

SPECIFICATION

JCB E-TECH



ELECTRIC MINI EXCAVATOR | 19C-1E

Transport weight: 1,902 – 2,037kg Zero Emissions. Lithium-ion Technology.

JCB

100% electric. Zero emissions.

JCB is leading the way in clean technology and reducing harmful emissions. That's why we are introducing JCB E-TECH, a new generation of electric products with zero emissions at point of use that don't compromise on performance. The new 19C-IE is the first of the electric generation and the industry's first fully electric mini excavator. It lets you do a full day's work on a single charge, giving you access to a whole new world of possibilities.

CHOOSE ZERO EMISSIONS.

The new 19C-IE is the industry's first fully electric mini excavator, with zero emissions at point of use and zero compromise on performance.

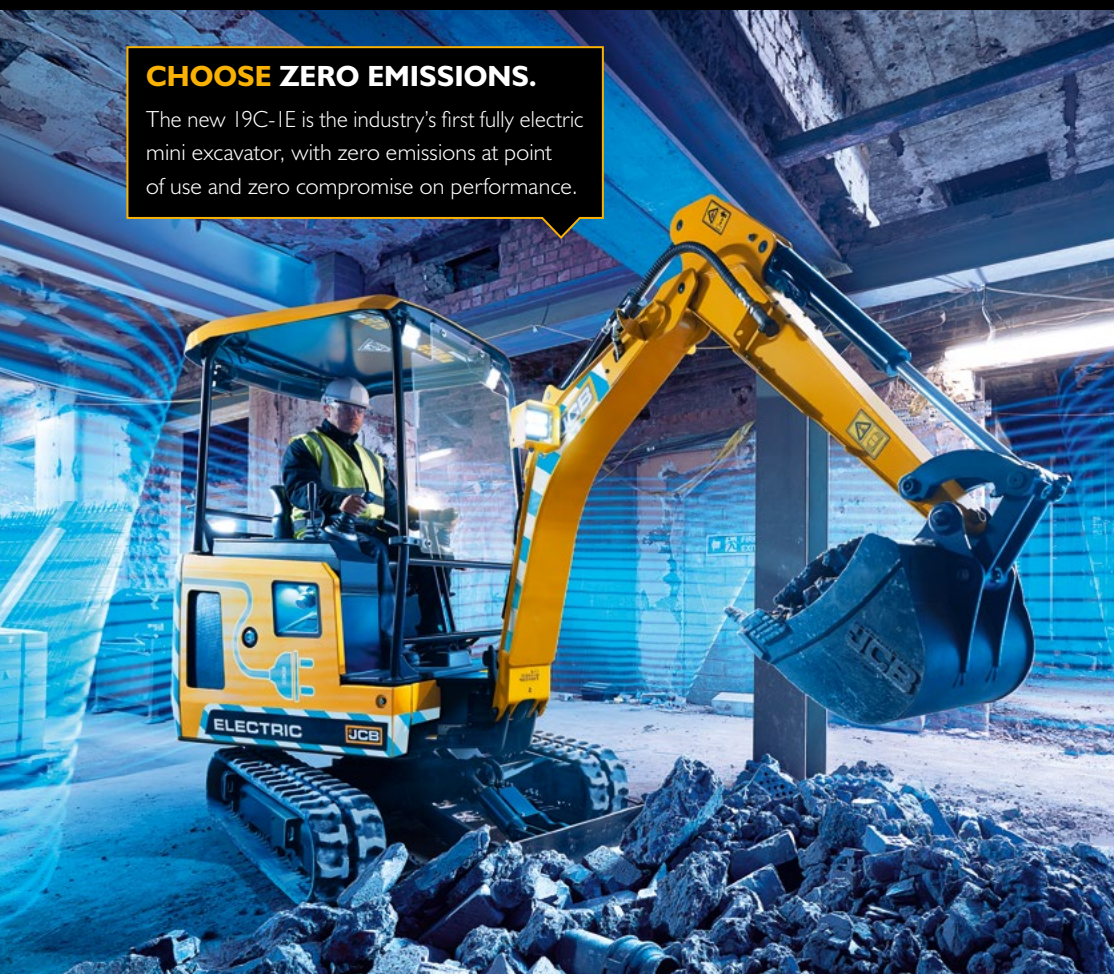


CHOOSE QUIET.

Low noise levels make the 19C-IE ideal for urban areas, indoor working, 'out-of-hours' working, and allows better communication with co-workers.

CHOOSE SAFE.

No trailing tethers, zero emissions, low noise levels and other innovative features provide peace of mind for working safely and efficiently.



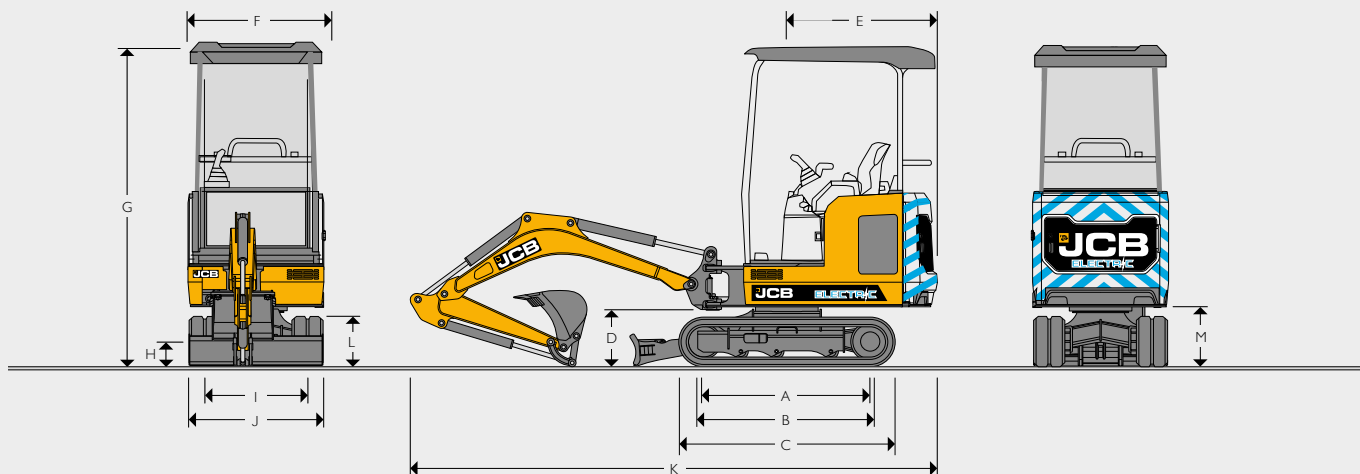
CHOOSE A FULL DAY'S WORK.

Four lithium-ion batteries power the machine for a full day on a single charge, while three charging options: 110V, 230V & 415V aid versatility.

CHOOSE ECONOMICAL.

With maintenance-free batteries, minimal daily checks and less servicing, the new 19C-IE will save you time and money.

STATIC DIMENSIONS



STATIC DIMENSIONS

A	Sprocket idler centres	mm	1218
B	Track length on ground	mm	1220
C	Undercarriage overall length – rubber	mm	1578
	Undercarriage overall length – steel	mm	1578
D	Kingpost clearance	mm	409
E	Tailswing radius	mm	1103
F	Overall width of superstructure	mm	996
G	Height over canopy	mm	2345
G	Height over cab	mm	2328
H	Ground clearance	mm	162
I	Track gauge – retracted/extended	mm	750 – 1110
J	Width over tracks / rubber / steel – retracted	mm	980
	Width over tracks / rubber / steel – extended	mm	1330
K	Transport length	mm	3860 – 3815
L	Track height	mm	367
M	Counterweight clearance	mm	434

POWER SOURCE

Battery Type	Manganese laminated Lithium-ion
Gross Capacity	19.8 kWh
System Voltage	48V
Zero Emissions at point of use	

CHARGING

On-board charger allowing direct connection to AC mains power supply

Indicative Charge Time - 20-80%, subject to environmental conditions.

On-board @ 110V – 10.5 hrs

On-board @ 230V – 5 hrs

Off-board fast charge - 0-100% @ 415V

2.5 hrs

Charging cable plug type

I6A 110V (Yellow)
I6A 230V (Blue)
I6A 415V (Red)

MOTOR

Motor Type	3 Phase AC Permanent Magnet
Motor Power	7kW continuous, 20kW peak
Operating Modes	L: 1200rpm G: 1600rpm H: 1800rpm

UNDERCARRIAGE

		Retractable
No. of bottom rollers		3
Track width rubber	mm	230
Travel speed – low	kph	2.4
Travel speed – high	kph	4.1
Tractive effort	kN	13.2

HYDRAULIC SYSTEM

Pump	cc	18
Nominal output @ max rpm	lpm	42
Excavator/track main relief pressure	bar	235
Slew main relief pressure	bar	167
Auxiliary hydraulic pressure (Aux 1)	bar	200
Auxiliary hydraulic pressure (Aux 2)	bar	200
Auxiliary hydraulic flow (Aux 1)	lpm	32
Auxiliary hydraulic flow (Aux 2)	lpm	32
Hydraulic pump		Piston

WEIGHTS

		Canopy	Cab
Operating weight	kg	1902	2037
Long dozer	kg	9	
Mechanical quickhitch	kg	14	
Hydraulic quickhitch (without hoses)	kg	24	
Gravemaster dipper	kg	5	
Ground bearing pressure (rubber tracks)	kg/cm ²	0.36	
Transport weight (operator weight – 75kg)**	kg	1827	1962

*Operator weight to ISO 6016 including cab/canopy, rubber tracks, 1100 dipper, 300mm bucket, 75kg operator. **Transport weight to ISO 6016 is mass of the base machine without operator.

SERVICE CAPACITIES

Hydraulic system	ltr	28
Hydraulic tank	ltr	15

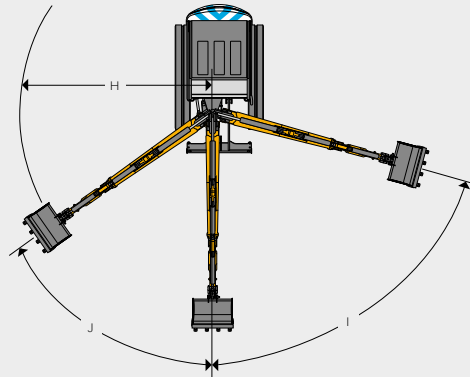
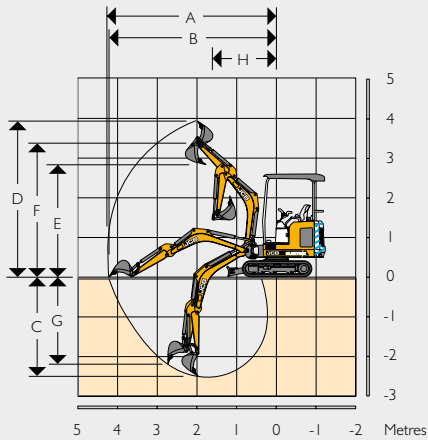
OPERATOR ENVIRONMENT

		Canopy	Cab
Canopy/cab height	mm	1364	1347
Canopy/cab length	mm	1427	1202
Canopy/cab width	mm	978	1040

DOZER

Dozer length (STD) centre of boss	mm	787
Max. height above ground	mm	239
Dig depth below ground	mm	225
Approach angle	degrees	25.3
Width (without wings)	mm	980
Width (with wings)	mm	1340
Height	mm	234

WORKING RANGE



		1100mm Dipper	1344mm Gravemaster Dipper
	Boom length	mm	1800
A	Max. digging reach	mm	4043
B	Max. digging reach on ground	mm	3981
C	Max. digging depth – dozer up	mm	2421
	Max. digging depth – dozer down	mm	2576
D	Max. digging height	mm	3667
	Max. dump/load-over height	mm	2637
E	Max. height to dipper nose pivot pin	mm	3154
F	Max. height to dipper nose pivot pin	mm	3335
G	Max. vertical wallcut depth	mm	2139
H	Min. front swing radius (no offset)	mm	1517
	Min. front swing radius (fully offset)	mm	1196
I	Boom swing left	degrees	75
J	Boom swing right	degrees	55
	Bucket rotation	degrees	201
	Dipper rotation	degrees	126
	Bucket tearout (power position)	kN	18
	Dipper tearout	kN	9.1
	Slew speed	rpm	7.9

EQUIPMENT

SERVICE AND MAINTENANCE

500 hours dig end greasing intervals	•
Grease gun & cartridge	•
Toolkit	+

TRACKS AND UNDERCARRIAGE

230mm short pitch rubber tracks	•
Two speed tracking	•
Retractable undercarriage	•
Extendable dozer blade	•
Heavy duty recoiled tracked tensioners	•
Long dozer blade	+
Auto kick down track motors	•
Auto Kick-up	•

OPERATOR STATION

On-board charger	•
LED worklights	•
Full audio visual warning systems	•
Full control isolation	•
12 volt power socket	•
ISO servo controls	•
Static seat	•
Electro-proportional thumb controlled dual flow auxiliary	•
Dual patterned controls (ISO/SAE changeover)	+
Vinyl suspension seat	•
Track lever pedals	•

POWER SOURCE

4 power packs	•
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HYDRAULICS

Hydraulic slew travel lock	•
Variable displacement pump	•
Straight line travel circuit	•
ORFS hydraulics	•
Quick release auxiliary couplers	•
Double acting auxiliaries	•
Auxiliary vent	•

PROTECTION AND SAFETY

ROPS, TOPS & FOPS certified cab/canopy	•
Internal lockable toolbox	•
Protected boom work light	•
2GO hydraulic isolation	•
Cesar Data Tag (UK ONLY)	•
Disconnect switch	•
Seat belt engaged green beacon	+
JCB LiveLink	•
Pin pad immobiliser	+
Polycarbonate front screen protection	+
Travel alarm	+

EXTERNAL EQUIPMENT

Charging leads 110V	•
Charging leads 230V	•
Fast charge 415V	+
Standard dipper (mm)	1100
Dipper options (mm)	1100/1344
Tie down points	•
LED amber beacon	•
Heavy duty kingpost	•
Exterior mirrors	+
GP & bladed bucket range	+
Mechanical quick hitch	+
Hydraulic quick hitch incl. pipework	+
Thumb ready dipper	+

STANDARD •
OPTIONAL +

LIFT CAPACITIES – 230MM RUBBER TRACKS, 1800MM BOOM, 1100MM DIPPER, NO BUCKET.																									19C-1E			
Load Point	   				   				   				   				   				   				Capacity at maximum reach			
Height	Extended	Retracted	Dozer Up	Dozer Down	Extended	Retracted	Dozer Up	Dozer Down	Extended	Retracted	Dozer Up	Dozer Down	Extended	Retracted	Dozer Up	Dozer Down	Extended	Retracted	Dozer Up	Dozer Down	Extended	Retracted	Dozer Up	Dozer Down	Distance			
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm			
2.5					520*	417	540*	439*	332*	319*	292*	301*									290*	277	270*	327*	2690			
2.0					564*	410	586*	476*	334*	321*	297*	311*	373*	219	341	357*					373*	219	341	357*	3000			
1.5					615*	396	634*	615*	402*	298	375*	392*	385*	220	356	375*					296	181	281	349*	3300			
1.0	689*	430	837	962*	644*	407	613*	646*	494*	286	461*	482*	395*	218	380	398*	274	170	264	336*	274	170	264	336*	3500			
0.5	665	417	789	986*	591	359	634	812*	451	273	454	575*	339	209	390	433*	267	165	272	344*	267	165	272	344*	3500			
0	780	490	795	958*	566	359	599	769*	424	267	439	552*	257	205	353	438*					306*	170	328*	332*	3400			
-0.5	918*	494	902*	920*	673*	359	590	724*	492*	272	432	532*	371*	214	378	392*					308*	191	313*	324*	3250			
-1.0	701*	479	705*	788*	551*	350	559*	596*	424*	266	421*	442*	290*	248*	323*	334*					290*	248*	323*	334*	3000			
-1.5	512*	476	480*	527*	460*	360	412*	428*													354*	298	348*	388*	2200			

NOISE/ VIBRATION					19C-1E
Noise and Vibration		Uncertainty		Measurement conditions	
Noise at the operator station (LpA)	Cab – 70dB / Canopy – 68dB	(KpA)	± 1 dB	ISO 6396: 2008	
Noise emission from the machine (LWA)	87 dB	(KWA)	± 1 dB	ISO 6395: 1988	
Hand Arm Vibration (m/s²)					
Tracking duty	≤ 2.5	(K)	*	EN ISO 5349-2: 2001	Based upon a test cycle defined in SAE J 1166
Low Idle & Excavating duty					
Whole Body Vibration (m/s²)	0.41	(K)	0.21	ISO 2631-1: 1997	

* based on 50% uncertainty of measurement



Lift capacity over 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. Lift capacities may be limited by local regulations. Please refer to your dealer.
 - 4. Standard equipment region dependent







100% electric. Zero emissions.

Your nearest JCB dealer

Electric Mini Excavator 19C-IE

Transport weight: 1,902 – 2,037kg Zero Emissions. Lithium-ion Technology.

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

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