







Your Most Reliable Partner

Heavy duty undercarriage for long life Reinforced structures: Boom & arm, lower & upper frames One Global Quality - Industry best components

Leading with Performance

Class leading lifting capacity, stability & digging force Superior multifunction for simultaneous operations Special profile bucket for handling marble & granite blocks

Excellent Fuel Efficiency

Fuel efficient JCB DieselMax 7.2 Litre CRDI Engine gives high torque at low speeds Energy saving hydraulics with Hydraulic Regeneration System

3 | JCB380LC QUARRY MASTER

Choice of economy modes



*As per the benchmarking data with leading competitions, comparative model in the class. It may vary depending on site condition, operator efficiency etc.

Low on Maintenance

Long maintenance intervals

Power core air filtration with scavenge system

Increased boom end greasing interval - Innovative bushes

Stay in Control

LiveLink enabled

Service - Reminders

Operation - Fuel level and fuel consumption reports

Security - Geofencing

We Care for Uptime

Premier Line Solutions

Reinforced structures

24x7 Uptime monitoring

FABRICATION

High Precision Laser Cutting Technology is only used by JCB in the industry for excavator parts. This cutting-edge technology provides accurate profile cut parts, delivers stronger structures.

JCB is the first in the industry to use a Bevel Cutting Robot, which gives the accuracy of 0.1 mm to the parts. Thereby, ensuring best weld joints and strength to each component.

JCB uses the unique Flattening Rollers, this 9-roll straightening process makes the parts straight within 0.1mm. This ensures accuracy of every structure, stronger components and best-in-class weld strength.

The high precision CNC Press Bending used by JCB ensures reliability of parts. This process delivers high precision and accurate bending of parts, making them of high quality and repeatable, JCB has biggest capacity for press brake in India to deliver the long parts without joints.

The unique Hydraulic Jigs make every JCB part reliable, accurate and repeatable. The predefined control points in this machine give every part the desired accuracy and avoid any manual intervention.

JCB uses the latest vision system in the robotic welding to weld 100% parts of the excavators. This unique addition to the conventional robotic welding, can see the exact weld positions, giving a perfect structure to the excavators.

The state-of-the art Duplex Boring Machine is the final process that ensures critical dimensions within 10 microns hence, improving the quality of the assembly.

E FARO Dimensional inspection is the latest technology used by JCB for guality assurance. This machine can measure the parts in few microns, ensuring best-in-class machine components.

Ultra-sonic Weld Inspection, the process used only by JCB that ensures zero defect in welding. This process checks internal weld integrity, 100% of JCB parts go through this test.

10 Bolstering JCB promise of zero defect machine is the pre-dispatch inspection. JCB experts carry out the PDI checks and other functional tests of each and every fabrication before assembly. Thus, making sure of zero fault forward.

























RELIABILITY AND DURABILITY

MANUFACTURED AT THE WORLD-CLASS JCB PUNE FACTORY WITH ROBUST STRUCTURES AND WELL ENGINEERED COMPONENTS, THIS **EXCAVATOR IS A RELIABLE PARTNER AND GIVES POWER TO DO MORE THAN YOU** EXPECT.

Heavy duty boom and arm made with high tensile strength steel and large sections, offer high strength to withstand high stress level in most demanding usage. These are manufactured using robotic welding techniques. The strengthened plates as well as the heavy duty wear strips at the dipper, makes the machine more durable and enables it to work in tough applications.

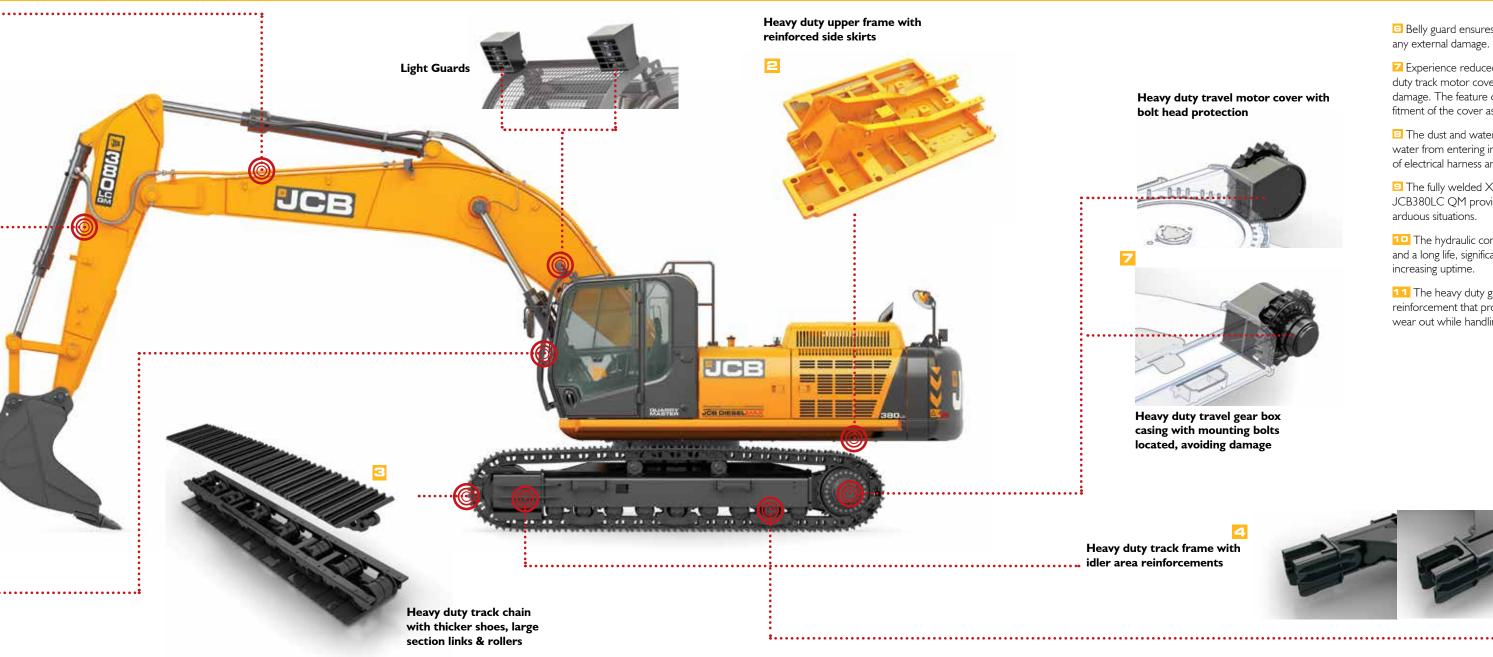
ICB380LC QM is equipped with a heavy duty rugged upper frame with reinforced side skirts. It also has thicker low stress, high strength steel plates and side section with additional reinforcement providing higher durability in tough working conditions.

E Well proven high strength design of track links make the track chain assembly heavy duty. Extended life is granted with track shoes of high plate thickness and grouser height.

Get a longer life and reduced maintenance cost with a heavy duty track frame and reinforcement of idler mounting area. It ensures rigidity of track frames even in demanding applications.

Equipped with 3 nos. of track guides on each side, JCB380LC QM minimises the sideways movement of the track chain to reduce damage of links and lower rollers.





Belly guard ensures protection of the rotary joints and hoses from

Z Experience reduced repair cost and increased uptime with heavy duty track motor covers that protect the track motor from external damage. The feature of bolt head protection makes removal and fitment of the cover assembly easy.

The dust and water-proof IP69 connectors prevent dust and water from entering into the electrical system. This increases the life of electrical harness and provide trouble-free operation.

 The fully welded X frame construction of the undercarriage of JCB380LC QM provides long term durability even in the most

10 The hydraulic components are proven to show high reliability and a long life, significantly reducing maintenance costs while

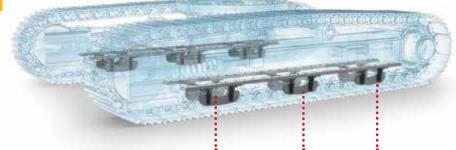
11 The heavy duty granite & marble buckets are equipped with reinforcement that provides protection from external impact and wear out while handling marble and granite blocks.

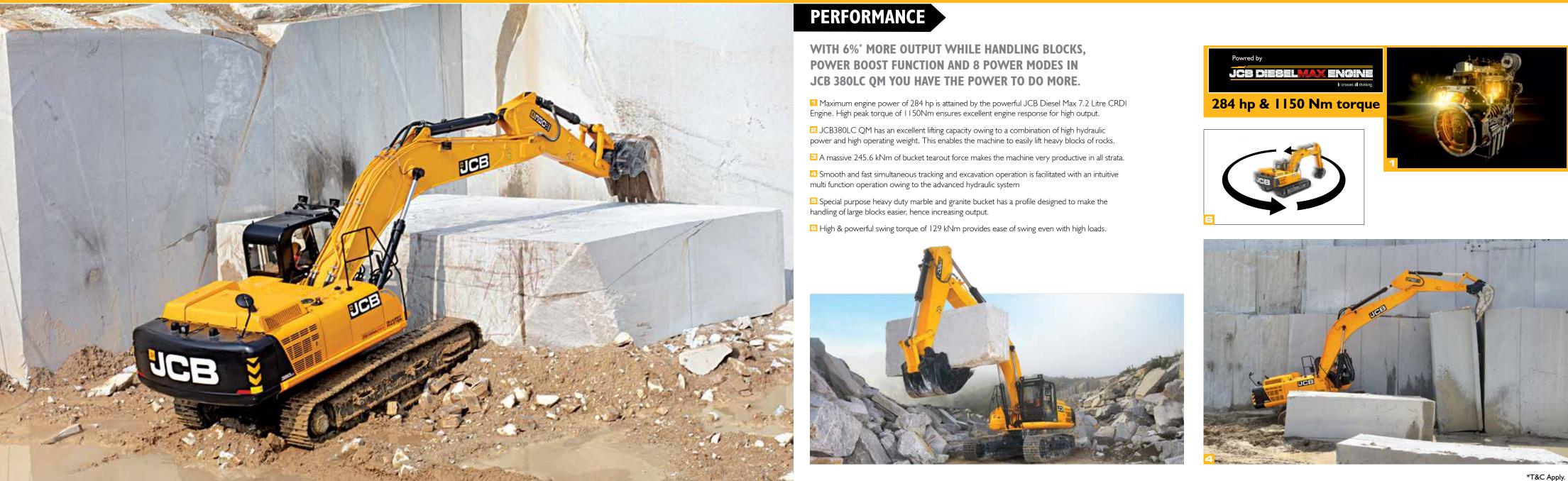




3 nos of track guides on each side- Retain the track in its position while working in tough underfoot conditions

















POWER TO DO MORE | 10

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 which is on the right hand side of the joystick in other modes.

User friendly modes including 3 lift modes and 4 digging modes are provided for adaptability of machine to suit application and job needs. These modes are selectable through engine throttle control dial switch. Moreover, the H+ mode can also be selected using an additional switch.

Po	wer mode	Usage for				
H+	High Power Plus	Provides maximum output Suitable for high output in heavy duty strata.				
Н	High Power	For high output requirements.				
, G2, G3	Economy	For general duty and digging operations.				
, L2, L3	Lifting	For heavy lifting operation.				









EFFICIENCY

THE 3%* EXTRA FUEL EFFICIENCY AND JCB DIESELMAX ENGINE IN JCB 380LC QM GIVES YOU POWER TO DO MORE SAVINGS.

JCB DIESELMAX 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 while maximising output.

The advanced eco hydraulic technology ensures that the machine always starts in idle for maximum fuel efficiency contributing to fuel savings. This system 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.



It crosses all thinking.





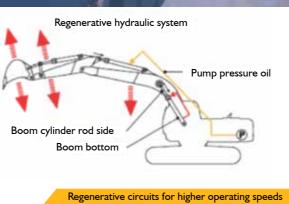
10

69

Innovative hydraulic regeneration system recycles oil across cylinders for faster cycle time and reduced fuel

Auto idler reduces engine speed automatically when





13 | JCB380LC QUARRY MASTER

COMFORT AND EASE OF USE

THE STATE-OF-THE-ART ERGONOMIC CAB OFFERS COMFORT TO THE OPERATOR, GIVING HIM THE POWER TO DO MORE PRODUCTIVE OPERATIONS, INCREASING PROFITS.

Highly customisable and user friendly 7" colour display easily monitors machine operating parameters. Engine dial control facilitates easy mode selection.

Construction of the machine to carry out tough jobs.

E The roof hatch keeps the cab well ventilated which is aided by a rear sliding window. Operator comfort is further enhanced as the front lower glass can also be removed for better ventilation.

☐ JCB380LC QM is equipped with 2 lights on the boom, 2 on the cab top, 1 on the upper frame and 1 on the counterweight. They provide a well illuminated and a safer work site, ensuring 24x7 operations.

Single piece, large right hand glass ensures excellent visibility. High visibility for digging at height through additional glass provided in front of the cab.

The fully air conditioned cab is with cooling and heating function. Temperature control function is an added feature to maintain desired in-cab temperature in both, hot and cold weather conditions. Air vents are placed at convenient locations for excellent cooling.



















EASE OF MAINTENANCE

THE SMART CONTROL SYSTEM HELPS TO TAKE PREVENTIVE MEASURES THEREBY, GIVING YOU POWER TO DO MORE PLANNING AND LESS DOWNTIME.

1 Pre-start checks as well as other important parameters during machine operation are monitored through the Smart Control System. It also provides timely audio-visual alert on display as well as through LiveLink, making preventive and corrective actions quicker and easier.

Schedule refueling, as the display shows quantity of fuel left in the tank. Increase uptime with fuel alerts, as they work as reminders, ease the planning of site operations and help to schedule refueling. Low coolant level alerts enable the operator to proactively maintain the coolant level and prevent the chances of overheating of the engine.

I Plan your maintenance with water in fuel alert. It indicates the presence of water in the fuel and allows the operator to drain water to protect the fuel system.

Alerts about high engine coolant temperature, high or low battery and low engine oil pressure, enables timely preventive and corrective actions.











Excellent serviceability with Cooling Pack Flymesh, which prevents clogging of the radiator and cooling of fins. It can be easily cleaned with a brush, maintaining the cooling efficiency of radiator and coolers. Side-by-side coolers provide excellent serviceability and ease of cleaning. In addition, a hinged condenser unit offers direct access to the coolers for better cleaning.

The engine bonnet is compact in size and opens front-to-rear, providing easy & safe engine service access. Supported by a gas strut, it minimises the effort while opening and closing the bonnet.

Z Air filter clog alert system enables to plan air filter maintenance or replacement when it is clogged. This ensures better output, uptime & a higher engine performance.

Save possible repair costs of hydraulics/ engine and ensure high uptime with maintenance reminders on the display. It helps you to plan maintenance as per recommended schedule.

Refuel pump makes fuel refilling easy, quick and hassle-free.

10 Filters are grouped together in the pump bay for fast and easy on ground service.



LOW MAINTENANCE COST

WITH LONGER SERVICE HOURS YOU ACTUALLY SAVE ON MAINTENANCE AND GET THE POWER TO DO MORE WORK IN HIGHER UPTIME.

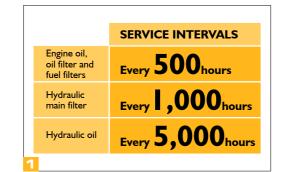
JCB's special oil filter systems keep hydraulic oil clean and extend its life up to 5,000 hours. It also enhances hydraulic filter life to 1,000 hours, significantly reducing maintenance costs while enhancing machine uptime.

Engine maintenance intervals are extended as fuel filters, engine oil & filters require replacement only after 500 hours leading to high machine uptime and low maintenance costs.

Specially designed air filter elements ensure high dust holding capacity. The auto scavenging system continually removes dust particles from air filter preventing it from clogging even in high dust environment. In addition, it also increases the interval of filter maintenance/change.

☐ JCB DIESELMAX Engine has an advanced multi-stage fuel filtration system including water separation at the first stage with water in fuel sensor to alert presence of water in fuel. The filtration system thus, protects the fuel system from contaminants and enhances life of the fuel system components.

Graphite infused bushes are used for pivot pins at both ends of boom to increase greasing interval to 1,000 hours, thus, reducing maintenance cost and enhancing machine uptime.







By using graphite impregnated bronze bushes, JCB has increased the boom and dipper greasing intervals to 1,000 hours for normal applications.

TO E

POWER TO DO MORE | 18



SAFETY

WITH MANY PROTECTIVE FEATURES JCB 380LC QM ENSURES UTMOST SAFETY OF THE OPERATOR EVEN IN ARDUOUS SITUATIONS, GIVING YOU MORE PEACE OF MIND.

LiveLink provides easy & remote monitoring of the machine on & off-site, thus, ensuring higher output and lower maintenance costs. It helps machine owners to know service, operation & security aspects of the machine including location tracking, health alerts, fuel levels, performance report, fleet management etc.

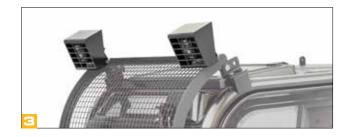
Cab front guard ensures machine and operator safety by protecting front wind screen glass from stones.

C The guards on the working lights protect them from external damage thereby, reducing possible repair cost and ensuring high uptime.

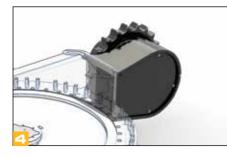
The heavy duty plate of track motor guard protects travel motors as it can withstand the damage from rocks.

Anti-slip top covers ensure safety with punched steel plates that give optimum grip even in wet conditions. Bolt-on plates have recessed bolts to reduce trip hazards.

Anti-engine restart system saves starter from damage, preventing it from starting automatically while the engine is ON, thus, ensuring high uptime and saving possible repair costs.

















Swing lock system prevents unintended swing operation, providing greater safety.

Belly guards are fitted at the lower frame of the machine to protect against damage to rotary coupling and hoses.

Accumulator helps to bring down the boom, arm or bucket back to the ground without starting the engine as well as making parking of the front-end safer by helping to relieve hydraulic pressure.

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.

Safe start of the engine is ensured with the Engine Start Safety System. It prevents sudden machine operations by isolating hydraulic system at the start of engine. To ensure safe start of the machine, the engine can be started only when the servo isolator lock is ON.

12 An emergency stop switch is provided to switch off the engine immediately, if required.

A full set of side & rear view mirrors are installed in the machine to provide all round visibility to the operator. This enhances operator safety & reduces chances of accident while saving possible repair costs.



XTRA CONTROL

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





Operation & performance monitoring



Provides information on fuel used and hours worked along with fuel consumption in litres/ hours for selected period.

Idle time monitoring helps in analysing the extent to which engine was idle. This can be used for better site management to minimise idle hours and save fuel consumption.



Machine usage can be monitored in details including the hours worked in power band which indicates the extent of loads on the machine.

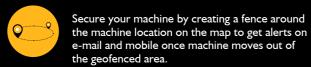
Security



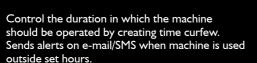
Helps to locate your machine precisely on map to display its current location. Historic records of machine location and movements are also available.

Secure your machine by creating a fence around

the geofenced area.









Alerts you in case the machine is being towed away even in engine off condition securing your investment.

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/SMS.



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 reports.

Reports and 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.



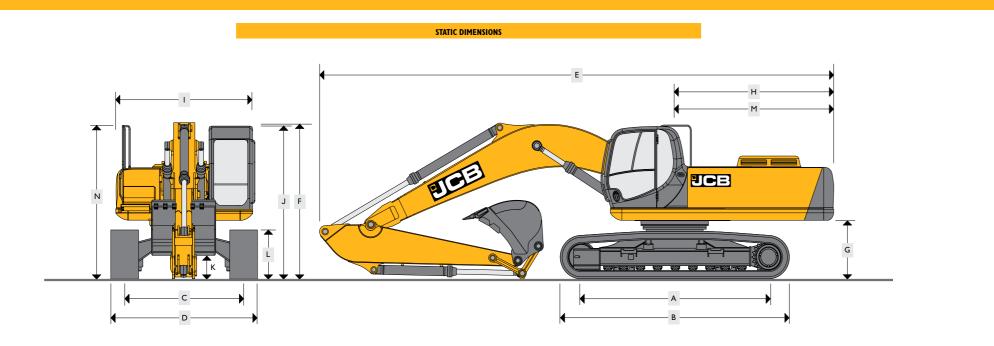
Get customised alerts on mobile on machine status and critical health alerts.





POWER TO DO MORE | 26

POWER TO DO MORE



STATIC E	DIMENSIONS		
Model			JCB380LC QM
А	Track length on ground	mm	4022
В	Undercarriage overall length	mm	4947
С	Track gauge	mm	2600
D	Width over tracks (600mm trackshoes)	mm	3200
G	Counterweight clearance	mm	1215
Н	Tail swing radius	mm	3571
1	Overall width of super structure	mm	2990
J	Height over cab	mm	3202
Κ	Ground clearance	mm	530
L	Track height	mm	1024
М	Tail length	mm	3563
Ν	Height over grab rail	mm	3359
Boom	option		Standard Monoboom 6.45 m
Dipper	lengths		2.63m
E	Transport length	mm	11353
F	Transport height	mm	3510

ENGINE	
Model	JCB DIESELMAX 672 TCAE Electronic Engine.
Туре	4-stroke, 6-Cylinder, High pressure common rail, ECU, turbocharged, intercooled.
Rated power	212 kW (284 HP) at 2000 rpm.
Engine peak torque	1150 Nm at 1400 rpm
Piston displacement	7.2 litres
Air filtration	Dry element with secondary safety element and in-cab warning indicator.
Starting system	24 volt.
Batteries	2 x 12 volt.
Alternator	24 volt, 55 Amp.

Trave

Monoboom available along with a choice of dipper lengths to suit the requirements of reach, dig-depth, loadover height and tearouts. Reserve strength is built into the fully welded structures for hydraulic hammer and other arduous operations. Fabricated bucket tipping links are provided with a choice of lift points.

SERVI

Fuel tan Engine of Swing r Track re Hydrau Hydrau

SWING SYSTEM	
Swing motor	Axial piston type.
Swing brake	Hydraulic braking plus automatic spring applied disc type parking brake.
Swing torque	129 kNm
Swing speed	8.9 rpm
Swing 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, strengthening ribs at idler area.
Recovery point	Front and rear.
Track shoe option	600 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 & shoes (each side)	JCB380LC QM
No. of track guides	3 per side
No. of lower rollers	9 per side
No. of upper rollers	2 per side
No. of track shoes	48 per side

TRACK DRIVE	
Туре	Fully hydrostatic, three speed with autoshift.
Travel motors	Variable axial piston type, fully guarded within undercarriage frame.
Final drive	Planetary reduction, bolt on sprockets.
Service brake	Hydraulic counter balance valve to prevent overspeeding on declines.
Park brake	Disc type, spring applied, automatic hydraulic release.
Gradeability	70% (35 deg) continuous.
Travel speed	High – 5.3 km/h
	Mid – 3.1 km/h
	Low – 2.2 km/h
Tractive effort	287 kN

EXCAVATOR END - MONOBOOM

CE CAPACITIES			
ank	Litres	590	
e coolant	Litres	45	
e oil	Litres	25	
g reduction gear	Litres	16	
reduction gear (each side)	Litres	5	
aulic system	Litres	430	
aulic tank	Litres	239	

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 304 l/min					
Servo pump	Gear type.					
Maximum flow	28.5 l/min.					
Control valve						
A combined four and five spool control valve with au	uxiliary service spool as standard.					
Relief valve settings						
Boom/Arm/Bucket	319 bar					
With power boost	348 bar					
Swing circuit	284 bar					
Travel circuit	343 bar					
Pilot control	45 bar					
Filtration						
In tank	150 micron, suction strainer.					
Main return line	10 micron, glass fibre element.					
Pilot line	10 micron, paper element.					
Hydraulic hammer return	10 micron, reinforced microform element.					

BUCKET AND ARM COMBINATION	ł i				
Bucket capacity	m ³	1.44 marble & granite Bucket	1.4 Rock Bucket	1.61 HD*	1.8 HD*
Bucket weight	kg	1879	1692	1518	1605
Toe plate or trench width	mm	1255	1410	1660	1825
JCB380LC QM					
2.63 m Arm	m				

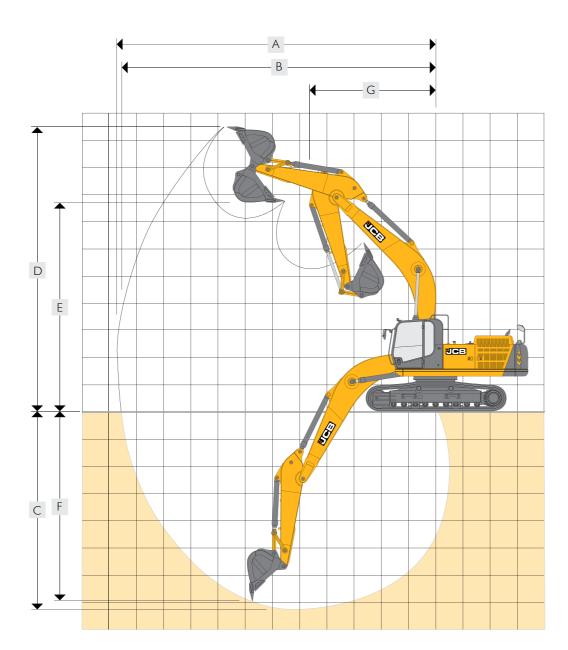
(Without quickhitch)

* Suitable for excavation & loading

Suitable for general excavating (materials up to 2000kg/Cu.m)

WEIGHTS AND GROUND BEARING PRESSURES – JCB380LC QM							
Description of whats included in measurement - 2.63 m Arm, 1.44 cum Granite & Marble bucket, full fuel tank, operator weight 80kg							
		600mm					
JCB380LC QM							
Machine weight	kg	36770					
Ground bearing pressure	kg/cm ²	0.78					

WORI	(ING RANGE - MONOBOOM 6.45M, I.4 CUM ROCK BUCK	ET	
			JCB380LC QM
Dippe	er length:		2.63m
А	Maximum digging reach	mm	11072
В	Maximum digging reach (on ground)	mm	10866
С	Maximum digging depth	mm	6726
D	Maximum digging height	mm	10007
Е	Maximum dumping height	mm	6898
F	Maximum vertical wall cut depth	mm	6202
G	Minimum swing radius	mm	5151
	Bucket rotation	degrees	175
	Dipper tearout with boost	kNm	201.3
	Bucket tearout with boost	kNm	245.6



LIFT CAPACITIES -	IFT CAPACITIES – Dipper length: 2.63m, Boom: 6.45m, Trackshoes: 600mm triple grouser, without bucket. JCB3									JCB380LC QM	
					Reach from S	wing Centre					
Load Point	: 3m		4.5	im	6	m	7.	5m	Ca	pacity at Max Re	ach
	ED-	ů.		<u>n</u> Ü	÷		÷		÷		Reach
Height	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
7.5m									9170*	8180	7006
6m					9810*	9810*	9000*	7240	8910*	6520	7965
4.5m			14080*	14080*	10960*	9880	9420*	7030	8630	5680	8555
3m					12300*	9290	10050*	6750	8040	5250	8852
1.5m					13340*	8820	10100	6490	7860	5100	8884
0m			18460*	12890	13710*	8550	9900	6310	8080	5210	8657
– 1.5m			17380*	12910	13300*	8470	9850	6270	8790	5640	8146
– 3m	19260*	19260*	15330*	13100	11900*	8580			9200*	6640	7292
– 4.5m			11640*	11640*					8530*	8530*	5945

ED Lift capacity front and rear. Notes: H Lift capacity full circle.

Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked* are based on hydraulic capacity.
Lift capacities assume that the machine is on firm, level ground.
Lift capacities may be limited by local regulations. Please refer to your dealer.

STANDARD EQUIPMENT	OPTIONAL EQUIPMENT
Belly guard & under covers	Full track guide
Track motor guard with bolt head protection	Buckets : 1.8 cum, 1.6cum, 1.4cum Rock, 1.44Granite & Marble
3 sets of track guides on each side	Rear view camera (standalone type)
Reinforced idler area	RBC / Hammer circuit
Boom- Heavy duty (6.45 m)	Travel Alarm
Arm- 2.63m	White Noise Alarm
Track shoe width - 600mm	Quick Hitch
Power Core air filtration with scavanging	Selector grab
Engine fan guard	Multiprocessor
Refueling pump	Lifting hook on tipping link
HVAC	Auxiliary flow (Full & low flow)
Air conditioned cab	Fire extinguisher
Cab front guard	
Wiper	
Sun screen on front glass	
2 nos of 24V auxilliary power point on the machine	
Mirrors-CAB LH, RH hand rail & counterweight	
LiveLink	
2 lights on boom, 1 no. on c/wt, 1 no.on tool box, 2 nos. on cab	
Light guards	
HSP pressure test points	
Mobile phone holder and power socket for mobile charger	
Coat hook	
Radio (FM) with media player (USB drive based) with speakers	
Health & Safety: Swing lock, pilot lock switch, accumulator, operator seat belt, , anti-slip panels on walking area	

31 | JCB380LC QUARRY MASTER