436 WHEELED LOADING SHOVEL

A Product of Hard Work

A powerful machine that's fully loaded


JCB
JCB
436ZX

Excellent all-round visibility

Large glass areas giving excellent visibility around the machine.

Sloped engine cover provides views at the rear.

Front quarter glass panels overlook central pivot area.

Power and performance

Axles provide automatic traction control for all conditions.

Smart hydraulic systems maximise efficiency and drive down fuel costs.

Automatic transmission ensures the machine is always in the right gear.

Built to last

High-quality, industry-recognised components.

Electronic safeguard systems prevent catastrophic failures.

Designed for easy servicing and maintenance.

Superb operator environment

Ergonomic high-back seat for superior comfort.

Easy-to-use, clearly marked controls.

Large, spacious cabin with ample storage room.

Easy access to all areas

Ground-level access for easy servicing and reduced downtime.

All components in accessible areas.

Large, single-piece engine cover and swing-out fan give access to engine and cooling bays.

Maximum safety

Inclined steps and well-placed grab handles allow easy access.

Ground-level checks eliminate the need to climb onto the machine.

Optional rear-view camera systems available.

Superb operator environment

Central to the 436's well-thought-out design is the person who will be controlling it. With operators working for up to 12 hours a day, they need to be constantly alert and comfortable so they can be productive. The 436's cab is a remarkable achievement, combining a stylish interior with highly practical features.

Easy, safe access

With a wide door, steps inclined to 10° (something that's fast becoming a quarry standard), non-slip surfaces and well-positioned handles, access is always easy and safe, helping to minimise accidents on site.

The largest cab in its class

At 3m³, the 436 has one seriously large operating environment, with every detail ergonomically designed for comfort and ease of use. There's also plenty of room for storage, including a massive open-floor space.

Positive pressure cab

The cab is fully sealed in order to reduce dust and dirt entering the cabin, maintaining a healthy working environment. To suit different environments, a range of fresh air intake filters (P3, carbon and standard) is also available; all are easy to remove for cleaning and replacement.

Ergonomic high-back seat

The standard high-backed suspension seat is fully adjustable and provides excellent support and comfort. The result is reduced operator fatigue for added productivity.

Just the right temperature

The excellent heating and ventilation systems ensure ideal working temperatures. There is a variable blower speed and a range of fresh air intake filters to choose from. The temperature and recirculation controls are all well marked out and simple to use. An optional air-conditioning system and heated, air-suspended seat are also available.

Complete controllability and all-round visibility

Today's worksites are busier than ever, so safety is always a primary concern. At JCB, we're committed to doing everything we can to reduce the risk of accidents and so we have designed the 436 to give operators the best possible visibility all around the machine.

Large operator environment

The 360° tinted glass cab allows the operator not only to spot almost all potential hazards, but also to view the load throughout its full lift range. The cab features narrow uprights between the glass panels, an extra large wiper and a choice of front and rear blinds to keep the sun off.

Heated mirrors

When it's cold outside, the heated mirrors prevent icing. Plus, there are two interior mirrors that provide superb views of hard-to-see areas.

Controls

All the 436's controls are conveniently placed and incredibly easy to use. There's a choice of single or multi-lever controllers – both allowing for consistent use with minimum fatigue. The single-lever controller incorporates a forward/reverse switch that can be used without taking your hands off the steering wheel, while the multi-lever version is a switch located to the side. Both controllers feature gear-change and disconnect switches, and the latter speeds things up by transferring engine power to the hydraulics.

Power and performance as standard

In a competitive world, you need to move the maximum amount of material at the lowest possible cost. Designed to deliver outstanding power and optimum efficiency, every component on the JCB 436 has been created to meet rigorous demands day in, day out.

A world-class powertrain

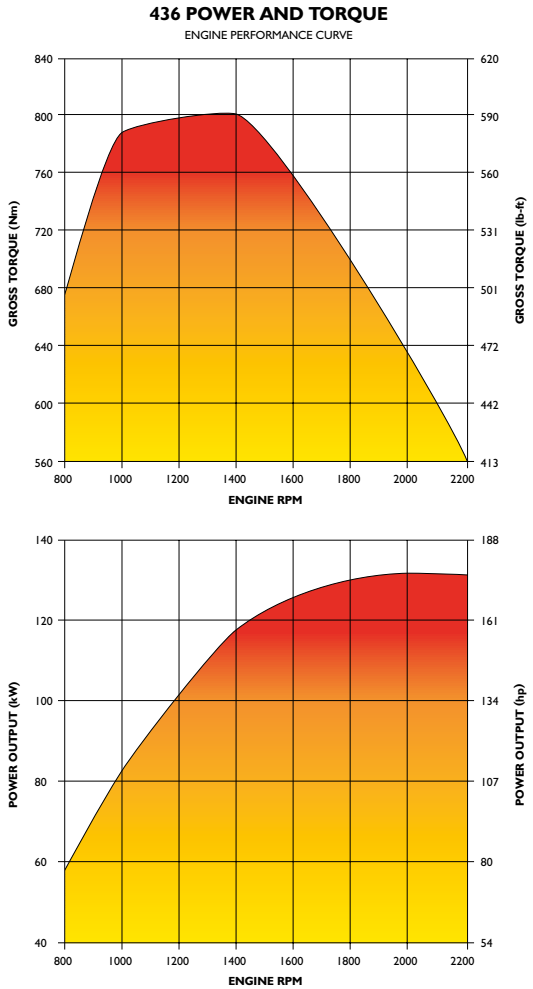
A perfectly matched, balanced powertrain provides the power to move even the most demanding material from A to B.

Turbocharged Cummins QSB engine

The 436 boasts an air-to-air intercooled low-emission engine with electronically controlled fuel-injection system. This delivers high torque at a low engine RPM, enabling the operator to fill the bucket faster.

ZF Smoothshift transmission

The 436 features a fully automatic transmission. Normally the driver has to select the correct gear to ensure efficient fuel use. But with this system the correct gear is automatically and immediately selected ensuring the absolute maximum productivity and fuel efficiency, and prolonging the life of the machine.



Graziano axles

The 436 is fitted with standard torque proportioning axles that keep the machine moving even in difficult conditions. If one wheel is slipping, power is automatically transferred to the wheel with traction. Torque is also increased at the hubs, which reduces stress on other components. Ultimately, this saves wear on the tyres and gets the job done faster. There's also the option to have even more advanced limited slip differential axles.

Oil-immersed brakes

The oil-immersed braking system not only ensures effective braking but also a long service life. As a safety precaution, a back-up brake circuit allows safe stopping in the event of drivetrain failure.

Load-sensing hydraulics

The 436 delivers efficient hydraulic oil flow on demand thanks to a load-sensing circuit. This minimises fuel consumption, directs power where it is needed most and allows for accurate and efficient load placements. When it comes to driving, the steering requires minimum effort, even at full articulation.

A choice of loader arms

Different jobs demand excellent versatility, which is why the 436 comes with a choice of either HT standard, high-lift and super-high-lift arms or ZX standard arms.

The Z bar arms generate maximum power to get more from the stockpile, while the HT arms can be used for a range of applications with different attachments. The high-lift and super-high-lift options allow you to load higher-sided vehicles or hoppers without the need for loading ramps or high-tip buckets

436ZX

436HT

436HT High Lift

436HT Super High Lift

Maintenance made easy

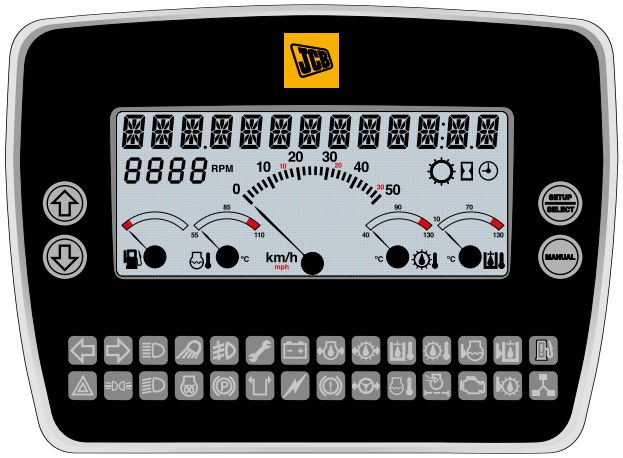
Once in use, the 436 rapidly becomes a vital part of the production process, so any downtime could mean a serious loss in productivity and, therefore, profitability. Keeping it in prime condition is vital, so we have made regular maintenance extremely easy to carry out, which in turn will maximise the machine's use and longevity.

Ground-level access

Daily and weekly maintenance checks can be completed easily and safely by operators, thanks to ground-level checkpoints.

Optimum cooling performance

Keeping your machine at the right temperature will ensure it stays efficient and has a long life. The 436's cooling system is cleverly designed to stay free of dirt and debris, while the cooling pack can be easily cleaned via the swing-out rear grille and single-piece engine cover doors. For particularly arduous or dusty conditions, add-on options include a fully automatic reversing fan and a widecore cooling pack. The reversing fan is designed to protect the cooling pack while the widecore pack allows larger particles through the cooler without catching.



The Electronic Monitoring System

Our sophisticated Electronic Monitoring System (EMS) controls and monitors the components, triggering built-in safeguards that prevent major damage to major parts. For example, if the coolant temperature gets too hot, the machine will automatically protect itself and shut down.

This multi-language system allows you to set certain functions to suit the application, for optimum performance, and displays key operation data in real time. Fault codes allow quick identification of problems enabling quicker turnaround of issues, while a service indicator lets you know when service is required.

Built to last

Everything about the new 436 indicates that it is built to last, offering maximum productivity over thousands of operational hours. Every single component has been carefully designed and manufactured to rigorous standards, ensuring long life, lower running costs and a high value when it finally comes to selling.

Designed-in strength

Using cutting-edge design techniques, the best components, sophisticated computational analysis and rigorous physical testing, JCB has created a machine fit for the demands of your business. The cast steel rear end (often of plastic fabrication on competitor machines) gives real strength and protects against significant damage, reducing operating costs. The slope of the rear bonnet is shaped for better visibility so that it's easier to see potential hazards, again reducing damage to the machine. Full chassis belly guarding also protects the main driveline components from damage on the underside.

Tailoring the machine for your needs

The 436 is built to cope with extremely demanding environments, but it can also be customised to meet the specific requirements of individual applications. For example, for waste applications a series of additional guards is available, including brake lines guards, extra belly guards, lift ram guards, cab screen guards, etc. And for load and carry operations, Smooth Ride Systems can be fitted, turning the arms into a form of suspension which allows them to float. The machine can then travel more quickly over the ground because shock loadings are not passed through the machine making it unstable, plus shock is not passed to loads through all the structures and systems.

Protected hydraulic circuits

A high-quality filtration system ensures no debris passes through the hydraulic circuit. This, along with highly adapted assembly procedures, ensures a long operating life.

Smooth operation

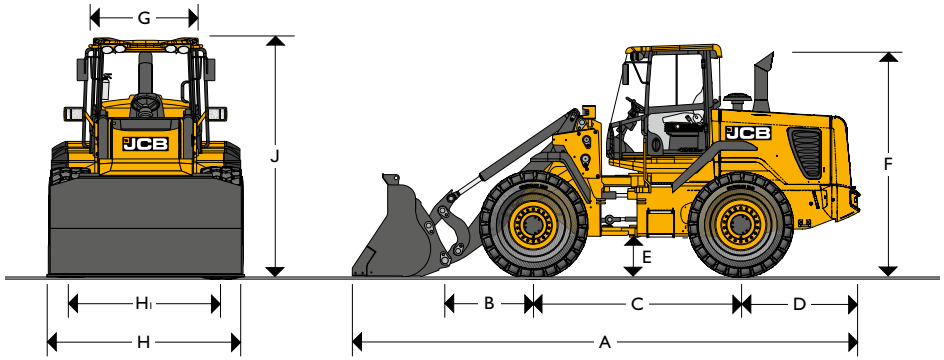
By reducing the shock passing through all the components, the machine is guaranteed smooth and easy operation – and a longer life span.

Easy maintenance

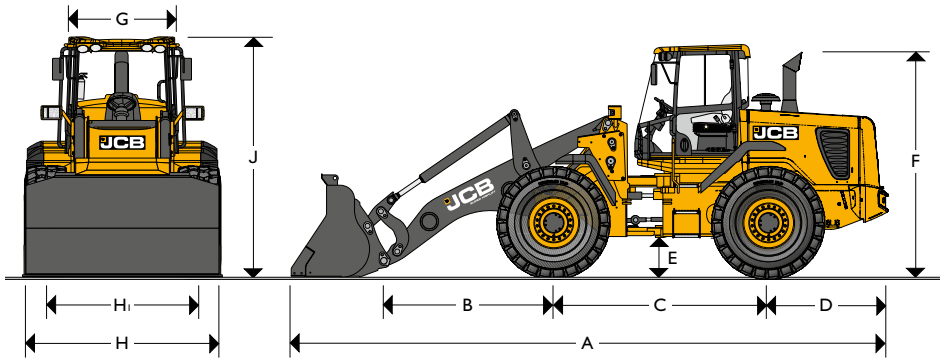
Easier access for operators and maintenance technicians ensures that the machine can be kept in the best condition, maintaining availability and productivity. Service intervals are every 500 hours.

MAX. ENGINE POWER: 132kW (177hp) MAX. OPERATING WEIGHT: 16897kg (37251lb) MAX. LOADER CAPACITY: 2.7m³ (3.5yd³)

436/436e HT – STATIC DIMENSIONS – Standard height arm



436/436e HT – STATIC DIMENSIONS – Hi-Lift & Super high lift arm



436/436e HT – STATIC DIMENSIONS – Standard height arm

			HT
A	Overall length	mm (ft-in)	6926 (22-9)
B	Axle to pivot pin	mm (ft-in)	1143 (3-9)
C	Wheel base	mm (ft-in)	3000 (9-10)
D	Axle to counterweight face	mm (ft-in)	1816 (5-11)
E	Minimum ground clearance	mm (ft-in)	459 (1-6)
F	Height over exhaust	mm (ft-in)	3192 (10-6)
G	Width over cab	mm (ft-in)	1400 (4-7)
H	Width over tyres	mm (ft-in)	2597 (8-6)
H1	Wheel track	mm (ft-in)	2070 (6-9)
J	Height over cab	mm (ft-in)	3335 (10-11)
	Pin height (maximum)	mm (ft-in)	3996 (13-1)
	Overall operating height	mm (ft-in)	5305 (17-4)
	Front axle weight	kg (lb)	6013 (13256)
	Rear axle weight	kg (lb)	8490 (18717)
	Total weight	kg (lb)	14503 (31974)
	Inside radius	mm (ft-in)	2825 (9-3)
	Maximum radius	mm (ft-in)	5860 (19-3)
	Articulation angle	degrees	± 40°

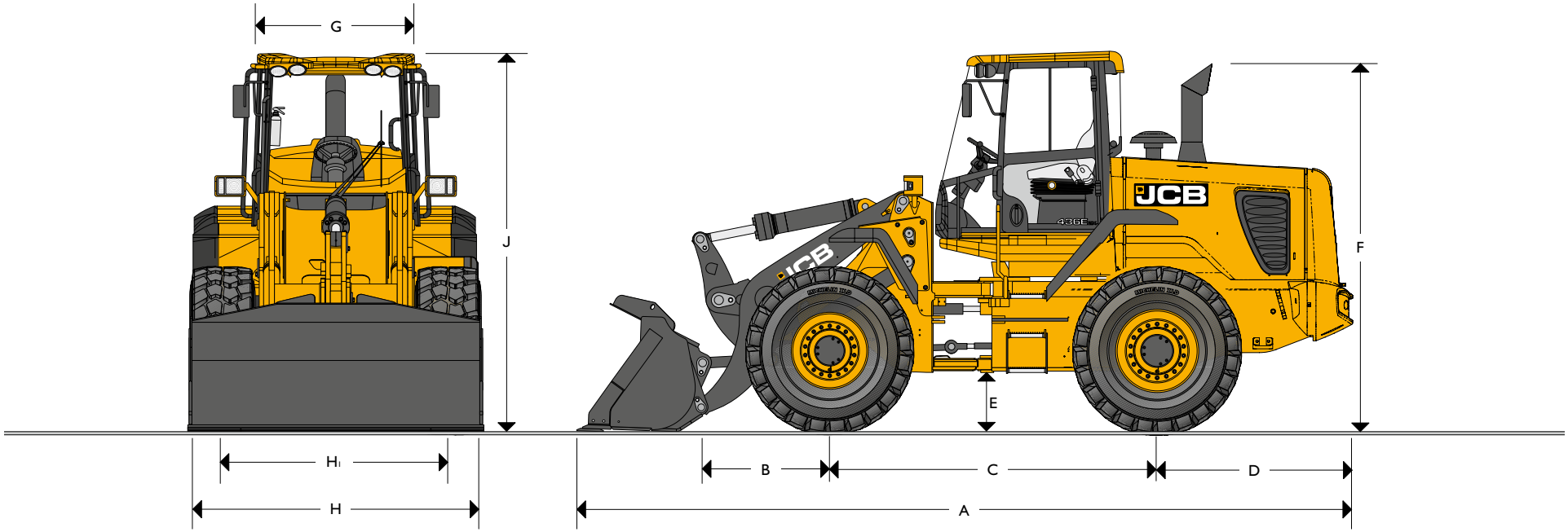
Data based on machine equipped with pin mounted 2.4m³ bucket with toe plates and Michelin 20.5R25 XHA (L3) radial tyres.

436/436e HT – STATIC DIMENSIONS – Hi-Lift & Super high lift arm

			Hi-Lift	SHL
A	Overall length	mm (ft-in)	7282 (23-11)	7726 (25-4)
B	Axle to pivot pin	mm (ft-in)	1499 (4-11)	2366 (7-9)
C	Wheel base	mm (ft-in)	3000 (9-10)	3000 (9-10)
D	Axle to counterweight face	mm (ft-in)	1816 (5-11)	1816 (5-11)
E	Minimum ground clearance	mm (ft-in)	459 (1-6)	459 (1-6)
F	Height over exhaust	mm (ft-in)	3192 (10-10)	3192 (10-10)
G	Width over cab	mm (ft-in)	1400 (4-7)	1400 (4-7)
H	Width over tyres	mm (ft-in)	2597 (8-6)	2597 (8-6)
H1	Wheel track	mm (ft-in)	2070 (6-9)	2070 (6-9)
J	Height over cab	mm (ft-in)	3335 (10-11)	3335 (10-11)
	Pin height (maximum)	mm (ft-in)	4650 (15-3)	5213 (17-1)
	Overall operating height	mm (ft-in)	5959 (19-6)	6522 (21-5)
	Front axle weight	kg (lb)	7133 (15726)	7968 (17566)
	Rear axle weight	kg (lb)	7860 (17328)	7577 (16704)
	Total weight	kg (lb)	14993 (33054)	15545 (34271)
	Inside radius	mm (ft-in)	2825 (9-3)	2825 (9-3)
	Maximum radius over shovel	mm (ft-in)	6000 (19-6)	6196 (20-4)
	Articulation angle	degrees	± 40°	± 40°

Data based on machine equipped with pin mounted 2.4m³ bucket with toe plates and Michelin 20.5R25 XHA (L3) radial tyres.

MAX. ENGINE POWER: 133kW (178hp) MAX. OPERATING WEIGHT: 16266kg (35860lb) MAX. LOADER CAPACITY: 2.7m³ (3.5yd³)



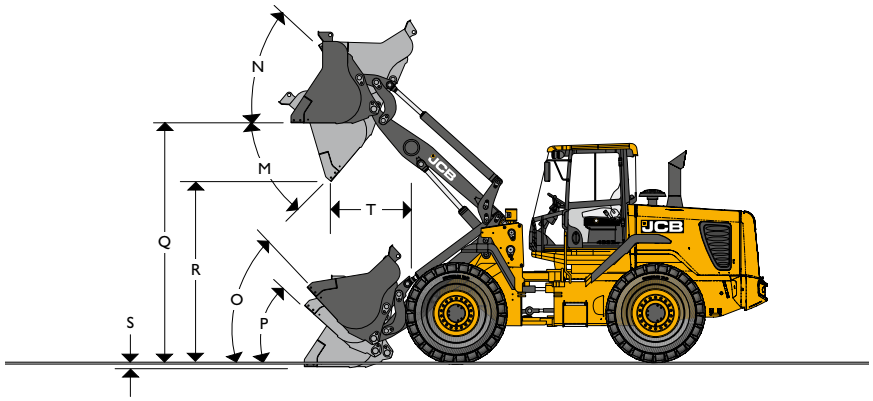
436/436e ZX – STATIC DIMENSIONS

		mm (ft-in)
A	Overall length with standard bucket	7169 (23-6)
B	Axle to pivot pin	1143 (3-9)
C	Wheel Base	3000 (9-10)
D	Axle to counterweight face	1816 (6-11)
E	Minimum ground clearance	459 (1-6)
F	Height over exhaust	3192 (10-6)
G	Width over cab	1400 (4-7)
H	Width over tyres	2597 (8-6)
H1	Wheel track	2070 (6-9)
J	Height over cab	3335 (10-11)

		mm (ft-in)
Pin height (maximum)		3996 (13-1)
Overall operating height		5305 (17-4)
Front axle weight	kg (lb)	6456 (14230)
Rear axle weight	kg (lb)	8466 (18660)
Total weight	kg (lb)	14922 (32900)
Inside radius		2825 (9-3)
Maximum radius over shovel		5900 (19-4)
Articulation angle	degrees	±40°

Data based on machine equipped with pin mounted 2.4m³ bucket with bolt-on toeplates and Michelin 20.5R25 XHA (L3) tyres.

436/436e HT – LOADER DIMENSIONS – Standard height arm



CHANGES TO OPERATING PERFORMANCE AND DIMENSIONS

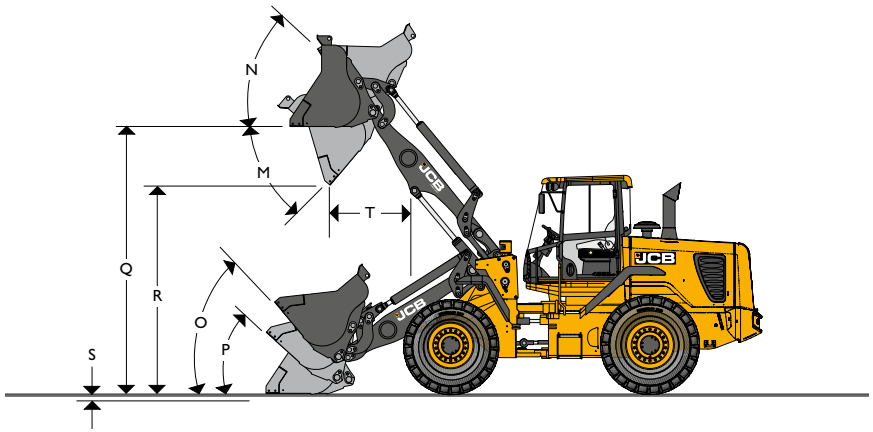
Tyre size	Manufacturer	Type	Rating	Op. weight kg (lb)	Tipping loads Straight kg (lb)	Tipping loads Full turn kg (lb)	Dimensions Vertical mm (in)	Dimensions Width mm (in)
20.5 - 25 (crossply)	Firestone		L2	-348 (-767)	-208 (-459)	-201 (-443)	-9 (-0.354)	+5 (+0.197)
20.5 - 25 (crossply)	Goodyear	SGL	L2	-54 (-119)	-32 (-71)	-31 (-68)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Goodyear	RL - 2 +	L2	+76 (+168)	+45 (+99)	+44 (+97)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Bridgestone	VUT	L2	-160 (-353)	-96 (-212)	-93 (-205)	0	0
20.5 R25 (radial)	Michelin	XTLA	L2	-160 (-353)	-96 (-212)	-93 (-205)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Bridgestone	VMT	L3	0	0	0	0	0
550/65 R25 (radial)	Michelin	XLD	L3	-120 (-265)	-71 (-157)	-69 (-157)	0	0
20.5 R25 (radial)	Michelin	XRD1A	L4	+456 (+1006)	+272 (+600)	+264 (+582)	+29 (+1.142)	+8 (+0.315)
20.5 R25 (radial)	Michelin	XMINED2	L5	+680 (+1500)	+407 (+897)	+393 (+867)	+29 (+1.1.42)	-3 (-0.118)
20.5 R25 (radial)	Goodyear	RL - 5K	L5	+600 (+1323)	+358 (+789)	+347 (+765)	+29 (+1.142)	-3 (-0.118)
Optional heavy counterweight		–	–	+380 (+839)	+680 (+1499)	+570 (+1257)	0	0

Assumes the machine is fitted with Michelin 20.5R25 XHA (L3) tyres.




Bucket mounting		Direct	Direct	Direct	Direct	Quickhitch	Quickhitch	Quickhitch	Quickhitch
Bucket type		General purpose	General purpose	General purpose	General purpose	General purpose	General purpose	General purpose	General purpose
Bucket equipment		Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate	Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate
Bucket capacity (SAE heaped)	m^3 (yd^3)	2.3 (3.0)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)	2.3 (3.0)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)
Bucket capacity (struck)	m^3 (yd^3)	1.984 (2.593)	2.270 (2.967)	2.057 (2.691)	2.346 (3.068)	1.984 (2.593)	2.270 (2.967)	2.057 (2.691)	2.346 (3.068)
Bucket width	mm (ft-in)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)
Bucket weight	kg (lb)	1151 (2532)	1224 (2693)	1163 (2559)	1236 (2719)	1124 (2473)	1199 (2638)	1136 (2499)	1211 (2664)
Maximum material density	kg/m^3 (lb/yd^3)	2082 (3509)	1814 (3058)	1995 (3363)	1747 (2945)	1958 (3300)	1706 (2876)	1876 (3062)	1642 (2768)
Tipping load straight	kg (lb)	11467 (25280)	11310 (24934)	11467 (25280)	11310 (24934)	10828 (23872)	10676 (23537)	10828 (23872)	10676 (23537)
Tipping load full turn	kg (lb)	9578 (21116)	9436 (20803)	9578 (21116)	9436 (20803)	9009 (19861)	8870 (19555)	9009 (19861)	8870 (19555)
Payload	kg (lb)	4789 (10558)	4718 (10401)	4789 (10558)	4718 (10401)	4504 (9930)	4435 (9777)	4504 (9903)	4435 (9777)
Maximum break out force	kN (lbf)	147 (33048)	134 (30240)	147 (33048)	134 (30240)	131 (29592)	122 (27432)	131 (29592)	122 (27432)
M Dump angle maximum	degrees	50°	50°	50°	50°	50°	50°	50°	50°
N Roll back angle full height	degrees	58°	58°	58°	58°	58°	58°	58°	58°
O Roll back at carry	degrees	48°	48°	48°	48°	48°	48°	48°	48°
P Roll back at ground level	degrees	43°	43°	43°	43°	43°	43°	43°	43°
Q Load over height	mm (ft-in)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)
R Dump height (45° dump)	mm (ft-in)	2806 (9-3)	2742 (9-0)	2974 (9-8)	2883 (9-6)	2721 (8-11)	2657 (8-9)	2862 (9-5)	2798 (9-2)
S Dig depth	mm (ft-in)	132 (0-5)	132 (0-5)	106 (0-4)	106 (0-4)	132 (0-5)	132 (0-5)	106 (0-4)	106 (0-4)
T Reach at dump height	mm (ft-in)	1148 (3-9)	1207 (4-0)	1044 (3-5)	1103 (3-7)	1225 (4-0)	1283 (4-3)	1121 (3-8)	1179 (3-10)
Reach maximum (45° dump) – horizontal arm	mm (ft-in)	1987 (6-6)	2051 (6-9)	1883 (6-2)	1947 (6-5)	1772 (5-10)	2136 (7-0)	1968 (6-5)	2032 (6-8)
Operating weight (includes 80kg operator and full fuel tank)	kg (lb)	14491 (31947)	14564 (32108)	14503 (31973)	14576 (32135)	14788 (32602)	14863 (32767)	14800 (32628)	14875 (32794)

436/436e HT – LOADER DIMENSIONS – Hi-Lift



CHANGES TO OPERATING PERFORMANCE AND DIMENSIONS

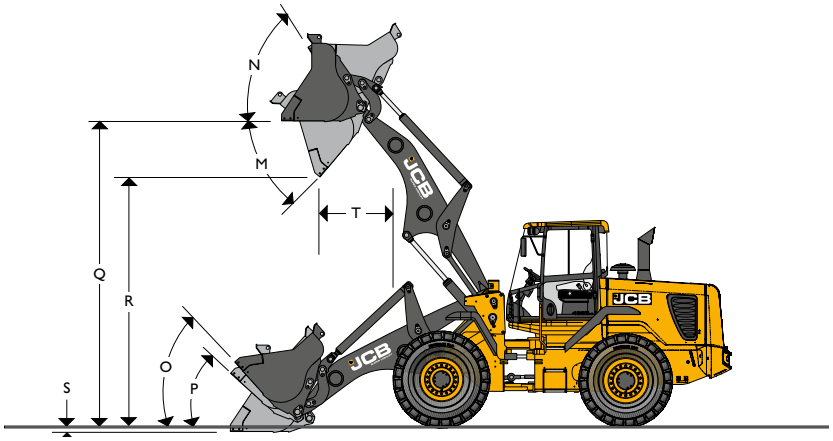
Tyre size	Manufacturer	Type	Rating	Op. weight kg (lb)	Tipping loads Straight kg (lb)	Tipping loads Full turn kg (lb)	Dimensions Vertical mm (in)	Dimensions Width mm (in)
20.5 - 25 (crossply)	Firestone		L2	-348 (-767)	-168 (-370)	-164 (-362)	-9 (-0.354)	+5 (+0.197)
20.5 - 25 (crossply)	Goodyear	SGL	L2	-54 (-119)	-25 (-55)	-24 (-53)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Goodyear	RL - 2 +	L2	+76 (+168)	+36 (+79)	+35 (+76)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Bridgestone	VUT	L2	-160 (-353)	-78 (-172)	-76 (-168)	0	0
20.5 R25 (radial)	Michelin	XTLA	L2	-160 (-353)	-78 (-172)	-76 (-168)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Bridgestone	VMT	L3	0	0	0	0	0
550/65 R25 (radial)	Michelin	XLD	L3	-120 (-265)	-55 (-128)	-55 (-121)	0	0
20.5 R25 (radial)	Michelin	XRD1A	L4	+456 (+1006)	+219 (+483)	+215 (+476)	+29 (+1.142)	+8 (+0.315)
20.5 R25 (radial)	Michelin	XMINED2	L5	+680 (+1500)	+321 (+708)	+321 (+708)	+29 (+1.1.42)	-3 (-0.118)
20.5 R25 (radial)	Goodyear	RL - 5K	L5	+600 (+1323)	+289 (+637)	+283 (+625)	+29 (+1.142)	-3 (-0.118)
Optional heavy counterweight		–	–	+380 (+839)	+550 (+1213)	+466 (+1027)	0	0

Assumes the machine is fitted with Michelin 20.5R25 XHA (L3) tyres.




	Bucket mounting		Direct	Direct	Direct	Direct	Quickhitch	Quickhitch	Quickhitch	Quickhitch
	Bucket type		General purpose	General purpose	General purpose	General purpose	General purpose	General purpose	General purpose	General purpose
	Bucket equipment		Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate	Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate
	Bucket capacity (SAE heaped)	m^3 (yd^3)	2.3 (3.0)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)	2.3 (3.0)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)
	Bucket capacity (struck)	m^3 (yd^3)	1.984 (2.593)	2.270 (2.967)	2.057 (2.691)	2.346 (3.068)	1.984 (2.593)	2.270 (2.967)	2.057 (2.691)	2.346 (3.068)
	Bucket width	mm (ft-in)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)
	Bucket weight	kg (lb)	1151 (2532)	1224 (2693)	1163 (2559)	1236 (2719)	1124 (2473)	1199 (2638)	1136 (2499)	1211 (2664)
	Maximum material density	kg/m^3 (lb/yd^3)	1582 (2667)	1379 (2324)	1516 (2555)	1327 (2237)	1488 (2508)	1396 (2353)	1426 (2404)	1248 (2104)
	Tipping load straight	kg (lb)	8715 (19213)	8595 (18949)	8715 (19213)	8595 (18949)	8229 (18142)	8114 (17888)	8229 (18142)	8114 (17888)
	Tipping load full turn	kg (lb)	7279 (16047)	7171 (15809)	7279 (16047)	7171 (15809)	6847 (15095)	6741 (14861)	6847 (15095)	6741 (14861)
	Payload	kg (lb)	3639 (8023)	3585 (7904)	3639 (8023)	3585 (7904)	3423 (7546)	3370 (7430)	3423 (7546)	3370 (7430)
	Maximum break out force	kN (lbf)	147 (33048)	134 (30240)	147 (33048)	134 (30240)	131 (29592)	122 (27432)	131 (29592)	122 (27432)
M	Dump angle maximum	degrees	45°	45°	45°	45°	45°	45°	45°	45°
N	Roll back angle full height	degrees	60°	60°	60°	60°	60°	60°	60°	60°
O	Roll back at carry	degrees	54°	54°	54°	54°	54°	54°	54°	54°
P	Roll back at ground level	degrees	45°	45°	45°	45°	45°	45°	45°	45°
Q	Load over height	mm (ft-in)	4409 (14-6)	4409 (14-6)	4409 (14-6)	4409 (14-6)	4409 (14-6)	4409 (14-6)	4409 (14-6)	4409 (14-6)
R	Dump height (45° dump)	mm (ft-in)	3460 (11-4)	3396 (11-2)	3628 (11-11)	3537 (11-7)	3375 (11-1)	3311 (10-10)	3516 (11-6)	3452 (11-4)
S	Dig depth	mm (ft-in)	127 (0-5)	127 (0-5)	101 (0-4)	101 (0-4)	127 (0-5)	127 (0-5)	101 (0-4)	101 (0-4)
T	Reach at dump height	mm (ft-in)	1148 (3-9)	1207 (4-0)	1044 (3-5)	1103 (3-7)	1225 (4-0)	1283 (4-3)	1121 (3-8)	1179 (3-10)
	Reach maximum (45° dump) – horizontal arm	mm (ft-in)	2477 (8-2)	2541 (8-4)	2373 (7-9)	2437 (8-0)	2262 (7-5)	2626 (8-7)	2458 (8-11)	2522 (8-3)
Operating weight (includes 80kg operator and full fuel tank)		kg (lb)	14981 (33027)	15054 (33188)	14993 (32922)	15066 (33215)	15278 (33682)	15353 (33848)	15290 (33709)	15365 (33874)

436/436e HT – LOADER DIMENSIONS – Super high lift arm



CHANGES TO OPERATING PERFORMANCE AND DIMENSIONS

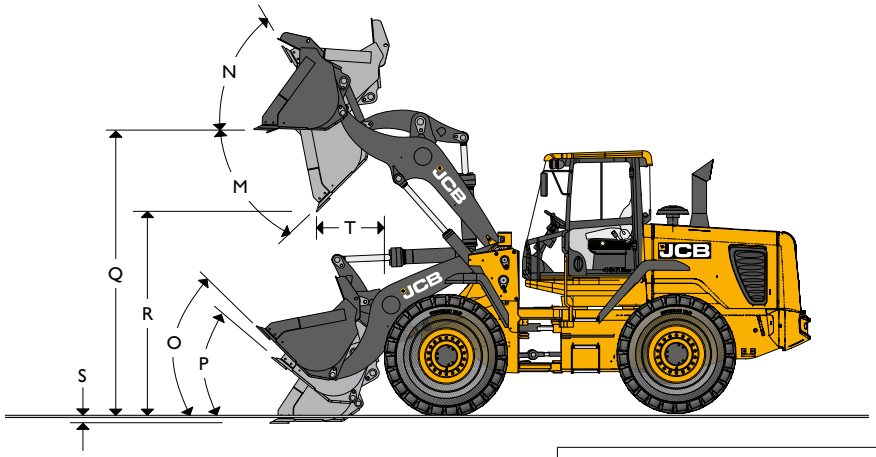
Tyre size	Manufacturer	Type	Rating	Op. weight kg (lb)	Tipping loads Straight kg (lb)	Tipping loads Full turn kg (lb)	Dimensions Vertical mm (in)	Dimensions Width mm (in)
20.5 - 25 (crossply)	Firestone		L2	-348 (-767)	-135 (-298)	-130 (-287)	-9 (-0.354)	+5 (+0.197)
20.5 - 25 (crossply)	Goodyear	SGL	L2	-54 (-119)	-21 (-46)	-20 (-44)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Bridgestone	VUT	L2	-160 (-353)	-73 (-161)	-64 (-141)	0	0
20.5 R25 (radial)	Goodyear	RL - 2 +	L2	+76 (+168)	+29 (+64)	+28 (+62)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Michelin	XTLA	L2	-160 (-353)	-73 (-161)	-64 (-141)	-9 (-0.354)	+5 (+0.197)
20.5 R25 (radial)	Bridgestone	VMT	L3	0	0	0	0	0
550/65 R25 (radial)	Michelin	XLD	L3	-120 (-265)	-46 (-101)	-45 (-99)	0	0
20.5 R25 (radial)	Michelin	XRD1A	L4	+456 (+1006)	-177 (-390)	-171 (-377)	+29 (+1.142)	+8 (+0.315)
20.5 R25 (radial)	Michelin	XMINED2	L5	+680 (+1500)	+264 (+582)	+255 (+562)	+29 (+1.1.42)	-3 (-0.118)
20.5 R25 (radial)	Goodyear	RL-5K	L5	+600 (+1323)	+232 (+512)	-225 (496)	+29 (+1.142)	-3 (-0.118)
Optional heavy counterweight		–	–	+380 (+839)	+421 (+928)	+353 (+778)	0	0

Assumes the machine is fitted with Michelin 20.5R25 XHA (L3) tyres.




	Bucket mounting		Direct	Direct	Direct	Direct	Quickhitch	Quickhitch	Quickhitch	Quickhitch
	Bucket type		General purpose	General purpose	General purpose	General purpose	General purpose	General purpose	General purpose	General purpose
	Bucket equipment		Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate	Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate
	Bucket capacity (SAE heaped)	m^3 (yd^3)	2.3 (3.0)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)	2.3 (3.0)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)
	Bucket capacity (struck)	m^3 (yd^3)	1.984 (2.593)	2.270 (2.967)	2.057 (2.691)	2.346 (3.068)	1.984 (2.593)	2.270 (2.967)	2.057 (2.691)	2.346 (3.068)
	Bucket width	mm (ft-in)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)
	Bucket weight	kg (lb)	1151 (2532)	1224 (2693)	1163 (2559)	1236 (2719)	1124 (2473)	1199 (2638)	1136 (2499)	1211 (2664)
	Maximum material density	kg/m^3 (lb/yd^3)	1288 (2171)	1123 (1893)	1235 (2082)	1081 (1822)	1212 (2043)	1055 (1778)	1161 (1957)	1016 (1713)
	Tipping load straight	kg (lb)	7247 (15977)	7148 (15759)	7247 (15977)	7148 (15759)	6843 (15086)	6747 (14875)	6843 (15086)	6747 (14875)
	Tipping load full turn	kg (lb)	5929 (13071)	5841 (12877)	5929 (13071)	5841 (12877)	5576 (12293)	5490 (12103)	5576 (12293)	5490 (12103)
	Payload	kg (lb)	2964 (6534)	2920 (6437)	2964 (6534)	2920 (6437)	2788 (6146)	2745 (6052)	2788 (6146)	2745 (6052)
	Maximum break out force	kN (lbf)	153 (34425)	139 (31247)	153 (34425)	139 (31247)	136 (30573)	124 (28550)	136 (30573)	127 (28550)
M	Dump angle maximum	degrees	50°	50°	50°	50°	50°	50°	50°	50°
N	Roll back angle full height	degrees	58°	58°	58°	58°	58°	58°	58°	58°
O	Roll back at carry	degrees	48°	48°	48°	48°	48°	48°	48°	48°
P	Roll back at ground level	degrees	43°	43°	43°	43°	43°	43°	43°	43°
Q	Load over height	mm (ft-in)	4976 (16-4)	4976 (16-4)	4976 (16-4)	4976 (16-4)	4976 (16-4)	4976 (16-4)	4976 (16-4)	4976 (16-4)
R	Dump height (45° dump)	mm (ft-in)	4023 (13-2)	3959 (13-0)	4191 (13-9)	4100 (13-5)	3938 (12-11	3874 (12-9)	4079 (13-5)	4015 (13-2)
S	Dig depth	mm (ft-in)	105 (0-4)	105 (0-4)	79 (0-3)	79 (0-3)	105 (0-4)	105 (0-4)	79 (0-3)	79 (0-3)
T	Reach at dump height	mm (ft-in)	1172 (3-10)	1231 (4-1)	1068 (3-6)	1127 (3-8)	1249 (4-1)	1307 (4-4)	1145 (3-9)	1230 (3-11)
	Reach maximum (45° dump) – horizontal arm	mm (ft-in)	2952 (9-8)	3016 (9-11)	2848 (9-4)	2912 (9-7)	2737 (9-0)	3101 (10-2)	2933 (9-7)	2997 (9-10)
Operating weight (includes 80kg operator and full fuel tank)		kg (lb)	15533 (34244)	15606 (34405)	15545 (34271)	15618 (34432)	15830 (34899)	15905 (35064)	15842 (34925)	15917 (35091)

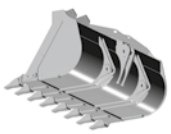
436/436e ZX – LOADER DIMENSIONS

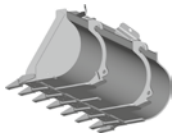


CHANGES TO OPERATING PERFORMANCE AND DIMENSIONS

Tyre size	Manufacturer	Type	Rating	Op. weight kg (lb)	Tipping loads Straight kg (lb)	Tipping loads Full turn kg (lb)	Dimensions Vertical mm (in)	Dimensions Width mm (in)
20.5 - 25 (crossply)	Firestone		L2	-348 (-767)	-208 (-459)	-201 (-443)	-9 (-0.354)	+5 (+0.197)
20.5 - 25 (crossply)	Goodyear	SGL	L2	-54 (-119)	-32 (-71)	-31 (-68)	-9 (-0.354)	+5 (+0.197)
20.5 R 25 (radial)	Goodyear	RL - 2 +	L2	+76 (+168)	+45 (+99)	+44 (+97)	-9 (-0.354)	+5 (+0.197)
20.5 R 25 (radial)	Bridgestone	VUT	L2	-160 (-353)	-96 (-212)	-93 (-205)	0	0
20.5 R 25 (radial)	Michelin	XTLA	L2	-160 (-353)	-96 (-212)	-93 (-205)	-9 (-0.354)	+5 (+0.197)
20.5 R 25 (radial)	Bridgestone	VMT	L3	0	0	0	0	0
550/65 R 25 (radial)	Michelin	XLD	L3	-120 (-265)	-71 (-157)	-69 (-157)	0	0
20.5 R 25 (radial)	Michelin	XRD1A	L4	+456 (+1006)	+272 (+600)	+264 (+582)	+29 (+1.142)	+8 (+0.315)
20.5 R 25 (radial)	Michelin	XMINED2	L5	+680 (+1500)	+407 (+897)	+393 (+867)	+29 (+1.142)	-3 (-0.118)
20.5 R 25 (radial)	Goodyear	RL-5K	L5	+600 (+1323)	+358 (+789)	+347 (+765)	+29 (+1.142)	-3 (-0.118)
Optional additional bolt-on counterweight				+380 (+838)	+680 (+1499)	+570 (+1257)	0	0

Assumes the machine is fitted with Michelin 20.5R25 XHA (L3) tyres.






	Bucket mounting		Direct	Direct	Direct	Direct	Direct	Quickhitch	Quickhitch	Quickhitch	Quickhitch
	Bucket type		General purpose	General purpose	Penetration	General purpose	General purpose	General purpose	General purpose	General purpose	General purpose
	Bucket equipment		Tipped teeth	Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate	Tipped teeth	Tipped teeth	Reversible toeplate	Reversible toeplate
	Bucket capacity (SAE heaped)	m³ (yd³)	2.3 (3.0)	2.6 (3.4)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)	2.3 (3.0)	2.6 (3.4)	2.4 (3.1)	2.7 (3.5)
	Bucket capacity (struck)	m³ (yd³)	1.984 (2.593)	2.274 (2.967)	2.274 (2.967)	2.057 (2.691)	2.346 (3.068)	1.984 (2.593)	2.274 (2.967)	2.057 (2.691)	2.346 (3.068)
	Bucket width	mm (ft-in)	2740 (9-0)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)	2740 (9-0)	2740 (9-0)	2700 (8-10)	2700 (8-10)
	Bucket weight	kg (lb)	1250 (2750)	1317 (2897)	1361 (2994)	1262 (2776)	1329 (2924)	1124 (2473)	1199 (2638)	1136 (2499)	1211 (2664)
	Maximum material density	kg/m³ (lb/yd³)	1999 (3369)	1744 (2940)	1752 (2953)	1913 (3224)	1676 (2825)	1908 (3216)	1664 (2805)	1811 (3053)	1600 (2697)
	Tipping load straight	kg (lb)	11057 (24376)	10911 (24055)	10953 (24147)	11044 (24348)	10898 (24026)	10551 (23261)	10404 (22937)	10451 (23040)	10388 (22902)
	Tipping load full turn	kg (lb)	9199 (20280)	9069 (19994)	9110 (20084)	9185 (20249)	9055 (19963)	8778 (19352)	8656 (19083)	8694 (19167)	8643 (19055)
	Payload	kg (lb)	4599 (10139)	4535 (9998)	4555 (10042)	4592 (10124)	4527 (9980)	4389 (9676)	4328 (9542)	4347 (9583)	4321 (9526)
	Maximum break out force	kN (lbf)	176 (39565)	162 (36418)	162 (36418)	176 (39565)	162 (36418)	157 (35294)	144 (32371)	157 (35294)	144 (32371)
M	Dump angle maximum	degrees	47°	47°	47°	47°	47°	47°	47°	47°	47°
N	Roll back angle at full height	degrees	58°	58°	58°	58°	58°	58°	58°	58°	58°
O	Roll back at carry	degrees	45°	45°	45°	45°	45°	45°	45°	45°	45°
P	Roll back at ground level	degrees	37°	37°	37°	37°	37°	37°	37°	37°	37°
Q	Load over height	mm (ft-in)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)	3755 (12-3)
R	Dump height (45° dump)	mm (ft-in)	2824 ((9-3)	2759 (9-1)	2759 (9-1)	2965 (9-9)	2833 (9-6)	2739 (9-0)	2674 (8-9)	2880 (9-5)	2748 (9-0)
S	Dig depth	mm (ft-in)	131 (0-5)	131 (0-5)	131 (0-5)	105 (0-4)	105 (0-4)	131 (0-5)	131 (0-5)	105 (0-4)	105 (0-4)
T	Reach at dump height	mm (ft-in)	1248 (4-1)	1312 (4-4)	1312 (4-4)	1144 (3-9)	1103 (3-7)	1333 (4-5)	1397 (4-7)	1229 (4-0)	1188 (3-11)
	Reach maximum (45° dump)	mm (ft-in)	2000 (6-7)	2064 (6-9)	2064 (6-9)	1896 (6-3)	1947 (6-5)	2077 (6-10)	2141 (7-0)	1973 (6-6)	2024 (6-8)
Operating weight (includes 80kg operator and full fuel tank)		kg (lb)	14910 (32871)	14977 (33019)	15021 (33116)	14922 (32897)	14989 (33045)	15207 (33526)	15274 (33673)	15219 (33552)	15286 (33700)

LOADER – HT

Widely spaced four ram geometry provides the combination of excellent visibility with high bucket torque characteristics throughout the working arc. The pin, bush and sealing design on all pivot points provide extended maintenance intervals.

LOADER – ZX

Heavy duty three ram geometry provides high breakout forces with excellent loading characteristics. The pin, bush and sealing design on all pivot points provide extended maintenance intervals.

436 (TIER 2 EMISSIONS)

6-cylinder wastegated turbo - charged, liquid cooled, direct injection diesel. Air-to-air charge-air cooling ensure low emissions and "clean - burn" combustion chamber provides minimum fuel consumption. A remote sump oil drain facility simplifies servicing.

Type		4 stroke direct injection
Make & model		Cummins BTAA 5.9C
Capacity	litres (in^3)	5.9 (360)
Bore	mm (in)	102 (4.0)
Stroke	mm (in)	120 (4.75)
Aspiration		Turbo charged
Cylinders		6
Max gross power to SAE J1995/ISO 14396	kW (hp) @ 2000rpm	132 (177)
Rated gross power to SAE J1995/ISO 14396	kW (hp) @ 2200rpm	129 (173)
Nett power to SAE J1349/EEC 80/1269	kW (hp) @ 2200rpm	123 (165)
Max torque	Nm (lbf.ft) @ 1300rpm	786 (580)

Emissions:-
Relevant standards EUNR MM Stage 2 USA CFR Part 89
(Complies with EU/EPA "Off Highway" Construction Equipment Regulation Stage 2).

436e (TIER 3 EMISSIONS)

6-cylinder wastegated turbo-charged, liquid cooled, direct injection common rail diesel. Air-to-air charge-air cooling ensure low emissions and "clean-burn" combustion chamber provides minimum fuel consumption. A remote sump oil drain facility simplifies servicing.

Type		4 stroke direct injection
Make & model		QSB 6.7
Capacity	litres	6.7
Aspiration		Turbo charged
Cylinders		6
Max gross power to SAE J1995/ISO 14396	kW (hp) @ 2000rpm	133 (178)
Rated gross power to SAE J1995/ISO 14396	kW (hp) @ 2200rpm	129 (173)
Nett power to SAE J1349/EEC 80/1269	kW (hp) @ 2200rpm	123 (165)
Max torque	Nm (lbf.ft) @ 1400rpm	800 (590)

Emissions:-
US EPA Tier 3, CARB Tier 3, EU Stage III.

TRANSMISSION

4 wheel drive, automatic smooth shift transmission electrically operated selector and gear change incorporating a speed inhibitor and modulation for smooth, responsive on-the-move direction and ratio changes. Single stage integral torque converter
4 forward and 3 reverse gears.

Type		Smooth shift powershift
Make & model		ZF 4WG 190
Torque converter stall ratio		2.873 : 1
1st gear	kph (mph)	8.2 (5.1)
2nd gear	kph (mph)	14.5 (9.0)
3rd gear	kph (mph)	27 (16.8)
4th gear (forward only)	kph (mph)	37.9 (23.5)

AXLES

Type	Epicyclic hub reduction
Make & model	Graziano PR12 B.O. front and rear
Overall axle ratio	21.098 : 1
Rear axle oscillation	21°

STEERING

Priority steer hydraulic system with emergency steering. Piston pump meters flow through steer valve @ 190 bar (2756 lb/in²) to provide smooth low effort response. Steering angle ± 40°. Steer rams located high in the chassis fabrication to provide protection from damage. Adjustable steering column.

BRAKES

Hydraulic power braking on all wheels, operating pressure 80 bar (1160psi). Dual circuit with accumulator back-up provide maximum safety under all conditions. Hub mounted, oil immersed, multi-plate disc brakes with organic brake linings are environmentally acceptable. Parking brake, mechanical disc type operating on transmission output shaft.

TYRES

A variety of tyre options are available including:
20.5 x 25 x 12 ply (L2). 20.5 x 25 SGL (L2). 20.5R25 RL-2+ (L2). 20.5R25 VUT (L2). 20.5R25 XTLA (L2). 20.5R25 VMT (L3). 550/65R25 XLD (L3). 20.5R25 XHA (L3). 20.5R25 XRD1A (L4). 20.5R25 XMINED2 (L5). 20.5R25 RL-5K (L5).

436/436e HT – LOADER HYDRAULICS

Variable displacement piston pumps feed a "load sensing" system providing a fuel efficient and responsive distribution of power as required. Main services are servo actuated from a single lever (joystick) loader control. Auxiliary circuits controlled via additional lever or joystick mounted electrical buttons. Accumulator back-up is available to control loader in the event of loss of pump pressure.

Pump type		Twin variable displacement piston pumps
Pump 1 max. flow	l/min (UK gal/min)	132 (29)
Pump 1 max. pressure	bar (lb/in²)	250 (3625)
Pump 2 max. flow	l/min (UK gal/min)	132 (29)
Pump 2 max. pressure	bar (lb/in²)	160 (2320)
Hydraulic cycle times at full engine revs		**seconds**
Arms raise (full bucket)		5.9
Bucket dump (full bucket)		1.0
Arms lower (empty bucket)		3.4
Total cycle		10.3

Ram dimensions		**Bore**	**Rod**	**Closed centres**	**Stroke**
Bucket ram x2	mm (in)	110 (4.3)	65 (2.6)	1740 (68.5)	1056 (41.6)
Lift ram x2	mm (in)	130 (5.1)	70 (2.8)	1259 (49.6)	813 (32)
Steer ram x2	mm (in)	80 (3.1)	50 (2.0)	621 (24.4)	312 (12.3)

436/436e HT – ELECTRICAL SYSTEM

24 volt negative ground system, 70 Amp alternator with 2 x 110 Amp hour low maintenance batteries. Isolator located in rear of machine. Ignition key start/stop and pre-heat cold start. Primary fuse box. Other electrical equipment includes quartz halogen, twin filament working lights, front/rear wash/wipe, heated rear screen, full road going lights, clock, gauge and warning light monitoring. Connectors to IP67 standard.

System voltage	Volt	24
Alternator output	Amp hour	70
Battery capacity	Amp hour	2 x 110

436/436e HT – CAB

Resiliently mounted ROPS/FOPS structure (tested in accordance with ISO 3471-1 : 1986 / ISO 3449 : 1984). De - luxe operator environment combines ergonomically located controls with a high level of appointment and low internal noise levels. Entry/exit is via large rear hinged door and anti - slip steps. Excellent forward visibility is provided by a 3 section curved, laminated windscreen and low waistline. Extensive instrumentation includes electronic monitoring panel and display (EMS). Heating / ventilation provides balanced and filtered air distribution throughout the cab via a powerful 11 kW capacity heater. The unitary construction allows easy sealing and prevents ingress of dust. A transmission lock on the selector prevents inadvertent engagement and the loader controls can be isolated for safe road travel. Noise level measured in accordance with 86/662/EEC, amendment 95/27/EC

Interior pressure level : 73 Lp (A)
Exterior power level : 105 Lw (A)

436/436e HT – ATTACHMENTS

An extensive range of attachments including pallet forks, crane jibs, high dumping buckets and timber grapples are available to fit directly or via the JCB quickhitch mounting.

436/436e HT – SERVICE FILL CAPACITIES

	litres (UK gal)
Hydraulic system	210 (46.2)
Fuel tank	230 (50.6)
Engine oil sump	14 (3.1)
Transmission oil system	32.5 (7.1)
Axle oil (front)	39 (8.6)
Axle oil (rear)	39 (8.6)
Engine coolant system	35 (7.7)

436/436e HT – STANDARD EQUIPMENT

Loader: Bucket reset mechanism, loader arm kickout mechanism, loader control isolator, single lever servo control, high torque geometry combines with excellent visibilty between the arms.

Engine: Air cleaner - 2 stage dry type - cyclonic with primary and safety elements, silencer and exhaust stack, sedimenter, twin bowl fuel filters, alternator and compressor drive belt guards. Isolated cooling package with hydraulically driven cooling fan.

Transmission: Single lever shift control, speed inhibitor, neutral start, disconnect on footbrake and loader lever, disconnect isolator switch, direction changes and kickdown on gear selector and loader control lever.

Axles: Epicyclic wheel hub reduction, fixed front, oscillating rear.

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

Hydraulics: Twin piston pump with priority steer, emergency steer back-up, 2 spool loader circuit with accumulator support, 3rd spool auxiliary hydraulic circuit as standard. Hydraulic tank located in the rear chassis fabrication.

Steering: Adjustable steering column, “soft feel” steering wheel 5 turns lock to lock, resilient stops on max lock.

Cab: ROPS/FOPS safety structure, interior reading light, centre mounted master warning light. Electronic monitoring panel with LCD message display. Two speed intermittent front windscreen wipe/wash and self park, single speed rear windscreen wipe/wash and self park. 3 speed heater/demisting with replaceable air filter, LH and RH opening windows, sun visor, sun blind, internal rear view mirror, heated external mirrors, adjustable suspension seat with belt and headrest, operator storage facilities, laminated windscreen, heated rear screen, loader control isolator, horn.

Electrical: Road lights front and rear, parking lights, front and rear working lights, reverse alarm and light, rear fog light, battery isolator, radio wiring and speakers, 70 amp alternator, rotating beacon.

Bodywork: Front and rear fenders, side and rear access panels, flexible bottom step, full width rear counterweight, recovery hitch, lifting lugs.

436/436e HT – OPTIONAL EQUIPMENT

Auxiliary 4th spool hydraulic service, air conditioning, limited slip differentials front/rear axles, additional counterweight, turbo 2 pre-cleaner, tooth guard, replaceable bucket wearparts, epoxy coated radiator/coolers, stainless steel brake pipes, smooth ride system (SRS), hydraulic quickhitch with in-cab hydraulic pin isolation, full rear fenders, high lift arms, super high lift arms, reversing camera (colour), auto greasing system, joystick or Multi-lever hydraulic controls, auxiliary hydraulic control on seperate lever or joystick mounted (proportional), Smart reverse alarm, parallel lift links (recommended for pallet forks), canopy cab, Wastemaster cab, Livelink telematics, widecore radiator, sealed electrics, grease gun and cartridge, basic and full belly guard kits, mesh air intake screen, ARV kit, safety strut, transmission cooler bypass, non-heated mirrors, 24V to 12V in cab converter, cab screen guards, air suspension seat, fire extinguisher, number plate light kit, additional front and rear worklights, white noise reverse alarm, automatically reversing fan, grease gun, LiveLink telematics.

436/436e HT – WASTEMASTER STANDARD EQUIPMENT

Machine as above including: basic and full belly guard kit, turbo 2 pre-cleaner, carbon cab air intake filter, front and rear light guards, widecore radiator, full Wastemaster branding, mesh air intake screen.

436/436e ZX – LOADER HYDRAULICS

Twin variable displacement piston pumps feed a "load sensing" system providing a fuel efficient and responsive distribution of power as required. Main services are servo actuated from a single lever (joystick) loader control. Auxiliary circuit controlled via additional lever or joystick mounted electrical buttons. Accumulator back-up is available to control loader in the event of loss of pump pressure.

Pump type		Twin variable displacement piston pumps
Pump 1 max. flow	l/min (UK gal/min)	132 (29)
Pump 1 max. pressure	bar (lb/in²)	250 (3625)
Pump 2 max. flow	l/min (UK gal/min)	132 (29)
Pmp 2 max. pressure	bar (lb/in²)	160 (2320)
Hydraulic cycle times at full engine revs		**seconds**
Arms raise (full bucket)		5.9
Bucket dump (full bucket)		1.0
Arms lower (empty bucket)		3.4
Total cycle		10.3

Ram dimensions		**Bore**	**Rod**	**Closed centres**	**Stroke**
Bucket ram x1	mm (in)	160 (6.3)	80 (3.1)	1200 (47.2)	536 (21.1)
Lift ram x2	mm (in)	130 (5.1)	70 (2.8)	1259 (49.6)	813 (32.0)
Steer ram x2	mm (in)	80 (3.1)	50 (2.0)	621 (24.4)	312 (12.3)

436/436e ZX – ELECTRICAL SYSTEM

24 volt negative ground system, 70 Amp alternator with 2 x 110 Amp hour low maintenance batteries. Isolator located in rear of machine. Ignition key start/stop and pre-heat cold start. Primary fuse box. Other electrical equipment includes quartz halogen, twin filament working lights, front/rear wash/wipe, heated rear screen, full road going lights, clock, gauge and warning light monitoring. Connectors to IP67 standard.

System voltage	Volt	24
Alternator output	Amp hour	70
Battery capacity	Amp hour	2 x 110

436/436e ZX – CAB

Resiliently mounted ROPS/FOPS structure (tested in accordance with ISO 3471-1 : 1986 / ISO 3449 : 1984). De-luxe operator environment combines ergonomically located controls with a high level of appointment and low internal noise levels. Entry/exit is via large rear hinged door and anti-slip steps. Excellent forward visibility is provided by a 3 section curved, laminated windscreen and low waistline. Extensive instrumentation includes electronic monitoring panel and display (EMS). Heating / ventilation provides balanced and filtered air distribution throughout the cab via a powerful 11 kW capacity heater. The unitary construction allows easy sealing and prevents ingress of dust. A transmission lock on the selector prevents inadvertent engagement and the loader controls can be isolated for safe road travel. Noise level measured in accordance with 86/662/EEC, amendment 95/27/EC

Interior pressure level : 73 Lp (A)
Exterior power level : 105 Lw (A)

436/436e ZX – ATTACHMENTS

An extensive range of attachments are available to fit directly or via the JCB quickhitch mounting.

436/436e ZX – SERVICE FILL CAPACITIES

	litres (UK gal)
Hydraulic system	210 (46.3)
Fuel tank	230 (50.7)
Engine oil sump	14 (3.1)
Transmission oil system	32.5 (7.1)
Axle oil (front)	39 (8.6)
Axle oil (rear)	39 (8.6)
Engine coolant system	35 (7.7)

436/436e ZX – STANDARD EQUIPMENT

Loader: Bucket reset mechanism, loader arm kickout mechanism, loader control isolator, single lever servo control, high breakout forces with excellent loading characteristics.

Engine: Air cleaner – 2 stage dry type – cyclonic with primary and safety elements, silencer and exhaust stack, sedimenter, twin bowl fuel filters, alternator and air conditioning compressor drive belt guards, isolated cooling pack with hydraulically driven cooling fan.

Transmission: Single lever shift control, speed inhibitor, neutral start, disconnect on footbrake and loader lever, disconnect isolator switch, direction changes and kickdown on gear selector and loader control lever.

Axles: Epicyclic wheel hub reduction, fixed front, oscillating rear.

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

Hydraulics: Twin piston pumps with priority steer, emergency steer back-up, 2 spool loader circuit with accumulator support, 3rd spool auxiliary hydraulic circuit as standard. Hydraulic tank located in the rear chassis fabrication.

Steering: Adjustable steering column, "soft feel" steering wheel 5 turns lock to lock, resilient stops on max lock.

Cab: ROPS/FOPS safety structure, interior reading light, centre mounted master warning light. Electronic monitoring panel with LCD message display. Two speed intermittent front windscreen wipe/wash and self park, single speed rear windscreen wipe/wash and self park. 3 speed heater/demisting with replaceable air filter, LH and RH opening windows, sun visor, sun blind, internal rear view mirror, heated external mirrors, adjustable suspension seat with belt and headrest, operator storage facilities, laminated windscreen, heated rear screen, loader control isolator, horn..

Electrical: Road lights front and rear, parking lights, front and rear working lights, reverse alarm and light, rear fog light, battery isolator, radio wiring and speakers, 70 amp alternator, rotating beacon.

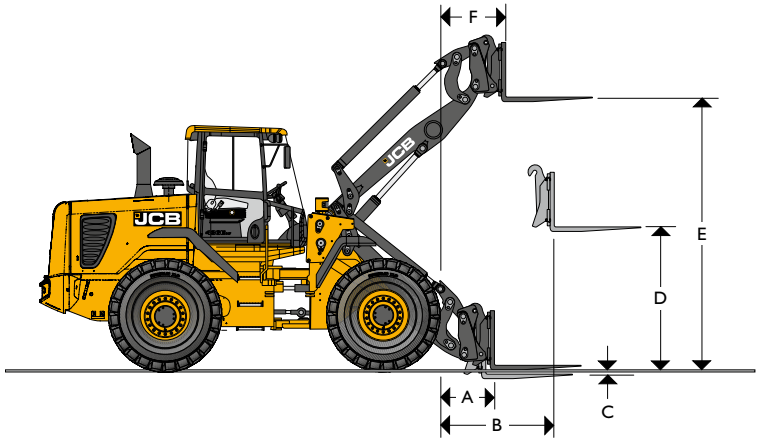
Bodywork: Front and rear fenders, side and rear access panels, flexible bottom step, full width rear counterweight, recovery hitch, lifting lugs.

436/436e ZX – OPTIONAL EQUIPMENT

Air conditioning, limited slip differentials front/rear axles, additional counterweight, turbo 2 pre-cleaner, tooth guard, replaceable bucket wearparts, epoxy coated radiator/coolers, stainless steel brake pipes, Smooth ride system (SRS), hydraulic quickhitch with in-cab hydraulic pin isolation, full rear fenders, reversing camera (colour), auto greasing system, auxiliary control buttons on joystick, 24V to 12V in cab converter, cab screen guards, air suspension seat, fire extinguisher, number plate light kit, additional front and rear worklights, white noise reverse alarm, automatically reversing fan, grease gun, LiveLink telematics.

436/436e ZX – WASTEMASTER STANDARD EQUIPMENT

Machine as above including: basic and full belly guard kit, turbo 2 pre-cleaner, carbon cab air intake filter, front and rear light guards, widecore radiator, full Wastemaster branding, mesh air intake screen.



436/436e HT – LOADER DIMENSIONS – FORK FRAME WITH FORKS

assumes Michelin 20.5R25 XHA (L3) tyres			Parallel fork	Roll back fork
	Fork carriage width	mm (ft-in)	1500 (4-11)	1500 (4-11)
	Length of tines	mm (ft-in)	1220 (4-0)	1220 (4-0)
A	Reach at ground level	mm (ft-in)	791 (2-7)	798 (2-7)
B	Reach at arms horizontal	mm (ft-in)	1613 (5-4)	1620 (5-4)
C	Below ground level	mm (ft-in)	8 (0-3/8)	16 (0-5/8)
D	Arms, horizontal height	mm (ft-in)	1946 (6-5)	1936 (6-4)
E	Arms, maximum height	mm (ft-in)	3828 (12-7)	3818 (12-6)
F	Reach at maximum height	mm (ft-in)	862 (2-10)	869 (2-10)
	Payload**	kg (lb)	5000 (11025)	5000 (11025)
	Tipping load straight	kg (lb)	8589 (18935)	8589 (18935)
	Tipping load full turn (40°)	kg (lb)	7267 (16021)	7267 (16021)
	Attachment weight	kg (lb)	482 (1063)	482 (1063)

**At the centre-of-gravity distance 500mm (1ft-8in). Based on 80% of full turn tipping load as defined by ISO 8313.
Manual fork spacings at 50mm increments. Fork section 100mm x 50mm (4in. x 2in.).

436/436e HT – HIGH LIFT LOADER DIMENSIONS – FORK FRAME WITH FORKS

assumes Michelin 20.5R25 XHA (L3) tyres			Parallel fork	Roll back fork
	Fork carriage width	mm (ft-in)	1500 (4-11)	1500 (4-11)
	Length of tines	mm (ft-in)	1220 (4-0)	1220 (4-0)
A	Reach at ground level	mm (ft-in)	1147 (3-9)	1154 (3-9)
B	Reach at arms horizontal	mm (ft-in)	2103 (6-11)	2110 (6-11)
C	Below ground level	mm (ft-in)	3 (0-1/12)	11 (0-1/3)
D	Arms, horizontal height	mm (ft-in)	1946 (6-5)	1936 (6-4)
E	Arms, maximum height	mm (ft-in)	4482 (14-8)	4472 (14-8)
F	Reach at maximum height	mm (ft-in)	862 (2-10)	869 (2-10)
	Payload**	kg (lb)	4650 (10251)	4650 (10251)
	Tipping load straight	kg (lb)	6871 (15147)	6871 (15147)
	Tipping load full turn (40°)	kg (lb)	5813 (12815)	5813 (12815)
	Attachment weight	kg (lb)	482 (1063)	482 (1063)

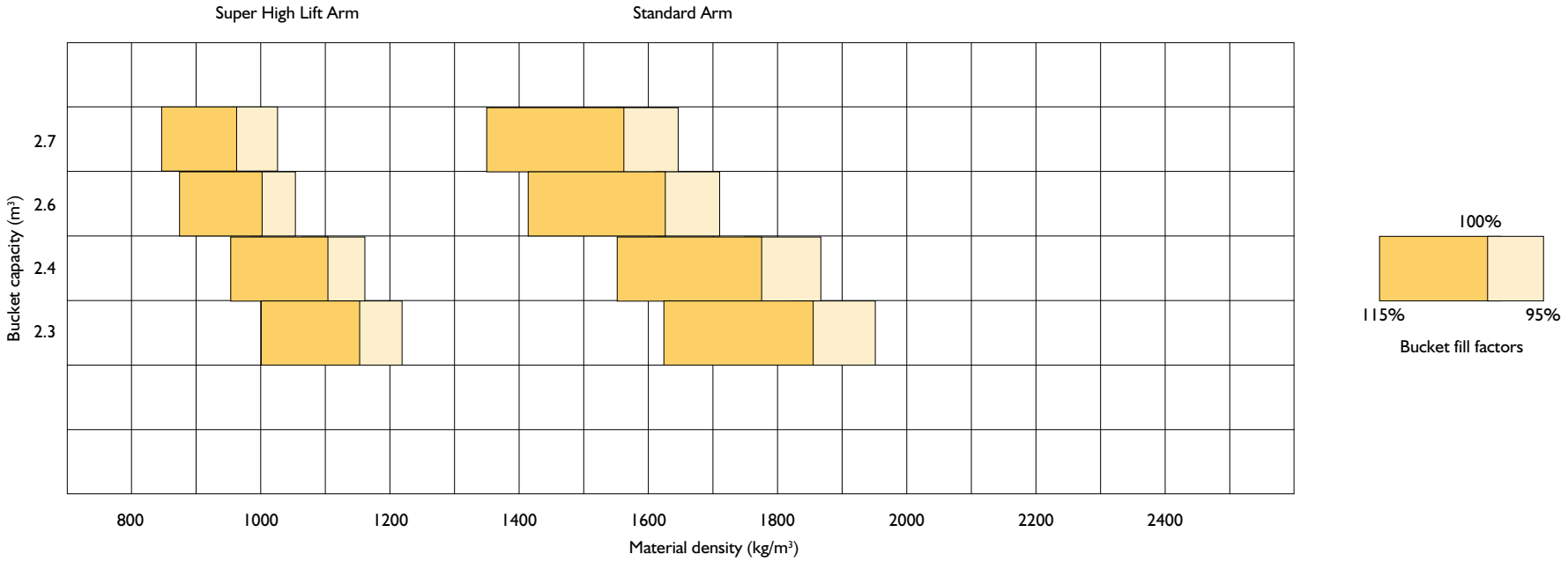
**At the centre-of-gravity distance 500mm (1ft-8in). Based on 80% of full turn tipping load as defined by ISO 8313.
Manual fork spacings at 50mm increments. Fork section 100mm x 50mm (4in. x 2in.).

436/436e HT – SUPER HIGH LIFT LOADER DIMENSIONS – FORK FRAME WITH FORKS

assumes Michelin 20.5R25 XHA (L3) tyres			Parallel fork	Roll back fork
	Fork carriage width	mm (ft-in)	1500 (4-11)	1500 (4-11)
	Length of tines	mm (ft-in)	1220 (4-0)	1220 (4-0)
A	Reach at ground level	mm (ft-in)	2014 (6-7)	2021 (6-8)
B	Reach at arms horizontal	mm (ft-in)	2578 (8-5)	2585 (8-6)
C	Below ground level	mm (ft-in)	-19 (-0-3/4)	-11 (-0-1/2)
D	Arms, horizontal height	mm (ft-in)	1946 (6-5)	1936 (6-4)
E	Arms, maximum height	mm (ft-in)	5045 (16-7)	5035 (16-6)
F	Reach at maximum height	mm (ft-in)	886 (2-11)	893 (2-11)
	Payload**	kg (lb)	3599 (7934)	3599 (7934)
	Tipping load straight	kg (lb)	5428 (11967)	5428 (11967)
	Tipping load full turn (40°)	kg (lb)	4499 (9919)	4499 (9919)
	Attachment weight	kg (lb)	440 (968)	440 (968)

**At the centre-of-gravity distance 500mm (1ft-8in). Based on 80% of full turn tipping load as defined by ISO 8313.
Manual fork spacings at 50mm increments. Fork section 100mm x 50mm (4in. x 2in.).

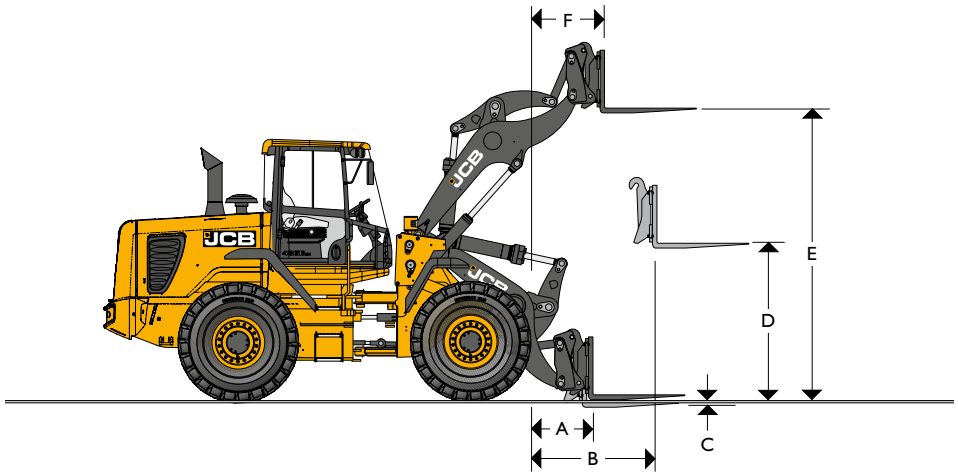
436/436e HT – BUCKET SELECTOR



BUCKET SELECTOR

	Loose density		Fill factor
Material	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 bitumous	765	1290	100
Fertiliser (mixed)	1030	1737	85
Coal anthracite	1046	1764	100
Earth (dry) (loose)	1150	1939	100
Nitrate fertiliser	1250	2180	85

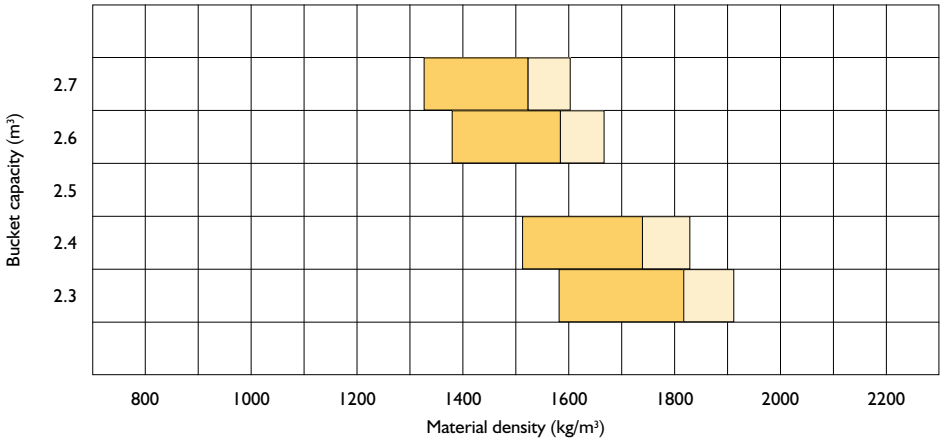
	Loose density		Fill factor
Material	kg/m³	lb/yd³	%
Sodium chloride (dry) (salt)	1300	2192	85
Cement Portland	1440	2428	100
Limestone (crushed)	1530	2580	100
Sand (dry)	1550	2613	100
Asphalt	1600	2698	100
Gravel (dry)	1650	2782	85
Clay (wet)	1680	2832	110
Sand (wet)	1890	3187	110
Fire clay	2080	3507	100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

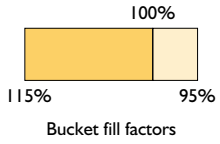


436/436e ZX – LOADER DIMENSIONS – FORK FRAME WITH FORKS

	Fork carriage width	mm (ft-in)	1500 (4-11)
	Length of tines	mm (ft-in)	1220 (4-0)
A	Reach at ground level	mm (ft-in)	798 (2-7)
B	Reach at arms horizontal	mm (ft-in)	1620 (5-4)
C	Below ground level	mm (ft-in)	16 (0-5/8)
D	Arms, horizontal height	mm (ft-in)	1936 (6-4)
E	Arms, maximum height	mm (ft-in)	3818 (12-6)
F	Reach at maximum height	mm (ft-in)	869 (2-10)
	Payload*	kg (lb)	5610 (12368)
	Tipping load straight	kg (lb)	8289 (18274)
	Tipping load full turn (40°)	kg (lb)	7013 (15461)
	Attachment weight	kg (lb)	482 (1063)

*At the centre-of-gravity distance 500mm (1ft-5½in). Based on 80% of full turn tipping load as defined by ISO 8313.
Assumes the fitment of Michelin 20.5R25 XHA (L3) tyres. Manual fork spacings at 50mm (2in) increments. Fork section 100mm x 50mm (4in x 2in).





Bucket fill factors

BUCKET SELECTOR

	Loose density		Fill factor
Material	**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 bitumous	765	1290	100
Fertiliser (mixed)	1030	1737	85
Coal anthracite	1046	1764	100
Earth (dry) (loose)	1150	1939	100
Nitrate fertiliser	1250	2180	85
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

JCB Sales Limited, Rocester, Staffordshire, United Kingdom ST14 5JP. Tel: +44 (0)1889 590312 Email: salesinfo@jcb.com

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