

NEW JCB 315LC HD | TRACKED EXCAVATOR

**BHARAT
KA JCB**



ARMED TO DELIVER

Engine power: 165kW (221 hp) | Bucket capacity: 1.24-1.80m³ | Operating weight: 32,940 - 34,462 kg



ARMED TO DELIVER

We dream. We are concerned. We grab the opportunity. We deliver. Because our commitment to excellence is unrelenting. JCB, powered to deliver success, is an insignia of India's growth.

When the going gets tough, the tough gets going. Introducing the JCB 315LC HD, which assures longevity and boosts productivity. It is a dependable product that comes with the advanced telematics technology of JCB LiveLink 4.0 for enhanced connectivity. It's a vital product to excel in difficult quarrying and mining tasks with enhanced uptime monitoring and customer support.



RELIABILITY & DURABILITY

WHEN YOU'RE TACKLING TOUGH APPLICATIONS AND DIFFICULT WORKING CONDITIONS, YOU NEED RELIABILITY AND DURABILITY. THE NEW JCB 315LC HD OFFERS EXACTLY THAT. HIGH-QUALITY COMPONENTS ALONG WITH SIMPLE AND ROBUST MECHANICAL FUEL INJECTION ENSURES EASE OF MAINTENANCE.

1 JCB's DIESELMAX engine with mechanical inline fuel injection system helps to enhance life of the components of the fuel injection system.

2 Heavy-duty boom and arm with cast pivots provides high strength and long life durability.

3 Advanced manufacturing and assembly processes helps in high level of precision and quality in components.

4 With a heavy-duty lower frame, an upper structure, and a high-strength boom and arm, this excavator is designed to excel at tough work like quarry applications.

5 A mechanical override of the engine throttle system is provided which helps to enhance machine uptime.

Including improved bucket design
1.24, 1.49, 1.61, 1.80 Cu.m



2 Dig end: With cast pivots for high strength



4



Improved counter weight installation with 6 bolt mounting

1 JCB's Dieselmax Engine



Handrail improvement
(Side to top mounting)



5 Mechanical override system



Heavy duty track chain with thicker shoes, large section links & rollers



PERFORMANCE

FIRST AND FOREMOST, THE NEW JCB 315LC HD IS DESIGNED TO MOVE MATERIAL IN GREAT QUANTITY AS QUICKLY AS POSSIBLE. IT HAS 7.2-LITRE JCB DIESELMAX FUEL EFFICIENT ENGINE THAT IS POWERFUL.

1 The 6 - cylinder 7.2 - litre JCB DIESELMAX engine produces its peak power 165kW (221 hp) and torque (960 Nm).

2 With a massive 221.5 kNm of bucket tear out force, fast cycle times in quarry and mining applications. The intuitive multifunctional operation makes simultaneous tracking and excavation smooth and fast.

3 A JCB 315LC HD provides a solid, stable work platform.

4 Choose from a range of hydraulic pipework options and you'll be able to use your JCB 315LC HD with a variety of JCB attachments for the ultimate versatility.



For maximum power and productivity, choose the Power+ mode from the rotary controller.

Simultaneous tracking and excavation are smooth and fast with an intuitive multifunction operation.

Strengthening ribs at an idler area provides the force and durability to work in the toughest applications.



EFFICIENCY

THE JCB 315LC HD IS DESIGNED TO MOVE MORE MATERIAL FOR LESS. TO ACHIEVE THIS, WE'VE DESIGNED THE ENGINE AND HYDRAULICS TO WORK IN PERFECT HARMONY FOR THE ULTIMATE EFFICIENCY.

1 The JCB DIESELMAX engine has an Eco mode, which reduces fuel consumption whilst maintaining substantial productivity levels.

2 Auto idle reduces engine speed to 1100 rpm after 6 seconds of machine inactivity. The engine speed is restored as soon as you operate the excavator again.

3 The innovative hydraulic regeneration system recycles oil across the cylinders for faster cycle times and reduced fuel consumption.

4 For even more fuel savings, you can use our innovative one-touch idle feature to reduce engine speed at the push of a button.

5 The machine has an optimised hydraulic pump settings for precise and efficient oil flow. The optimised spool configuration within the main valve block delivers the flow for arduous applications.



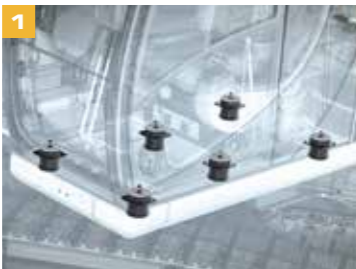
Choose Eco mode for precise, efficient excavation and a significant reduction in fuel consumption.



COMFORT MADE EASY

HERE AT JCB, WE TAKE OPERATORS' COMFORT AS PRIORITY, BECAUSE IT CONTRIBUTES TO PRODUCTIVITY. THE NEW JCB 315LC HD IS THEREFORE, A COMFORTABLE AND ERGONOMICALLY DESIGNED EXCAVATOR. IT ALSO HAS AN AIR CONDITIONED CABIN FOR MAXIMUM OPERATOR COMFORT AS STANDARD.

- 1 To minimise noise and vibration, the cab sits on six viscous rubber mounts.
- 2 JCB's climate control option offers a precisely controlled cab temperature with fresh or recirculated air.
- 3 The spacious floor area with large high grip rubber coated pedals and a rubber footrest is a perfect set-up for operator comfort.
- 4 Ventilation is plentiful, through the standard cab roof hatch and sliding window on LH side.
- 5 A 70/30 front screen split gives the JCB 315LC HD excellent front visibility. A clear view of the front right track provides easy, safe trench digging and comfortable manoeuvring.
- 6 Operators are well informed about important information via the 8.89cm (3.5 inch) display. Its settings can be accessed via a new rotary controller.
- 7 A spacious storage area behind the seat provides plenty of room for operator's personal items.



EASE OF MAINTENANCE

WE WANTED TO MAKE SURE THAT THE NEW JCB 315LC HD WAS AS AFFORDABLE, EFFICIENT AND HIGHLY PRODUCTIVE AS POSSIBLE. IT IS AN EASY TO MAINTAIN AND SERVICE EXCAVATOR, HELPING YOU TO GET THE BEST.

- 1 To prevent blockages in the cooling pack, a fly-mesh guard has been fitted. The condenser unit is hinged so it swings out easily, providing access to the other coolers for cleaning. Because they're mounted side by side on a JCB 315LC HD, the engine radiator, hydraulic cooler and intercooler can be serviced individually and cleaned easily.
- 2 Fluid filters (engine oil and fuel) are centrally located for fast and easy servicing.
- 3 It's easy to keep track on the maintenance on this excavator because the in-cab monitor displays useful reminders. Users can also track machines using JCB LiveLink telematics to stay well informed about all the upcoming maintenance requirements.
- 4 Radial seal air filter with wire mesh ensures error proof fitment and ease of maintenance.
- 5 JCB 315LC HD bonnet opens and closes easily with gas-assisted cylinders, and the service bays are large and wide for good access.
- 6 There is a large 590-litre fuel tank to allow long operating hours between refills.



SAFETY

FOR OVERALL SAFETY, THE NEW JCB 315LC HD IS EQUIPPED WITH EXCELLENT VISIBILITY TO ALL CORNERS, NON-SLIP SURFACES AND SAFE SERVICE ACCESS.

- 1 A large glass area and low bonnet line offers superb visibility.
- 2 This excavator is equipped with a full set of side and rear view mirrors for all round visibility.
- 3 With work lights, you can rely on optimum all-round visibility even in low-light conditions.
- 4 JCB's optional rear view camera displays an uninterrupted rear view for improved operator confidence whilst machine operation.
- 5 The bonnet opens front-to-rear for easy and safe engine service access.
- 6 JCB's Safety Level Lock fully isolates hydraulic functions to avoid unintended movements. JCB's 2GO system means a new JCB 315LC HD can only be started in a safe locked position via two separate inputs.
- 7 The steps and platforms have anti-slip punched steel plates for optimum grip. Bolt-on plates have recessed bolts to reduce trip hazards.
- 8 Livelink-telematics system is a standard feature. This innovative JCB feature helps you to maximise security, fleet utilisation, and allows you to monitor useful information like fuel usage on different shifts.
- 9 To prevent engine damage in arduous conditions, there is an engine overheat safety system as standard.



LIVELINK

INTRODUCING THE
NEXT GENERATION
ADVANCED TELEMATICS TECHNOLOGY- LIVELINK

Advanced
LIVE JCB LINK
4.0

SERVICE



Service reminder



Machine data backup



Critical machine health alerts

OPERATION



Fuel level information



Machine utilisation reports



Engine status

SECURITY



GPS tracking



Towaway alerts



Operating hours

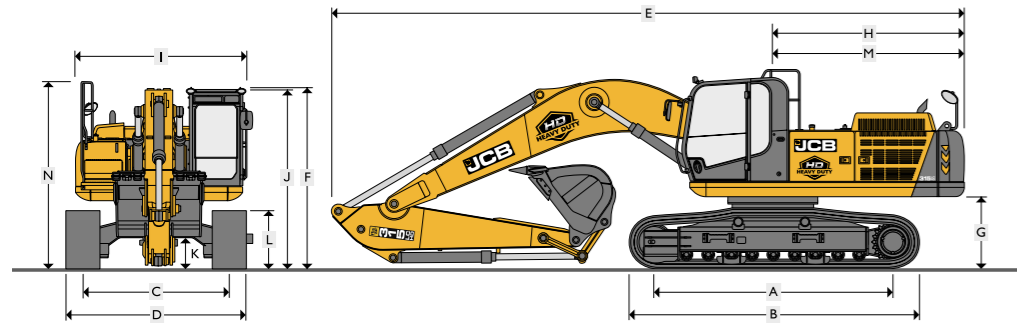


Geofencing

LiveLink is an advanced telematics technology which helps you monitor and manage your machine fleet remotely from anywhere in the world via web or your smartphone.

Power of LiveLink: With LiveLink you can reduce fuel cost, optimise machine, operator performance, proactively manage service and maintenance to maximise uptime. Stay connected to your machines via remote monitoring, experience new levels of control and efficiency with LiveLink.





STATIC DIMENSIONS			
Model	JCB 315LC HD		
A Track length on ground	m	3.99	
B Undercarriage overall length	m	4.95	
C Track gauge	m	2.6	
D Width over tracks (600 mm trackshoes)	m	3.2	
D Width over tracks (700 mm trackshoes)	m	3.3	
D Width over tracks (800 mm trackshoes)	m	3.4	
D Width over tracks (900 mm trackshoes)	m	3.5	
G Counterweight clearance	m	1.2	
H Tail swing radius	m	3.21	
I Overall width of super structure	m	3.07	
J Height over cab	m	3.3	
K Ground clearance	mm	550	
L Track height	m	1.03	
M Tail length	m	3.2	
N Height over grab rail	m	3.4	
		Monoboomb 6.2 m	
Dipper lengths		2.5 m	3.1 m
E Transport length	m	10.74	10.63
F Transport height	m	3.45	3.26

ENGINE	
Model	JCB DIESELMAX 672 mechanical engine
Type	Water cooled, 4-stroke, 6-cylinder in line, mechanical direct injection, turbocharged, intercooled
Rated power	165 kW (221 hp) at 1800 rpm
Piston displacement	7.2 L
Air filtration	Dry element with secondary safety element & in-cab warning indicator.
Starting system	24 V
Batteries	2 x 12 V
Alternator	24 V, 55 A

SLEW SYSTEM	
Slew motor	Axial piston type.
Slew brake	Negative type, oil lubricated, multi-disc parking brake.
Slew torque	100.3 kNm
Slew speed	9.4 rpm
Slew gear	Large diameter, internally toothed fully sealed grease bath lubricated.

UNDERCARRIAGE				
Carriage options	LC - Long Carriage.			
Construction	Fully welded 'X' frame type with central belly guarding and sloping side members with dirt relief holes under top rollers.			
Recovery point	Front and rear.			
Track shoe options	600 mm	700 mm	800 mm	900 mm
Upper and lower rollers	Heat treated, sealed and lubricated.			
Track adjustment	Grease cylinder type.			
Track idler	Sealed and lubricated, with spring cushioned recoil.			
Track type	Sealed and lubricated.			
Rollers and shoes (each side)	LC			
No. of track guides	2 per side			
No. of lower rollers	9 per side			
No. of upper rollers	2 per side			
No. of track shoes	50 per side			

TRACK DRIVE	
Type	Fully hydrostatic, two speed with autoshift
Travel motors	Variable swash axial piston type, fully guarded within undercarriage
Final drive	Planetary reduction, bolt-on sprockets
Service brake	Hydraulic counter balance valve
Park brake	Disc type, spring applied, automatic hydraulic release
Gradeability	70% (35 deg) continuous.
Travel speed	High – 5.2 km/h Low – 2.1 km/h
Tractive effort	246.3 kNm

HYDRAULIC SYSTEM	
Open centered, negative control hydraulic system with twin variable flow piston pumps providing flow-on-demand.	
Pumps	
Main pumps	2 variable displacement axial piston type.
Maximum flow	2 x 250 LPM
Servo pump	Gear type
Maximum flow	18 LPM
Control valve	
A combined four and five spool control valve with auxiliary service spool as standard	
Relief valve settings	
Boom/Arm/Bucket	343 bar MRV (392 bar ARV).
Swing circuit	290 bar
Travel circuit	343 bar
Pilot control	39 bar
Filtration	
In tank	195 µm, suction strainer.
Main return line	10 µm
Pilot line	10 µm
Hydraulic hammer return	10 µm, aluminium housing with perbunan (NBR) seals

SERVICE CAPACITIES		
Fuel tank	L	590
Engine coolant	L	32
Engine oil	L	30
Swing reduction gear	L	16
Track reduction gear (each side)	L	5
Hydraulic system	L	430
Hydraulic tank*	L	239

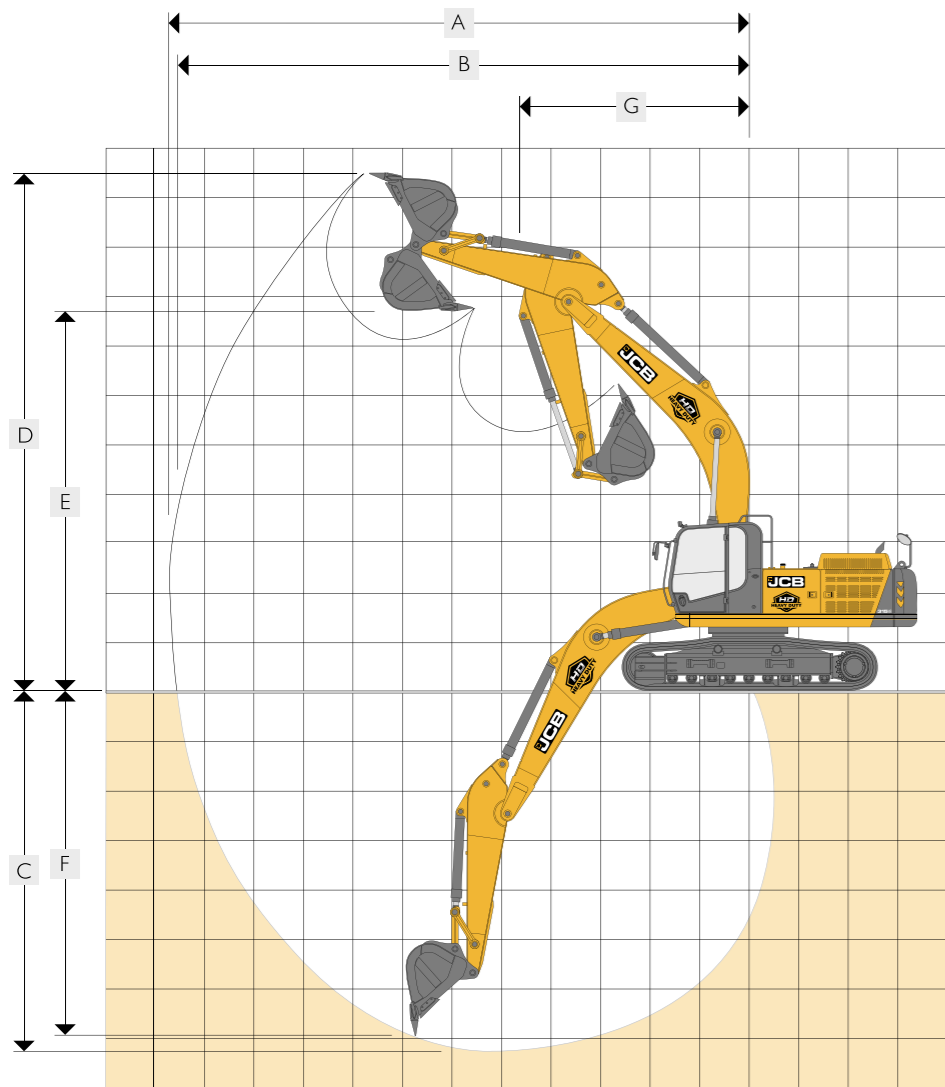
*Deduction cylinder volumes and service fill (25 litres).

WEIGHTS AND GROUND BEARING PRESSURES					
Figures include 1.49m ³ (1443 kg) bucket, 80kg operator, full fuel tank and 2.5 m dipper.					
		600 mm shoes	700 mm shoes	800 mm shoes	900 mm shoes
Machine weight	kg	32940	33294	34054	34462
Ground bearing pressure	kg/cm ²	0.63	0.55	0.49	0.44

BUCKET AND ARM COMBINATION					
Bucket width	m	1.3	1.51	1.6	1.76
Bucket capacity	m ³	1.24	1.49	1.61	1.80
Bucket weight	kg	1282	1443	1542	1629
LC					
2.5 m No Quickhitch (Quickhitch)	m	□ (■)	■ (●)	●	●
3.1 m No Quickhitch (Quickhitch)	m	□ (●)	●	●	●

□ = Suitable for general excavating (materials up to 1800 kg/m³)
 ■ = Suitable for light excavating (materials up to 1500 kg/m³)
 ● = Suitable for grading and loading (materials up to 1200 kg/m³)

STANDARD/OPTIONAL EQUIPMENT		
	Standard	Optional
Alarm	-	Travel alarm
Arm	2.5 m Heavy duty arm	3.1 m Heavy duty arm
Beacon	-	Warning beacon
Breaker	-	HM270T (includes moil & chisel)
Belly plate thickness	Undercarriage 6 mm, revolving frame 2 mm	10mm plate (undercarriage & revolving frame)
Buckets	1.61 m ³ HD	1.24 m ³ HD, 1.49 m ³ HD, 1.80 m ³ HD
Camera	-	Rear-view camera with monitor
Climate control	Standard climate control	Carbon filter
Fire extinguisher	-	Fire extinguisher kit
Hydraulic oil	Hydraulic oil HP46	Hydraulic oil HP32, Hydraulic oil HP68
Lifting hook	-	Lifting hook on tipping link (hook or eye)
Lights	6 x Standard halogen worklights	Worklight guards
Pipework options	-	Hammer pipework Open/close pipework (high flow double acting) Rotate pipework (low flow double acting) Merged high flow (double acting)
Quickhitch	-	Hydraulic quick hitch & installation kit
Track guides	Twin track guides	Full length track guides
Trackshoes	12mm Standard duty	600 mm 700 mm 800 mm 900 mm
		15 mm Heavy duty



WORKING RANGE MONOBOOM 6.2 M				
Dipper length		2.5m	3.1m	
A	Maximum digging reach	m	10.15	10.73
B	Maximum digging reach (on ground)	m	9.94	10.52
C	Maximum digging depth	m	6.57	7.17
D	Maximum digging height	m	9.94	10.28
E	Maximum dumping height	m	6.9	7.23
F	Maximum vertical wall cut depth	m	5.78	6.5
G	Minimum swing radius	m	4.07	4.11
	Bucket rotation	deg	185°	185°
	Maximum dipper tear out	kN	156.2	126.5
	Maximum bucket tear out	kN	221.3	221.5

LIFT CAPACITIES – Dipper length: 2.5m, Boom: 6.2m, 600mm Trackshoes, No bucket.

Load Point	Reach from Swing Centre								Capacity at Maximum Reach		m
	3.0m		4.5m		6.0m		7.5m		kg	kg	
Height	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	
7.5m	-	-	-	-	7030*	7030*	-	-	7120*	7020	6.54
6m	-	-	-	-	7360*	7360*	7060*	5450	7070*	5350	7.57
4.5m	-	-	10560*	10560*	8350*	7580	7360*	5290	7170*	4540	8.19
3m	-	-	13410*	10620	9620*	7050	7950*	5040	6740	4120	8.5
1.5m	-	-	-	-	10720*	6600	7980	4810	6560	3970	8.54
0m	-	-	15600*	9630	10940	6350	7810	4660	6750	4050	8.3
-1.5m	13420*	13420*	15100*	9650	10870	6290	7780	4630	7430	4440	7.75
-3m	18550*	18550*	13740*	9850	10360*	6410	-	-	8760*	5390	6.83
-4.5m	-	-	10820*	10320	-	-	-	-	8910*	8010	5.34
-6m	-	-	-	-	-	-	-	-	-	-	-

LIFT CAPACITIES – Dipper length: 3.1m, Boom: 6.2m, 600mm Trackshoes, No bucket.

Load Point	Reach from Swing Centre												Capacity at Maximum Reach		m
	1.5m		3.0m		4.5m		6.0m		7.5m		9m		kg	kg	
Height	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	
7.5m	-	-	-	-	-	-	-	-	-	-	-	-	5470*	5470*	7.28
6m	-	-	-	-	-	-	6610*	6610*	6370*	5590	-	-	5280*	4710	8.21
4.5m	-	-	-	-	9350*	9350*	7650*	7650*	6830*	5390	-	-	5320*	4060	8.79
3m	-	-	-	-	12230*	11050	9000*	7200	7510*	5110	6180	3770	5550	3720	9.08
1.5m	-	-	-	-	14510*	10090	10260*	6700	8020	4840	6040	3650	5930	3580	9.11
0m	-	-	-	-	15480*	9660	10970	6380	7800	4650	-	-	6070	3630	8.88
-1.5m	-	-	12490*	12490*	15410*	9560	10810	6240	7700	4560	-	-	6580	3920	8.38
-3m	14370*	14370*	19520	19520*	14450*	9680	10790*	6280	7780	4630	-	-	7730	4600	7.54
-4.5m	-	-	16940*	16940*	12270*	10030	8960*	6550	-	-	-	-	8460*	6240	6.23
-6m	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Lift capacity front and rear.



Lift capacity full circle.

- Notes:
1. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
 2. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 3. Rated loads are limited by hydraulic capacity rather than tipping load.
 4. Lifting capacities marked* are based on hydraulic capacity.