

## SPECIFICATION

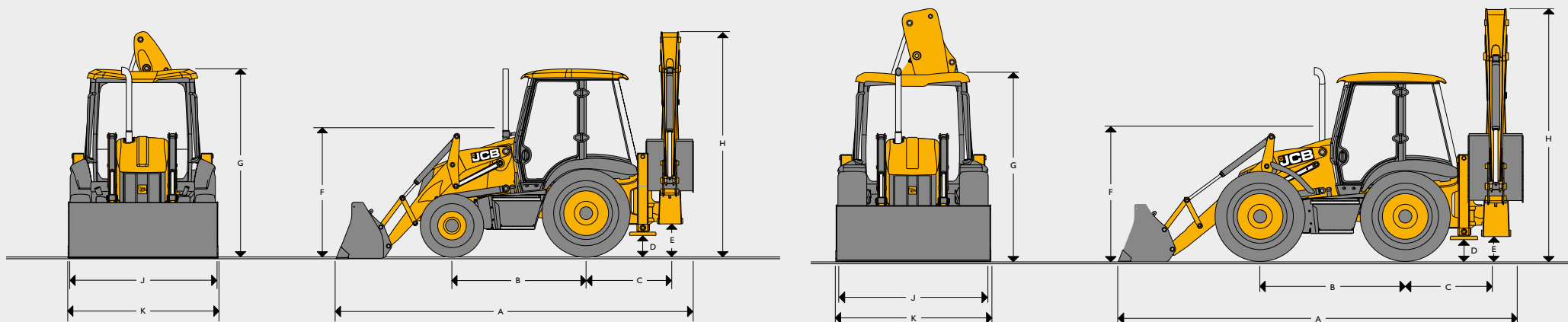


**EXCAVATOR LOADER** | 3CX ECO, 3CX PLUS, 3CX PRO, 4CX PLUS, 4CX PRO, 5CX PRO

Gross power: 55kW (74hp) - 81kW (109hp) Maximum dig depth: 6.51 m Weight: 7702 - 8880kg

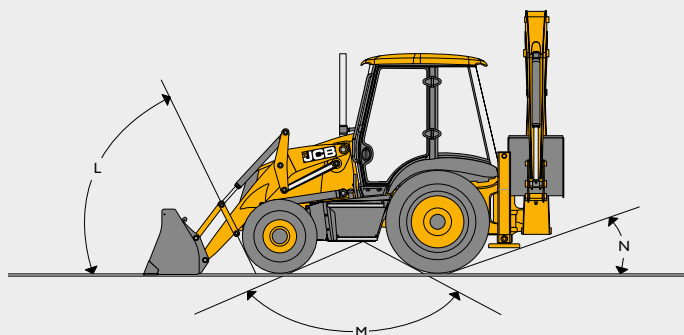


STATIC DIMENSIONS



Dimensions in m	3CX ECO		3CX PLUS		3CX PRO		4CX PLUS		4CX PRO		5CX PRO	
A Total travel length	5.62		5.62		5.62		5.91		5.91		5.91	
B Axle centreline distance	2.17		2.17		2.17		2.22		2.22		2.22	
C Slew centre to rear axle centre distance	1.36		1.36		1.36		1.36		1.36		1.36	
D Stabiliser feet clearance	0.37		0.37		0.37		0.33		0.34		0.34	
E Kingpost clearance	0.52		0.52		0.52		0.48		0.50		0.50	
F Steering wheel centre height	1.94		1.94		1.94		1.86		1.88		1.88	
G Cab roof height	3.03		3.03		3.03		2.98		3.03		3.03	
H Total travel clearance	3.61		3.61		3.61		3.48		3.62		3.97	
J Rear frame width	2.35	2.24*	2.35	2.24*	2.35	2.24*	2.36	2.36	2.36	2.36	2.36	2.36
K Shovel width	2.35	2.23*	2.35	2.23*	2.35	2.23*	2.33	2.33	2.33	2.33	2.33	2.33
K Shovel width - option	-	-	-	-	-	-	-	-	2.44	2.44	2.44	2.44

\* Narrow option



GROUND LINE ANGLES

Machine model		3CX ECO, 3CX PLUS, 3CX PRO	4CX PRO, 5CX PRO
L	Approach angle	degrees 66°	74°
M	Interference angle/ramp to ground plane	degrees 120°	118°
N	Departure angle	degrees 20°	19°

ENGINE					
Model		3CX ECO	3CX PLUS* 4CX PLUS*	3CX PLUS 3CX PRO	4CX PRO 5CX PRO
Engine standard		Stage V	Stage V	Stage V	Stage V
Manufacturer		JCB	JCB	JCB	JCB
Aspiration		Turbocharged & Intercooled	Turbocharged & Intercooled	Turbocharged & Intercooled	Turbocharged & Intercooled
Displacement	litre	3.0	4.8	4.8	4.8
No. of cylinders		4	4	4	4
Bore	mm	92	106	106	106
Stroke	mm	112	112	112	112
Rated engine	rpm	2200	2200	2200	2200
<b>Power ratings</b>					
Rated ISO 14396 (SAE J1995 Gross)	kW	55	72	81	81
<b>Maximum torque</b>					
Max. torque rpm	Nm	440	450	516	516
Max. torque rpm	rpm	1200	1450	1450	1450

\* Model not available in all regions

ELECTRICAL AND INSTRUMENTATION	
7" colour display screen	Audio and phone, controls, engine coolant temperature, fuel level, machine hours, help files, service alerts, clock
Front display	Speedometer, warning alerts, engine oil, water in fuel, transmission oil temperature and pressure, park brake, air cleaner, alternator
Battery	1000 CCA (120 amp)
Horn	Controlled from both front and rear
Alternator	95 amp (55kW) 150 amp (72kW/81 kW)
Front working lights	4 adjustable
Rear working lights	4 adjustable

ENGINE SUPPORT SYSTEM	
Fuel type	Diesel
Fuel filter	Replaceable cartridge plus water/sediment separator prefilter
Air cleaner	Dual, dry element type, with self cleaning internal air intake precleaner
Oil filter and lubrication	Full flow, spin-on type filter
Cooling system	Hot climate specification, pressurised 1.0 bar suction fan. Pressurised recovery tank with integral filler neck

TRANSMISSION									
Model	3CX ECO 55kW		3CX PLUS 72kW		3CX PLUS 81kW	3CX PRO 81kW	4CX PLUS 72kW		4CX PRO, 5CX PRO
Manufacturer	JCB	JCB	JCB	JCB	JCB	JCB	JCB	JCB	JCB
Type	Syncroshuttle	Powershift	Syncroshuttle	Powershift	Powershift	Autoshift**	Syncroshuttle	Powershift	Autoshift
Gear selection	Manual	Powershift	Manual	Powershift	Powershift	Powershift	Manual	Powershift	Powershift
TorqueLock	N/A	Optional	N/A	Standard	Standard	Standard	N/A	Standard	Standard
Gear 1	5.8	5.0	5.8	5.4	5.4	4.9	5.1	4.9	4.9
Gear 2	9.4	9.3	9.4	10.0	10.0	8.9	8.3	8.6	8.9
Gear 3	20.2	21.5	20.2	22.5	22.5	12.6	17.7	19.8	12.6
Gear 4	41.8	38.1	41.8	41.8	41.8	18.2	36.7	36.7	18.2
Gear 5	-	-	-	-	-	33	-	-	33
Gear 6	-	-	-	-	-	47	-	-	42

\*\* Engine Speed at 2200rpm on 400/70-20 Front Tyres and 480/80-R26 Rear Tyres.

OPERATING WEIGHTS						
Machine model		3CX ECO	3CX PLUS	3CX PRO	4CX PLUS, 4CX PRO	5CX PRO
Fixed dipper	kg	7702	-	-	8178	8394
Extended dipper	kg	8135	8135	8135	8585	8880

Operating weight to ISO 6016 includes machine with 6-in-1 shovel, 600mm excavator bucket and a full fuel tank and operator. Actual weight will vary depending on machine options.

FRONT AXLE		
Model	3CX ECO, 3CX PLUS, 3CX PRO	4CX PLUS, 4CX PRO, 5CX PRO
Type	JCB steer drive with torque proportional	JCB epicyclic hub reduction with torque proportional
Limited slip	-	Option
Axle ratings	kg	kg
Static load rating	16500	25000
Dynamic load rating	8300	12500
Oscillation angle	16°	16°

REAR AXLE		
Model	3CX ECO, 3CX PLUS, 3CX PRO	4CX PLUS, 4CX PRO, 5CX PRO
Type	JCB epicyclic hub reduction with torque proportional	JCB epicyclic hub reduction with torque proportional
Limited slip	Option	Option
Axle ratings	kg	kg
Static load rating	25000	25000
Dynamic load rating	12500	12500

STEERING		
Model	3CX ECO, 3CX PLUS, 3CX PRO	4CX PLUS, 4CX PRO, 5CX PRO
Axles	Steer drive	Steer drive
Steering turns - lock to lock	2¾	2¾
	m	m
Kerb – kerb turning circle - unbraked	8.1	9.1
Loader clearance circle - unbraked	10.4	10.7
Kerb – kerb turning circle - braked	6.9	8.0
Loader clearance circle - braked	9.5	9.5

(Depending on tyre size, ground conditions etc.)

SERVICE CAPACITIES			
Model		3CX ECO, 3CX PLUS, 3CX PRO	4CX PLUS, 4CX PRO, 5CX PRO
Cooling system	ltr	18.5	18.5
Fuel tank	ltr	150	150
Engine oil with filter	ltr	15	15
Gearbox with filter	ltr	16	16
Rear axle	ltr	16	16
Front drive axle	ltr	16	16
Hydraulic system incl. tank	ltr	117	117

HYDRAULIC SYSTEM		
Piston pump flow @ 2200rpm	l/min	165
System relief pressure	bar	251
Loader auxiliary flow	l/min	140

Smooth Ride System SRS standard.

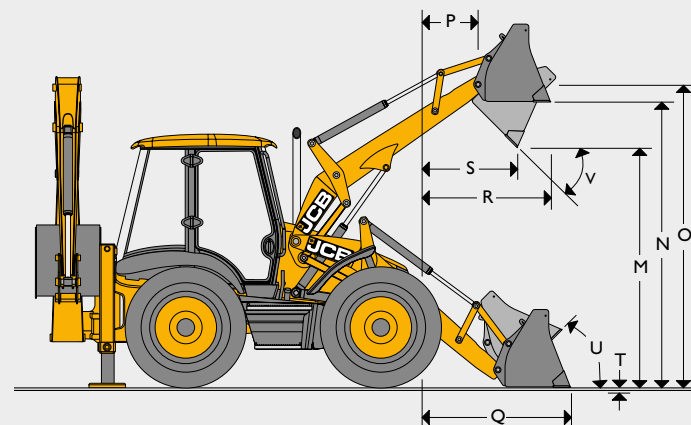
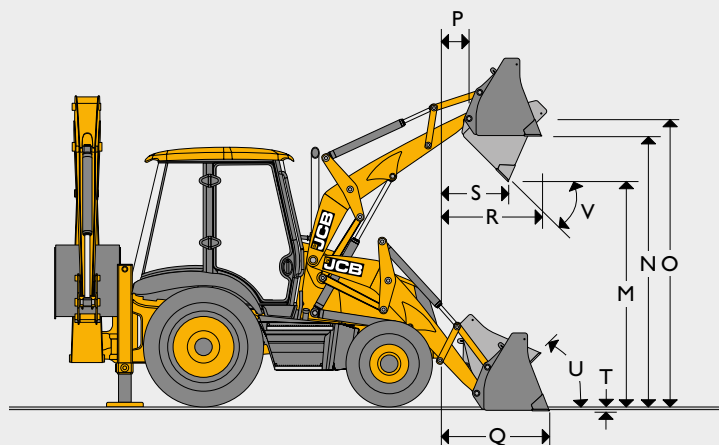
OPTIONAL ACCESSORIES	
<b>Tyres</b> - Michelin brand of tyres with a selection of traction/industrial tread in a crossply/radial construction, Sitemaster brand.	
<b>Hydraulics</b> - Hammer pipework, Bi-directional pipework, Hand-held tool circuit, 9m hose reel, Excavator lifting kits for EN474 and non-EN474.	
<b>Machine features</b> - JCB Power Slide, Grid heaters, Black and yellow trim kits.	
<b>Machine and site protection</b> - Fuel tank guards, Stabiliser street pads, Lubricity filter, Biodegradable oil.	
<b>Attachments</b> - Standard excavator buckets (300mm to 900mm), Deep profile excavator bucket (300mm to 940mm), Ditching buckets (1542mm to 1828.8mm), General purpose 6-in-1 front shovel (1 m <sup>3</sup> to 1.3m <sup>3</sup> ), Manual/hydraulic front quickhitch, Manual/hydraulic rear quickhitch, Hammer pipework, Bi-directional pipework, Hand-held tool circuit.	
<b>Safety and security</b> - Reverse alarm.	

CAB CONFIGURATION		
Seat and comfort		Visibility
Mechanical suspension seat	●	Exterior mirrors ●
Air suspension seat	○	Interior rear view mirror ●
Seat head rest	○	Front windscreen heater ○
Arm rest	●	10 LED working lights ○
Seat belt	●	Reverse alarm ●
Heater	●	LED roof beacons ●
Air conditioning (3CX PRO, 4CX PRO, 5CX PRO)	●	<b>Controls</b>
Air conditioning (3CX ECO, 3CX PLUS, 4CX PLUS)	○	Servo controls (ISO/SAE changeover) ●
<b>Doors and windows</b>		<b>Security</b>
Tinted glass	●	Instrumental panel vandal guard ○
Front windscreen wiper	●	Fire extinguisher ○
Rear windscreen wiper	●	Immobiliser (standard in UK and on 3CX PLUS, 4CX PLUS) ○
Rear one piece opening window	●	Livelink (region specific) ●
Door ajar stays	●	Rear light guards ●
<b>Steering column</b>		Front bumper protection ●
Tilted steering column	●	End boom damping ●
Steering wheel knob	●	<b>Storage</b>
Telescopic steering column	○	Side storage & roof storage (lockable) ●
Yellow cab grab handles	●	<b>Radio</b>
Automatic cab interior light	●	(Bluetooth, USB aux, SD) & speakers, integrated hands free phone system ●

● Standard ○ Option

NOISE AND VIBRATION LEVELS		
Internal dB(A)	74dB(A) - (55 to 68kW engine)	75dB(A) - (81 kW engine)
External dB(A)	102	
Vibration	Hand arm vibration 2.5m/s <sup>2</sup> - Whole body vibration 0.5m/s <sup>2</sup>	

LOADER DIMENSIONS



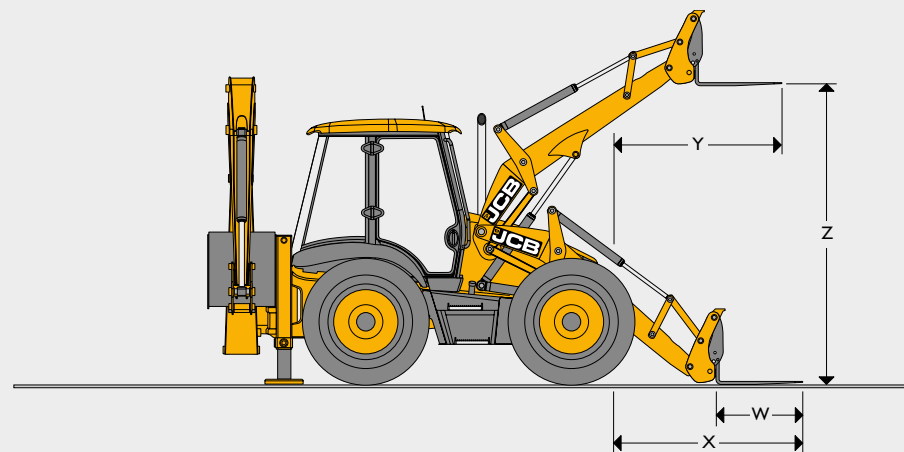
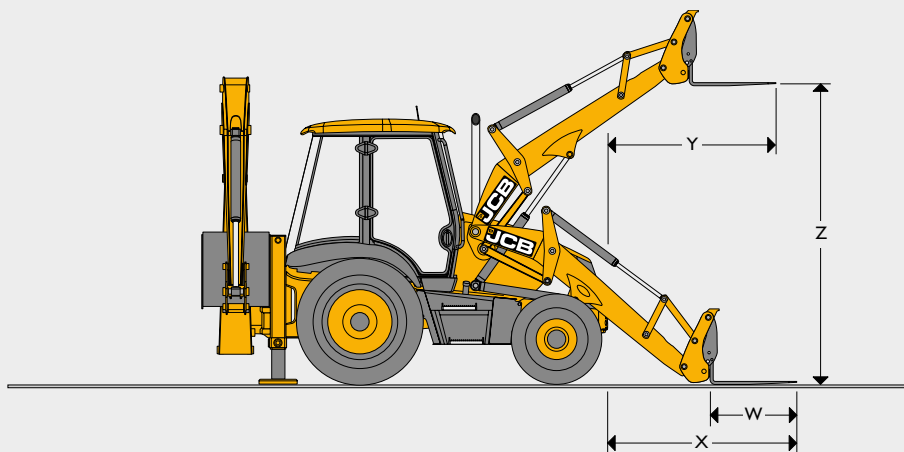
Model		3CX ECO, 3CX PLUS, 3CX PRO		4CX PLUS, 4CX PRO	4CX PRO, 5CX PRO	
		GP shovel	6-in-1 shovel	6-in-1 shovel	6-in-1 shovel	
M	Dump height	m	2.74	2.72	2.64	2.69
N	Load over height	m	3.23	3.20	3.13	3.18
O	Loader hinge pin height	m	3.45	3.45	3.41	3.46
P	Pin forward reach	m	0.36	0.36	0.47	0.41
Q	Reach at ground (toe plate horizontal)	m	1.42	1.37	1.50	1.39
R	Max. reach at full height	m	1.20	1.15	1.22	1.17
S	Reach at full height fully dumped	m	0.83	0.78	0.82	0.76
T	Dig depth	m	0.07	0.10	0.23	0.18
U	Roll back at ground	degrees	45°	45°	45°	45°
V	Dump angle	degrees	43°	43°	44°	45°
	Jaw opening width	m	-	0.95	0.95	0.95

LOADER PERFORMANCE

Model		3CX ECO, 3CX PLUS, 3CX PRO		3CX PRO	4CX PLUS, 4CX PRO, 5CX PRO
		GP shovel	6-in-1 shovel	6-in-1 shovel	6-in-1 shovel
	Loader breakout – shovel	kgf	6170	6531	6590
	Loader breakout – arms	kgf	4942	4732	5730
	Rated operating capacity 7'4"*	kgf	3479	3229	4378
	Rated operating capacity 7'8"*	kgf	3439	3169	-
	Rated operating capacity	kg	-	-	-
	Clamping force	kgf	-	2940	2945

\*Rated operating capacity as determined according to ISO 14397: 2007

**LOADER ATTACHMENTS – Forklift Performance Data**



Model	3CX ECO, 3CX PLUS, 3CX PRO		4CX PLUS		4CX PRO		5CX PRO	
	6-in-1 shovel mounted forks	Quickhitch mounted forks	6-in-1 shovel mounted forks	Quickhitch mounted forks	6-in-1 shovel mounted forks	Quickhitch mounted forks	6-in-1 shovel mounted forks	Quickhitch mounted forks
W Forks – tine length	m	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Forks – tine width	m	0.08	0.08	0.08	0.08	0.08	0.08	0.08
X Forks reach at ground level	m	2.66	2.03	2.78	2.18	2.68	2.13	2.68
Y Forks reach at full height	m	2.25	1.72	2.38	1.81	2.30	1.76	2.30
Z Forks lift height – max	m	2.92	3.27	2.85	3.23	2.90	3.28	2.90
Fork spacing – min	m	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Fork spacing – max	m	2.17	1.03	2.17	1.03	2.17	1.03	2.17
SWL @ 500mm load centres	kg	1000	2000	1000	2000	1000	2000	1000

**LOADER ATTACHMENTS – Direct Mount**

Width mm (ft-in)	Capacity SAE			
	G.P. Shovel		6 in 1	
	Rated m <sup>3</sup>	Struck	Rated m <sup>3</sup>	Struck
2235 (7-4)	1.0	0.83	1.0	0.76
2350 (7-8)	1.1	0.91	1.2	1.02
2350 (7-8) 4CX PLUS	1.3	1.19	1.2	1.02
2440 (8-0) 4CX PRO, 5CX PRO	-	-	1.3	1.19



## BACKHOE PERFORMANCE

Model			3CX ECO, 3CX PLUS, 3CX PRO		3CX PRO	4CX PLUS	4CX PLUS, 4CX PRO	5CX PRO
			Standard Dipper	Extradig	Extradig	Standard Dipper	Extradig	Extradig
Bucket tearout	kgf	Speed	5431	5385	5385	5431	5385	5387
		Power	6324	6228	6228	6324	6228	6230
Dipper tearout	kgf	Ext	–	2255	2255/ 2729*	–	2729	2675
		Ret	3217	3225	3225/ 3903*	3893	3903	3722
Lift capacity of bucket pivot at full reach	kg	Ext	–	719	719/ 1082*	–	1082	1199
		Ret	1584	1451	1451/ 1885*	2046	1885	1556

\* Heavy lift excavator

## BACKHOE ATTACHMENTS – Standard Profile Bucket

Model					3CX ECO, 3CX PLUS, 3CX PRO, 4CX PLUS, 4CX PRO, 5CX PRO			
Width*		Capacity SAE		Weight (+ Teeth)				
mm	Rated m <sup>3</sup>	Rated m <sup>3</sup>	kg	Teeth				
229	0.04	0.03	95	0				
305 †	0.06	0.05	102	3				
356 †	0.075	0.06	105	3				
400 †	0.09	0.07	109	3				
457 †	0.12	0.09	116	3				
610 †	0.17	0.13	140	4				
800 †	0.24	0.17	162	5				
950 †	0.30	0.21	198	5				

\* Including sidecutters. Width less sidecutters deduct 25mm.

† Available with additional wear strips to give added strength and rigidity.

## DITCHING BUCKETS

Model							3CX ECO, 3CX PLUS, 3CX PRO			4CX PLUS, 4CX PRO, 5CX PRO		
Width*		Capacity SAE		Weight	Capacity SAE		Weight					
mm	Rated m <sup>3</sup>	Struck m <sup>3</sup>	kg	Rated m <sup>3</sup>	Struck m <sup>3</sup>	kg						
1525	0.22	0.155	150	0.22	0.16	150						
1830	0.26	0.186	172	0.26	0.19	172						

## TAPERED BUCKETS – 3CX &amp; 4CX All models

Width*						Capacity SAE			
mm	Rated m <sup>3</sup>	Struck m <sup>3</sup>	Angle degrees		Teeth				
381–1676	0.07	0.06	30		2				
305–1067	0.12	0.10	60		2				

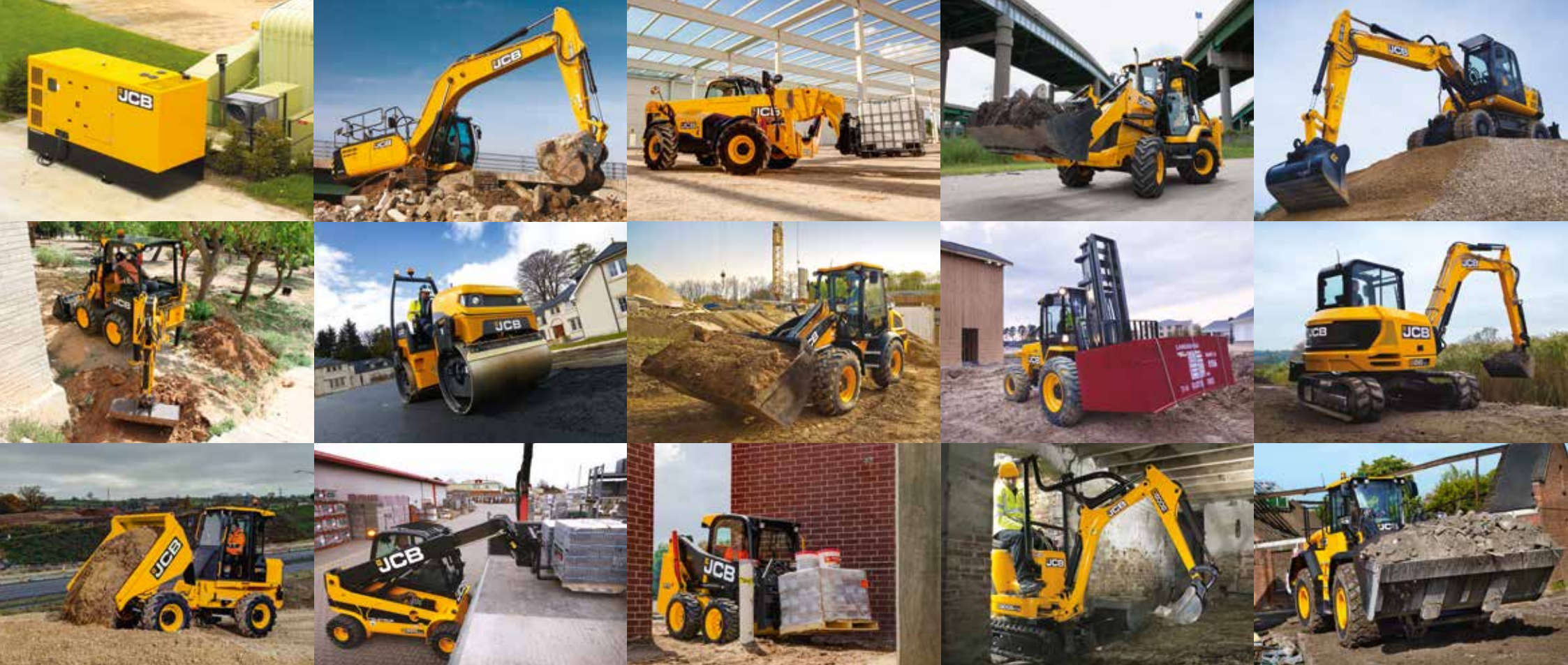
## BACKHOE ATTACHMENTS – Standard Profile Bucket

Model										3CX ECO, 3CX PLUS, 3CX PRO				4CX PLUS, 4CX PRO, 5CX PRO			
Width*		Capacity SAE		Weight (+ Teeth)				Capacity SAE		Weight (+ Teeth)							
mm	Rated m <sup>3</sup>	Struck m <sup>3</sup>	kg	Teeth	Rated m <sup>3</sup>	Struck m <sup>3</sup>	kg	Teeth	Rated m <sup>3</sup>	Struck m <sup>3</sup>	kg	Teeth					
305	0.09	0.07	102	3	0.09	0.07	102	3	0.09	0.07	102	3					
356	0.11	0.09	117	3	0.11	0.09	117	3	0.11	0.09	117	3					
457	0.16	0.13	122	3	0.16	0.13	122	3	0.16	0.13	122	3					
610	0.23	0.18	142	4	0.23	0.18	142	4	0.23	0.18	142	4					
800	0.30	0.24	163	5	0.30	0.24	163	5	0.30	0.24	163	5					
950	0.38 †	0.30	183	5	0.38	0.30	183	5	0.38	0.30	183	5					
1100	0.48 †	0.34	203	6	0.48	0.34	203	6	0.48	0.34	203	6					

\* Including sidecutters. Width less sidecutters deduct 25mm (1 in).

† Capacity in cu.yd.





**ONE COMPANY, OVER 300 MACHINES.**

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