

NEW

JCB220LC XTRA | HYDRAULIC EXCAVATOR



Engine Power : 170 hp (127 kW) Bucket Capacity : 0.8 cu.m - 1.2 cu.m Operating Weight : 21750 Kg



Courtesy of Machine.Market

GO THE XTRA MILE WITH JCB 220LC XTRA



Download the JCB AR app from
Play Store or App Store
to see the machine in action.



Scan the image

XTRA - PERFORMANCE

High engine power of 170 hp
Output increased by 7%*
New smart controls : 8 power modes

XTRA - RELIABILITY

Deep section design of boom and arm
Heavy duty upper and lower frame
Proven world-class components

XTRA - CONTROL

Livelinek enabled
Service - Reminders
Operation - Fuel level and fuel consumption reports
Security - Geofencing

XTRA - FUEL EFFICIENCY

Fuel efficient JCB ecoMAX engine
8%* more fuel efficient
Eco hydraulics

XTRA - CARE

Uptime technology
Supported by JCB Premier Line solutions
2 Years/5000 hours standard warranty*

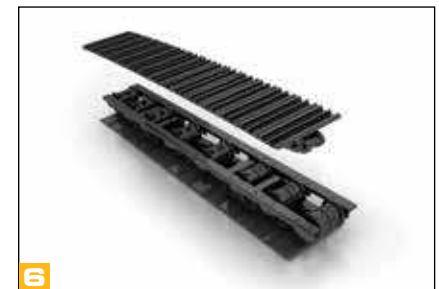
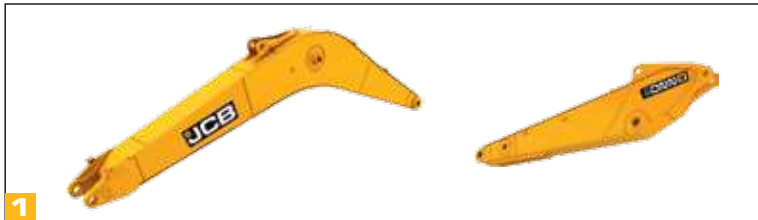


RELIABILITY & DURABILITY

STRENGTH INSIDE AND OUT

Your most reliable partner

- 1 Boom and arm are made of high tensile steel that offer higher strength and long life in most arduous applications. Additional plate and wear ribs are provided in arm for additional strength and protection from any external damage.
- 2 Use of robust cast ends and pivot bosses provide higher strength and durability to boom and arm.
- 3 A rigid upper frame provides excellent durability through robust design. Closed box section design of side members at pump and radiator bay enhance strength to reduce extent of damage due to any external impact.
- 4 The lower frame is of X type design which provides strength & rigidity. The long undercarriage version is strengthened at idler area to retain its profile in most demanding application. The X frame has additional reinforcement plates at the top for enhanced strength.
- 5 Our advanced manufacturing and assembly process produce high precision and quality assembled components.
- 6 Heavy duty track chain offers improved strength and wear properties of track links and track shoes for higher service life.



JCB uses Finite Element Analysis with extensive rig and endurance testing to make key components last longer



XTRA PRODUCTIVITY

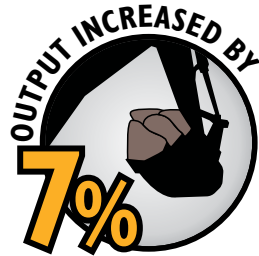
1 JCB ecoMAX engine produces 170 hp @ 1850 rpm while providing excellent torque of 695 Nm @ 1500 rpm. This results in excellent ability to dig in tough strata and high output.

2 The JCB220LC XTRA has new variable power modes for complete flexibility, it adapts to work requirement. New H+ mode increases hydraulic power and increases output by 7% over previous model.

3 Hydraulic regeneration system on boom, arm & bucket operation recycles hydraulic oil across the cylinders for faster cycle times and reduced overall fuel consumption.

4 A massive 14360 kg of bucket tearout force helps in high output even in tough strata.

5 Power boost feature increases hydraulic system pressure by 9% to provide higher digging force and lifting capacity when needed. It is always ON in lifting and H+ mode whereas it can be activated using a power boost switch on the right hand joystick in other modes.



JCB ENGINE
ecoMAX

16
Valves
Effort

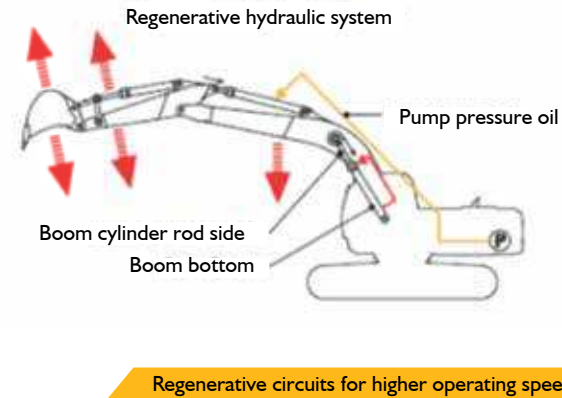
BIG
on Fuel
Saving

1

Power mode		Usage for
H+	High power plus	Provides maximum output. Suitable for high output in heavy duty strata.
H	High power	For high output requirements.
G1, G2, G3	Economy	For general duty and digging operations.
L1, L2, L3	Lifting	For light digging work and lifting operations.



2



3



4



5

XTRA FUEL EFFICIENCY

JCB ecoMAX engine provides high fuel efficiency and generates high torque at low speed to suit the job needs.

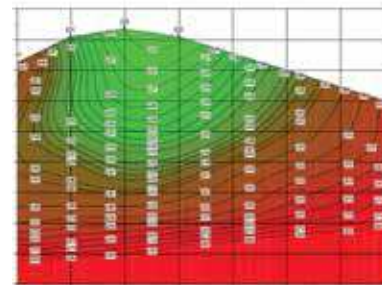
Common rail fuel injection system delivers high power with low fuel consumption.



JCB ENGINE
ecoMAX

16 Valves
Effort

BIG on Fuel
Saving



2 Eco hydraulics has been designed to make the hydraulics more efficient by reducing losses in the system. This helps in reducing fuel consumption and thus providing savings in fuel cost.

3 Auto idler reduces engine speed automatically when machine is not at work, thus saving fuel.

 **eco**
HYDRAULICS



2

3



XTRA CARE



JCB PREMIER LINE SOLUTIONS ARE A SET OF NEW AND INNOVATIVE SOLUTIONS DESIGNED TO GIVE MAXIMUM VALUE TO JCB'S PRIVILEGED CUSTOMERS. IT IS A COMPREHENSIVE RANGE OF CUSTOMISED SUPPORT PACKAGES, INNOVATIVELY DESIGNED TO OFFER REAL TIME AND PROACTIVE PRODUCT SUPPORT SOLUTIONS. THESE ARE EXCLUSIVE OFFERINGS AND ARE AVAILABLE TO ONLY A PRIVILEGED FEW.

At the heart of JCB Premier Line are:-

1. Machine uptime
2. Parts availability
3. Various warranty options

Uptime technology

JCB's advanced telematics solution - Livelink and Tech Web are innovative connectivity solutions that facilitate 24x7 monitoring of machines. Through the use of big data these help in determining field issues and trends which result in better and faster service mobility. Inputs and analysis of this data help in offering solutions for preventive maintenance, even before a machine breaks down.

Uptime app

The JCB mobile app has been updated with an Uptime+ feature that allows for an instant alert to be sent to JCB engineers – all at the simple press of a button. This real time, convenient solution empowers customers to login their service requests instantly and thus ensuring 24x7 continuity of operations for their business.



UpTIME+



Product support

The Premier Line solutions offer unmatched product support to the customers. It offers on-site product support through placement of site engineers to the customers who have a fleet of these machines*.

Skilled service engineers

JCB India has a comprehensive and extensive training program for engineers at its plants and facilities. These are done on a continuous basis to ensure expert support and faster resolution of issues. All engineers are mapped on a skill matrix and regular skill upgrade sessions, which are undertaken from time to time.

Warranty

JCB machines are innovatively designed and built to deliver business success. To further build on its value, it offers warranty packages designed specifically for business needs. Apart from a standard warranty of two years or for 5000 hours, whichever is earlier JCB also has an option for an extended warranty for machine and power train components upto 7000 hours.

Assured parts supply

JCB India has built a robust logistics and supply management chain across the country that facilitates the provision of parts for all machines in the shortest time.



*T&C Apply



XTRA COMFORT

A comfortable operator is a productive operator

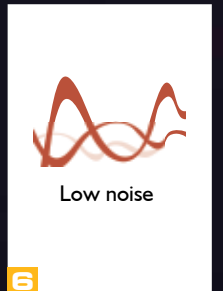
- 1 The cabin is of pressed steel construction with large internal space and excellent overall visibility. The cab is mounted on viscous mounts to absorb vibrations.
- 2 The roof hatch is provided to keep the cab well ventilated which is aided by a rear sliding window. Front lower glass can be removed for better ventilation.
- 3 Air-conditioner with cooling and heating function, auto temperature control feature keeps the cab to comfortable temperature level in hot & cold weather conditions.



4 The deluxe operator seat provides a high level of seating comfort. While the seat is adjustable for weight, seating angle, forward and backward movement and back rest angle it can be moved along with the joystick to ensure best position of operator with respect to the controls for fatigue free operation.

5 High visibility for working at height through additional glass provided in front of the cab.

6 Low engine noise levels for enhanced operator comfort for long working hours.



XTRA SAFETY

1 Safety lever lock fully isolates hydraulic functions to avoid unintended movements. Our 2GO system means the servo isolator lock can be released only with two separate inputs.

2 To ensure safe start of the machine, the engine can be started only when the servo isolator lock is ON. An emergency stop switch is provided to switch off the engine immediately, if required.

3 The steps and platforms have anti-slip punched steel plates for optimum grip even in wet conditions. Bolt-on plates have recessed bolts to reduce trip hazards.

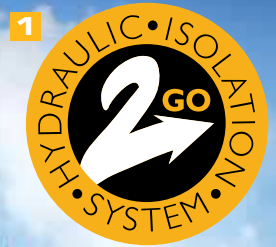
4 The cab has a large glass area and low bonnet line for superb visibility.

5 The JCB220LC XTRA is equipped with a full set of side and rear view mirrors for all round visibility and safety.

6 Belly guards are fitted on the lower frame to protect damage to rotary coupling and hoses.

7 A mesh guard is fitted as a standard to protect the cab front glass from any damage.

8 The JCB220LC XTRA provides a well illuminated work site with 2 lights on boom, 2 on the cab top, 1 on the upper frame and 1 on the counterweight enabling 24x7 operations.



LOW MAINTENANCE & HIGH UPTIME

1 The JCB220LC XTRA offers high oil and filter change intervals resulting in low maintenance cost.

Longer service interval also means that machine keeps running longer, thus increasing machine uptime.

2 Graphite infused bushes are used for pivot pins at both ends of boom to increase greasing interval to 1000 hours, thus saving cost and effort.

3 Heavy duty bucket is fitted with floating bush and shims arrangement for easy adjustment of gap between bucket and dipper. This helps in keeping the bucket O-ring effectively seated and thus increasing life of bucket pin and bushes.

4 Air pre-cleaner with cyclonic action removes the dust to enhance service life of air filters.

5 Three stage fuel filtration with water separator is provided for protection of fuel system from the entry of water and contaminants in fuel system.



SERVICE INTERVALS	
Engine oil, oil filter and fuel filters	Every 500 hours
Hydraulic main filter	Every 1000 hours
Hydraulic oil	Every 5000 hours



1

3

4

5

Easy maintenance

- 6 The engine bonnet is compact and opens front-to-rear for easy and safe engine service access. It is supported by gas strut which reduces effort of opening and closing the bonnet.
- 7 Side by side coolers are easy to access for cleaning. A hinged condenser unit provides direct access to the coolers for cleaning.
- 8 Refuel pump makes fuel refilling easy, quick and hassle free.
- 9 Filters are grouped together in pump bay for fast and easy on ground service.



Smart control system

10 Smart control system closely monitors the machine and assists in pre-start checks. It also tracks important parameters during machine operation, while providing the following information:

Next service due	Engine oil change
Low engine oil level	High hydraulic oil temperature
Low coolant level	High engine temperature
Water in fuel	Low engine oil pressure
Low fuel level	Air filter clog



XTRA CONTROL

NOW BE ASSURED OF YOUR JCB EXCAVATOR'S SERVICE, OPERATION AND SECURITY WITH THE ADVANCED TELEMATICS SYSTEM CALLED LIVELINK*



Stay connected 24x7

Operation & performance monitoring

- Provides information on fuel used and hours worked along with fuel consumption in litres/hour for selected period.
- Idle time monitoring helps in analysing the extent to which engine is idling. This can be used for better site management to minimise idling and save fuel consumption.
- Machine usage can be monitored in details including the hours worked in power band which indicates the extent of load on the machine.

Security

- Helps to locate your machine precisely on map to display its current location. Historic records of machine location and movements are also available.
- Secure your machine by creating a fence around the machine location on the map to get alerts on e-mail and mobile once machine moves out of the geofence area.
- Control the duration in which the machine should be operated by creating time curfew. Sends alerts on e-mail when machine is used outside set hours.
- Alerts you in case the machine is being towed away even in engine off condition securing your investment.

Reports & alerts

- Provides customised reports on performance, utilisation, fleet summary, landmark activity, machine hours and service status.
- Machines can be grouped together in a fleet for consolidated views and reports which make fleet management easy.
- Variety of reports can be received on periodic basis be it daily, weekly, monthly as required.
- Get customised alerts on mobile on machine status and critical health alerts.

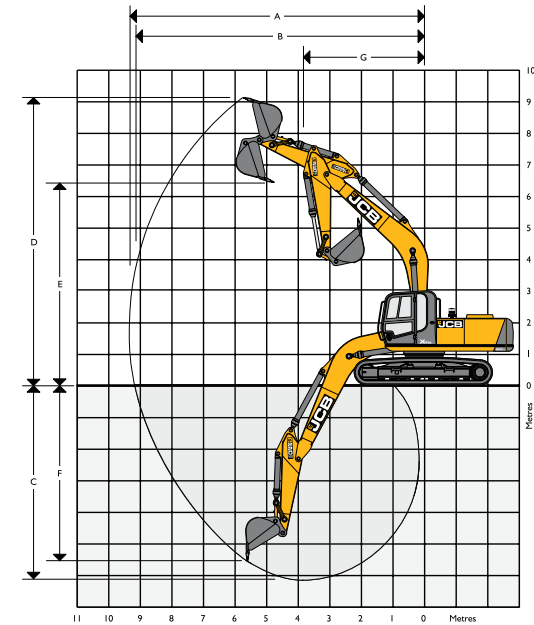
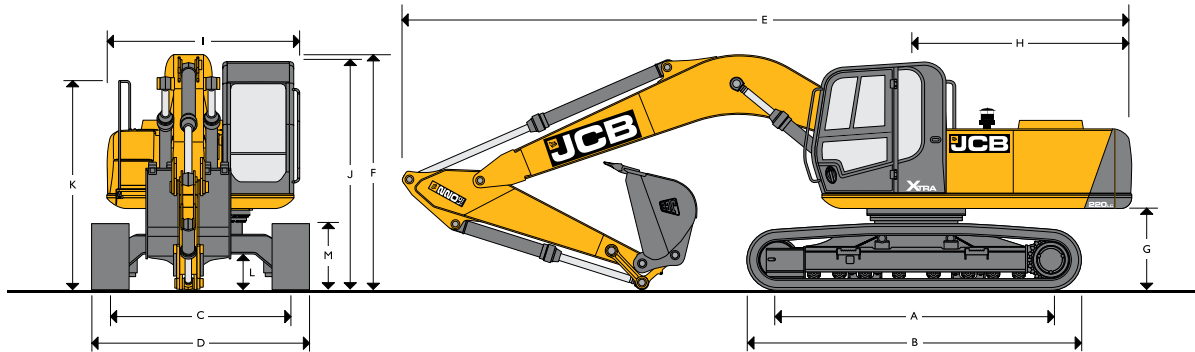
Proactive maintenance & usage

- Sends maintenance reminders in advance for planning maintenance so that the machine is serviced as per required schedule.
- Alerts are provided in case any critical health parameter needs attention. Such alerts are displayed on the dashboard of the Livelink website. These are sent by e-mail.
- Reports hammer abuse events which can be used for adopting correct method of hammer operation.
- Instantaneous fuel level can be monitored remotely. This can also be reported through customised daily report.





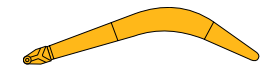
GROSS ENGINE POWER : 170 hp
MAX. OPERATING WEIGHT : 21750 kg



STATIC DIMENSIONS

A Track length on ground	mm	3710
B Undercarriage overall length	mm	4469
C Track gauge	mm	2390
D Width over tracks	mm	2990
E Transport length with monoboom and 2.4 m dipper	mm	9650
F Transport height with monoboom and 2.4 m dipper	mm	3185
G Counterweight clearance	mm	1044
H Tail swing radius	mm	2825
I Width of super structure*	mm	2563
J Height over cab	mm	3001
K Height over handrail	mm	2755
L Ground clearance	mm	461
M Track height	mm	848

WORKING RANGE



Dipper	unit	Arm length	
		2.40 m	3.00 m
A Maximum digging reach	m	9.30	9.79
B Maximum digging reach (on ground)	m	9.10	9.61
C Maximum digging depth	m	5.98	6.59
D Maximum digging height	m	9.03	9.12
E Maximum dumping height	m	6.46	6.57
F Maximum vertical wall cut depth	m	5.47	6.14
G Minimum swing radius	m	3.85	3.74
Bucket rotation	degree	183	182
Dipper tearout (ISO6015)	kgf	11700	9842
Dipper tearout with boost	kgf	12723	10703
Bucket tearout (ISO6015)	kgf	13205	13205
Bucket tearout with boost	kgf	14360	14360

* All dimensions, weights and timings are variable within 1.5%. JCB reserves the right to change specifications without prior notice.

ENGINE

Model	: JCB ecoMAX 448T2.
Type	: Turbo-charged, 4-Cylinder, Water-cooled, common rail injection system.
Gross power	: 127 kW(170 hp) @ 1850 rpm.
Piston displacement	: 4.765 litres.
Air filtration	: Dry element with secondary safety element and in cab warning indicator.
Cooling	: Water cooler via large capacity radiator with anti-block "wavy" fins.
Starting system	: 24 volt.
Batteries	: 2x12 volt heavy-duty.
Alternator	: 24 volt, 55 amp.
Refuelling pump	: Electric type.

CAB + CAB GUARD

Pressed steel construction with high strength rolled sections. Excellent all round visibility during digging, loading & positioning, removable front lower glass and sliding rear window. Excellent ergonomic positioning for operator comfort. Windscreen wiper, mobile phone charging point & document holders provided. Cab guards for cab front protection against flying objects. Additional cab top lights for illumination.

CONTROLS

Excavator	: All servo lever operated, to ISO control pattern, independently adjustable to the seat.
Tracks	: Individually servo operated by foot pedal or speed selection via joystick button.
Auxiliary	: Via servo operated foot pedal.
Controls isolation	: Gate lock lever at cab entrance.
Engine speed	: Dial type throttle control
Engine stop	: Ignition key operated and separate shutdown button.
Power boost	: Automatic in L & H + modes.
Horn	: Operated via servo lever mounted button.

EXCAVATOR END

Monoboom is available with a 2.40 m dipper as a standard fitment. Reserve strength is built into the fully welded structures for hydraulic hammer and other arduous operations.

EXCAVATOR BUCKET

All buckets are JCB type fully welded steel, with sealed, hardened steel pivot pins and replaceable wear parts.

Capacity (Cu.m)	Toe Plate Width (mm)	Weight (Kg)
0.8 cu.m HD	1144	942
0.9 cu.m GP	1180	822
1.02 cu.m GP	1320	920
0.9 cu.m HD	1222	983
1.02 cu.m HD	1350	1040
1.15 cu.m GP	1420	974
1.2 cu.m GP	1528	900

POWER BOOST

The digging force can be further boosted by a new power boost system

Dipper tearout maximum	12723 kg
Bucket tearout maximum	14360 kg

HYDRAULIC SYSTEM

A variable flow system with flow on demand, variable power output and servo operated, multi-function open centre control. Machine auto warm-up maximises performance in cold/startup conditions.

Pumps

Main pumps : 2 variable displacement axial piston type.
Maximum flow : 2x213 L/min.
Servo pump : Gear type.
Maximum flow : 18 L/min.

Control valve

A combined four and five spool control valve with auxiliary service spool as standard. When required, twin pump flow is combined to boom, dipper and bucket services for greater speed and efficiency.

Relief valve settings

Boom/Arm/Bucket	343 bar
With power boost	373 bar
Swing circuit	289 bar
Travel circuit	343 bar
Pilot control	40 bar

A separate cushion control valve in the servo system provides cushioning of the boom and dipper spools selection and quick warm-up of the servo system.

Hydraulic cylinders

Double acting type, with bolt-up end caps and hardened steel bearing bushes. End cushioning is fitted as standard on boom, dipper and bucket arms.

Cooling

Worldwide cooling is provided via full return line air blast cooler with anti-blockway cooling fins.

SWING SYSTEM

Swing motor	: Axial piston type.
Swing brake	: Hydraulic braking plus automatic spring applied disc type parking brake.
Final drive	: Planetary reduction.
Swing gear	: Large diameter, internally toothed fully sealed grease bath lubricated.
Swing lock	: Multiposition switchable brake.
Swing speed	: 12.5 rpm

UNDERCARRIAGE

Construction	: Fully welded, "X" frame type with central belly guarding and sloping side members with dirt relief holes under top rollers.
Track shoe	: 600 mm (Standard)
Upper & lower rollers	: Heat treated, sealed and lubricated.
Track adjustment	: Sealed and lubricated, with spring enhanced recoil. Grease cylinder type.
No. of track guides	2 per side
No. of lower rollers	8 per side
No. of upper rollers	2 per side
No. of track shoes	49 per side

TRACK DRIVE

Type	: Fully hydrostatic, three speed with auto shift
Travel motors	: Variable swash axial piston type, fully guarded within undercarriage frame.
Final drive	: Planetary reduction, bolt-on sprockets
Service brake	: Hydraulic counter balance valve to prevent over speeding on gradients.
Park brake	: Disc type, spring applied, automatic hydraulic release.
Grade ability	: 70% (35 degree) continuous
Travel speed	: High - 5.5 km/h, Mid - 3.2 km/h, Low - 2.3 km/h
Tractive effort	: 197.8 kN (20170 kgf)

WEIGHT AND GROUND BEARING PRESSURE

Standard machine with bucket, operator, full capacity lubes and fuel.

Maximum operating weight	21750 kg
Ground bearing pressure	0.49 kg/sq.cm

STANDARD EQUIPMENT

Auto Idler
Work lights : 2 each on boom and 1 on main frame
Additional lights : 2 nos. on cab & 1 no. on counterweight
Windscreen wiper
Engine fan guard
Undercarriage belly guard
Turbo II pre-cleaner
Suspension seat
Removable front lower glass in cab
Rock breaker pipe mounting brackets
Tool kit
Handrail and nonslip walk ways
FM radio and USB music player with speakers
Mirrors on cab grab rail, right hand rail and counterweight
Heavy duty track motor cover plate
Livelink
Engine emergency stop system
Heavyduty idler frame
Cab front grill

OPTIONAL EQUIPMENT

Cabin top guard
Rock breaker - HM2180HD and HM2160HD
Rock breaker pipe work
General purpose buckets (0.9 cu.m, 1.02 cu.m, 1.15 cu.m, 1.2 cu.m)
Heavyduty buckets (0.8 cu.m, 0.9 cu.m, 1.02 cu.m)
First aid kit
Long reach attachment (15 m)
3 m arm











SERVICE CAPACITIES

Fuel tank	343 lt
Engine coolant	18 lt
Engine oil	21.0 lt
Swing reduction gear	5.0 lt
Track reduction gear (each side)	2x5.2 lt
Hydraulic system	200 lt
Hydraulic tank	120 lt

*All dimensions, weights and timings are variable within 1.5% JCB reserves the right to change specifications without prior notice.

"All dimensions, weights, timings, features & measures mentioned in the brochure could have variance. JCB reserves the right to change specification without prior notice."









LIFT CAPACITIES : JCB220LC XTRA , 2.4 m arm, 49x600 tracks, without bucket

Reach	3 m		4.5 m		6.0 m		7.5 m		Capacity at max. reach	
Load point height										

LIFT CAPACITIES: JCB220LC XTRA, 2.4 m ARM, 49x600 TRACKS, WITHOUT BUCKET

Reach	3 m		4.5 m		6 m		7.5 m		Max. reach		Max. reach
Load point ht.	Kg	Kg	Kg	Kg	Kg	Kg	Kg	Kg	Kg	Kg	mm
7.5 m									*6060	5650	5533
6 m					*6200	4970			*5580	4060	6755
4.5 m			*7840	7530	*6730	4830			5200	3390	7486
3.0 m			*9930	7000	7220	4610	5100	3300	4730	3060	7868
1.5 m			11050	6580	6990	4400	5000	3210	4590	2950	7949
0 m			10820	6380	6840	4260	4930	3150	4720	3020	7741
-1.5 m	*11210	*11210	10780	6350	6790	4220			5210	3310	7218
-3.0 m	*15510	12620	10900	6450	6870	4300			6410	4040	6300
-4.5 m	*11720	*11720	*8320	6730					*7670	6210	4760

LIFT CAPACITIES : JCB220LC XTRA, 3.0 m arm, 49x600 tracks, without bucket

Reach	3 m		4.5 m		6.0 m		7.5 m		Capacity at max. reach	
Load point height										

LIFT CAPACITIES: JCB220LC XTRA, 3.0 m ARM, 49x600 TRACKS, WITHOUT BUCKET

Reach	3 m		4.5 m		6 m		7.5 m		Max. reach		Max. reach
Load Point Ht.	Kg	Kg	Kg	Kg	Kg	Kg	Kg	Kg	Kg	Kg	mm
7.5 m					*4800	*4800			*4130	*4130	6226
6 m									*3870	3590	7332
4.5 m					*6100	4880	5230	3410	*3840	3040	8011
3.0 m	*12490	*12490	*8960	7140	*7080	4640	5110	3310	*3970	2770	8367
1.5 m			*10980	6630	7000	4400	4980	3190	4170	2670	8444
0 m	*6660	*6660	10790	6340	6800	4230	4880	3100	4260	2710	8249
-1.5 m	*11050	*11050	10680	6250	6710	4150	4850	3060	4620	2930	7760
-3.0 m	*16770	12330	10730	6300	6740	4170			5490	3460	6916
-4.5 m	*13740	12680	*9780	6490					*7580	4820	5552

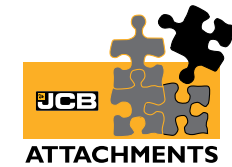
 Life capacity front and rear

 Lift capacity full circle

Notes: • For lifting capacity including bucket, subtract total weight of bucket and quickhitch from above value • The above loads are in compliance with SAE and ISO standards i.e. 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is less. Lifting capacities marked * are based on hydraulic capacity

* All dimensions, weights and timings are variable within 1.5% JCB reserves the right to change specifications without prior notice.

INDIA'S BEST & LARGEST DEALER NETWORK





ONE COMPANY, OVER 300 MACHINES.

Dealer's stamp:

JCB INDIA LIMITED : 23/7 Mathura Road, Ballabgarh - 121 004 Haryana, India.
 Tel.: + 91 129 4299000 Fax : +91 129 2309050 E-mail : delhi.marketing@jcb.com
 Website : www.jcbindia.com

©2009 JCB Sales. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB Sales. All references in this publication to operating weights, sizes, capacities and other performance measurements are provided for guidance only and may vary dependant upon the exact specification of machine. They should not therefore be relied upon in relation to suitability for a particular application. Guidance and advice should always be sought from your JCB Dealer. JCB reserves the right to change specifications without notice. Illustrations and specifications shown may include optional equipment and accessories. The JCB logo is a registered trademark of J.C. Bamford Excavators Ltd.

