

## SPECIFICATION



### HYDRADIG RANGE | 110W

Max reach: 8,020mm   Max roading speed: 40kph   Lift capacity: 3,182kg





## HYDRADIG PLUS

The Hydradig PLUS features additional comfort and benefits, such as an additional low flow service, LED lights, deluxe seat, reverse steering, SRS and Bluetooth radio.



**PRO**



**PLUS**

## HYDRADIG

The JCB Hydradig is an operator's introduction to ultimate productivity, featuring TAB boom, multiple steer modes, rear dozer, halogen lights, plus high and low flow hydraulics.

## HYDRADIG PRO

The range topping Hydradig PRO offers maximum versatility, featuring an all new rear chassis mounted skid hitch, with 150 l/min high flow hydraulics.

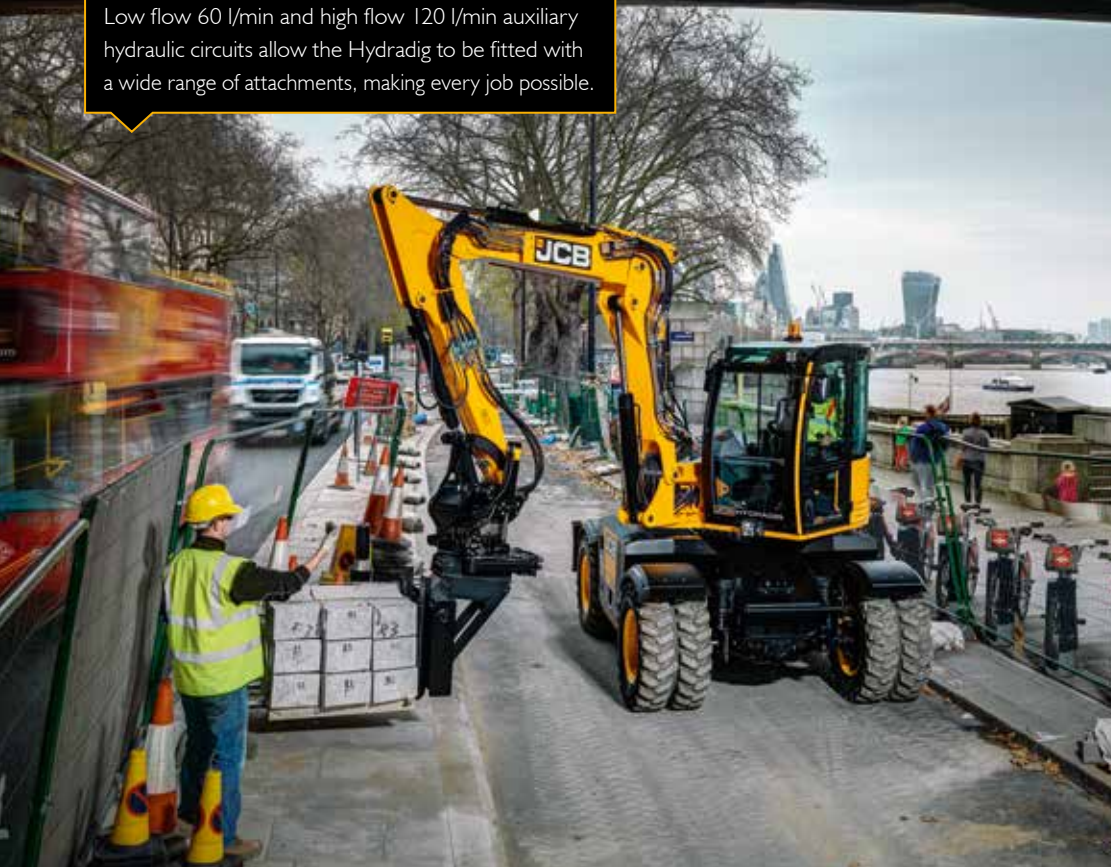
# THE ONE MACHINE FLEET

The JCB Hydradig is a wheeled excavator re-engineered from the ground up, making it unique with class-leading stability. A class-leading hydrostatic transmission, auxiliary hydraulic circuits and CommandPlus cab also give the Hydradig ultimate versatility, productivity and comfort.



## ULTIMATE VERSATILITY

Low flow 60 l/min and high flow 120 l/min auxiliary hydraulic circuits allow the Hydradig to be fitted with a wide range of attachments, making every job possible.



## ULTIMATE STABILITY

Due to its unique design, the JCB Hydradig has class-leading stability, enabling performance and safety when digging or lifting from the side.

## ULTIMATE PRODUCTIVITY

A class-leading hydrostatic transmission and dedicated highway mode allow a 40kph roading speed, for efficient travel between sites and greater uptime.



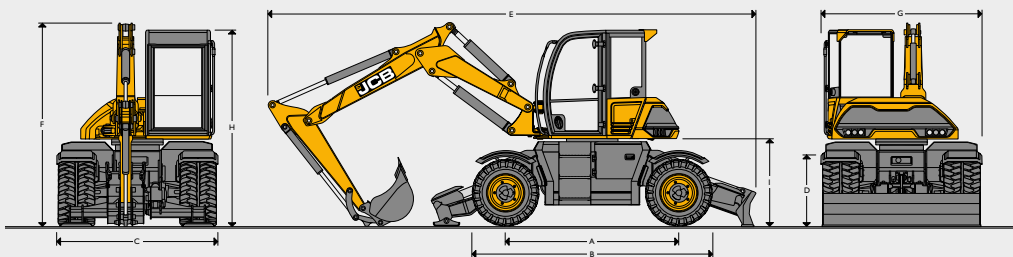
## ULTIMATE COMFORT

The JCB CommandPlus cab features a suspension seat, sliding window and climate control to optimise operator comfort.

## ULTIMATE VISIBILITY

The JCB Hydradig provides unrivalled all-round visibility, allowing the operator to see all four wheels, plus a 1m perimeter around the machine at ground level.

STATIC DIMENSIONS



STATIC DIMENSIONS

A	Wheelbase	mm	2650
B	Length over tyres	mm	3689
C	Width over tyres	mm	2420
D	Height over tyres	mm	1016
G	Transport width	mm	2440
H	Height over cab	mm	2988
I	Clearance under counterweight	mm	1319
J	Ground clearance	mm	298

TAB

<b>Dipper lengths</b>		<b>1.65m</b>	<b>2.0m</b>	<b>2.25m</b>
E	Roading length	mm	5899	5899
E	Transport length	mm	7654	7730
F	Roading height	mm	3907	3907
F	Transport height	mm	2988	2988

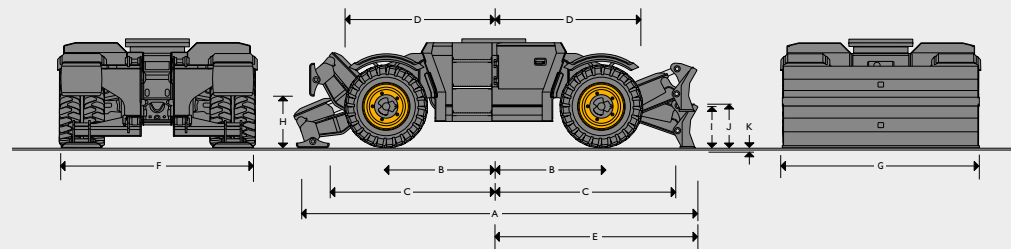
\*Machine is specified with a rear dozer blade. Please check chassis options for alternative specification dimensions.

ENGINE

Model	JCB DIESELMAX 448 EU Stage V EPA compliant		
Type	4-stroke, 4-cylinder in-line, common rail, direct injection, turbocharged and intercooled diesel		
Rated power (ISO 14396)	kW (hp)	81 (109) @ 2200 rpm	
Gross torque (ISO 14396)	Nm	516 @ 1450 rpm	
Piston displacement	l	4.8	
Air filtration	Dry element with secondary safety element and in-cab warning sensor		
Starting system	V	12	
Batteries	V	12	
Alternator	V	12, 170 ampere	

CHASSIS OPTIONS

Any combination of dozer (parallel/radial), stabiliser or grab stowage bar are available to both front and/or rear of chassis.



STATIC DIMENSIONS

Front axle / rear axle	Oscillating steering axle / rigid steering axle	
Axes load capacity	tonnes	14
Axes load oscillation	degrees	+/- 8
Transmission	Hydrostatic drive via piston motor and stepless transmission	
A	Overall length	
	Rear stabiliser only	mm
	Rear dozer only (raised)	mm
	Rear SSL hitch only (raised)	mm
	Front dozer and rear stabiliser (raised)	mm
	Front and rear stabiliser (raised)	mm
B	Centre of slew ring to front and rear axle	mm
C	Centre of slew ring to front stabiliser (rear stabiliser)	mm
D	Centre of slew ring to front tyre face	mm
E	Centre of slew ring to rear dozer blade (lowered)	mm
F	Width over stabilisers	mm
G	Width over dozer blade	mm
	Width over SSL hitch	mm
H	Stabiliser lift height	mm
I	Dozer lift height (clearance)	mm
J	Dozer blade height (lowered)	mm
K	Dozer dig depth	mm
	SSL hitch lift height (clearance)	mm

SLEW SYSTEM

Slew motor	Axial piston type	
Slew brake	Hydraulic braking plus automatic spring applied disc type parking brake	
Slew torque	kNm	27.0
Slew speed	rpm	8.9 rpm
Slew gear	11 tooth pinion / 84 tooth ring	

## MAIN HYDRAULIC SYSTEM

System	Electronically controlled system using two variable displacement piston pumps plus twin gear pumps for steering, brakes and cooling.			
<b>Services pump</b>	72cc variable displacement axial piston pump.			
Flow rate @ 2200rpm	l/min	158.4		
Excavator main relief pressure	bar	280		
<b>Transmission pump – 40kph</b>	85cc variable displacement axial piston pump in a closed loop hydrostatic drive system independent from working hydraulics.			
Flow rate @ 2200rpm	l/min	187		
Transmission absolute pressure	bar	525		
<b>Transmission pump – 20kph</b>	65cc variable displacement axial piston pump in a closed loop hydrostatic drive system independent from working hydraulics.			
Flow rate @ 2200rpm	l/min	143		
Transmission absolute pressure	bar	525		
<b>High flow auxiliary</b>				
High flow auxiliary pressure	bar	210		
High flow auxiliary max. flow	l/min	120		
<b>Low flow auxiliary</b>				
Low flow auxiliary pressure	bar	210		
Low flow auxiliary max. flow	l/min	60		
Second low flow auxiliary pressure	bar	210		
Second low flow auxiliary max. flow	l/min	60		
<b>Chassis high flow auxiliary</b>				
Chassis high flow auxiliary flow	l/min	150 (fixed)		
Chassis high flow auxiliary pressure	bar	240		
<b>Hydraulic cylinders</b>	Hardened, chromed piston rods with end damping on boom raise and dipper in.			
<b>Filtration</b>				
In tank	125 micron suction strainer			
Main return line	10 micron return line filter			
<b>Lower chassis high flow auxiliary</b>				
Lower chassis high flow auxiliary pressure	bar	280		
Lower chassis high flow auxiliary max. flow	l/min	50		

## TYRES

	Dual with spacer	Dual without spacer	Single	Floatation	Wider floatation	
Size	9.00 R20	315/70 R22.5	405/70 R20	550/45 R22.5	600/40 R22.5	
Inflation pressure	bar	7.0	4.0	6.0	8.5	3.8

## TURNING RADIUS

		To outside of tyres	To outer edge of front mounted dozer blade
		4-Wheel Steer	4-Wheel Steer
Dual wheels	mm	4163	4650
Single wheels	mm	3946	4511
Floatation wheels	mm	3946	4511

## TRAVEL SPEED

Max. roading speed	kp/h	40
Drawbar pull	kNm	45
Steering	Fully hydraulic system with 4-wheel steer, 2-wheel steer and crab steer	

## BRAKES

Brakes	All hydraulic dual circuit brake system with positive brake back off	
Parking brake	Built into the transmission	
Gradability	degrees	26.6 / 50% maximum continuous

## SERVICE CAPACITIES

Fuel tank	litres	157
Engine coolant	litres	28
Engine oil	litres	14
Hydraulic system	litres	190
Hydraulic tank	litres	130
Transmission (dropbox)	litres	1
Axle differentials (each)	litres	18 front, 14 rear
Axle hubs (each)	litres	2
DEF fluid capacity	litres	19

## OPERATING WEIGHTS

Machine equipped with no bucket, 75kg operator, 154kg fuel, dual tyres, 2000mm dipper.		
		<b>TAB</b>
No dozer, no stabiliser	kg	11050
Rear dozer	kg	11650
Rear stabiliser	kg	11550
Front dozer and rear stabiliser	kg	12050
Front stabiliser and rear stabiliser	kg	12000

## BUCKET AND ARM COMBINATIONS

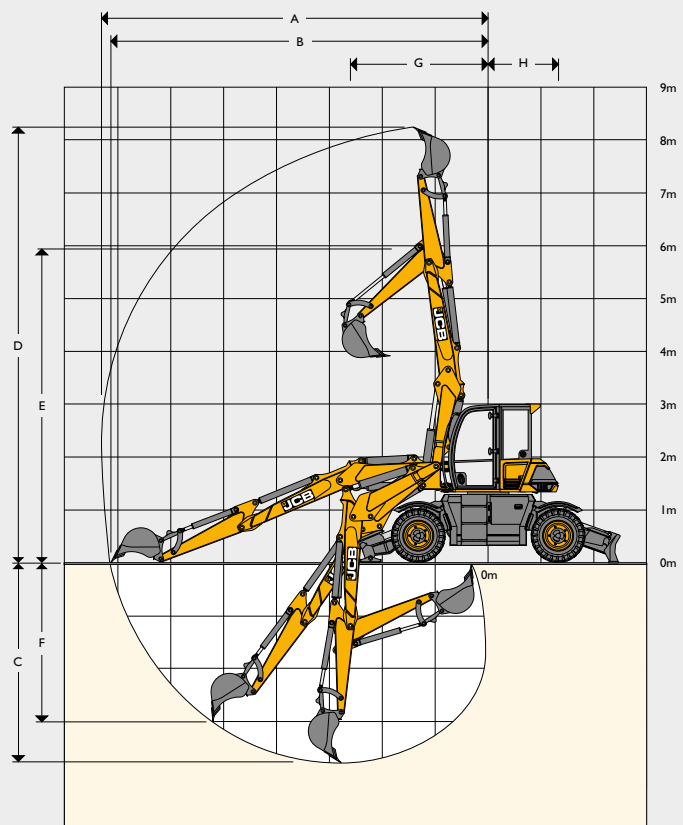
Bucket options	GP Bucket								
	mm	250	300	400	450	500	600	800	900
Bucket width	mm	250	300	400	450	500	600	800	900
Bucket capacity	m <sup>3</sup>	0.06	0.08	0.11	0.13	0.15	0.19	0.27	0.31
Bucket weight	kg	102	109	107	113	120	135	166	179
<b>T.A.B.</b>									
1.65m		☐	☐	☐	☐	☐	☐	☐	☐
2.00m		☐	☐	☐	☐	☐	☐	☐	☐
2.25m		☐	☐	☐	☐	☐	☐	☐	☐

☐ = Material weight up to 2000kg/m<sup>3</sup>.● = Material weight up to 1600kg/m<sup>3</sup>.■ = Material weight up to 1200kg/m<sup>3</sup>.

The above are to subject to ground conditions and are a guide only.



WORKING RANGE – TAB



Based on 1.65m dipper.


WORKING RANGE: TAB

Dipper length		1.65m	2.0m	2.25m
A	Max. digging reach	mm	7420	8020
B	Max. digging reach (on ground)	mm	7165	7785
C	Max. digging depth	mm	3810	4410
D	Max. digging height	mm	8195	8795
E	Max. loadover height	mm	5659	5965
F	Max. vertical wall cut depth	mm	3000	3540
G	Min. swing radius	mm	2500	2940
H	Min. tailswing radius	mm	1342	1342
	Boom swing left	degrees	50	50
	Boom swing right	degrees	70	70
	Bucket rotation	degrees	184	184
	Dipper tearout	kNm	48.3	39
	Bucket tearout	kNm	60.2	60.2

**LIFT CAPACITIES: 1.65M DIPPER WITH STABS AND DOZER DEPLOYED** **TAB**

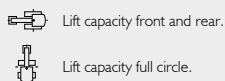
Reach	3m		4m		5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
4.5m	1827*	1827*	2105*	2105*	1767*	1767*	-	-	1516*	1298	5964
3.0m	-	-	2566*	2212	1954*	1684	1512*	1277	1384*	1106	6518
1.5m	-	-	2913*	2188	2147*	1604	1625*	1232	1395*	1060	6632
0m	-	-	2691*	2129	2024*	1556	1500*	1213	1230*	1060	6339
-1.0m	2789*	2789*	2250*	1940	1695*	1461	-	-	1042*	1042*	5887

**LIFT CAPACITIES: 1.65M DIPPER OFF DUAL TYRES** **TAB**

Reach	3m		4m		5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
4.5m	1827*	1827*	2105*	2105*	1767*	1422	-	-	1516*	1030	5964
3.0m	-	-	2566*	1886	1954*	1358	1512*	1018	1384*	878	6518
1.5m	-	-	2913*	1725	2147*	1276	1625*	983	1395*	845	6632
0m	-	-	2691*	1688	2024*	1242	1500*	971	1230*	909	6339
-1.0m	2789*	2789*	2250*	1719	1695*	1256	-	-	1042*	1042*	5887

**LIFT CAPACITIES: 2.00M DIPPER WITH STABS AND DOZER DEPLOYED** **TAB**











Reach	3m		4m		5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
4.5m	-	-	1908*	1908*	-	-	1385*	1194	1336*	1152	6358
3.0m	-	-	2412*	2412*	1844*	1590	-	-	1232*	1006	6874
1.5m	-	-	2846*	2196	2095*	1596	1559*	1222	1241*	968	6982
0m	-	-	2766*	2104	2052*	1532	1568*	1191	1142*	985	6706
-1.0m	3182*	3182*	2406*	2074	1810*	1530	1275*	1099	991*	991*	6288



Notes:

1. For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
2. 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.
3. Lift capacities assume that the machine is on firm, level ground.
4. Lift capacities may be limited by local regulations. Please refer to your dealer.

**LIFT CAPACITIES: 2.0M DIPPER OFF DUAL TYRES** **TAB**

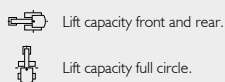
Reach	3m		4m		5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
4.5m	-	-	1908*	1908*	-	-	1385*	1043	1336*	919	6358
3.0m	-	-	2412*	1920	1844*	1365	-	-	1232*	795	6874
1.5m	-	-	2846*	1729	2095*	1268	1559*	972	1241*	766	6982
0m	-	-	2766*	1662	2052*	1219	1568*	949	1142*	818	6706
-1.0m	3182*	3182*	2406*	1673	1810*	1223	1275*	959	991*	991*	6288

**LIFT CAPACITIES: 2.25M DIPPER WITH STABS AND DOZER DEPLOYED** **TAB**

Reach	3m		4m		5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
4.5m	-	-	1582*	1582*	1598*	1598*	1325*	1325*	1226*	1057	6636
3.0m	-	-	2149*	2149*	1770*	1526	1386*	1195	1135*	940	7127
1.5m	-	-	2777*	2204	2056*	1600	1512*	1217	1142*	906	7231
0m	-	-	2795*	2088	2063*	1520	-	-	1081*	932	6967
-1.0m	2908*	2908*	2500*	2078	1871*	1510	1369*	1171	950*	950	6570

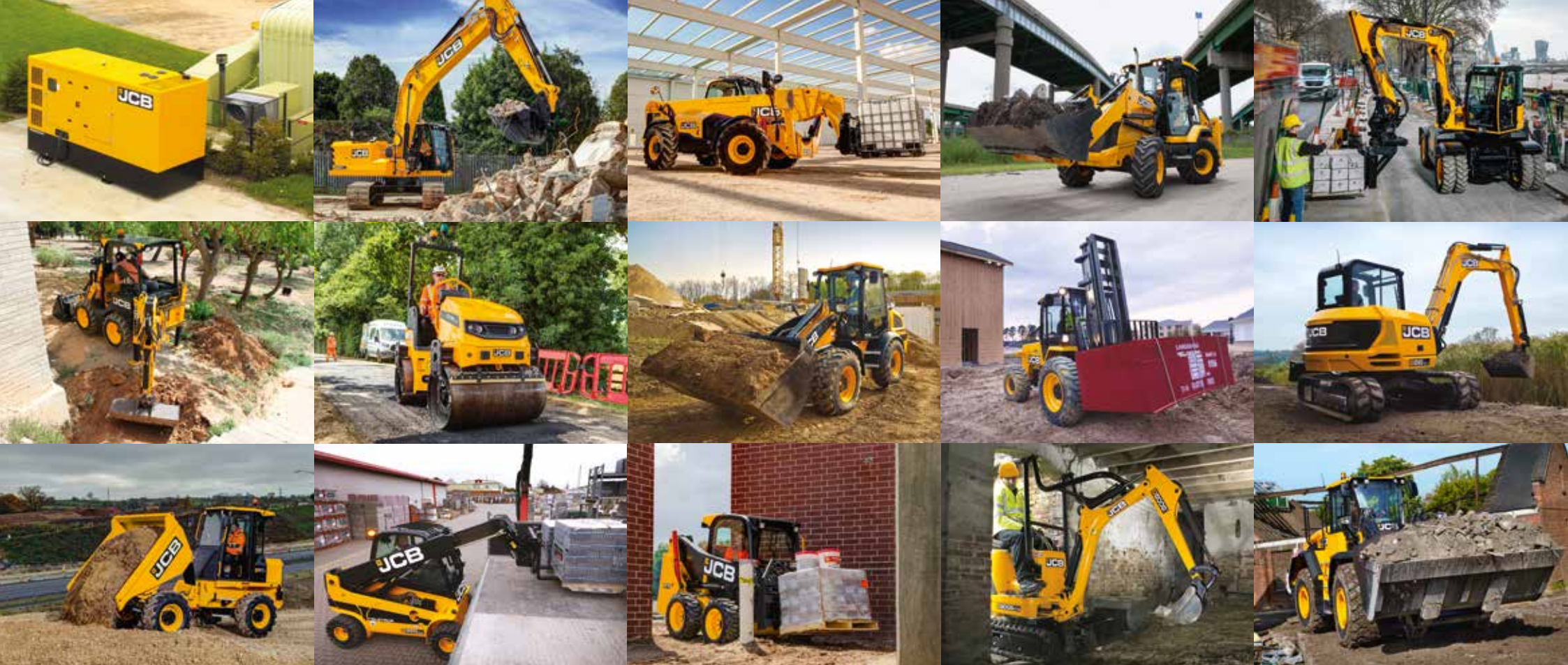
**LIFT CAPACITIES: 2.25M DIPPER OFF DUAL TYRES** **TAB**

Reach	3m		4m		5m		6m		Capacity at Max Reach		
											
Load Point Ht.	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm
4.5m	-	-	1582*	1582*	1598*	1598*	1325*	1052	1226*	848	6636
3.0m	-	-	2149*	2149*	1770*	1372	1386*	1018	1135*	740	7127
1.5m	-	-	2777*	1734	2056*	1270	1512*	965	1142*	713	7231
0m	-	-	2795*	1645	2063*	1204	-	-	1081*	759	6967
-1.0m	2908*	2908*	2500*	1646	1871*	1202	1369*	933	950*	950*	6570



Notes:

1. For lifting capacity including bucket, subtract total weight of bucket or bucket and quickhitch from above values.
2. 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.
3. Lift capacities assume that the machine is on firm, level ground.
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**ONE COMPANY, OVER 300 MACHINES.**

Your nearest JCB dealer

**HYDRADIG RANGE | 110W**

Max reach: 8,020mm    Max roading speed: 40kph    Lift capacity: 3,182kg

JCB Sales Limited, Rocester, Staffordshire, United Kingdom ST14 5JP.

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

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