

## SPECIFICATION



### BACKHOE LOADER | 3CX / 4CX / 5CX

Gross power: 55 - 81kW (74 - 109hp) Maximum dig depth: 6.51m Operating weight: 7887 - 9500kg



# LOADING MADE EASY

Effortlessly load material with single lever control, incorporating the 6-in-1 function for easy shovel operation. New F-N-R switch on the lever, quickly lets you change machine direction.

## VERSATILITY MADE EASY

Multifunction with one machine by using the excavator mounted breaker alongside the loader shovel to quickly break and move material with no attachment changeover.



## MOVING MATERIAL MADE EASY

The large shovel makes handling easy. Smooth Ride System helps avoid spillages, while forks move palletised loads without needing a forklift.



## GRADING MADE EASY

A 2.3m wide 6-in-1 shovel and substantial pushing performance provide outstanding levelling and grading performance.



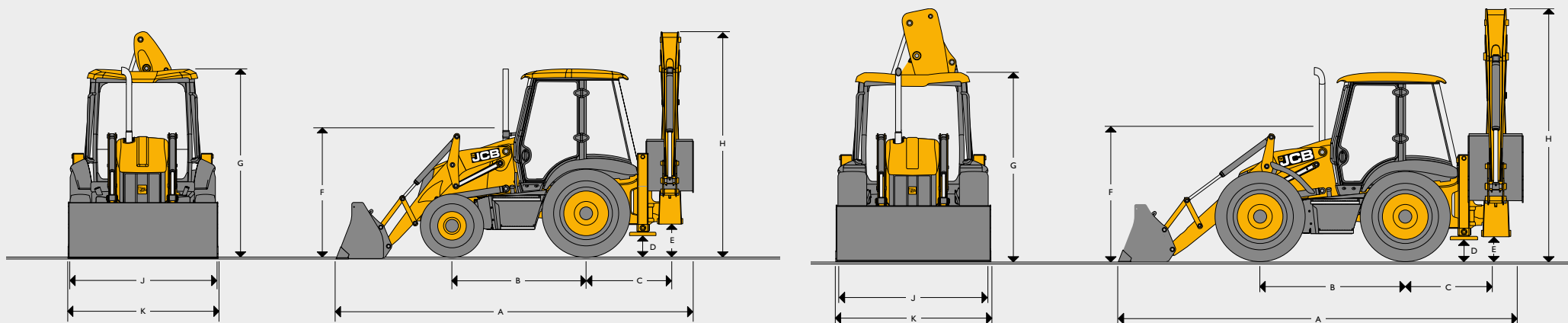
## ROADING MADE EASY

Drive to site without the cost of a lorry, while 6-speed Autoshift transmission with TorqueLock as standard reduces travel times by up to 10% and saves fuel.

## EXCAVATING MADE EASY

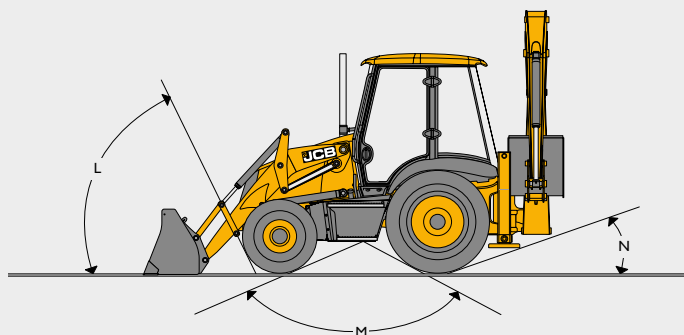
Excavate up to 190 tonnes per hour with the capability to fit large capacity buckets up to 0.48 m<sup>3</sup>, while an extending dipper enables exceptional reach to 7.7m.

STATIC DIMENSIONS



Dimensions in m	3CX		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, 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	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	
Camera system (optional)	Quick hitch mounted and cab roof camera with 7" colour screen
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	105 amp (55kW) 170 amp (72kW/81kW)
Front working lights	4 x 1000 lumen LED adjustable lights (standard) / 4 x 2000 lumen LED adjustable lights (option)
Rear working lights	4 x 1000 lumen LED adjustable lights (standard) / 6 x 2000 lumen LED adjustable lights (option)
Green beacon (optional UK only)	Wiring, magnetic mount and 1 roof mounted green beacon light

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 55kW	3CX PLUS 81kW	3CX PRO 81kW	4CX PLUS 72kW	4CX PRO, 5CX PRO
Manufacturer		JCB	JCB	JCB	JCB	JCB
Type		Autoshift	Autoshift	Autoshift**	Autoshift	Autoshift
TorqueLock		Standard	Standard	Standard	Standard	Standard
Gear 1	kph	5.2	5.2	4.9	4.9	4.9
Gear 2	kph	9.5	9.5	8.9	8.9	8.9
Gear 3	kph	13.5	13.5	12.6	12.6	12.6
Gear 4	kph	19.4	19.4	18.2	18.2	18.2
Gear 5	kph	35	35	33	33	33
Gear 6	kph	40	40	47	42	42

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

OPERATING WEIGHTS							
Machine model		3CX	3CX PLUS	3CX PRO	4CX PLUS	4CX PRO	5CX PRO
Fixed dipper	kg	7887	-	-	8178	-	9034
Extended dipper	kg	8320	8600	8600	9350	9350	9500

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, 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, 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, 3CX PLUS, 3CX PRO	4CX PLUS	4CX PRO, 5CX PRO
Axles	Steer drive	Steer drive	Steer drive
Steering turns - lock to lock	2¾	2¾	2¾
	m	m	m
Kerb – kerb turning circle - unbraked	8.1	9.35	9.1
Loader clearance circle - unbraked	10.4	11.15	10.7
Kerb – kerb turning circle - braked	6.9	8.0	8.0
Loader clearance circle - braked	9.5	9.5	9.5

(Depending on tyre size, ground conditions etc.)

## STEERING

Model	3CX, 3CX PLUS, 3CX PRO	4CX PLUS	4CX PRO, 5CX PRO
2WS	✓	✓	✓
AWS	-	✓	✓
Crab steer	-	-	✓

## SERVICE CAPACITIES

Model	3CX, 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

**Tyres** - Michelin/Goodyear/JCB Sitemaster brand of tyres with a selection of traction/industrial tread in a crossply/radial construction. 18" and 20" tyre options are available

**Hydraulics** - Hammer pipework, Bi-directional pipework, Hand-held tool circuit, 9m hose reel, Excavator lifting kits for EN474 and non-EN474.

**Machine features** - JCB Power Slide, Grid heaters, Black and yellow trim kits, Integrated quick hitch with forks.

**Machine and site protection** - Fuel tank guards, Stabiliser street pads, Lubricity filter, Biodegradable oil.

**Attachments** - 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, Hand-held tool circuit, Laser mount pole,

**Safety and security** - Reverse alarm.

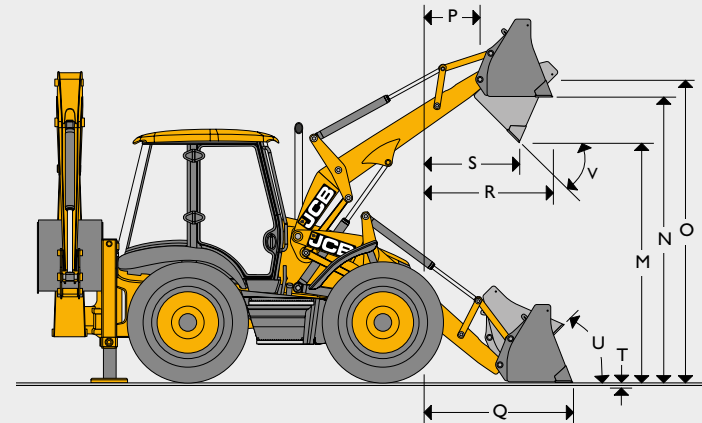
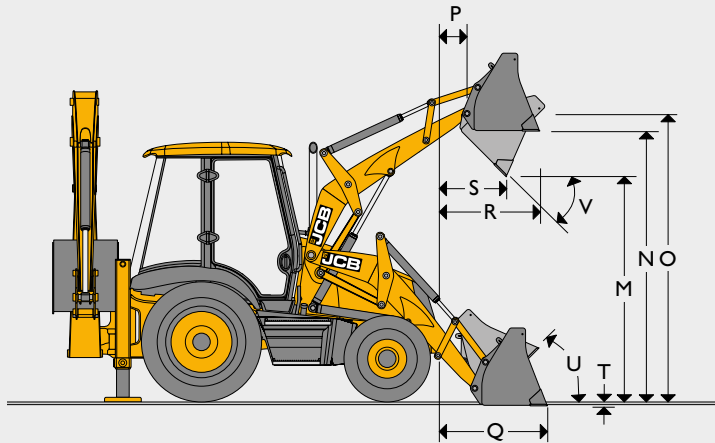
## CAB CONFIGURATION

Seat and comfort	Miscellaneous
Mechanical suspension seat ●	Roof mounted camera ○
Air suspension seat (standard on joystick controls) ○	Quick hitch camera ○
Seat head rest ○	Exterior mirrors ●
Arm rest ●	Interior rear view mirror ●
Seat belt ●	Front windscreen heater ○
Heater ●	10 LED working lights (2000 lumens each) ○
Air conditioning (3CX PRO, 4CX PRO, 5CX PRO) ●	Reverse alarm ●
Air conditioning (3CX, 3CX PLUS, 4CX PLUS) ○	LED roof beacons ●
Doors and windows	Controls
Tinted glass ●	FNR switch ●
Front windscreen wiper ●	Return to grade ●
Rear windscreen wiper ●	Return to dig ●
Rear one piece opening window ●	ISO/SAE changeover (Joystick controls) ●
Door ajar stays ●	Security
Steering column	Instrumental panel vandal guard ○
Tilted steering column ●	Fire extinguisher ○
Steering wheel knob ●	Immobiliser (standard in UK and on 3CX PLUS, 4CX PLUS) ○
Automatic cab interior light ●	Liveline (region specific) ●
Storage	Rear light guards ●
Side storage & roof storage (lockable) ●	Front bumper protection ●
Radio	End boom damping ●
(Bluetooth, USB aux, SD) & speakers, integrated hands free phone system ●	Dualdrive* (Pro models) ●
	● Standard ○ Option *Regional dependant

## NOISE AND VIBRATION LEVELS

Internal dB(A)	74dB(A) - (55) 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



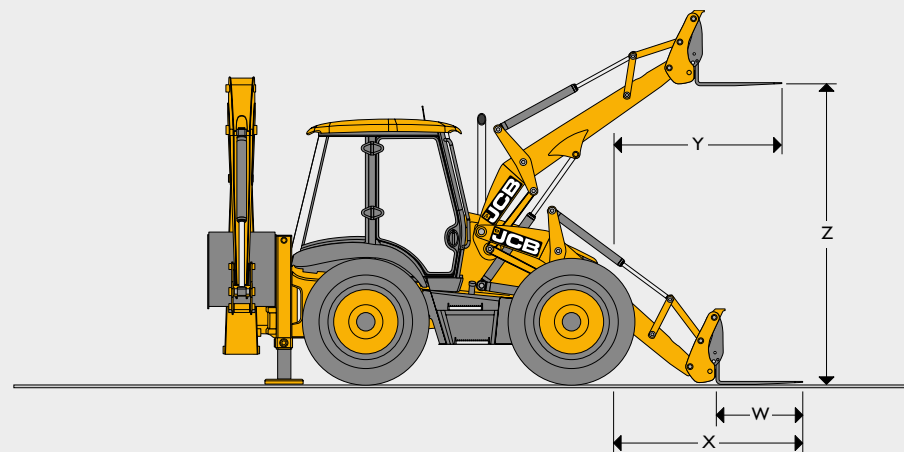
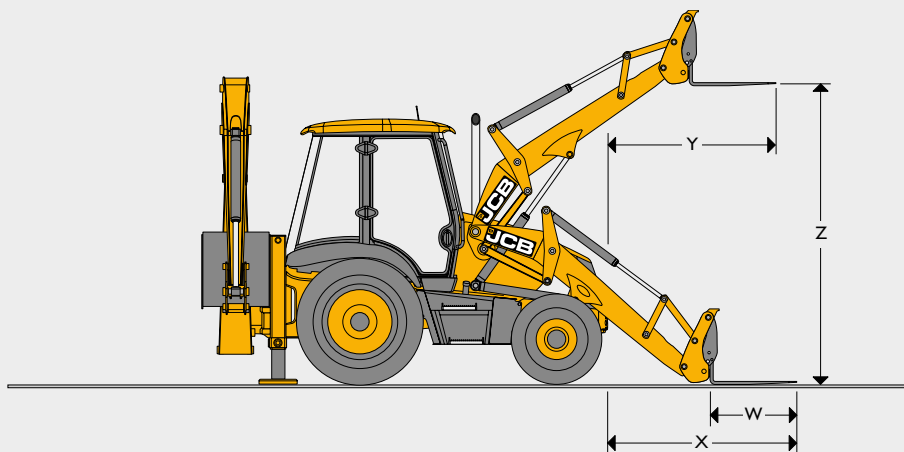
Model		3CX, 3CX PLUS, 3CX PRO		4CX PLUS	4CX PRO, 5CX PRO	
		GP shovel	6-in-1 shovel	6-in-1 shovel	6-in-1 shovel	
M	Dump height	m	2.74	2.72	2.64	2.69
N	Load over height	m	3.23	3.20	3.13	3.18
O	Loader hinge pin height	m	3.45	3.45	3.41	3.46
P	Pin forward reach	m	0.36	0.36	0.47	0.41
Q	Reach at ground (toe 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, 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, 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	1.10	1.10	1.10	1.10	1.10	1.10	1.10
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	1.95	2.78	2.10	2.68	2.13	2.68
Y Forks reach at full height	m	2.25	1.73	2.38	1.86	2.30	1.76	2.30
Z Forks lift height – max	m	2.92	3.25	2.85	3.23	2.90	3.28	2.90
Fork spacing – min	m	0.20	0.38	0.20	0.38	0.20	0.38	0.20
Fork spacing – max	m	2.17	1.36	2.17	1.36	2.17	1.36	2.17
SWL @ 500mm load centres	kg	1000	2000	1000	2000	1000	2000	1000

\*Dimensions dependent on tyre options.

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, 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, 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 †	0.08	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, 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		Angle degrees	Teeth
mm	Rated m <sup>3</sup>	Struck m <sup>3</sup>		
381–1676	0.07	0.06	30	2
305–1067	0.12	0.10	60	2

## BACKHOE ATTACHMENTS – Standard Profile Bucket

Model	3CX, 3CX PLUS, 3CX PRO				4CX PLUS, 4CX PRO, 5CX PRO			
	Capacity SAE		Weight (+ Teeth)		Capacity SAE		Weight (+ Teeth)	
Width*	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
356	0.11	0.09	117	3	0.11	0.09	117	1
457	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
800	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
1100	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.