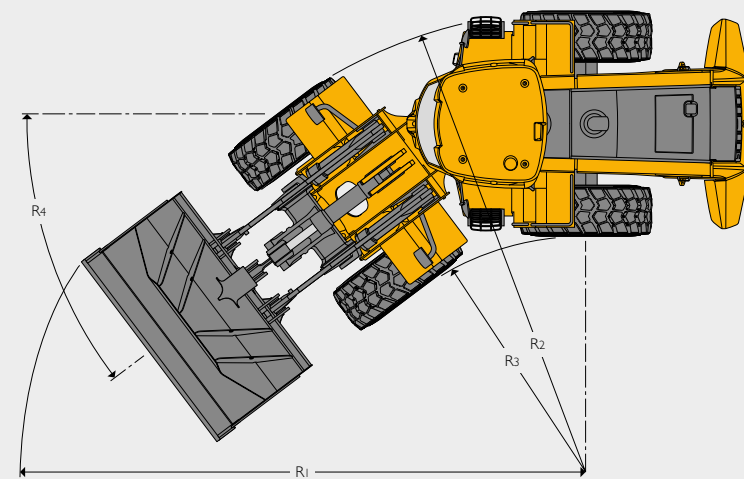
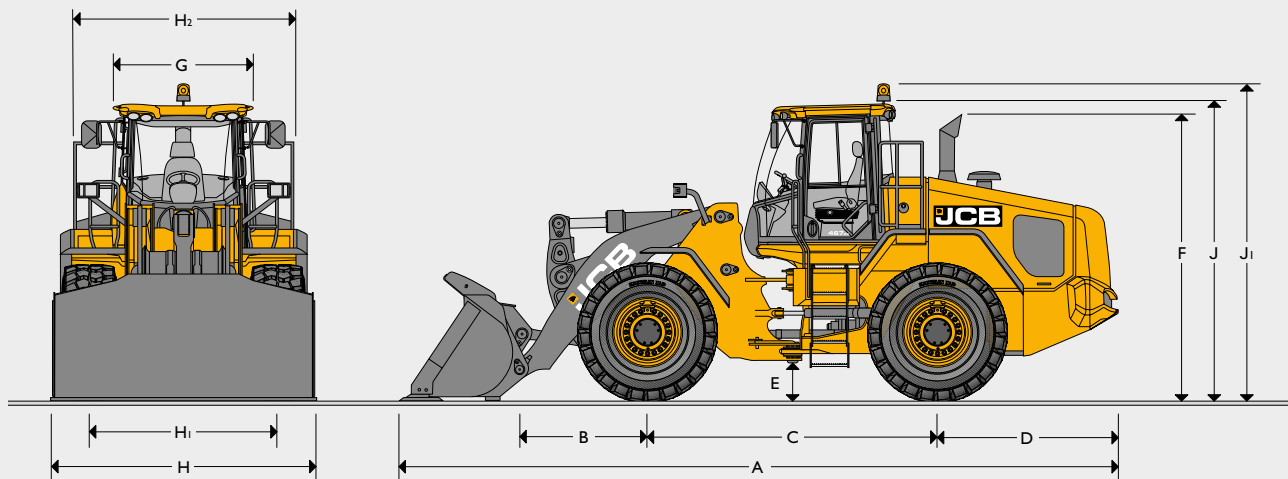




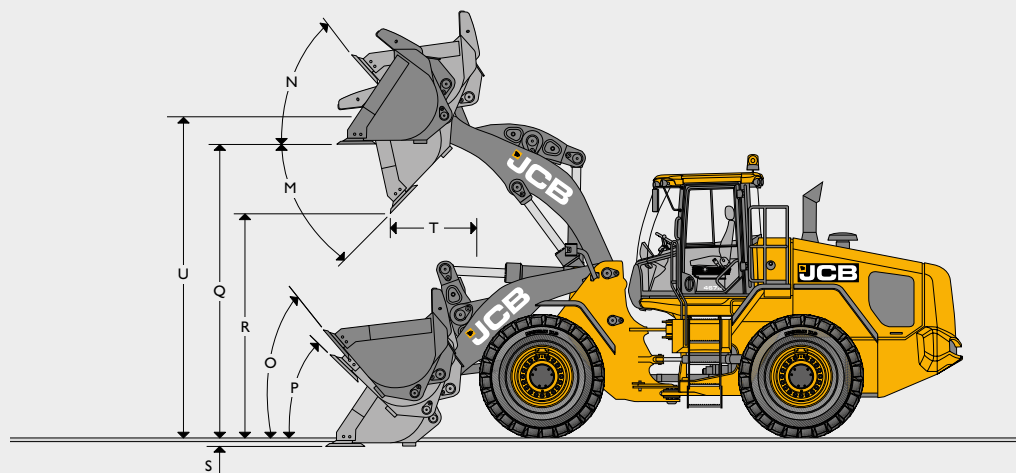
STATIC DIMENSIONS

A	Overall length	mm (ft-in)	8686 (28-6)
B	Axle to pivot pin	mm (ft-in)	1553 (5-1)
C	Wheelbase	mm (ft-in)	3500 (11-6)
D	Axle to counterweight face	mm (ft-in)	2185 (7-2)
E	Ground clearance	mm (ft-in)	474 (1-7)
F	Height over exhaust	mm (ft-in)	3465 (11-4)
G	Width over cab roof	mm (ft-in)	1690 (5-7)
H	Max. width over tyres	mm (ft-in)	2955 (9-8)
H ₁	Wheel track	mm (ft-in)	2280 (7-6)
H ₂	Max. width over fenders	mm (ft-in)	2710 (8-11)
J	Height over cab roof and lowered beacon	mm (ft-in)	3704 (12-2)
J ₁	Height over raised beacon	mm (ft-in)	3939 (12-11)
	Pin height (maximum)	mm (ft-in)	4350 (14-3)
	Front axle weight	kg (lbs)	10980 (24207)
	Rear axle weight	kg (lbs)	12820 (28263)
	Total weight	kg (lbs)	23800 (52470)

Data based on machine equipped with direct mounted 4 m³ bucket with toe plates and Michelin XHA2 (L3) 26.5R25 tyres.

TURNING CIRCLE

R ₁	Max. turn radius over shovel	mm (ft-in)	7910 (25-11)
R ₂	Max. turn radius over tyre	mm (ft-in)	6726 (22-1)
R ₃	Inside turn radius	mm (ft-in)	3744 (13-3)
R ₄	Articulation angle	degrees	37



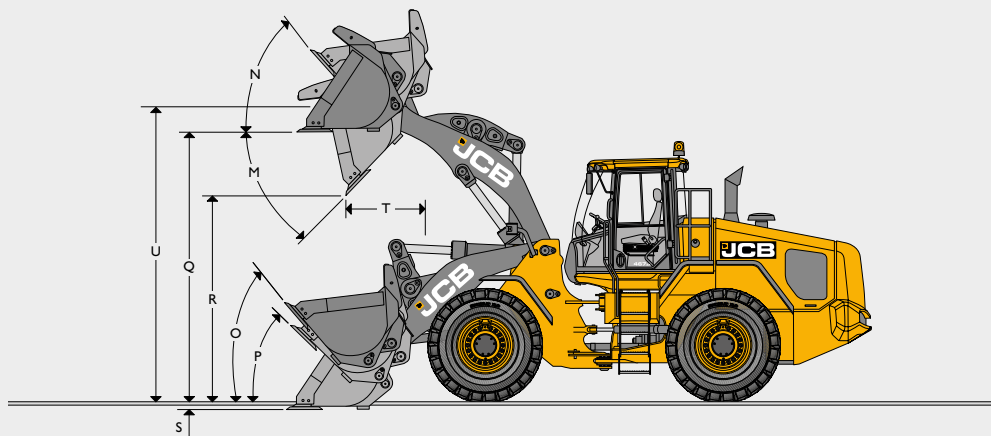
CHANGES TO THE OPERATING PERFORMANCE AND DIMENSIONS

Tyre size	Manufacturer	Type	Rating	Op weight kg (lb)	Tipping loads		Dimensions	
					Straight kg (lb)	Full turn kg (lb)	Vertical mm (in)	Width mm (in)
26.5 R25	Michelin	XHA2	L3	-	-	-	-	-
26.5 R25	JCB Earthmover	ET6A	L3	+180 (397)	+121 (267)	+104 (229)	-	-
26.5-25	JCB Sitemaster (BKT)	XL-Grip	L3 32ply	-128 (282)	-86 (190)	-74 (163)	+9 (0.4)	+2 (0.1)
26.5 R25	Michelin	XLDD2A	L5	+680 (1499)	+459 (1012)	+393 (866)	+35 (1.4)	+8 (0.3)
26.5 R25	Michelin	XMineD2	L5	+1068 (2355)	+721 (1590)	+617 (1360)	+40 (1.6)	+40 (1.6)
26.5 R25	SG Revolution	S2C2 DWL	Solid	+4240 (9348)	+1752 (3863)	+1500 (3307)	+48 (1.9)	-43 (1.7)

LOADER DIMENSIONS

		Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
Bucket mounting		Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
Bucket type		G.P.	G.P.	G.P.	G.P.	G.P.	G.P.	G.P.	G.P.	G.P.
Bucket equipment		Teeth	Teeth	Toeplate	Teeth & Toeplate	Teeth	Toeplate	Teeth & Toeplate	Teeth	Toeplate
Bucket capacity (SAE heaped)	m³ (yd³)	3.8 (4.97)	4 (5.23)	4 (5.23)	4 (5.23)	4.2 (5.49)	4.2 (5.49)	4.2 (5.49)	4.4 (5.76)	4.4 (5.76)
Bucket capacity (struck)	m³ (yd³)	3.26 (4.26)	3.47 (4.54)	3.47 (4.54)	3.47 (4.54)	3.67 (4.79)	3.67 (4.79)	3.67 (4.79)	3.84 (5.02)	3.84 (5.02)
Bucket width	mm (ft-in)	3258 (10-8)	3258 (10-8)	3231 (10-7)	3258 (10-8)	3258 (10-8)	3231 (10-7)	3258 (10-8)	3258 (10-8)	3231 (10-7)
Bucket weight	kg (lb)	2050 (4520)	2113 (4658)	2098 (4625)	2260 (4982)	2176 (4797)	2161 (4764)	2323 (5121)	2239 (4936)	2224 (4903)
Max. material density	kg/m³ (lb/yd³)	2019 (4451)	1907 (4204)	1913 (4217)	1892 (4171)	1805 (3979)	1810 (3990)	1791 (3949)	1712 (3774)	1717 (3785)
Tipping load straight	kg (lb)	17460 (38493)	17353 (38257)	17405 (38371)	17221 (37966)	17247 (38023)	17298 (38136)	17114 (37730)	17140 (37787)	17192 (37902)
Tipping load full turn	kg (lb)	15348 (33837)	15254 (33629)	15300 (33731)	15138 (33374)	15161 (33424)	15206 (33524)	15044 (33166)	15067 (33217)	15113 (33318)
Payload	kg (lb)	7674 (16918)	7627 (16815)	7650 (16865)	7569 (16687)	7580 (16711)	7603 (16762)	7522 (16583)	7534 (16610)	7556 (16658)
Max. breakout force	kN (lbf)	199 (44737)	188 (42264)	187 (42039)	187 (42039)	186 (41815)	180 (40466)	180 (40466)	180 (40466)	175 (39342)
Tractive effort	kN (lbf)	237 (53280)	237 (53280)	237 (53280)	237 (53280)	237 (53280)	237 (53280)	237 (53280)	237 (53280)	237 (53280)
M Max. dump angle	degrees	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
N Roll back angle at full height	degrees	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
O Roll back at carry	degrees	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2
P Roll back at ground level	degrees	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3
Q Load over height	mm (ft-in)	3938 (12-11)	3938 (12-11)	3965 (13-0)	3938 (12-11)	3938 (12-11)	3965 (13-0)	3938 (12-11)	3938 (12-11)	3965 (13-0)
R Dump height (45° dump)	mm (ft-in)	2884 (9-5)	2849 (9-4)	3054 (10-0)	2884 (9-5)	2820 (9-3)	3019 (9-10)	2849 (9-4)	2792 (9-1)	2990 (9-9)
S Dig depth	mm (ft-in)	60 (0-2)	60 (0-2)	95 (0-3)	95 (0-3)	60 (0-2)	95 (0-3)	95 (0-3)	60 (0-2)	95 (0-3)
T Reach at dump height	mm (ft-in)	1389 (4-6)	1424 (4-8)	1258 (4-1)	1389 (4-6)	1453 (4-9)	1293 (4-2)	1424 (4-8)	1481 (4-10)	1322 (4-4)
U Height to bucket pivot pin	mm (ft-in)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)
Reach maximum (45° dump)	mm (ft-in)	1526 (5-0)	1561 (5-1)	1395 (4-6)	1526 (5-0)	1590 (5-2)	1430 (4-8)	1561 (5-1)	1618 (5-3)	1457 (4-9)
Overall length	mm (ft-in)	8899 (29-2)	8949 (29-4)	8686 (28-6)	8899 (29-2)	8989 (29-5)	8736 (28-7)	8949 (29-4)	9029 (29-7)	8776 (28-9)
Operating weight*	kg (lb)	23752 (52364)	23815 (52503)	23800 (52470)	23962 (52,827)	23878 (52642)	23863 (52609)	24025 (52966)	23941 (52781)	23926 (52748)

* (Includes 80kg operator and full fuel tank)



CHANGES TO THE OPERATING PERFORMANCE AND DIMENSIONS

Tyre size	Manufacturer	Type	Rating	Op weight kg (lb)	Tipping loads		Dimensions	
					Straight kg (lb)	Full turn kg (lb)	Vertical mm (in)	Width mm (in)
26.5 R25	Michelin	XHA2	L3	-	-	-	-	-
26.5 R25	JCB Earthmover	ET6A	L3	+180 (397)	+121 (267)	+104 (229)	-	-
26.5-25	JCB Sitemaster (BKT)	XL-Grip	L3 32ply	-128 (282)	-86 (190)	-74 (163)	+9 (0.4)	+2 (0.1)
26.5 R25	Michelin	XLDD2A	L5	+680 (1499)	+459 (1012)	+393 (866)	+35 (1.4)	+8 (0.3)
26.5 R25	Michelin	XMineD2	L5	+1068 (2355)	+721 (1590)	+617 (1360)	+40 (1.6)	+40 (1.6)
26.5 R25	SG Revolution	S2C2 DWL	Solid	+4240 (9348)	+1752 (3863)	+1500 (3307)	+48 (1.9)	-43 (1.7)

LOADER DIMENSIONS

		Direct	Direct	Direct	Direct	Direct	Direct
Bucket mounting		Direct	Direct	Direct	Direct	Direct	Direct
Bucket type		G.P.	G.P.	G.P.	G.P.	G.P.	G.P.
Bucket equipment		Teeth & Toeplate	Teeth	Toeplate	Teeth & Toeplate	Toeplate	Teeth & Toeplate
Bucket capacity (SAE heaped)	m³ (yd³)	4.4 (5.76)	4.6 (6.02)	4.6 (6.02)	4.6 (6.02)	4.8 (6.28)	4.8 (6.28)
Bucket capacity (struck)	m³ (yd³)	3.84 (5.02)	4.02 (5.26)	4.02 (5.26)	4.02 (5.26)	4.17 (5.45)	4.17 (5.45)
Bucket width	mm (ft-in)	3258 (10-8)	3258 (10-8)	3231 (10-7)	3258 (10-8)	3231 (10-7)	3258 (10-8)
Bucket weight	kg (lb)	2386 (5260)	2302 (5075)	2287 (5042)	2449 (5399)	2350 (5181)	2512 (5538)
Max. material density	kg/m³ (lb/yd³)	1699 (3746)	1628 (3589)	1633 (3600)	1615 (3561)	1555 (3428)	1538 (3391)
Tipping load straight	kg (lb)	17008 (37496)	17034 (37554)	17086 (37668)	16901 (37260)	16979 (37432)	16795 (37027)
Tipping load full turn	kg (lb)	14951 (32961)	14974 (33012)	15019 (33111)	14857 (32754)	14926 (32906)	14764 (32549)
Payload	kg (lb)	7475 (16480)	7487 (16506)	7510 (16557)	7429 (16378)	7463 (16453)	7382 (16275)
Max. breakout force	kN (lbf)	175 (39342)	175 (39342)	171 (38442)	171 (38442)	166 (37318)	166 (37318)
Tractive effort	kN (lbf)	237 (53280)	237 (53280)	237 (53280)	237 (53280)	237 (53280)	237 (53280)
M Max. dump angle	degrees	45.6	45.6	45.6	45.6	45.6	45.6
N Roll back angle at full height	degrees	51.4	51.4	51.4	51.4	51.4	51.4
O Roll back at carry	degrees	49.2	49.2	49.2	49.2	49.2	49.2
P Roll back at ground level	degrees	44.3	44.3	44.3	44.3	44.3	44.3
Q Load over height	mm (ft-in)	3938 (12-11)	3938 (12-11)	3938 (12-11)	3938 (12-11)	3938 (12-11)	3938 (12-11)
R Dump height (45° dump)	mm (ft-in)	2820 (9-3)	2764 (9-0)	2962 (9-8)	2792 (9-1)	2934 (9-7)	2764 (9-0)
S Dig depth	mm (ft-in)	95 (0-3)	60 (0-2)	95 (0-3)	95 (0-3)	95 (0-3)	95 (0-3)
T Reach at dump height	mm (ft-in)	1453 (4-9)	1509 (4-11)	1250 (4-1)	1481 (4-10)	1378 (4-6)	1509 (4-11)
U Height to bucket pivot pin	mm (ft-in)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)	4350 (14-3)
Reach maximum (45° dump)	mm (ft-in)	1590 (5-2)	1646 (5-4)	1487 (4-10)	1618 (5-3)	1515 (4-11)	1646 (5-4)
Overall length	mm (ft-in)	8989 (29-5)	9069 (29-9)	8816 (28-11)	9029 (29-7)	8856 (29-0)	9069 (29-9)
Operating weight*	kg (lb)	24088 (53105)	24004 (52920)	23989 (52887)	24151 (53244)	24052 (53026)	24214 (53383)

* (Includes 80kg operator and full fuel tank)

ENGINE

6-cylinder turbo-charged and charge air cooled 10.8l diesel engine. Select electronically controlled high pressure direct injection fuel system ensures "clean burn" for low fuel consumption and emissions.

Manufacturer		Cummins
Model		QSM11
Displacement	ltr (in ³)	10.8 (660)
Bore	mm (in)	125 (4.92)
Stroke	mm (in)	147 (5.79)
Aspiration		Turbocharged
No. of cylinders		6
Max. gross power to SAE J1995/ISO 14396	kW (hp) @ 1800rpm	239 (320)
Rated gross power to SAE J1995/ISO 14396	kW (hp) @ 2100rpm	216 (290)
Nett power to SAE J1349	kW (hp) @ 2100rpm	214 (287)
Gross torque at 1400rpm	Nm (lbf-ft) @ 1400rpm	1478 (1090)
Economic working range	rpm	800 - 1800
Torque rise	%	50.4
Valves per cylinder		4
Wet weight	kg	984
Air cleaner		Donaldson 15" 2 stage
Fan drive type		Hydraulic
Emissions		US EPA Tier 3, CARB Tier 3, EU Stage IIIA

TRANSMISSION

4 wheel drive, automatic 4 speed transmission with electro-hydraulically operated selector and "Power-Inch" intelligent clutch cut off technology as standard. Optional 5 speed transmission with auto-locking torque converter available for even more speed and efficiency.

Type	4 speed non- lock up converter	5 speed with lock up torque converter
Make	ZF	ZF
Model	4WG260 (standard)	5WG260 with lock-up (option)
Forward speed 1	7.3 (4.6)	7.3 (4.6)
Forward speed 2	12.5 (7.8)	12.8 (7.8)
Forward speed 3	27.5 (17.1)	19.8 (12.3)
Forward speed 4	40.0 (24.9)	28.8 (17.9)
Forward speed 5	-	40.0 (24.9)*
Reverse 1	7.3 (4.6)	7.3 (4.6)
Reverse 2	12.5 (7.8)	12.8 (8.0)
Reverse 3	27.5 (17.1)	28.8 (17.9)

* Denotes speed limited by transmission electronic control unit

AXLES

Type (differential – optional)	Limited Slip
Type (differential – optional)	Open with auto-locking front
Make and model	ZF MT-L 3105 MK 2 (front and rear)
Overall axle ratio	24.666:1
Rear axle oscillation	degrees ± 12.5°

ELECTRICAL SYSTEM

System voltage	Volt	24
Alternator output	Amp hour	70
Battery capacity	Amp hour	180
Cold cranking capacity (SAE)	Amp hour	1150

CAB

ROPS/FOPS structure (tested in accordance with ROPS: EN ISO 3471:2008, FOPS: EN ISO 3449: 2008 (level 2). Entry/exit is via a rear hinged door, grab handles giving 3 points of contact and anti-slip inclined steps. Forward visibility through a curved, laminated windscreen with lower glazed quarter panels, two interior mirrors and heated exterior mirrors. Instrument cluster includes analogue/digital display gauges along with full colour LCD screen including selectable machine and operator menus along with service and diagnostic screens. Finger tip multi-lever hydraulic controls (hydro-electronic for light precise feel) with integrated transmission kick down. Heating/ventilation provides balanced and filtered air distribution throughout the cab via a powerful 8 kW capacity heater. Air conditioning is offered as standard with an optional climate control system. Provision of speakers and antenna for radio fitment (radio/CD not included). The cab environment is positively pressurised preventing the ingress of dust including in-cab recirculation filter.. Fabric mechanical suspension seat as standard with various options including vinyl material, air suspension, heating and deluxe Grammer Actimo XXL air suspension seat with headrest, twin armrests, lumbar support, backrest extension, heating and full adjustment. Coat hook, cup holder and additional stowage space. Fuse box positioned at rear for access to fuses, relays and diagnostic connectors. Rear floor panel access to hydraulic pump and transmission.

Exterior Noise Level: - 108 dB

Interior Noise Level: - 73 dB

CAB

Priority steer hydraulic system with secondary steering. Piston pump meters flow through steer valve to provide smooth low effort response. Steering angle ±37°. Steer rams fitted with end rod damping to provide cushioned steering at full articulation.

HYDRAULICS

Variable displacement piston pumps feed a “load-sensing” system providing fuel efficient and responsive distribution of power as required, main services are actuated via electro-hydraulic joystick lever controls. Accumulator back-up available to control loader in the event of loss of pump pressure.

Pump type			Bosch/Rexroth Axial Piston, Variable Displacement Pump, Load sensing		
Pump 1 max. flow		l/min (UK gal/min)	240 (52.8)		
Pump 1 max. pressure		bar (lb/cubic in)	280 (406 l)		
Pump 2 max. flow		l/min (UK gal/min)	155 (34.1)		
Pump 2 max. pressure		bar (lb/cubic in)	200 (290 l)		
Hydraulic cycle times					
Arms raise (laden)		seconds	5.2		
Arms lower		seconds	3		
Bucket dump (laden)		seconds	1.9		
Bucket crowd		seconds	1.7		
Total cycle time		seconds	10.1		
Ram dimensions		Bore	Rod (diameter)	Closed Centres	Stroke
Bucket rams	mm	180	110	1229 ±2.5	540 ±2.5
Lift rams	mm	160	95	1425 ±2.5	777 ±2.5
Steer rams	mm	90	50	809 ±2.5	471 ±2.5

LOADER DIMENSIONS

Hydraulic power braking on all wheels, operating pressure 70 bar (1015 psi). Dual circuit with accumulator back-up. In-board mounted, oil immersed, multi-plate disk brakes with environmentally acceptable linings. Parking brake, electro-hydraulic disc type operating on transmission output shaft.

SERVICE CAPACITIES

Hydraulic system	litres (UK gal)	170 (37.4)
Fuel system	litres (UK gal)	325 (71.5)
Engine oil (includes filter)	litres (UK gal)	41 (9.0)
Engine coolant	litres (UK gal)	39 (8.5)
Axles	litres (UK gal)	42 (9.2)
Transmission	litres (UK gal)	42 (9.2)

STANDARD EQUIPMENT

Loader: Detents include shovel reset, arm height limiter (kickout) and float, loader control isolator for safety, Z-bar loader geometry provides high breakout forces along with excellent visibility to shovel corners, large diameter pins with secondary sealing preventing material ingress.

Engine: Cummins QSM11, 10.8l, 6 cylinders, 4 valves per cylinder, wastegated turbocharger, charge air cooled, Celect high pressure fuel injection system. In-cylinder emissions technology, 2 stage aspirated dry type air cleaner with rain cap, twin water separating filters, auto-tensioning alternator and air conditioning compressor drive belts, isolated single faced cooling package with variable speed hydraulically driven fan.

Transmission: Fully automatic smoothshift, neutral start, manual speed select through column lever, Direction change and kick-down functions located within loader lever area for ease of use. Progressive intelligent clutch cut off feature limits tractive effort providing maximum power to hydraulics while reducing service brake wear. 4 speed as standard, optional 5 speed with lock-up converter (2-5th) providing increased efficiency and productivity.

Axles: Planetary drive, cylindrical roller bearings, low drag co-efficient, wheel speed braking. Limited slip differential as standard, optional open differential with automatic hydraulic locking differential on front axle only (manual actuation on joystick lever if required).

Brakes: Multi-plate wet disc brakes, dual circuit hydraulic power. Parking disc brake on transmission output shaft.

Hydraulics: Variable displacement piston pumps with priority steer, emergency steer back-up, 2 spool loader circuit with accumulator support, 3rd and 4th spool auxiliary hydraulic circuits available as an option. Multi-lever electro-hydraulic controls. Load suspension option providing cushioning effect reducing shock loadings, increasing material retention and operator comfort.

Steering: Adjustable steering column, “soft feel” steering wheel (4.2 turns lock to lock), end damped rams.

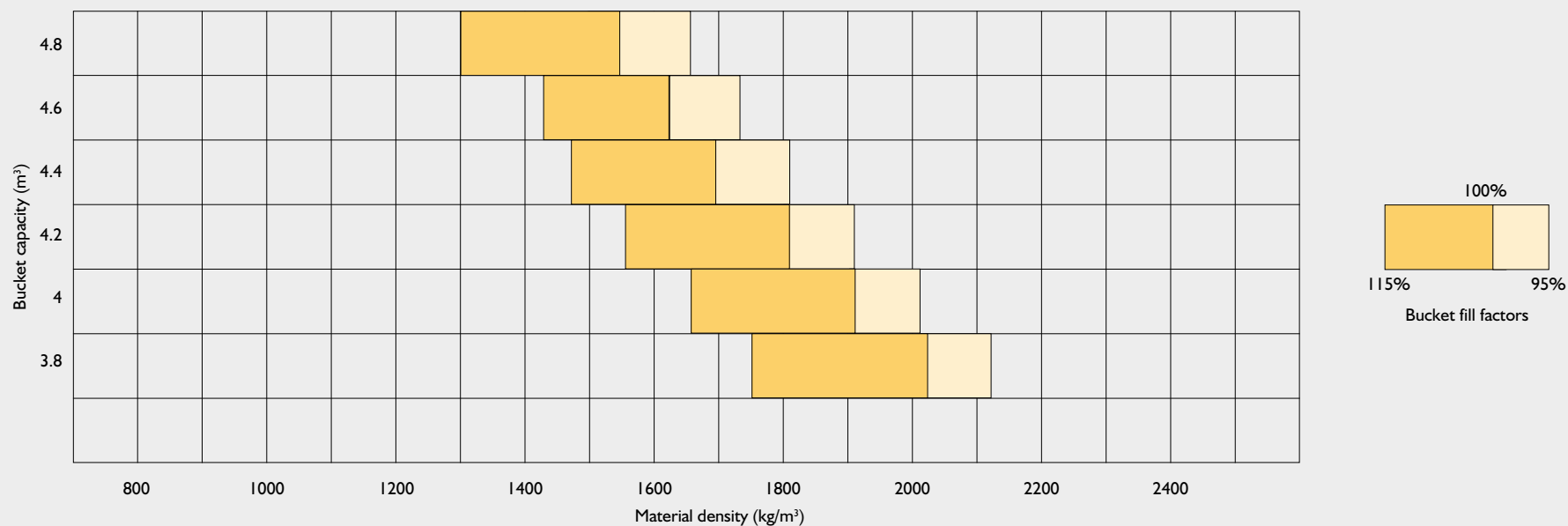
Cab: ROPS/FOPS safety structure, interior light, full colour LCD monitor with analogue gauges, two-speed intermittent front windscreen wipe/wash and self park, single speed rear windscreen wipe/wash and self park. 3 speed heater/demister with replaceable air filter, LH and RH (hinged) opening windows, sun visor, internal rear-view mirrors, heated external mirrors, mechanical suspension seat with lap belt, operator storage facilities, laminated windscreen, loader control isolator, horn, adjustable height arm rest.

Electrical: Road lights front and rear, front (twin bulb) and rear working lights, reverse alarm (112dba) and light, rear fog light, battery isolator, radio wiring and speakers (radio not included), 70 amp alternator, rotating beacon.

Bodywork: Front and rear fenders, side “gull wing” access panels to engine bay, rear access to wide core cooling package (6.35 Fins per inch), flexible bottom access step, full width rear counterweight, recovery hitch, lifting lugs, hydraulic tank positioned behind cab with eye level gauge, fuel fill at rear access bays for transmission filters, emergency steer pump, batteries and isolator, pressure test ports; remote greasing in articulation region, eye level transmission gauge and fill point.

OPTIONAL EQUIPMENT

Open differential axles with auto-locking front; 5 speed transmission with lock-up torque converter; load suspension (SRS); climate control (Automatic Temperature Control); seating options including – vinyl cloth seat base, 3” (5,000lbs lap belt), air suspension, heated air suspension, deluxe Grammer Actimo XXL with air suspension, heating, lumbar support, headrest, armrests, fully adjustable; non-heated external mirrors; reverse camera; front roller blind; front and rear roller blind; fire extinguisher; 24/12v in-cab converter; carbon air recirculation filter; front windscreen guards; turbo 2 engine pre-cleaner; grease gun and cartridge, number plate lighting kit, folding beacon, additional worklights (2 front / 2 rear), automatic reversing fan, 3 and 4 spool hydraulics, smart reverse alarm (112 dba), white noise BBS reverse alarm (102 dba), lift ram safety strut, wax protective coating (transport).



BUCKET SELECTOR			
Material	Loose density		Fill factor
	kg/m³	lb/yd³	%
Sodium chloride (dry) (salt)	1300	2192	85
Cement Portland	1440	2428	100
Limestone (crushed)	1530	2580	100
Sand (dry)	1550	2613	100
Asphalt	1600	2698	100
Gravel (dry)	1650	2782	85
Clay (wet)	1680	2832	110
Sand (wet)	1890	3187	110
Fire clay	2080	3507	100
Copper (concentrate)	2300	3878	85
Slate	2800	4721	100
Magnetite	3204	5402	100

BUCKET SELECTOR			
Material	Loose density		Fill factor
	kg/m³	lb/yd³	%
Snow (fresh)	200	337	110
Peat (dry)	400	674	100
Sugar beet	530	894	100
Coke (loose)	570	961	85
Barley	600	1012	85
Petroleum coke	680	1146	85
Wheat	730	1231	85
Coal bituminous	765	1290	100
Fertiliser (mixed)	1030	1737	85
Coal anthracite	1046	1764	100
Earth (dry) (loose)	1150	1939	100
Nitrate fertiliser	1250	2180	85