1950	1950	7.09
Ground Line	*2500	*2500	*2450	*2450	*3450	*3450	*2850	2400			*2250	1950	6.93
-1.5 m	*2450	*2450	*2500	*2500	*3350	*3350	*3400	2350			*2800	2150	6.43
-3.0 m	*2450	*2450	*2650	*2650	*3350	*3350					*2750	*2750	5.34















### 312D L

Medium stick – 2500 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m			*1200	*1200							*1200	*1200	4.29
6.0 m					*1350	*1350					*1300	*1300	5.89
4.5 m			*3750	*3750	*2300	*2300	*1500	*1500			*1500	*1500	6.81
3.0 m	*3900	*3900	*5050	*5050	*3100	*3100	*1650	*1650			*1500	*1500	7.31
1.5 m	*2400	*2400	*2800	*2800	*3700	*3700	*1900	*1900			*1600	*1600	7.48
Ground Line	*2400	*2400	*2450	*2450	*3500	*3500	*2350	*2350			*1800	*1800	7.33
-1.5 m	*2400	*2400	*2450	*2450	*3200	*3200	*3000	2350			*2200	1950	6.86
-3.0 m	*2400	*2400	*2550	*2550	*3450	*3450					*2400	2400	5.98















### 312D L

Long stick – 3000 mm

Shoes – 600 mm

Standard counterweight – 2450 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
													m
7.5 m					*1200	*1200					*1200	*1200	5.04
6.0 m					*1550	*1550	*1350	*1350			*1350	*1350	6.45
4.5 m					*2700	*2700	*1400	*1400			*1350	*1350	7.30
3.0 m			*4500	*4500	*3100	*3100	*1500	*1500	*1400	*1400	*1400	*1400	7.77
1.5 m	*2400	*2400	*3200	*3200	*3350	*3350	*1750	*1750	*1550	*1550	*1450	*1450	7.92
Ground Line	*2350	*2350	*2500	*2500	*3600	*3600	*2100	*2100	*1800	1700	*1600	1600	7.79
-1.5 m	*2350	*2350	*2450	*2450	*3200	*3200	*2900	2300			*1950	1750	7.35
-3.0 m	*2350	*2350	*2500	*2500	*3250	*3250	*3000	2300			*2450	2050	6.54
-4.5 m	*2500	*2500	*2900	*2900							*3500	*3500	4.35



Load Point Height



Load Radius Over Front



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.

# 312D/312D L Hydraulic Excavator Specifications

## Lift Capacities with VA Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.

### 312D L

Short stick – 2100 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

No Blade

Boom Length	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		VA Boom		m
	1	2	1	2	1	2	1	2	1	2	1	2	
7.5 m			*1200	*1200							*1200	*1200	3.56
6.0 m			*1700	*1700	*1350	*1350					*1350	*1350	5.39
4.5 m			*4800	*4800	*1800	*1800	*1650	*1650			*1600	*1600	6.38
3.0 m	*3000	*3000	*4950	*4950	*3400	*3400	*2000	*2000			*1850	1850	6.91
1.5 m	*2450	*2450	*2600	*2600	*4000	3350	*2400	2200			*1950	1700	7.09
Ground Line	*2500	*2500	*2450	*2450	*3450	3100	*2850	2100			*2250	1700	6.93
-1.5 m	*2450	*2450	*2500	*2500	*3350	3050	3350	2050			*2800	1850	6.43
-3.0 m	*2450	*2450	*2650	*2650	*3350	3100					*2750	2450	5.34

### 312D L

Medium stick – 2500 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

No Blade

Boom Length	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		VA Boom		m
	1	2	1	2	1	2	1	2	1	2	1	2	
7.5 m			*1200	*1200							*1200	*1200	4.29
6.0 m					*1350	*1350					*1300	*1300	5.89
4.5 m			*3750	*3750	*2300	*2300	*1500	*1500			*1500	*1500	6.81
3.0 m	*3900	*3900	*5050	*5050	*3100	*3100	*1650	*1650			*1500	*1500	7.31
1.5 m	*2400	*2400	*2800	*2800	*3700	3400	*1900	*1900			*1600	1550	7.48
Ground Line	*2400	*2400	*2450	*2450	*3500	3150	*2350	2100			*1800	1550	7.33
-1.5 m	*2400	*2400	*2450	*2450	*3200	3050	*3000	2050			*2200	1700	6.86
-3.0 m	*2400	*2400	*2550	*2550	*3450	3050					*2400	2100	5.98

### 312D L

Long stick – 3000 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

No Blade

Boom Length	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		VA Boom		m
	1	2	1	2	1	2	1	2	1	2	1	2	
7.5 m					*1200	*1200					*1200	*1200	5.04
6.0 m					*1550	*1550	*1350	*1350			*1350	*1350	6.45
4.5 m					*2700	*2700	*1400	*1400			*1350	*1350	7.30
3.0 m			*4500	*4500	*3100	*3100	*1500	*1500	*1400	*1400	*1400	*1400	7.77
1.5 m	*2400	*2400	*3200	*3200	*3350	*3350	*1750	*1750	*1550	1550	*1450	1400	7.92
Ground Line	*2350	*2350	*2500	*2500	*3600	3150	*2100	2100	*1800	1500	*1600	1400	7.79
-1.5 m	*2350	*2350	*2450	*2450	*3200	3000	*2900	2000			*1950	1500	7.35
-3.0 m	*2350	*2350	*2500	*2500	*3250	3000	*3000	2000			*2450	1800	6.54
-4.5 m	*2500	*2500	*2900	*2900							*3500	3300	4.35

# 312D/312D L Hydraulic Excavator Specifications

## Lift Capacities with VA Boom

All weights are in kg. Calculations are made without bucket, but with CW20 Quick Coupler.













### 312D L

Short stick – 2100 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
													
7.5 m			*1200	*1200							*1200	*1200	3.56
6.0 m			*1700	*1700	*1350	*1350					*1350	*1350	5.39
4.5 m			*4800	*4800	*1800	*1800	*1650	*1650			*1600	*1600	6.38
3.0 m	*3000	*3000	*4950	*4950	*3400	*3400	*2000	*2000			*1850	*1850	6.91
1.5 m	*2450	*2450	*2600	*2600	*4000	3950	*2400	*2400			*1950	*1950	7.09
Ground Line	*2500	*2500	*2450	*2450	*3450	*3450	*2850	2500			*2250	2000	6.93
-1.5 m	*2450	*2450	*2500	*2500	*3350	*3350	*3400	2450			*2800	2250	6.43
-3.0 m	*2450	*2450	*2650	*2650	*3350	*3350					*2750	*2750	5.34













### 312D L

Medium stick – 2500 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
													
7.5 m			*1200	*1200							*1200	*1200	4.29
6.0 m					*1350	*1350					*1300	*1300	5.89
4.5 m			*3750	*3750	*2300	*2300	*1500	*1500			*1500	*1500	6.81
3.0 m	*3900	*3900	*5050	*5050	*3100	*3100	*1650	*1650			*1500	*1500	7.31
1.5 m	*2400	*2400	*2800	*2800	*3700	*3700	*1900	*1900			*1600	*1600	7.48
Ground Line	*2400	*2400	*2450	*2450	*3500	*3500	*2350	*2350			*1800	*1800	7.33
-1.5 m	*2400	*2400	*2450	*2450	*3200	*3200	*3000	2450			*2200	2050	6.86
-3.0 m	*2400	*2400	*2550	*2550	*3450	*3450					*2400	*2400	5.98













### 312D L

Long stick – 3000 mm

Shoes – 600 mm

Heavy counterweight – 2650 kg

Blade down

	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
													
7.5 m					*1200	*1200					*1200	*1200	5.04
6.0 m					*1550	*1550	*1350	*1350			*1350	*1350	6.45
4.5 m					*2700	*2700	*1400	*1400			*1350	*1350	7.30
3.0 m			*4500	*4500	*3100	*3100	*1500	*1500	*1400	*1400	*1400	*1400	7.77
1.5 m	*2400	*2400	*3200	*3200	*3350	*3350	*1750	*1750	*1550	*1550	*1450	*1450	7.92
Ground Line	*2350	*2350	*2500	*2500	*3600	*3600	*2100	*2100	*1800	1800	*1600	*1600	7.79
-1.5 m	*2350	*2350	*2450	*2450	*3200	*3200	*2900	2400			*1950	1800	7.35
-3.0 m	*2350	*2350	*2500	*2500	*3250	*3250	*3000	2400			*2450	2150	6.54
-4.5 m	*2500	*2500	*2900	*2900							*3500	*3500	4.35



Load Point Height



Load Radius Over Front



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.

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

## Electrical

- 24 V electric starting
- 50 A alternator
- Cat battery
- Circuit breaker
- Warning horn
- Working light mounted on storage box

## Engine

- 2300 m altitude capability
- Additional 10 micron fuel filter
- Cat C4.2 ACERT Diesel Engine with 24 V electric starting and air-intake heater
- Caterpillar extended life coolant
- Economy mode
- One touch low idle with Automatic Engine Speed Control
- Remote engine oil filter
- Secondary engine shutoff switch
- Stage IIIA emission package for EU territories
- Two 2-micron fuel filters
- Water separator in fuel line

## Operator Station

- Adjustable armrests
- Air conditioner
- Ashtray and 24 V cigar lighter
- Beverage holder
- Bolt-on FOGS installation capability
- Coat hook
- Flexible antenna
- High Back Seat
- Interior lighting
- Literature compartment
- Positive filtered ventilation

- Rear window, emergency exit
- Retractable seat belt
- ROPS cab
- Seat integrated control joysticks
- Sliding upper door window
- Stationary skylight (polycarbonate)
- Storage compartment suitable for lunch box and utility space for magazines
- Tool control (to preset up to 10 hydraulic work tools configurations)
- Two travel control pedals with removable hand levers
- Washable floor mat
- Windshield wiper (parallel type) and washer

## Monitor

- Full graphic and full color display with language capability
- Full time clock
- Start up level check for hydraulic oil, engine oil and engine coolant
- Warning information, filter and fluid change information
- Working hour information

## Undercarriage/Structure

- Automatic travel parking brakes
- Grease lubricated tracks
- Heavy duty idler tension spring
- Hydraulic track adjusters
- Idler and center track guiding guards
- Steps - four
- Towing eye on base frame
- Two speed travel with automatic shift change

## Other Standard Equipment

- “On Demand Power Supply” (Regulation of engine rpms according to hydraulic demands)
- 2450 kg counterweight
- Automatic swing parking brake
- Doors and cab locks with Caterpillar one key security system
- Steel firewall between engine and main pump
- Boom and stick drift reducing valves
- Boom and stick regeneration circuits
- Boom lowering device for backup
- Cat branded XT hoses and reusable couplings
- Cab handrail
- Cat Data Link and capability to use ET (Electronic Tool Technician)
- EU sound package for EU territories
- High performance hydraulic oil, capsule filter
- Mirrors, rear view (frame right, cab left)
- One auxiliary hydraulic valve
- Product Link ready
- Radial seal air filters with double element
- Reverse swing damping valve
- Sound and vibration suppression system
- Straight line travel
- S•O•S quick sampling valves for engine oil, hydraulic oil and coolant

# 312D/312D L Optional Equipment

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

## Front Linkage

Booms

One-piece 4650 mm

Variable Angle

Bucket linkage

Sticks

Short 2100 mm

Medium 2500 mm

Long 3000 mm

Quick couplers

Tear drop pin conversion

## Undercarriage

Tracks for standard undercarriage

500 mm Triple Grouser

700 mm Triple Grouser

For long undercarriage

500 mm Triple Grouser

600 mm Triple Grouser

700 mm Triple Grouser

Blades

2500 mm

2700 mm

## Guards

Bottom guard, heavy duty

Swivel guard

Track guiding guards, full length for long undercarriage

## Operator Compartment

Cover for lunch box

Two available types of joystick :

1) Joystick with four on/off buttons, or

2) Thumb wheel modulation joystick

Radio

Rain protector for front windshield

Seats

High-back seat, mechanical suspension

High-back seat, air suspension, heater

Sunshade

Windshield

One-piece highly resistant

70/30 split

## Hydraulics

Auxiliary Combined Action Circuit

Auxiliary Single Action circuit

Boom auxiliary lines

Boom medium pressure lines

Boom quick coupler lines

Medium pressure system

Quick disconnect Medium Pressure

Quick Coupler Control Circuit

Stick auxiliary lines

Stick medium pressure lines

Stick quick coupler lines

## Miscellaneous Options

Boom lowering control device (with Over Load Warning Device)

Heavy counterweight, 2650 kg, with lifting eye

High Ambient Cooling package

Starting kit, cold weather (-25 °C)

Stick lowering control device

Water separator level indicator

Working light, boom, right side

2 Working lights, cab mounted

Travel alarm



# 312D/312D L Hydraulic Excavator

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

HEHH3999 – EU (09-2009)

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Caterpillar dealer for available options. Note also that the machines featured may not be equipped with an appropriate operator protective structure as required for compliance to the Machinery Directive (2006/42/EC). All machines will be supplied by Caterpillar with a compliant cab structure, details available from your dealer.

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