



WHEEL LOADER | 413S

Operating weight: 8953kg Gross engine power: 108kW (145hp) Full turn tipping load: 5410kg Standard shovel capacity: 1.6m³



A **QUALITY** PROCESS.

WE KNOW THAT A WHEEL LOADER IS A KEY PART OF AGRICULTURE. THAT'S WHY THE JCB 413S IS BUILT ON A FOUNDATION OF QUALITY AND RELIABILITY. THE PROCESSES WE'VE USED TO DESIGN AND MANUFACTURE THEM WILL SAFEGUARD YOUR WORKING PROCESS, HOUR AFTER HOUR, DAY AFTER DAY.

We use state-of-the-art manufacturing processes like robot machining, precision paint technology and innovative assembly techniques to achieve the very highest levels of quality.



Designed to work hard.

1 Finite element analysis, as well as extensive endurance and rig testing ensure superior structural strength and durability. Cold cell testing guarantees starting performance down to -20°C .

2 Precision machining provides high tolerances and accurate location of pins and bushes.



Protecting ancillaries.

3 A solid cast rear counterweight protects the rear of your machine – including the rear lights and cooling pack – from damage.

For additional protection, there are impact-resistant fender edges and trims fitted.

Well articulated.

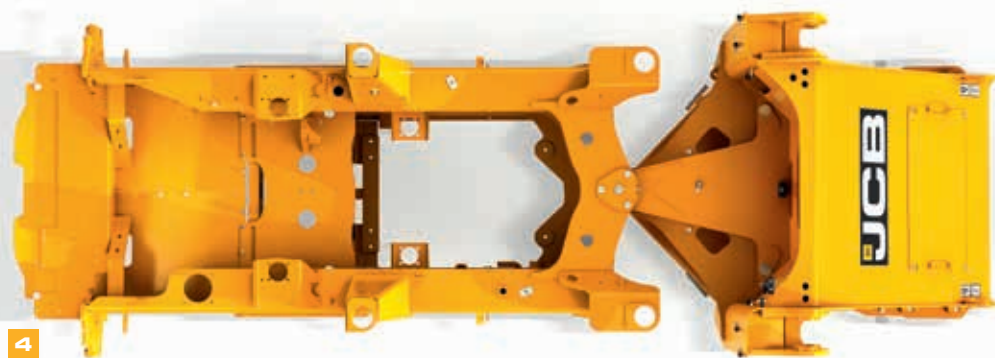
4 The articulation joint has a heavy-duty centre pin and oversized bush, as well as twin taper roller bearings on the bottom box joints. This can tolerate both vertical and horizontal loads for durability and rigidity.

5 Hoses are neatly routed and clamped through the articulation joint, well away from any pinch points. Steering rams are positioned high up and well protected from possible impact and site damage.

The machine features steel fluid tanks for the ultimate in leak protection; a far superior solution to the plastic tanks favoured by some competitors.



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PRODUCTIVE PERFORMANCE.

THE 413S CAN PERFORM GREAT FEATS OF PRODUCTIVITY. WITH HIGH POWER AND TORQUE, THE MACHINE MEETS TIER 4 FINAL EMISSIONS LEGISLATION WITHOUT NEEDING A DPF WHICH ELIMINATES THE NEED FOR PERIODIC REGENERATION.

Engine productivity.

1 The EcoMAX 4.8 litre engine achieves maximum engine power (108kW) and peak torque (560Nm) at low revs for excellent response.

A variable geometry turbocharger provides increased performance at low engine speed for improved cycle times and tractive effort.

Loading productivity.

2 JCB's optional quickhitch makes attachment changing quick and efficient. The quickhitch is designed to be compatible with aftermarket attachments too.

Powerful hydraulics result in fast cycle times and increased productivity, that's why we've fitted a single variable displacement piston pump hydraulics which can deliver up to 156 l/min for superb multi-functioning.

Towing productivity.

3 The hydraulic tow hitch on the 413S not only increases machine versatility, but it hydraulically folds away from the operator's seat, preventing impact damage and grounding when working on uneven ground or gradients.



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COMMANDPLUS controls.

A choice of 3 or 4-spool hydraulics gives you the scope for invaluable extra versatility. Flow can be adjusted from the cab via the all-new Command Plus controls.



There's no need to worry about wasting time and money replacing a diesel particulate filter (DPF) on your loader; its EcoMAX engine meets Tier 4 Final/Stage IV legislation using only exhaust gas recirculation (EGR) and selective catalytic reduction (SCR). This setup also improves fuel economy.



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Loading productivity (continued).

4 So you can perform parallel lifting and use plenty of attachments, the 413S is fitted with a high torque (HT) loader arm. You can also opt for a high lift (HL) arm for high-up applications like spreader and feeder loading.

Drivetrain productivity.

5 With a choice of axle options you can tailor performance to any application.

- > Open differentials are ideal for hard standing ground conditions.
- > Limited slip differential axles increase tractive effort and are perfect for soft muddy ground conditions.

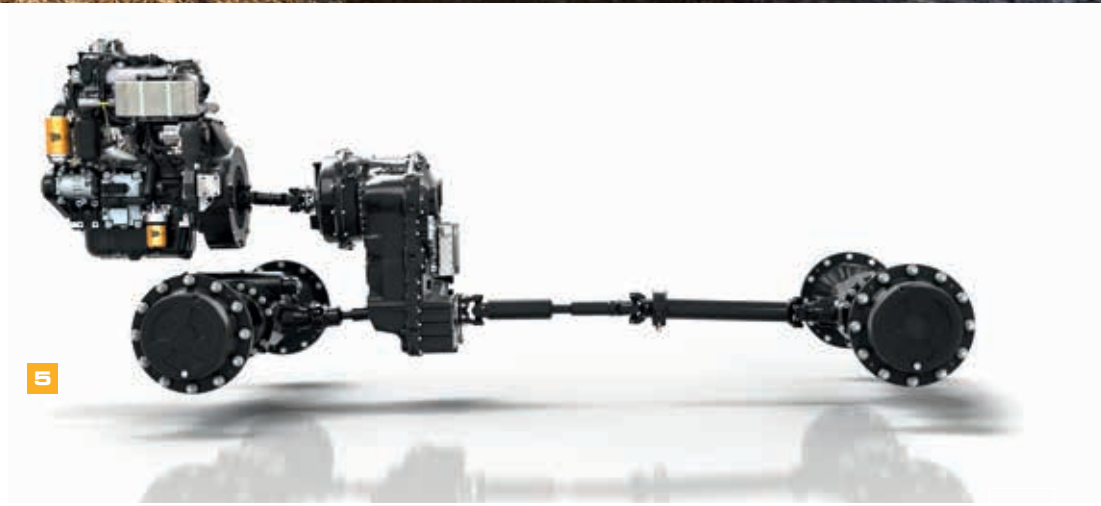


The transmission disconnect feature performs clutch cut-off for efficient, productive loader control. This feature controls tractive effort via the transmission, diverting maximum power to the loader hydraulics and reducing brake wear and fuel consumption.



4 HT Standard Lift

HT High Lift



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EFFICIENT BY DESIGN.

THE 413S IS DESIGNED TO MOVE MORE MATERIAL FOR LESS. TO ACHIEVE THIS, WE'VE DESIGNED THE ENGINE, AXLES, DRIVELINE AND HYDRAULICS TO WORK IN HARMONY WITH EACH OTHER, FOR ULTIMATE EFFICIENCY AND DURABILITY.



Powering it all.

1 No DPF means unnecessary additional fuel piping is eliminated as is the potentially dangerous temperatures involved in regeneration. The fuel that would have been needed to restore your DPF can be used instead for actual productive work.

2 EcoMAX produces high levels of power and torque at engine speeds as low as 1500-1600 rpm for efficient matching of transmission and hydraulics.

3 High back-off brakes reduce viscous drag during roading and rehandling, which boosts fuel efficiency.



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An efficient engine.

4 A viscous coupled engine fan automatically adjusts its speed depending on ambient temperature, optimising cooling, saving fuel and lowering noise.

Using specialist attachments is easy with an in-cab adjustable proportional auxiliary flow rate.

Our 6-speed transmission gives you a range of gears to suit a wide range of applications. The operator can choose from manual or automatic gear shifting at the press of a button.

Unloaded spool valves in the valve block mean that arms lower under gravitational, not hydraulic force, reducing fuel consumption.

JCB's innovative variable displacement pump feeds a load-sensing valve block which only consumes power on demand, providing precise, efficient loader control.

COMMANDPLUS controls.

JCB Smoothride load suspension limits shock loadings and therefore reduces material spillage and structural stress, as well as increasing operator comfort. The speed of engagement is adjustable from within the cab using the latest state-of-the-art CommandPlus controls.



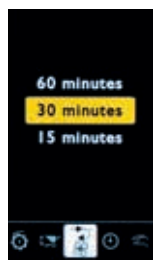
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Adjustable SRS engagement speed.



Adjustable Auxiliary control.



Adjustable reversing fan intervals.



COMMANDPLUS.

THE LATEST JCB 413S WHEEL LOADER BOASTS OUR ALL-NEW COMMAND PLUS CAB. THIS UNIQUE APPROACH TO ERGONOMICS IS THE RESULT OF A RADICAL RETHINK AND A RIGOROUS RESEARCH PROGRAMME. EXPECT BEST-IN-CLASS COMFORT, VISIBILITY, ERGONOMICS AND QUIETNESS.

See the difference.

1 You'll immediately notice the totally redesigned ROPS structure; this has allowed the A pillars to be moved to the same width as the rear of the cab, providing a larger interior with a superb panoramic front windscreen. All switches and auxiliary controls are now located on the right-hand A-pillar for easier access.

2 Using your machine's simple, dedicated menu interface is easily done with an intuitive optional rotary controller.

3 Operating your 413S loader is now easier than ever. All of the controls are seat-mounted, even going as far as to move with the seat suspension. You can also select the control system that's best for your operators: choose from single lever joystick or multi-lever configurations, all using electro-hydraulics for the ultimate in precision.

4 There are two full colour LCD screens to navigate the operating menus, one of which doubles as a monitor for the optional rear-view camera and CommandPlus control menu.



The noise level in the cab is an incredibly low 68dB(a): so quiet you can hardly hear the engine running.

5 To keep the operator environment comfortable for working at all times, we've positively pressurised the cab to eliminate dust and fumes.

6 After extensive research into operator ergonomics, we've devised the Command Driving Position, which boasts the very optimal control layout for a multitude of different driver shapes and sizes available, ranging from an air suspension standard seat to a super deluxe half leather seat, featuring fully adjustable heating and cooling functionality, electrically adjustable lumbar support and adjustable dampers.

7 A set and forget feature makes operator access even easier. In short, your preferred steering wheel position is stored and can be instantly returned to, even after you've folded the wheel away.

Specify your 413S with either air conditioning or automatic climate control to create perfect working temperatures.

With a dedicated media port on board, you can be assured of superb connectivity for all your electronic devices.

A sliding window on both sides of the cab allows easy communication with people outside the machine.

The optional electronic handbrake offers numerous advantages: it's quick and easy to operate, and, because there's no cable, there are fewer holes in the cab. This helps to isolate the operator environment further.



LOW MAINTENANCE LONG INTERVALS.

WHEEL LOADERS NEED TO SPENT THE MAXIMUM AMOUNT OF TIME HARD AT WORK. WE'VE DESIGNED THE 413S TO DO JUST THAT, WITH LONG SERVICE INTERVALS AND QUALITY COMPONENTS.

Routine maintenance.

1 Gain access to the engine bay and cooling pack areas easily with the compact single piece bonnet.

You can check washer fluid level, engine oil and coolant from inside the cab, with all other routine checks and grease points located at ground level. This makes life both easier and safer.

2 Accessing the diesel and DEF (Diesel Exhaust Fluid) tanks is similarly straightforward. Both filler points are separated so as to avoid accidental cross-contamination when refilling.

Most Tier 4 Final/Stage IV engines use a costly Diesel Particulate Filter (DPF) that can cost a lot of money and time when it needs replacing. The EcoMAX engine is DPF-free, reducing your servicing and running costs.

3 With the optional auto lubrication kit, your machine will take care of its own greasing requirements.



Less servicing, more service.

4 The CommandPlus cab relays machine condition giving real time alerts, safeguarding both the machine and operator.

The intuitive CommandPlus “help function” provides the operator with meaningful descriptions of the in-cab switch function. Using the “?” button, this allows new or unfamiliar operators to quickly and easily understand machine functions without having to refer to the operators manual.

5 To prove how good EcoMAX engines are, we’ve tested them for 110,000 hours in 70 different machines across the toughest applications and environments.

Full hydraulic dual circuit braking with multiple oil immersed discs gives the braking system a virtually maintenance-free lifespan.

A cyclonic engine fan scavenge filter provides four times the filtering capacity of a standard air filter. It’s a longer life system, with fewer components and a higher level of efficiency, making for better engine protection.

There’s a large 116-litre fuel tank fitted, with optional 111 litre auxiliary fuel tank, which ensures maximum working hours between refills.



COMMANDPLUS controls.
If you’re planning to use your wheel loader in environments with large amounts of airborne debris, opt for the adjustable reversing fan. The fan can be operated via the CommandPlus controls.

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DRIVE SAFELY.

THE NEW 413S IS DESIGNED TO KEEP THE OPERATOR AND YOUR WORKSITE SAFE AT ALL TIMES. GREAT VISIBILITY, NON-SLIP SURFACES AND FULL ROPS/FOPS PROTECTION ARE JUST THE START.

Safely does it.

- 1 Our optional rear-view camera displays an unobstructed rearward view on the in-cab colour monitor.
- 2 Superb visibility in dark conditions is guaranteed with JCB's optional LED worklights.
- 3 You'll find the rear-view mirrors mounted in front of the A-pillars for improved all-round visibility.

Interior mirrors, heated exterior mirrors and bonnet mirrors combine to offer excellent views to every corner of your machine.



Safely does it (continued).

4 Access steps on the 413S are inclined and equally spaced, complemented by well positioned grab handles for three points of contact at all times.

5 Full fender coverage flaps have been carefully designed to keep forward spray to a minimum for all tyre options. This increases safety and decreases debris build-up. The battery and tool box are lockable for added security.

The cab is isolator-mounted, compliant with ROPS/FOPS standards, and positively pressurised against dust. You can choose from fresh air and carbon filters as well.

6 Engines fitted with a DPF can pose an increased fire risk because extreme heat can be created in regeneration mode. The new 413S doesn't use a DPF, so this is no cause for concern.

7 Non-slip walkways and additional grab handle options allow for safe movement around the machine.

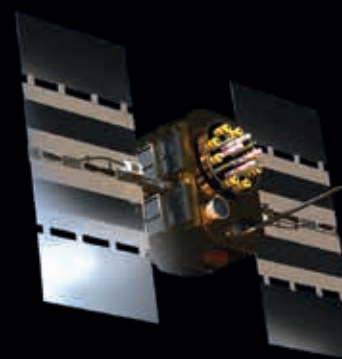


LIVELINK, WORK SMARTER.

LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MANAGE JCB MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE. ACCESS EVERYTHING FROM MACHINE ALERTS TO FUEL REPORTS AND HISTORY INFORMATION, WITH ALL DATA STORED AT A SECURE CENTRE.

Productivity and cost benefits

By providing information like idle time monitoring and machine fuel consumption, JCB Livelink helps reduce your fuel usage, saving money and improving productivity. Machine location information can help improve efficiency and perhaps even reduce insurance costs.



Maintenance benefits

Manage machine maintenance easily – accurate hours monitoring and service alerts improve maintenance planning, while real-time location data helps you manage your fleet. Critical machine alerts and maintenance history records are also available.



Security benefits

Livelink's real-time geofencing alerts tell you when machines move out of predetermined zones, and real-time curfew alerts inform you of unauthorised usage. Further benefits include real-time location information.



A GREAT BUSINESS DECISION.

WE'LL PROVIDE YOU WITH FIRST CLASS SUPPORT AND ASSISTANCE TO SUIT YOUR EXACT BUSINESS NEEDS RIGHT FROM DAY ONE. SO WHEREVER YOU ARE, YOUR MACHINE WILL ALWAYS PERFORM TO ITS FULL POTENTIAL – ONE OF MANY REASONS WHY STARTING A WORKING RELATIONSHIP WITH JCB IS A GREAT BUSINESS DECISION.

Machine selection.

Your JCB dealer has the right technical knowledge and expertise to ensure that you assess all the machine options available to you. This includes rental options and new or used machine sales.

Rebuild and Refurbishment Programme.

If your business isn't in a position to buy a brand new machine, then JCB's Rebuild and Refurbishment programme can help you to extend the service life of your current vehicle cost-effectively.

Technical support.

All local JCB dealers have instant access to factory expertise and technical support to provide you with the maximum machine uptime. JCB's Global Parts Centres, meanwhile, deliver around 95% of all parts anywhere in the world within 24 hours.

Component monitoring.

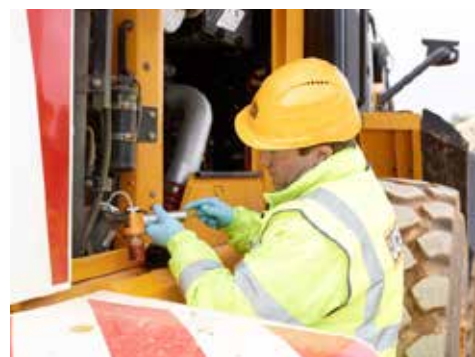
JCB machines benefit from a sophisticated component monitoring programme that provides preventative maintenance and oil sampling to keep everything working at its optimum level.

Service support.

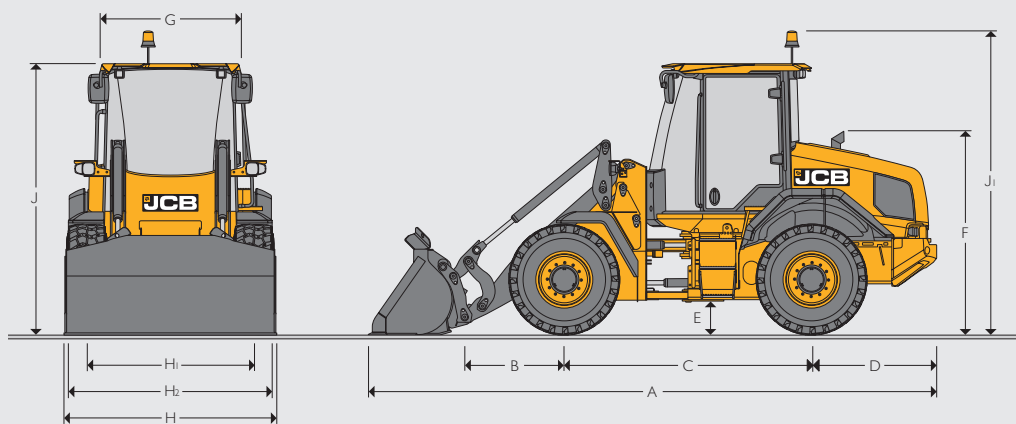
We offer a range of extended warranties, from JCB PremierCover (full comprehensive cover) to JCB PowertrainCover (engine, axles, transmission and hydraulic pump cover). Service agreements, as well as service-only or Repair and Maintenance contracts ensure that we have the up-time of your wheel loading shovel totally covered. Our dealer maintenance specialists around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient repair work.

Finance and Insurance.

Finance and Insurance specialists are always on-hand to provide fast, flexible, competitive quotes. Naturally, packages can be tailored to suit your specific business needs.



STATIC DIMENSIONS

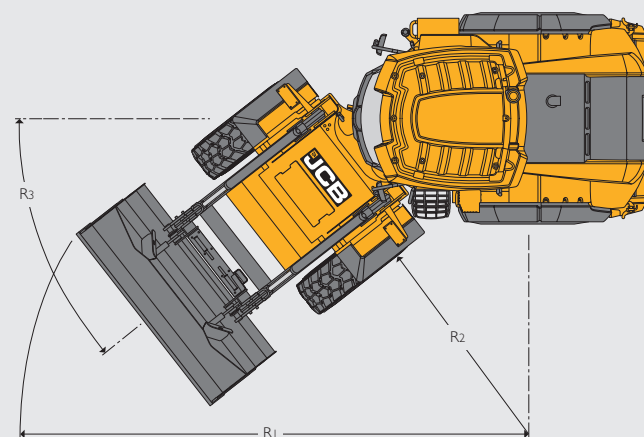


STATIC DIMENSIONS

			413S HT	413S HT HL
A	Overall length	mm	6524	6718
B	Axle to pivot pin	mm	1215	1409
C	Wheel base	mm	2750	2750
D	Axle to counterweight face	mm	1365	1365
E	Minimum ground clearance	mm	351	351
F	Height over exhaust	mm	2280	2280
G	Width over cab	mm	1431	1431
H	Max. width over tyres	mm	2347	2347
H1	Wheel track	mm	1880	1880
H2	Max. width over fenders	mm	2412	2412
J	Height over cab	mm	3064	3064
J1	Height over raised beacon	mm	3425	3425
	Front axle weight	kg	3765	3928
	Rear axle weight	kg	5288	5209
	Total weight	kg	9053	9137

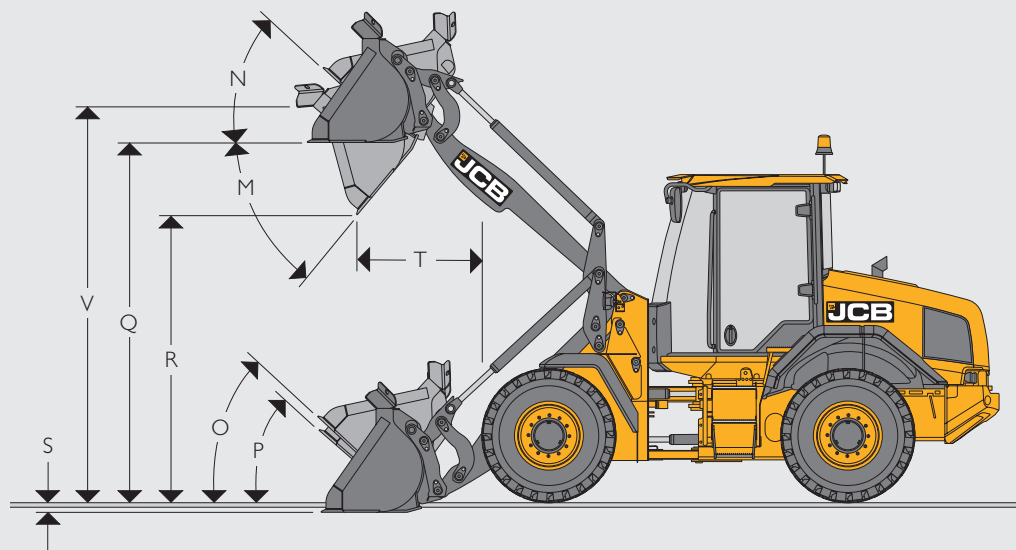
413S data based on machine equipped with quickhitch mounted 1 m³ bucket with toe plates and Michelin XMCL460/70 R24 tyres.

TURNING CIRCLE



TURNING CIRCLE

			413S HT	413S HT HL
R1	Maximum turn radius over shovel	mm	5445	5534
R2	Inside turn radius	mm	2600	2600
R3	Articulation angle	degrees	40	40



TYRE SIZE 413S HT

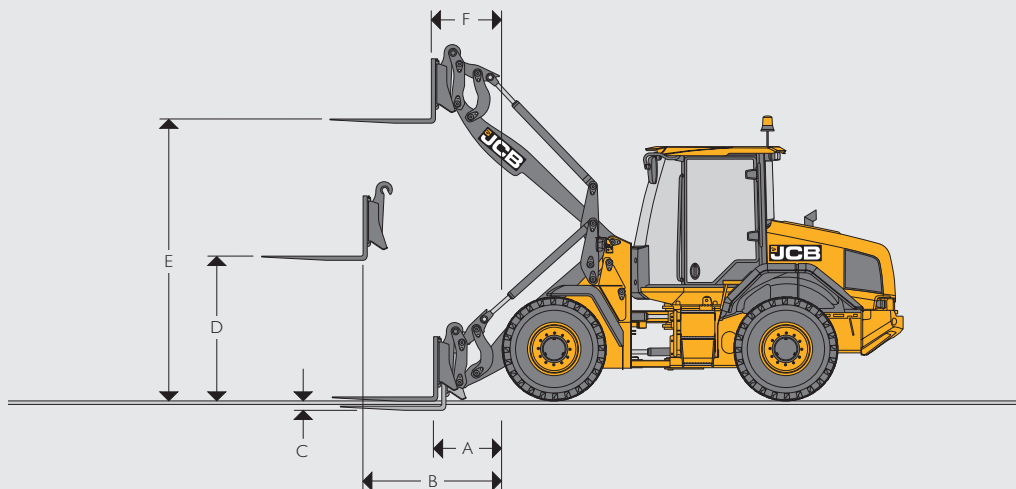
Tyre size	Manufacturer	Type	Rating	Operating weight (kg)	HT		Dimensions	
					STL kg	FTTL kg	Vertical mm	Width mm
540/70 R24	Michelin	XMCL		74	12	10	21	84
500/70 R24	Michelin	XMCL		154	48	43	46	165
17.5R25	Michelin	SNOPLUS	L2	370	115	103	18	-59
17.5R25	Michelin	XTLA	L2	318	99	88	14	-48
15.5R25	Nokian	LOADER GRIP 2	L3	-36	-11	-10	-4	-153
17.5R25	Nokian	LOADER GRIP	L2	228	71	63	32	-62
17.5R25	Nokian	GRS		306	95	85	43	-62

LOADER DIMENSIONS 413S HT, HT HL

Model	413S HT										413S HT HL								
	Direct					Quickhitch					Direct					Quickhitch			
Shovel mounting	General purpose										General purpose								
Shovel type	General purpose										General purpose								
Shovel equipment	Tipped teeth		Reversible toeplate				Reversible toeplate				Tipped teeth		Reversible toeplate				Reversible toeplate		
Shovel capacity (SAE heaped 100%)	m ³	1.2	1.4	1.2	1.4	1.6	1	1.2	1.4	1.6	1.2	1.4	1.2	1.4	1.6	1	1.2	1.4	1.6
Shovel capacity (struck)	m ³	1.01	1.18	1.01	1.18	1.36	0.84	1.01	1.18	1.36	1.01	1.18	1.01	1.18	1.36	0.84	1.01	1.18	1.36
Shovel width	mm	2250	2400	2250	2400	2400	2286	2250	2400	2400	2250	2400	2250	2400	2400	2286	2250	2400	2400
Shovel weight	kg	528	603	528	603	638	386	505	580	614	502	681	528	638	638	386	505	580	638
Maximum material density *	kg/m ³	2340	1956	2340	1956	1691	2397	2215	1864	1610	2145	1793	2145	1793	1530	2202	2029	1704	1451
Tipping load straight *	kg	6575	6426	6575	6426	6350	5656	6293	6149	6078	6042	5904	6042	5904	5836	5213	5775	5642	5508
Tipping load full turn *	kg	5616	5478	5616	5478	5410	4793	5315	5218	5153	5148	5020	5148	5020	4956	4404	4896	4773	4643
Payload *	kg	2808	2739	2808	2739	2705	2397	2658	2609	2577	2574	2510	2574	2510	2448	2202	2435	2386	2322
Maximum breakout force	kN	73.2	67.7	73.2	67.7	62.7	67.9	67.2	62.3	57.1	73.2	67.7	73.2	67.7	67.7	67.9	67.7	62.3	57.1
M Dump angle maximum	degrees	47	47	47	47	47	47	47	47	47	43	43	43	43	43	43	43	43	43
N Roll back angle full height	degrees	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
O Roll back at carry	degrees	46	46	46	46	46	43	46	46	46	49	49	49	49	49	46	49	49	49
P Roll back at ground level	degrees	42	42	42	42	42	42	42	42	42	46	46	46	46	46	46	46	46	46
Q Load over height	mm	3354	3354	3354	3354	3354	3379	3371	3371	3371	3599	3599	3599	3599	3599	3624	3616	3616	3616
R Dump height (45 deg dump)	mm	2775	2709	2775	2709	2658	2610	2739	2673	2622	3051	2992	3051	2992	2945	2900	3016	2955	2907
S Dig depth	mm	122	122	122	122	122	105	105	105	105	122	122	122	122	122	97	107	107	107
T Reach at dump height	mm	937	998	937	998	1046	1064	994	1056	1103	950	1018	950	1018	1071	1079	1013	1079	1130
V Pin height (maximum)	mm	3579	3579	3579	3579	3579	3579	3579	3579	3579	3824	3824	3824	3824	3824	3824	3824	3824	3824
Reach maximum (45 deg dump) horizontal arm	mm	1671	1734	1671	1734	1784	1840	1732	1796	1846	1821	1885	1821	1885	1939	1990	1880	1948	1992
Operating weight (includes 75Kg operator and full fuel and DEF tanks)	kg	8850	8918	8850	8913	8953	9118	9036	9103	9137	8936	9004	8936	8999	9039	9204	9122	9189	9223

* Assumes machine is fitted with 1 m³ shovel with bolt on toe plate and Michelin XMCL460/70 R24 tyres and heavy duty counterweight.

LOADER DIMENSIONS – FORK FRAME WITH FORKS



LOADER DIMENSIONS – FORK FRAME WITH FORKS

		Parallel fork		Non parallel fork	
		413S HT	413S HT HL	413S HT	413S HT HL
Fork carriage width	mm	1500	1500	1500	1500
Length of tines	mm	1220	1220	1220	1220
A Reach at ground level	mm	922	1117	937	1132
B Reach at arms horizontal	mm	1535	1685	1542	1692
C Below ground level	mm	74	74	84	84
D Arms, horizontal height	mm	1671	1671	1660	1660
E Arms, maximum height	mm	3402	3647	3392	3637
F Reach at maximum height	mm	829	789	836	796
Tipping load straight	kg	4158	3855	4149	3848
Tipping load full turn (40°)	kg	3326	3084	3319	3078
Payload*	kg	4900	4557	4889	4549
Attachment weight	kg	435	435	430	430

Assumes manual fork spacing at 50mm increments. Fork section 100mm x 50mm and Michelin XMCL460/70 R24 tyres.

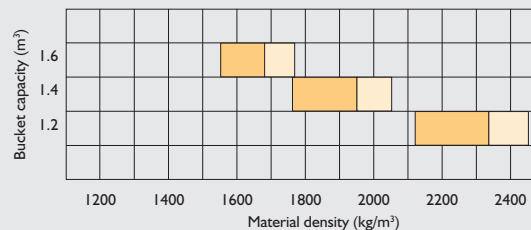
* At the centre of gravity distance 600mm. Based on 80% of FTTL as defined in ISO 8313.

BUCKET SELECTOR

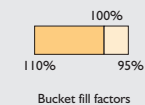
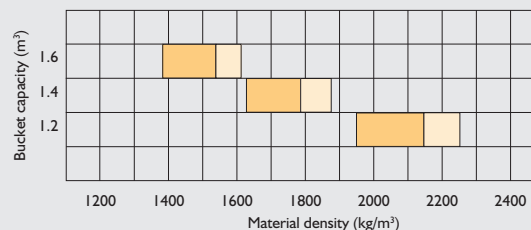
Material	Loose density (kg/m ³)	Fill factor (%)
Snow (fresh)	200	110
Peat (dry)	400	100
Sugar beet	530	100
Coke (loose)	570	85
Barley	600	85
Petroleum coke	680	85
Wheat	730	85
Coal bituminous	765	100
Fertiliser (mixed)	1030	85
Coal anthracite	1046	100
Earth (dry) (loose)	1150	100
Nitrate fertiliser	1250	85
Sodium chloride (dry) (salt)	1300	85
Cement Portland	1440	100
Limestone (crushed)	1530	100
Sand (dry)	1550	100
Asphalt	1600	100
Gravel (dry)	1650	85
Clay (wet)	1680	110
Sand (wet)	1890	110
Fire clay	2080	100
Copper (concentrate)	2300	85
Slate	2800	100
Magnetite	3204	100

Above based upon 1m³ shovel.

413S HT



413S HT HL



ENGINE			
Manufacturer		JCB	
Model		EcoMAX T4F	
Capacity	litres	4.8	
Aspiration		Turbo charged	
Cylinders		4	
Max gross power to SAE J1995/ISO 14396	kW (hp) @ 2200rpm	108.3 (145.2)	
Max torque	Nm @ 1500rpm	560	
Valves per cylinder	mm	4	
Air cleaner	mm	Cyclonic pre filter with engine fan scavenge system	
Fan drive type		Standard: Fan drive type Option: Hydraulic (auto reverse)	
Emissions		Tier 4F	

TRANSMISSION			
		6 speed non-lock up converter	
Model		ZF 6WG115	
		Forward	Reverse
40kph			
1 st gear	kph	6.0	6.3
2 nd gear	kph	9.2	14.9
3 rd gear	kph	14.1	34.1
4 th gear	kph	21.7	-
5 th gear	kph	32.4	-
6 th gear	kph	40.0	-
50kph			
1 st gear	kph	6.9	7.3
2 nd gear	kph	10.6	17.1
3 rd gear	kph	16.2	39.2
4 th gear	kph	24.9	-
5 th gear	kph	37.2	-
6 th gear	kph	50.0	-

ELECTRICAL SYSTEM			
System voltage	Volt	24	
Alternator output	Amp hour	100	
Battery capacity	Amp hour	2 x 110	

LOADER HYDRAULICS			
Pump type		Variable placement piston pump	
Pump 1 max. flow	l/min	156	
Pump 1 max. pressure	bar	240	
Hydraulic cycle times at full engine revs			
Arms raise (full bucket)	Seconds	4.4	
Bucket dump (full bucket)	Seconds	1.7	
Arms lower (empty bucket)	Seconds	2.8	
Total cycle	Seconds	8.9	

AXLES			
Type		Limited Slip Differential	
Make & model	Standard fit	JCB PD70 (front & rear)	
Overall axle ratio 40kph		18.16:1	
Overall axle ratio 50kph		15.78:1	
Rear axle oscillation		± 11°	

STEERING	Hydraulic power steering system emergency steering.		
BRAKES	Hydraulic power braking on all wheels. In board mounted, oil immersed, multi-plate disc brakes. Mechanically or Electro-Hydraulically activated disc type parking brake operating on transmission output shaft.		
CAB	In-cab noise level – 68dB(A). External Noise 104dB(A).		

NOISE AND VIBRATION				
			Uncertainty	Measurement conditions.
Noise at the operator station	LpA	68 dB	+/- 1 dB	Determined in accordance with the test method defined in ISO 6396 and the dynamic test condition defined on 2000/14/EC.
Noise emission from the machine	LWA	104 dB	+/- 1 dB	Guaranteed equivalent sound power (external noise) determined in accordance with the dynamic test conditions defined in 2000/14/EC.
Whole body vibration	m/s ²	0.58	+/- 0.11 dB	ISO 2632-1:1997 normalised to an 8h reference period and based upon a test cycle comprising of loader work (soil).
Hand-arm vibration	m/s ²	<2.5	N/A	ISO 5349-2:2001 dynamic test conditions.

SERVICE FILL CAPACITIES			
Hydraulic system	litres	155	
Fuel tank	litres	116	
DEF Tank	litres	20	
Auxiliary fuel tank	litres	111	

EQUIPMENT

SERVICE AND MAINTENANCE

5 year LiveLink telematics	•
Engine oil remote drain and fill	•
Grouped pressure test points	•
Lockable tool box	•
Lubrication points accessible from ground level	•
Transmission oil level sight gauge	•
Hydraulic level sight gauge	•

ENGINE

Air cleaner – cyclonic pre-filter with engine fan scavenge system	•
Fixed viscous mounted fan	•
Automatically reversing cooling fan	+
Crankcase breather oil trap	•
DEF fluid	•
Epoxy coated radiator / coolers	+
Fuel filter	•
Fuel pre-filter with water trap	•
Hydraulically driven cooling fan	•
-20° cold start	•
SCR engine emission control	•
Waste gated turbo	•
Widecore radiator	•

ELECTRICAL

100 amp alternator	•
Amber rotating beacon	•
Electrical adjustable mirrors	•
Heated mirrors	•
External battery isolator	•
Fold down beacon arm	•
Halogen front and rear working lights	•
Full road light kit	•
Integrated rear view camera	+
LED front and rear working lights	+
LED 360° work lights	+
Number plate light kit	+
Radio wiring and speakers	•
Reverse alarm	•
Smart reverse alarm	+
White noise reverse alarm and light	+

DRIVE TRAIN

6 speed transmission 40 kph	+
6 speed transmission 50 kph	+
Gear kick down on loader control lever	•
Loader lever direction control	•
Neutral start	•
Open differential	•
Limited slip differentials front and rear	+
Oscillating rear axle	•
Foot brake operated transmission disconnect (selectable)	•
Selectable automatic powershift	•
Steering column single lever shift control (direction and gear)	•
Transmission cooler bypass	+

BRAKE SYSTEM

Multi-plate wet disc brakes	•
Parking disc brake on transmission output shaft	•
Mechanical hand operated park brake	•
Electrical hydraulic park brake	+
Independent accumulator backup for electric park brake	+

OPERATOR STATION

Fully glazed cab	•
Front windscreen guards	+
Air conditioning	•
Climate control	+
Single lever joystick	•
Multi-lever hydraulic controls	+
Proportional electro hydraulic auxiliary control	+
Electronic adjustment of SRS (Smooth Ride System) cut-in speed	+
Electronic adjustment of reverse fan interval	+
Air suspension cloth seat	•
Deluxe heated air suspension cloth seat	+
Super deluxe heated & cooled air suspension half leather seat	+
Front roller blind	•
Rear roller blind	+
Cab air intake filter	•
Carbon cab air intake filter	+
12V in cab power socket	•
2 x 12V in cab power socket	+
24V in cab power socket	+
Reversing camera (colour)	+
Fold away adjustable steering column	•
ROPS / FOPS safety structure	•
Interior light	•

OPERATOR STATION (CONTINUED)

Front primary display screen	•
Secondary A post display screen, rotary control menu interface	+
A post mounted membrane switches	•
50 mm seatbelt	•
75 mm seat belt	+
Fire extinguisher (UK & USA only)	+
Two speed intermittent front windscreen wipe / wash and self-park	•
Single speed rear windscreen wipe/wash and self-park	•
3 speed heater/demisting	•
LH and RH sliding opening windows	•
Floor mat	•
Cup holder	•
Steering wheel spinner knob	•
Internal rear view mirror	•
Tinted cab glass	•
Multi-media port (USB and 3.5mm)	+
Operator stowage	•
Laminated windscreen	•
Heated rear screen	•
Loader control isolator	•
Horn	•
Adjustable armrest	•
Removable storage rubber mats	•

FRONT PRIMARY DISPLAY

Warning lights

Direction indicators	•
Master warning	•
High coolant temperature	•
Battery charging condition	•
Low fuel level	•
Engine oil pressure	•
Hazard lamps	•
Park brake state	•
Road lights	•
Main beam lights	•
Rear fog lights	•
Engine pre-heat	•
Brake system pressure	•
Low steering pressure	•

Buzzer alerts

Engine air filter blocked	•
Diesel exhaust fluid (DEF)	•
Torque reduction in case of malfunction	•
Amber warning lamp	•

EQUIPMENT

FRONT PRIMARY DISPLAY (CONTINUED)

Gauge display	
Engine speed	•
Coolant temperature	•
Fuel level	•
LCD screen display	
Current gear	•
Torque reduction in case of malfunction	•
Amber warning lamp	•
Diesel exhaust fluid (DEF)	•
Secondary steer system pressure	•
Steer mode	•
Ground speed	•
Engine Speed (numeric display)	•
Clock	•
Hydraulic state	•
SRS (Smooth Ride System)	+
Beacon	•
Front work lamps	•
Rear work lamps	•
Heated rear screen	•
Transmission sump temperature	•
Data screens	
DEF level	•
Hydraulic oil temperature	•
Torque convertor temperature	•
Volume of fuel remaining	•
Total fuel used (resettable)	•
Instantaneous fuel use	•
Average fuel use (resettable)	•
Current date	•
Machine hours	•
Trip distance (resettable)	•
Hours to service	•
Daily checks	•
Engine oil level	•
DEF level	•
RIGHT HAND SECONDARY DISPLAY - OPTIONAL	
Clock	•
Climate control	•
Fan speed	•
In-cab temperature set	•
Machine hours	•
Rear view camera	•
Fuel use	•

RIGHT HAND SECONDARY DISPLAY - OPTIONAL (CONTINUED)

Time and date	•
Auxiliary flow rate	+
Hydraulic oil temperature	•
Transmission oil temperature	•
Machine settings screen	
Coolant temperature	•
Engine oil pressure	•
Air filter	•
Transmission sump temperature	•
Transmission torque convertor temperature	•
Hydraulic oil temperature	•
Battery voltage	•
Help display	•
On-screen handbook	•
HYDRAULIC SYSTEM	
Smoothride system (SRS)	+
Hydraulic quickhitch with in-cab isolation	+
Auxiliary ARV kit	+
Auxiliary hydraulic service	+
Twin auxiliary hydraulic service	+
Emergency steer back-up	•
JCB biodegradable hydraulic oil	+
Electronic hydraulic isolation	•
Automatic boom kick-out. Detent	•
Automatic bucket positioner	•
Front loader float	•
Hydraulic oil cooler	•
EXTERNAL EQUIPMENT	
Front and rear fenders	•
Front adjustable mud flaps	•
Front wheel spray guards	•
Rear fender chevrons	•
Automatic greasing system	+
Grease gun and cartridge	+
Mesh air intake screens	•
Flexible bottom step	•
Full width rear counterweight	•
Chevron rear counterweight	+
Recovery hitch	•
Lifting / tie down lugs	•

PROTECTIVE EQUIPMENT

Loader arm safety strut	•
Light guards	+
Belly guard kit	+
Articulation joint safety strut	•
OTHER EQUIPMENT	
High lift loader end	+

STANDARD •

OPTIONAL +







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