



MINI EXCAVATOR | 8020 CTS

Operating Weight: 2067kg | Net Engine Power: 14.2kW



QUALITY, RELIABILITY AND STRENGTH.

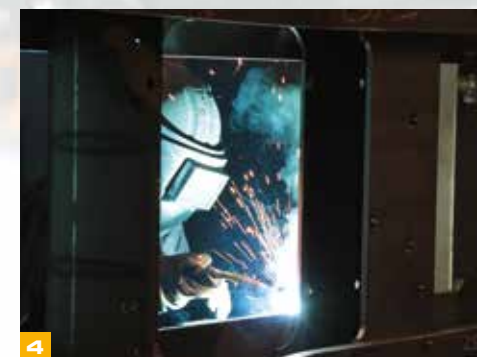
SMALL BUT TOUGH, OUR JCB 8020 CTS MINI EXCAVATOR IS BUILT TO WORK. LIKE ALL JCBs, IT BOASTS EXCEPTIONAL BUILD QUALITY, SUPERB RELIABILITY AND COLOSSAL STRENGTH.

High-strength undercarriage.

- 1 With adjustable wear pads on its track extensions, an 8020 CTS will give you a long service life and a firm, positive, quiet ride during tracking.
- 1 For ultimate rigidity the extending undercarriage beams are constructed from 25mm solid steel plate.
- 2 The 8020 CTS has high-strength box section dozer blades which can withstand impacts from kerbs and manhole covers. Dozer blade hoses are protected by a steel plate.
- 3 The high quality short pitch tracks perform in the most arduous applications.

Built to last.

- 4 JCB uses state-of-the-art manufacturing processes to achieve ultimate build quality, reliability, durability, service life and machine uptime. Our in-house paint process is a case in point, guaranteeing quality and lasting protection.



We've redesigned the rear structure for improved damage protection on site – there's a new 3mm thick steel bonnet – and an inset rear counterweight grill.



Quality above all.

- 5 To optimise durability and service life, we've fitted replaceable steel bushes to the kingpost, dipper nose and bucket tipping link. This also provides smooth and accurate operation.
- 6 An 8020 CTS' hydraulic hoses (including the auxiliary) are routed through the boom for ultimate damage protection.
- 7 Zero risk of inadvertently damaging the boom cylinder during hammering or lorry/skip loading activities due to the new positioning of the top mounted boom cylinder.
- 8 The 8020 CTS uses the very latest sealing technology – O-ring face trapezoidal seal hydraulics minimise leaks.
- 9 The optional lower steel door averts costly glass breakages.



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PERFORMANCE AND PRODUCTIVITY.

WHILST A JCB 8020 CTS IS EXTREMELY STRONG, IT'S ALSO HIGHLY MANOEUVRABLE, AND BOASTS CLASS-LEADING PERFORMANCE: THE PERFECT COMBINATION FOR ANY MINI EXCAVATOR.



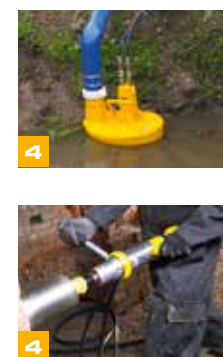
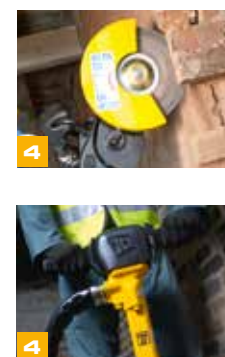
Higher, further, deeper.

- 1 Our 8020 CTS excavator has class-leading lift capacity, courtesy of a large lift ram, centrally-positioned kingpost and a low centre of gravity.
- 2 An 8020 CTS uses dig-end geometry, providing extra reach, load-over height, and dig depth for class-leading excavation performance.



Versatility.

- 3 You can choose from JCB's huge range of specially-designed 8020 CTS attachments. They provide ultimate performance, full JCB warranty compliance, and optimum fit and operation.
- 4 A handheld tool circuit option means that the 8020 CTS can power a wide range of JCB hydraulic tools, from breakers and drills to pumps and cutters.



Built for productivity.

5 A solid, stable work platform improves productivity, versatility and operator confidence.

6 Stability is increased further still with an extending undercarriage. In addition to this, retracting the undercarriage improves access to confined areas.

7 A powerful 14.2kW engine produces high torque at low revs, providing ample power for even the most demanding tasks.

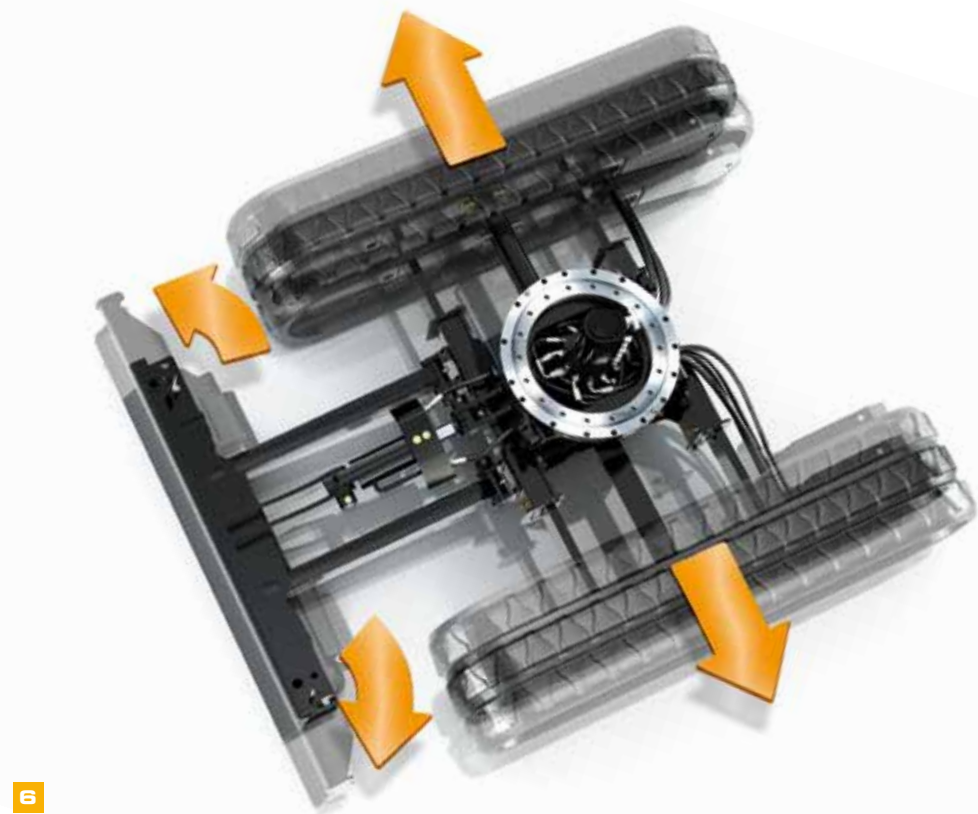
Our 8020 CTS has an impressive bucket tearout force (19.0kN). Combined with fast cycle times, this allows you to do more work in less time.

8 Our hydraulic system allows you to travel in a straight line at the same time as selecting excavator functions, increasing productivity.

9 We've designed the dozer blade profile for supremely efficient material roll. This means grading performance is improved during dozing.

9 The 8020 CTS machine has excellent load hold capability, which means the excavator arms can be accurately controlled, especially during precise lift and placing tasks.

10 Because an 8020 CTS has an operating weight of just 2067kg, it can be easily towed to wherever you need it.



EASE OF OPERATION.

THE JCB 8020 CTS MACHINE IS DESIGNED TO MINIMISE OPERATOR EXERTION, AND THEREFORE MAXIMISE OPERATOR PRODUCTIVITY. CONTROLLABILITY, COMFORT, VISIBILITY, MAINTENANCE AND SAFETY ARE ALL BUILT IN.

In perfect control.

- 1 The 8020 CTS has a two-speed tracking button on the dozer lever that's easy and intuitive to use.
- 2 Our hydraulic system allows for a smooth, controlled, precise and balanced operation of excavator functions.

Comfortably, visibly better.

- 3 We've used a one-piece seat base on the 8020 CTS; this reduces machine vibration and provides high levels of operator comfort.

- 4 The short pitched tracks engage every tooth on the sprocket for less vibration and noise, and a far smoother ride.

- 5 A large glass area and low bonnet profile provide excellent all-round visibility, including to the front right-hand track. As a result, our 8020 CTS doesn't need mirrors to meet EU regulations.

- 6 Dozer extensions swing out easily on an 8020 CTS, allowing operators to quickly and easily shift the dozer wings.



Designed for easy maintenance.

7 By improving the cab tilt angle by 17%, we've increased service access on the 8020 CTS still further (it was already best-in-class). This design eliminates the need to work through restrictive floor hatches during servicing.

8 Wide-opening rear bonnet is supported by a gas strut for easy access to routine checks. We've grouped all daily service points to make servicing quick and easy. The push-button bonnet latch and gas strut provide effortless service access.

9 All hoses are colour coded for quick and easy identification in the event of accidental damage.

10 All 8020 CTS services, including tracking and dozer, are isolated when the control pod is raised.

Safe and sound.

JCB's optional impact protection front screen shields the operator from flying debris when using breakers.

11 We've fitted tinted cab glass as standard to reflect the sun's energy, increasing operator comfort.

Our Thatcham approved* immobiliser can help reduce insurance rates by up to 40%.

12 A large lockable external toolbox provides safe tool stowage.

13 The large door opening gives easy entry and exit.

14 An optional operator presence switch means an 8020 CTS can't be operated unless its operator is in the seat.

**Region specific*



LIVELINK, WORK SMARTER.

JCB LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MONITOR AND MANAGE YOUR MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE.

Productivity and cost benefits –

Machine location information can improve fleet efficiency and you may even enjoy reduced insurance costs courtesy of the added security that LiveLink brings.

** Note: Please consult your local dealer for LiveLink availability*



Maintenance benefits – Accurate hours monitoring, maintenance history records, critical machine alerts and service alerts improve maintenance planning.

Security benefits – Real-time geofencing lets you set operating zones and curfew alerts that tell you when your machinery is outside of pre-determined times. Location information helps you store machines safely.

VALUE ADDED.

JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.



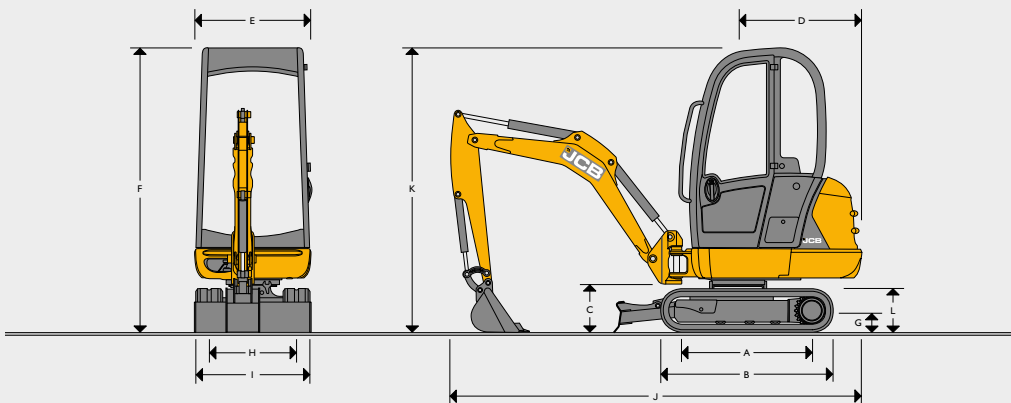
1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.



2 The global network of JCB Parts Centres is another model of efficiency; with 16 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.

STATIC DIMENSIONS



STATIC DIMENSIONS

A	Sprocket idler centres	mm	1362
B	Undercarriage overall length	mm	1724
C	Kingpost clearance	mm	435
D	Tailswing radius	mm	1059
	Tailswing over track	mm	558/378
E	Overall width of superstructure	mm	996
F	Height over cab	mm	2355
G	Ground clearance	mm	148
H	Track gauge	mm	752 to 1112
I	Width over tracks (retracted)	mm	1002
	Width over tracks (extended)	mm	1362
J	Transport length – Standard dipper	mm	3600
K	Transport height with FOGS guard	mm	2377
K	Transport height without FOGS guard	mm	2355
L	Track height	mm	366

ENGINE

Model		403D-11
Fuel		Diesel
Cooling		Water cooled
Gross power ISO 14396	kW (hp) @ 2200 rpm	14.7 (19.7)
Net power	kW (hp) @ 2200 rpm	14.2 (19)
Gross torque ISO 14396	Nm @ 1600 rpm	66.8
Net torque	Nm @ 1600 rpm	64.2
Displacement	cc / litres	1131 / 1.131
Gradeability	degrees	35
Starter motor	kW (hp)	1.1 (1.48)
Battery	volt / Ah	12v / 60
Alternator	amps	40

UNDERCARRIAGE

No of bottom rollers		4
Track width	mm	250
Ground bearing pressure	kg/cm ²	0.30
Ground clearance	mm	148
Track tensioning		Grease
Travel speed – low	kph	2.2
Travel speed – high	kph	3.6
Tractive effort (nominal)	kN	16.8

HYDRAULIC SYSTEM

		Variable pump
Pump		1 Variable (2 Ports) / 1 Gear
Nominal output	lpm	55.4 (22 x 22 x 11.4)
Excavator/track main relief	bar	230
Slew main relief	bar	160
Auxiliary hydraulic flow	lpm	26
Hydraulic motors		Piston

OPERATOR ENVIRONMENT

Cab/canopy length	mm	1171
Cab/canopy width	mm	974
Distance from seat base to roof	mm	1223
Door aperture width	mm	624

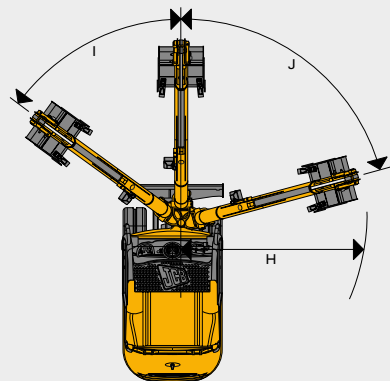
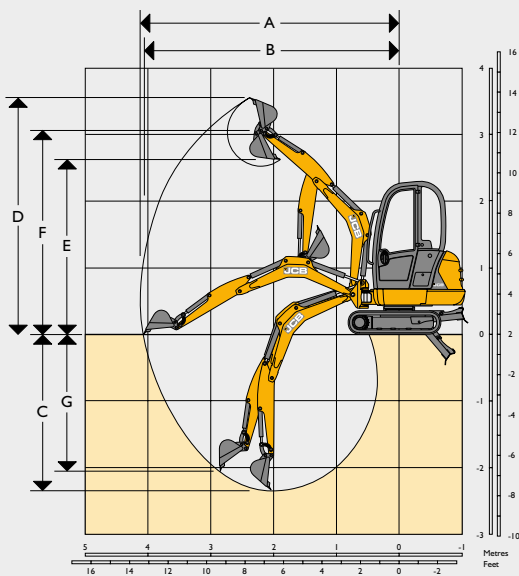
SERVICE CAPACITIES

Fuel tank	litres	23.5
Engine coolant	litres	5
Engine oil	litres	4
Hydraulic system	litres	28
Hydraulic tank	litres	25

DOZER BLADE

Maximum height (above ground)	mm	308
Dig depth (below ground)	mm	201
Approach angle	degrees	25
Width	mm	1000
Width (extended)	mm	1362
Height	mm	175
Reach in front of tracks	mm	370

WORKING RANGE



Boom length	mm	1899
Dipper length	mm	1261
A Maximum digging reach	mm	4308
B Maximum digging reach on ground	mm	4252
C Maximum digging depth – dozer up	mm	2504
Maximum digging depth – dozer down	mm	2621
D Maximum digging height	mm	3690
E Maximum dump height	mm	2779
F Maximum height to dipper nose pivot pin	mm	3194
G Maximum vertical wallcut depth	mm	2187
H Minimum front swing radius (no offset)	mm	1737
Minimum front swing radius (fully offset)	mm	1519
I Boom swing left	degrees	55
J Boom swing right	degrees	75
Bucket rotation	degrees	198
Dipper rotation	degrees	121
Bucket tearout	kN	19
Dipper tearout	kN	9.6
Slew speed	rpm	8.1

EEC NOISE LEVELS (95/27/EC DYNAMIC)

Cab external sound	dB (LwA)	93
Cab internal sound	dB (LpA)	77

MACHINE WEIGHTS

Operating weight*	kg	2067
With canopy	kg	-80
With FOGS guard	kg	+25





















*Operating weight to ISO 6016 including cab, rubber tracks, standard dipper, 300mm bucket, full tanks and a 75kg operator.


STANDARD EQUIPMENT


ROPS & TOPS certified canopy, full audio/visual warning systems, slew travel lock, control isolator, external lockable toolbox, 12v power socket, lifting points, short pitch 250mm rubber tracks, 2-speed autoshift tracking, hydraulically extending undercarriage, extendable dozer blade, heavy-duty recoil track tensioner, ISO servo controls, static seat, boom worklight, double acting auxiliary circuit, variable pump main hydraulics, straight line travel circuit, top mounted boom ram, 126 l mm dipper, bushed kingpost, steel bushes in dipper nose and bucket link, tilting cab, 3mm pressed steel bonnet.

OPTIONAL EQUIPMENT

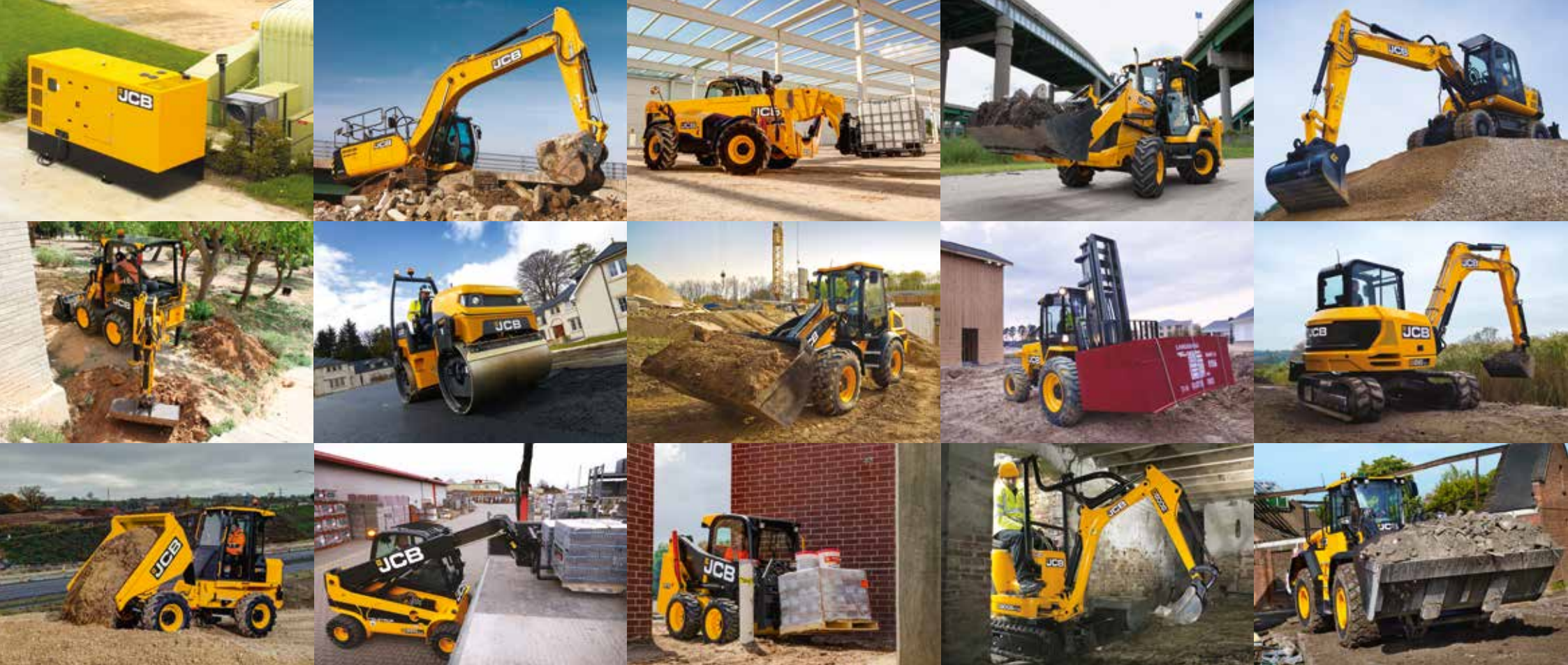
ROPS & TOPS certified fully glazed cab with steel or glass lower door (includes heater, interior light, door holdback latch with internal/external release, gas-strut-assisted front screen), 250mm steel tracks, suspension seat, dual pattern controls (ISO/SAE change-over), cab/canopy mounted worklights, dipper auxiliary pipework extensions, handheld tool circuit, engine fan guard kit, FOPS roof guard, external mirror, track pedals, toolkit, radio, biodegradable hydraulic oil, fire extinguisher, sunblind (cab builds), battery isolator, travel alarm, immobiliser, external fuel filler with lockable cap, inclinometer kit, rotating or strobe beacon, toolkit and greasegun, JCB impact protection front screen, dozer streetpads, counterweight protection bumper kit, front and rear bolt on tie down points, high visibility reflective decal kit, worklight guards, customised paint, object lifting kit, 9 digging buckets (1160mm to 760mm), 2 ditching/grading buckets (900mm & 1000mm), hydraulic breakers, earthdrills, mechanical quickhitch.

LIFT CAPACITIES – Standard Dozer, 250mm Rubber Tracks, I261mm dipper, No bucket.																						8020 CTS
Load Point	Reach from slew centre																					
	1.5m				2.0m				2.5m				3.0m				Capacity at maximum reach					
Height																					Distance	
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
1.5													351*	239	351*	351*	260	173	323*	323*	3600	
1					602*	422	602*	602*	470*	302	470*	470*	398*	230	398*	398*	254	167	319*	267	3700	
0.5					582	379	729*	729*	437	275	527*	527*	335	220	409*	409*	246	151	294*	251	3750	
Ground Level	752	479	990*	791	551	353	778*	618	402	263	580*	468	314	207	427*	353	233	153	301*	301*	3700	
-0.5	743	484	862*	862*	539	347	684*	684*	390	257	517*	517*	309	203	402*	402*	291*	164	291*	291*	3500	
-1	723*	458	723*	723*	573*	338	573*	573*	446*	251	446*	446*	329*	186	329*	329*	271*	179	271*	271*	3300	

 Lift capacity front.

 Lift capacity full circle.

- Notes:**
1. 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.
 2. Lift capacities assume that the machine is on firm, level ground and equipped with an approved lifting point.
 3. A bucket must be fitted when lifting, the weight of this bucket must be deducted from the above lift capacities.
 4. Lift capacities may be limited by local regulations. Please refer to your dealer.



ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

MINI EXCAVATOR 8020 CTS

Operating weight: 2067kg Net engine power: 14.2kW

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Tel: +44 (0)1889 590312 Email: salesinfo@jcb.com

Download the very latest information on this product range at: www.jcb.com

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