



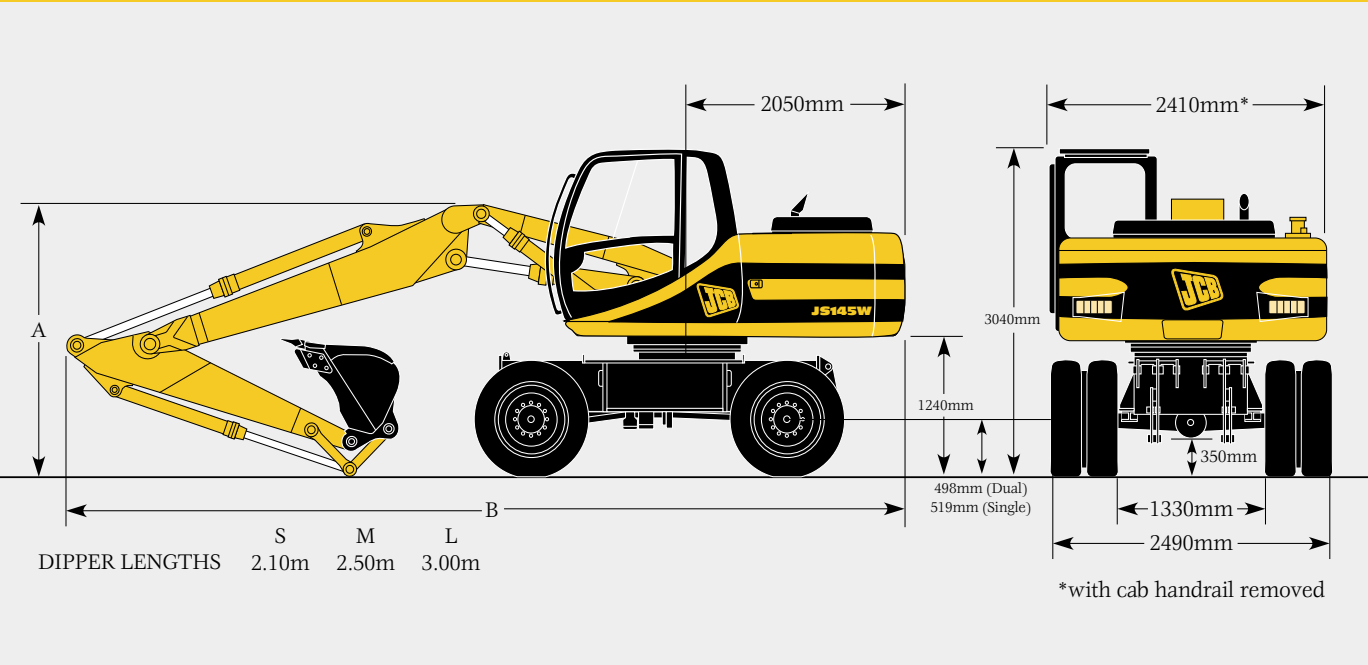
JCB JS145W

WHEELED EXCAVATOR



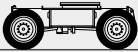
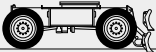
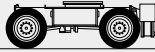
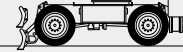
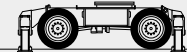
MAX. OPERATING WEIGHT: 14960 kg
NETT ENGINE POWER: 74 kW (100 hp)

STATIC DIMENSIONS



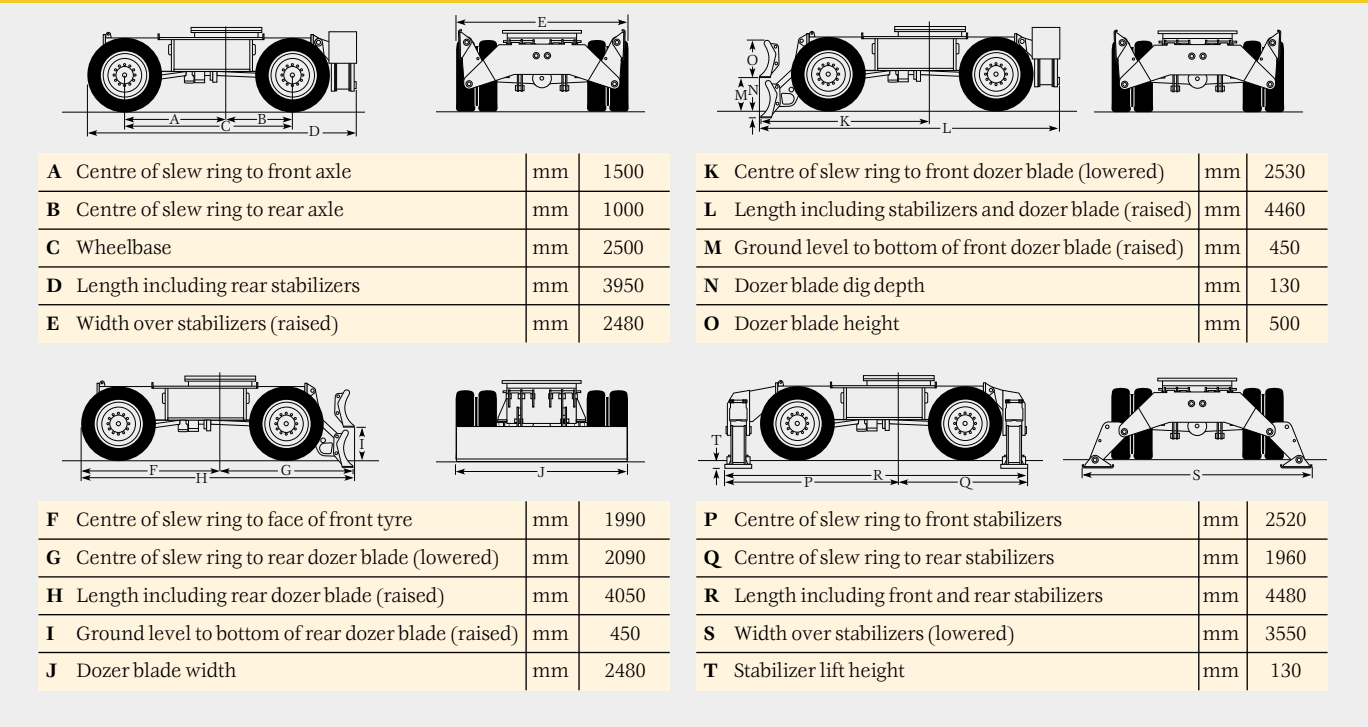
BOOM							
DIPPER ARM		S	M	L	S	M	L
A	mm	3040	3040	3040	3040	3040	3040
B	mm	7580	7600	7630	7310	7650	7890

OPERATING WEIGHTS

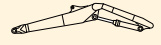
CHASSIS						
	kg	12,700	13,140	13,580	14,120	14,460
	kg	13,200	13,640	14,080	14,620	14,960

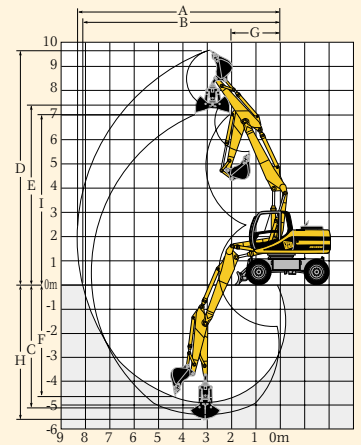
Machine equipped with excavating bucket and dual wheels. For single wheels subtract 400kg.

CHASSIS OPTIONS



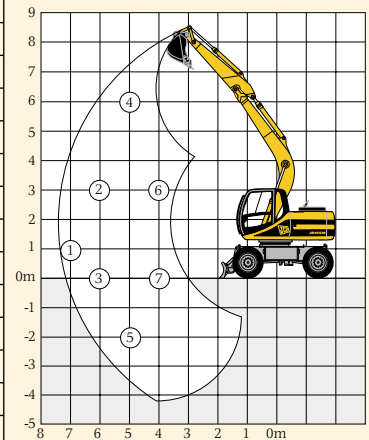
WORKING RANGES

BOOM							
DIPPER ARM		2.10m	2.50m	3.00m	2.10m	2.50m	3.00m
A Max digging reach	mm	7980	8350	8800	8360	8750	9235
B Max digging reach (on ground)	mm	7745	8125	8585	8140	8525	9000
C Max digging depth	mm	4775	5175	5675	5020	5425	5930
D Max digging height	mm	9185	9455	9775	9675	10000	10400
E Max loadover height	mm	6780	7050	7400	7275	7575	7950
F Max vertical wall cut depth	mm	4200	4600	5050	4240	4625	5105
G Min swing radius	mm	2050	2050	2410	2490	2575	2680
H Max digging depth with grab	mm	4900	5300	5800	5145	5550	6055
I Max dumping height with grab	mm	6655	6925	7275	7150	7450	7825
Bucket rotation		182°	182°	182°	182°	182°	182°
Dipper tearout	kgf	8843	7430	6190	8843	7430	6190
Dipper tearout with boost	kgf	9570	8040	6700	9570	8040	6700
Bucket tearout	kgf	7720	7720	7720	7720	7720	7720
Bucket tearout with boost	kgf	8350	8350	8350	8350	8350	8350



MONOBOOM LIFT CAPACITIES

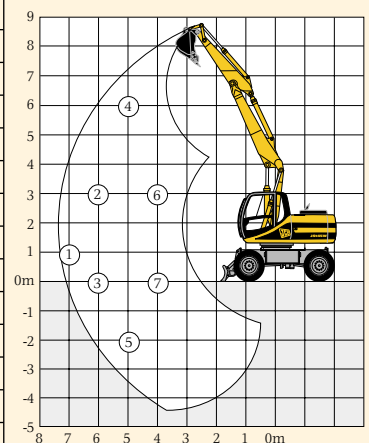
CHASSIS													
DIPPER ARM		2.10m	2.50m	3.00m	2.10m	2.50m	3.00m	2.10m	2.50m	3.00m	2.10m	2.50m	3.00m
①	O/E	2410	2400	2390	2500	2490	2480	3280*	3180*	3020*	3280*	3180*	3020*
	360°	1520	1530	1500	1830	1830	1810	2370	2360	2350	2730	2720	2710
②	O/E	3220	3070*	2770*	3300*	3070*	2770*	3300*	3070*	2770*	3300*	3070*	2770*
	360°	2100	2130	2130	2490	2510	2520	3170	3070*	2770*	3300*	3070*	2770*
③	O/E	3030	3020	3010	3140	3130	3120	3950*	3860*	3690*	3950*	3860*	3690*
	360°	1910	1920	1880	2300	2290	2270	2970	2960	2940	3420	3420	3400
④	O/E	2260*	2460*	2020*	2260*	2460*	2020*	2260*	2460*	2020*	2260*	2460*	2020*
	360°	2260*	2460*	2020*	2260*	2460*	2020*	2260*	2460*	2020*	2260*	2460*	2020*
⑤	O/E	3990	3960	3910	4140	4140	4050	4760*	4820*	4800*	4760*	4820*	4800*
	360°	2480	2480	2400	2990	2460*	2910	3890	3860	3800	4510	4470	4420
⑥	O/E	4400*	3980*	3420*	4400*	3980*	3420*	4400*	3980*	3420*	4400*	3980*	3420*
	360°	4050	3980*	3420*	4400*	3980*	3420*	4400*	3980*	3420*	4400*	3980*	3420*
⑦	O/E	5820	5840	5830	6010	6030	5900*	6290*	6170*	5900*	6290*	6170*	5900*
	360°	3520	3570	3530	4260	4270	4270	5600	5620	5620	6290*	6170*	5900*



BUCKET WEIGHT 468kg

TRIPLE ARTICULATION LIFT CAPACITIES

CHASSIS													
DIPPER ARM		2.10m	2.50m	3.00m	2.10m	2.50m	3.00m	2.10m	2.50m	3.00m	2.10m	2.50m	3.00m
①	O/E	2470	2460	2450	2560	2550	2540	3120*	3110*	2940*	3210*	3110*	2940*
	360°	1550	1540	1530	1870	1860	1850	2420	2410	2400	2790	2780	2770
②	O/E	3230*	3030*	2770*	3230*	3030*	2770*	3230*	3030*	2770*	3230*	3030*	2770*
	360°	2140	2160	2180	2540	2560	2590	3200	3030*	2770*	3230*	3030*	2770*
③	O/E	3080	3080	3060	3190	3190	3170	3850*	3760*	3610*	3850*	3760*	3610*
	360°	1920	1920	1890	2320	2310	2290	3010	3010	2990	3480	3470	3460
④	O/E	2690*	2460*	2080*	2690*	2460*	2080*	2690*	2460*	2080*	2690*	2460*	2080*
	360°	2690*	2460*	2080*	2690*	2460*	2080*	2690*	2460*	2080*	2690*	2460*	2080*
⑤	O/E	4060	4020	3970	4200	4170	4110	4650*	4700*	4680*	4650*	4700*	4680*
	360°	2490	2460	2400	3020	2980	2920	3940	3910	3850	4570	4540	4480
⑥	O/E	4500*	4160*	3640*	4500*	4160*	3640*	4500*	4160*	3640*	4500*	4160*	3640*
	360°	4070	4160*	3640*	4500*	4160*	3640*	4500*	4160*	3640*	4500*	4160*	3640*
⑦	O/E	5870	5890	5850	6070	6060	5860*	6150*	6080*	5860*	6150*	6080*	5860*
	360°	3510	3520	3510	4260	4270	4270	5630	5650	5650	6150*	6080*	5860*



BUCKET WEIGHT 423kg

Unit: kg

O/E = Lift capacity over least stable end. 360° = Lift capacity full circle.

Notes: 1. Lifting capacities are based on the ISO standard, 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, stabilized and equipped with twin tyres, an approved lifting point and bucket.

3. Lift capacities may be limited by local regulations. Please refer to your dealer.

STANDARD EXCAVATING BUCKETS

All buckets are JCB – Esco fully welded steel, with sealed, hardened steel pivot pins and replaceable wear parts.

Max Width mm (in.)	Capacity (SAE heaped) cu.m (cu.yd)	Weight kg (lb)
600 (24)	0.32 (0.42)	369 (814)
750 (30)	0.43 (0.56)	423 (933)
900 (36)	0.55 (0.72)	468 (1032)
1000 (40)	0.63 (0.82)	507 (1118)
1100 (44)	0.72 (0.94)	537 (1184)
1200 (48)	0.80 (1.05)	576 (1270)

DIGGING GRABS

					WEIGHT
cu.m	mm	mm	mm	mm	kg
0.20	300	1660	1325	1735	600
0.27	400	1660	1325	1735	620
0.34	500	1660	1325	1735	640
0.40	600	1660	1325	1735	660
0.47	700	1660	1325	1735	730
0.54	800	1660	1325	1735	760

When grab is used a suspension link is required. The additional length of the link should be taken into account.

CHASSIS

Structure: high strength flanged 'u' section.
Chassis Options

Dozer Blade: front or rear pin mount.

Stabilisers: front or rear pin mount, independently operable – plus combinations.

Grab Stowage: heavy duty, pin mounted stowage bar.

Transmission: hydrostatic drive via piston motor and powershift transmission.

Travel speed: Low ratio 14kph
High ratio 35kph

Creep speed 3.3kph

Axes: four wheel drive. Front steering axle oscillates for rough ground mobility.

Axle load capacity: 26 tonnes

Axle oscillation: + / - 8.5 degrees

Ground clearance 350mm

Steering: fully hydraulic system.

Turning radius:

To outside of tyres 5.45m

To outer edge of front mounted

dozer blade 6.06m

Brakes: all hydraulic, dual circuit brake system.

Parking Brake: built into the transmission .

ENGINE

Standard Engine: Isuzu A4G1T-S2.

Type: Water cooled, 4-stroke, 4-cylinder in-line, direct injection, turbocharged diesel.

Net Power: (SAE J1349 and 80/1269/EC) 72kW (96hp) at 2300 RPM.

Piston displacement: 4.329 litres.

Starting system: 24 volt.

Batteries: 2 x 12 volt Heavy Duty.

Alternator: 24 volt 40 amp.

SERVICE CAPACITIES

Fuel tank	240lt
Engine coolant	16.4lt
Engine oil	14.7lt
Swing reduction gear	2.2lt
Hydraulic system	124lt
Hydraulic tank	73lt
Transmission	3.4lt
Axle differentials (each)	R-12, F-14lt
Axle hubs (each)	2.0lt

TYRES

Twins: 10.00 x 20 tyres (16PR) with spacer ring.

Singles: 18R x 19.5 tyres (Radials).

SWING SYSTEM

Drive train: axial piston motor and planetary reduction final drive.

Swing brake: Hydraulic braking plus automatic spring applied disc type parking brake.

Swing speed: 13.4RPM

Swing gear: Large diameter, internally toothed fully sealed grease bath lubricated.

Swing lock: Multi position switchable brake and mechanical lock.

MAIN HYDRAULIC SYSTEM

System Load-sensed hydraulic system with twin variable flow piston pumps providing flow-on-demand for maximum efficiency.

Main pumps: 2 variable displacement axial piston type

Maximum flow 2 x 138 l/min

Main circuit pressure 314 bar

With power boost 343 bar

Servo pump: gear type

Maximum flow 22 l/min

Servo pressure 40 bar

Optional Circuits

Hammer: includes automatic engine speed

setting and return filter.

Maximum flow 138 l/min

Maximum pressure 314 (343) bar

(pre-set to 180 bar)

Grab operation:

Maximum flow 138 l/min

Maximum pressure for grab ram

operation 314 (343) bar

Low Flow Pipework: two options available, one with 20L/min flow and a second with an adjustable flow of 27-45L/min.

Hydraulic Cylinders with hardened, chromed piston rods and end cushioning on boom, dipper and bucket crowd cylinder.

Filtration

In tank: 150 micron, suction strainer.

Main return line: 10 micron, fibreform element.

Pilot line: 10 micron, paper element.

Nephron by pass line: 1.5 micron paper element.

Hydraulic hammer return: 10 micron, reinforced microform element.

INSTRUMENTATION

AMS - Advanced Management System

The JCB Advanced Management System matches engine power and pump output to optimise machine performance in each of the four

selectable work modes –

H (Heavy) 100% engine and hydraulic power for maximum output

S (Standard) 90% engine and hydraulic power for good economical output

L (Light) 70% engine and hydraulic power for precision finishing and low fuel consumption

F (Fine) 70% power with permanent power boost for maximum lifting ability.

The system monitors all critical machine functions and operator selections which are shown on the display panel, conveniently mounted in the operators line of site. The diagnostic function built into the system constantly monitors machine usage and performance, as well as providing the service engineer with valuable information on any machine fault.

CAB

Frame: Pressed steel cab frame conforming to ISO dimensional standards, noise and vibration isolated by six hydraulically damped resilient mountings.

EXCAVATOR END

Booms: Monoboom or triple articulation boom with choice of dipper lengths to match the requirements of reach, lift capacity and tearout.

Bucket tipping links: fabricated type with choice of 1 tonne lift, max capacity lift and no-lift point - with link stowage lock (grab work).

STANDARD/OPTIONAL EQUIPMENT

Auto engine warm up	Std
Double element air cleaner	Std
Radiator fine mesh grille	Std
Heavy duty alternator	Std
Electrics isolator	Std
Heavy duty batteries	Std
Tinted safety glass	Std
Radio & cassette player	Std
Operators storage box	Std
Removable floor mat	Std
Windscreens wash/wipe	Std
Plug-in power socket	Std
Power boost	Std
Auto-idle	Std
One-touch engine speed control	Std
Hydraulic cushion control	Std
Nephron hydraulic oil filtration	Std
Grouped HSP pressure test points	Std
Auxiliary pipework mounting brackets	Std
Work lights – boom & mainframe mounted	Std
Upper structure under covers	Std
External mirrors	Std
Handrail & nonslip pads	Std
Creep speed	Std
Tipping link with stowage lock	Std
Load holding valves (lift)	Std
On the move gear change	Std
Oscillating axle lock	Std
Adjustable steer column	Std
Spring assisted opening screen	Std
Auto engine/hydraulics warm up	Std
Hose burst check valves &	
Overload warning system	Opt
Tipping link mounted lift points	Opt
General purpose buckets	Opt
Ditch/grading buckets	Opt
Quickhitch buckets	Opt
Hydraulic hammers	Opt
Hammer pipework	Opt
Low flow (grab rotate/weedcutter) pipework	Opt
Bucket to grab changeover pipework	Opt
Air conditioning	Opt
Cab mounted & rear work lights	Opt
Rotating beacon	Opt
Additional toolbox	Opt
Grab stowage bar	Opt

