

JCB NXT 145 QUARRY MASTER

INTELLI
CONTROL



THE NXT LEVEL

Engine Power : 100 hp (75 kW) | Bucket Capacity : 0.63 - 0.72 cu.m | Operating Weight : 14,500 kg

 **JCB**

Take your business to THE NXT LEVEL, with the JCB NXT 145 Quarry Master Tracked Excavator.

JCB presents the JCB NXT 145 Quarry Master Tracked Excavators, a rugged solution that is tough outside and intelligent inside.

It has enhanced endurance attributed to a newly inducted heavy-duty boom, extra safety features and added comfort for the operators. Powered by IntelliControl, an intelligent way that offers NXT level fuel efficiency and productivity, with the utmost ease of use and control on the machine operation, maintenance and safety. IntelliControl offers 3 power modes, across 10 engine speed bands.

The JCB NXT 145 Quarry Master comes with an advanced telematics system - JCB LiveLink, which is CAN based technology that keeps you connected for total control over machine improving your business efficiency. Backed by industry's finest customer support network, always look for a better way with JCB.

Take your business to THE NXT LEVEL, with the new JCB NXT 145 Quarry Master Tracked Excavators.



JCB NXT 145QM

TRACKED EXCAVATOR



NXT LEVEL OF
RELIABILITY



NXT LEVEL OF
FUEL EFFICIENCY



NXT LEVEL OF
PERFORMANCE



NXT LEVEL OF
CONNECT



NXT LEVEL OF
EASY MAINTENANCE



NXT LEVEL OF
COMFORT



NXT LEVEL OF
SAFETY

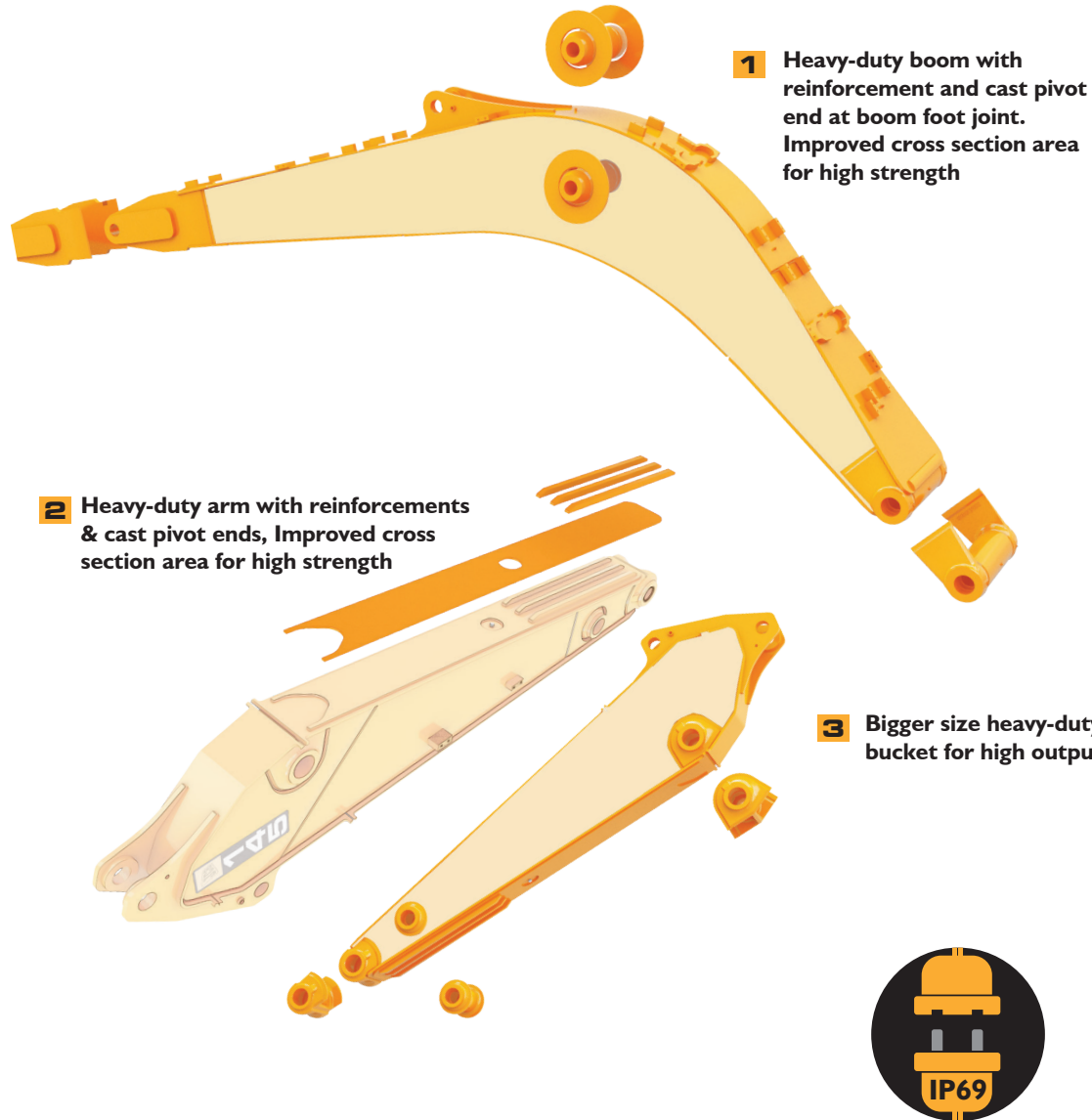


NXT LEVEL OF
INTELLIGENCE



NXT LEVEL OF RELIABILITY

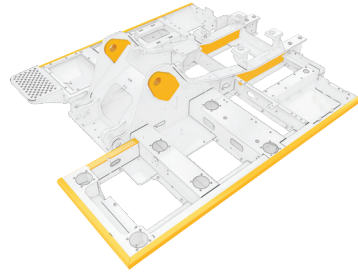
ENHANCED ENDURANCE INSIDE AND OUTSIDE.





4 Light Guards

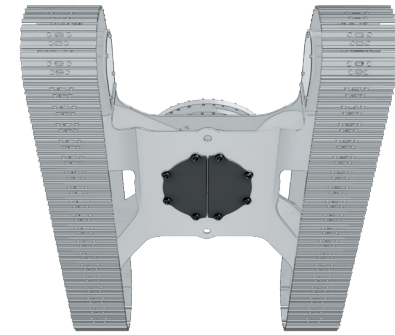
10 Heavy-duty upper frame with reinforced side member



9 Heavy-duty Top Guard

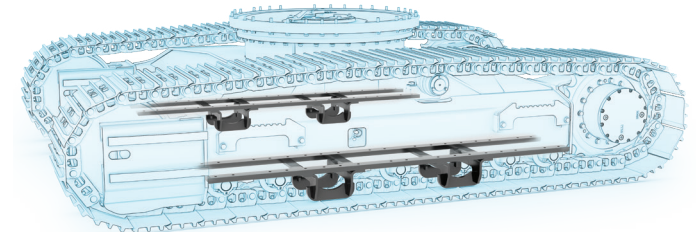


8 Heavy-duty Front Guard

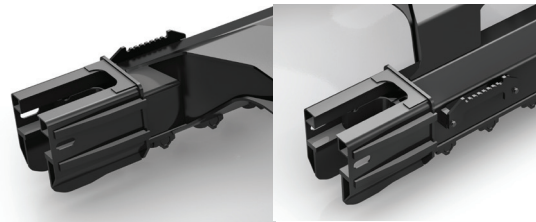


Belly guard ensures protection of the rotary joint and hoses from any external damage

7 2 nos of track guides on each side-retain the track in its position while working in tough underfoot conditions



6 Heavy-duty track frame with idler area reinforcements



NXT LEVEL OF PERFORMANCE

GET NXT LEVEL OF PERFORMANCE WITH NEW POWER MODES FOR UNMATCHED OUTPUT.



3 User-friendly modes

Power		Usage
P+	Power Plus	Provides maximum output. Suitable for high output in heavy-duty strata.
P	Power	For high output requirements.
E	Economy	For general duty and digging operations.



Excellent bucket and arm tear-out forces resulting in higher output.

13.6 rpm swing speed completing digging in less time and increase, the productivity of the machine.



NXT LEVEL OF EFFICIENCY

THE CLASS-LEADING EFFICIENCY WITH ENERGY SAVING **ecoHYDRAULICS** OFFERING NXT LEVEL OF SAVINGS.

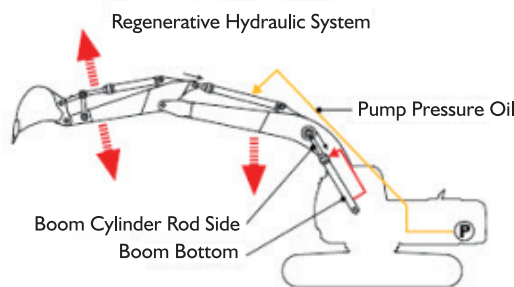
ecoHYDRAULICS minimise the hydraulic losses resulting in enhanced fuel efficiency, thus increasing savings.



One-touch deceleration system, helps to reduce engine rpm by just giving one-touch to the switch.



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



Regenerative circuits for higher operating speeds



*T&C Apply.

NXT LEVEL OF INTELLIGENCE

INTELLI CONTROL IS A NEW INTELLIGENT WAY TO OFFER EXCELLENT FUEL EFFICIENCY AND PRODUCTIVITY WITH THE UTMOST EASE OF USE AND CONTROL.



Operational information



Quantity of fuel left in tank



Engine speed & operating mode status



Trip meter



Auto idle status & time setting



Machine operating parameters



Camera ready display



Breaker hour meter

Maintenance information



Maintenance due information



Colour coded health alerts based on severity



Hour meter, counting of attachment operation



Easy diagnostic system



Service warning alerts



NXT LEVEL OF CONNECT



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

Security



Fuel level drop alert via SMS/e-mail



Alerts in case the machine is used outside the set hours



Geofencing alerts

Reports & alerts



Customised reports on machine performance



Easier fleet management



Periodic reports

Safety



Engine high rpm shut down report



Long engine idling report



Critical health alerts

Operation & performance monitoring



Idle time monitoring



Instantaneous fuel level monitoring



Working hour monitoring

Proactive maintenance & usage



Maintenance reminders



NXT LEVEL OF EASY MAINTENANCE AND SAFETY

THE JCB NXT 145 QUARRY MASTER ENSURES EASE OF MAINTENANCE AND ALERTS ON DISPLAY.

Class-leading maintenance interval

Service intervals on bucket operation	
Engine oil, oil filter and fuel filters	Every 500 hours
Hydraulic main filter	Every 1,000 hours
Hydraulic oil	Every 5,000 hours



Graphite infused bush for 50 hours greasing at boom ends

First-in-class safety features



Breaker overuse alert



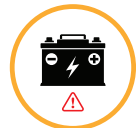
Selectable swing lock



Hydraulic accumulator



Critical health alerts



Battery disconnect switch



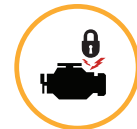
Service due reminder



Radial seal air filter



2 Go system



Hydraulic interlock to start the engine



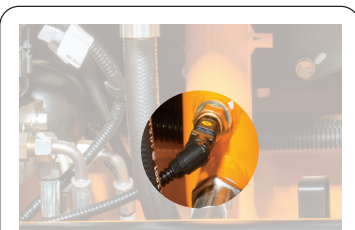
Engine & hydraulic overheat safety system



Advanced self-diagnosis system with error codes and multi-coloured warning alerts for easy and quick maintenance.



Display of all critical parameters accessed through internal menu for easy health monitoring.



Alerts about high engine coolant temp, low engine oil pressure & high hydraulic oil temperature.



Wire mesh guard on the cooling pack to prevent entry of debris or other objects.



Compact size engine bonnet helps in easy and effortless handling during the maintenance.



Battery disconnect switch helps to isolate the machine's electric system easily, whenever required.

NXT LEVEL OF COMFORT

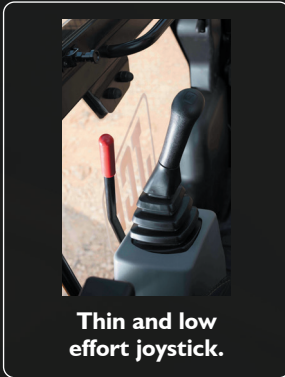
A COMFORTABLE OPERATOR IS A PRODUCTIVE OPERATOR.



Rotary switch controls.



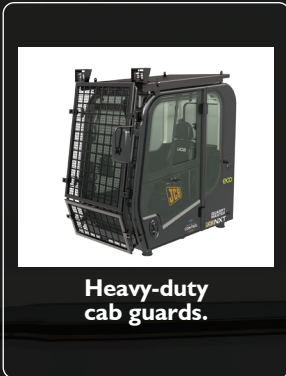
Powerful AC cabin.



Thin and low effort joystick.



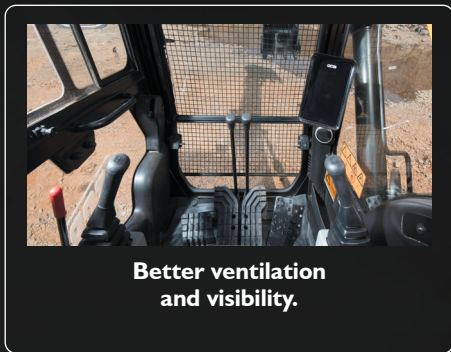
Laminated glass on the front and right-hand side of the cabin.



Heavy-duty cab guards.



6 nos. viscous mounts to absorb vibration that ensures comfort for the operator.



Better ventilation and visibility.



Easy to open roof hatch assisted helps to keep the cab well ventilated.



NXT LEVEL OF CARE

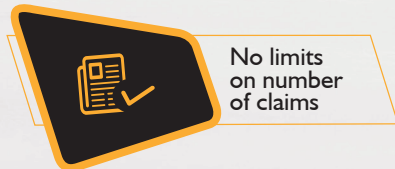
GIVE YOUR MACHINE EXTENDED WARRANTY AND CARE.

- JCB Careplus is an extended warranty programme that comes into effect after the machine standard warranty expires.
- JCB Careplus can be purchased within the 1st year from the sale of the machine.
- The programme offers you peace of mind and saves your maintenance cost even after your machine standard warranty expires.



Extended
Warranty
Programme

BENEFITS OF JCB CAREPLUS



No limits
on number
of claims



Preventive
maintenance
service*



Nationwide
coverage*



JCB skilled
manpower
support



Maximum
productivity



Maximum
uptime



Maximum
performance

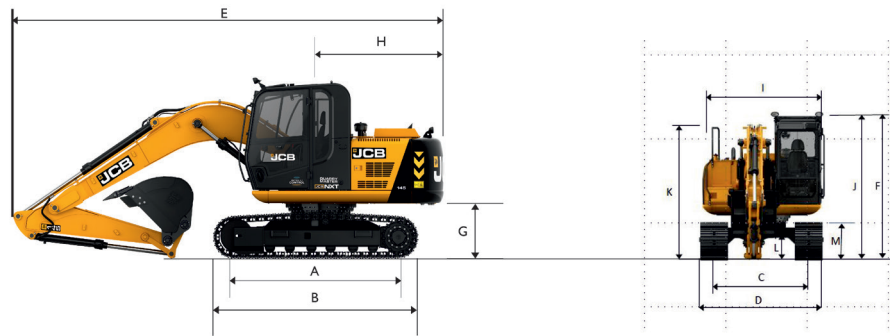


Breakdown
cost protection



Better resale
value





STATIC DIMENSIONS			
With boom length: 4.70 m, dipper length: 2.10 m			
A	Track length on ground	m	2.78
B	Undercarriage overall length	m	3.55
C	Track gauge	m	1.99
D	Width over tracks (500 mm track shoes)	m	2.49
E	Transport length with mono boom	m	7.63
F	Transport height with mono boom	m	2.98
G	Counterweight clearance	mm	910
H	Tail swing radius	m	2.15
I	Width of superstructure	m	2.41
J	Height over cab	m	2.98
K	Height over grab rail	m	2.62
L	Ground clearance	mm	460
M	Track height	mm	815

* Machine in transport position

WORKING RANGE		
Boom length:		4.70 m
Dipper length:		2.10 m
Maximum digging reach	m	8.04
Maximum digging reach (on ground)	m	7.89
Maximum digging depth	m	5.21
Maximum digging height	m	8.89
Maximum dumping height	m	6.37
Maximum vertical wall cut depth	m	4.64
Maximum swing radius	m	2.12
Bucket rotation	dig.	182°
Maximum dipper tear-out (ISO 6015)	kgf	7566
Maximum bucket tear-out (ISO 6015)	kgf	9432

ENGINE	
Model	: Cummins 4BT 3.9C.
Gross Power	: 100 HP
Piston displacement	: 3.9 L

TRACK DRIVE	
Gradeability	: 70% (35 deg.) continuous
Travel speed	: 3.6 kmph
Tractive effort	: 104.1 KN (10615 kgf)

EXCAVATOR BUCKET	
Bucket size Max. width toe plate	Capacity
1.04 m	0.63 cu.m
1.16 m	0.72 cu.m

UNDERCARRIAGE	
JCB NXT 145Quarry Master	
Track Shoe	500 mm (standard)
Upper & lower rollers	Heat-treated, sealed and lubricated.
Track adjustment	Grease cylinder type.
No. of track guides	2 per side
No. of lower rollers	7 Per side
No. of upper rollers	1 per side
No. of track shoes	44 per side

FORCES	
Bucket tear-out force	9432 kgf
Arm digging force	7566 kgf

SERVICE CAPACITIES	
Fuel tank	: 253 L
Engine coolant	: 21.2 L
Engine oil	: 13.5 L
Swing reduction gear	: 3.2 L
Track reduction gear (each side)	: 3.0 L
Hydraulic system	: 173.0 L
Hydraulic tank	: 73.0 L

SWING SYSTEM	
Swing motor	: Axial piston type.
Swing brake	: Hydraulic braking, electrically operated spring applied disc type parking brake.
Final drive	: Planetary reduction.
Swing gear	: Large diameter, internally toothed fully sealed grease bath lubricated.
Swing speed	: 13.6 RPM

HYDRAULIC SYSTEM	
3 Work modes: eco, Power & Power+	
Pumps	
Main pumps	: 2 variable displacement axial piston type.
Maximum flow	: 2 x 120 L/min
Servo pump	: Gear type.
Maximum flow	: 20 L/min

Control valve	
Relief valve settings	
Boom / Arm / Bucket	: 330 bar
Swing circuit	: 279 bar
Travel circuit	: 330 bar
Pilot control	: 40 bar

WEIGHT AND GROUND BEARING PRESSURE	
Operating weight	14,500 kg.
Ground bearing pressure	0.47 kg/sq.cm.

STANDARD EQUIPMENT	
Engine fan guard	
Turbine type air pre-cleaner	
FM radio and music player with speakers	
Auxiliary pipework mounting brackets	
Boom and mainframe mounted work lights	
Cab mounted work lights (2 no.)	
Undercarriage belly guards	
Upper structure under covers	
Tool Kit	
Handrail	
Windscreen wiper	
Radiator fly mesh	
Mirror on cab grabrail	
LiveLink	
Heavy-duty track motor cover	
Heavy-duty cab front & top guard	
Front work lamp guards	
500 mm track shoe	
Laminated glass on the front and right-hand side of the cabin	

OPTIONAL EQUIPMENT	
Fully-ducted, air-conditioned cab (Cooling only)	
Mirror on handrail RH	
Refuel pump	
Rockbreaker	
Rockbreaker pipework	
Ripper tooth	
Option of 0.72 & 0.63 cu.m buckets	
Counterweight lamp	
First aid kit	
Fire extinguisher	
Reflectors	
Cold start kit	

FILTRATION SYSTEM	
In-tank	: 150 microns, suction strainer.
Main return line	: 10 microns, high-efficiency glass fibre
Pilot line	: 10 microns, paper element.
Hydraulic hammer return	: 5 microns, reinforced microform element.