



838T WHEEL LOADER

T-SERIES

Engine	Cummins B4.5
Max. Gross Power	115 kW
Operating Weight	13,009 - 16,730 kg
Bucket Capacities	1.8 - 4.0 m ³



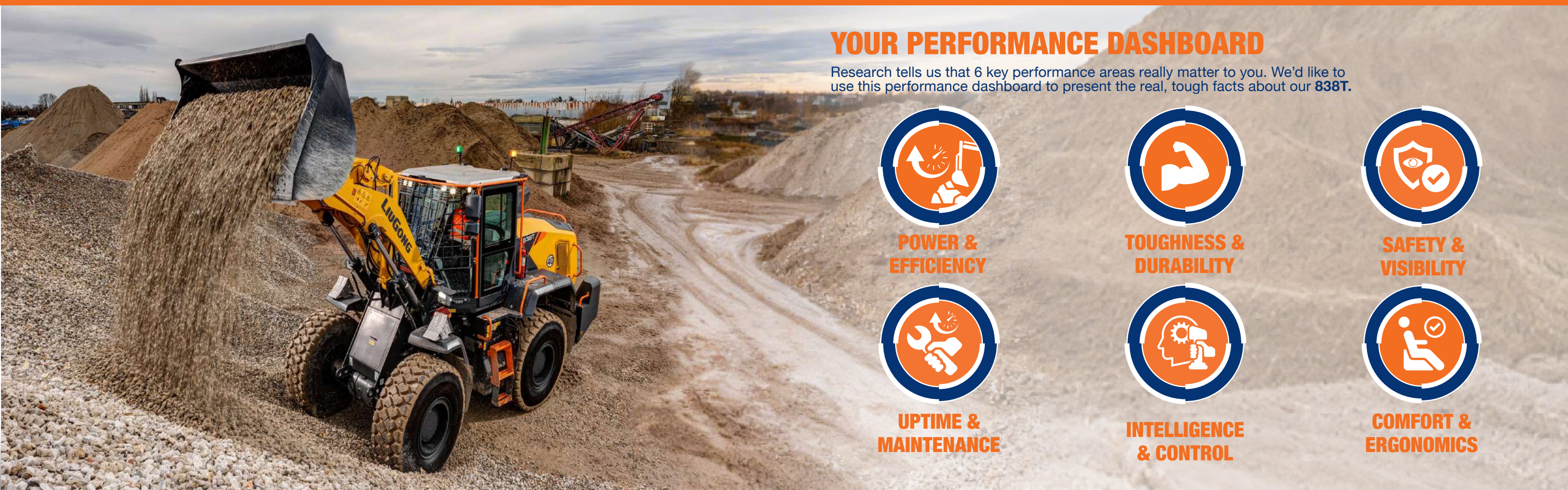
TOUGH WORLD. TOUGH EQUIPMENT.

CUSTOMER DRIVEN DESIGN...

For over 65 years, LiuGong has built machines that thrive in the toughest environments. The 838T, part of our advanced T-Series, is engineered for maximum power, precision, and durability.

Designed to excel in demanding applications, this machine combines cutting-edge technology with proven reliability to keep you working efficiently in even the harshest conditions.

Since launching our first wheel loader in 1966, we've remained committed to innovation, ensuring every LiuGong machine is built to perform, wherever the job takes you.



YOUR PERFORMANCE DASHBOARD

Research tells us that 6 key performance areas really matter to you. We'd like to use this performance dashboard to present the real, tough facts about our 838T.



**POWER &
EFFICIENCY**



**TOUGHNESS &
DURABILITY**



**SAFETY &
VISIBILITY**



**UPTIME &
MAINTENANCE**



**INTELLIGENCE
& CONTROL**



**COMFORT &
ERGONOMICS**

THIS IS LIUGONG



65+
YEARS
EST 1958



30+
PRODUCT LINES



12
GLOBAL R&D CENTERS



30+
GLOBAL
OFFICES



16,000+
EMPLOYEES



20+
GLOBAL MANUFACTURING
FACILITIES

A RANGE YOU CAN TRUST.

From aggregates, mixing plant, earthmoving, fertilizer and municipal engineering, you can trust the 838T to deliver. With the power, performance and adaptability you need to take on the toughest challenges, our T-Series machines won't let you down.



LET'S TAKE A CLOSER LOOK...



POWER THAT DRIVES PRODUCTIVITY

Advanced power shift transmission and intelligent fuel management system deliver uncompromised power with enhanced efficiency.

- ▶ Cummins B4.5 EU Stage V engine delivers robust power and superior fuel economy.
- ▶ Programmable auto-idle shutdown feature reduces fuel consumption during idle periods.
- ▶ ZF powershift provides faster acceleration and faster cycle times.
- ▶ Close-center, variable-displacement hydraulic system ensures optimum performance, minimizing energy loss while boosting fuel efficiency and productivity.
- ▶ Automatic temperature-controlled, reversible hydraulic fan adjusts its speed based on ambient temperature and cooling demand, improving engine efficiency and reducing fuel consumption.



TOUGHER BY DESIGN

Engineered for extreme conditions, 838T's heavy-duty components maximize reliability and extend machine life.

- ▶ LiuGong heavy-duty wet axle with limited-slip differentials is engineered to handle heavy loads with ease even on the most rugged terrain.
- ▶ Highly durable chassis frame is built tough and rigorously tested to withstand the most extreme environments.
- ▶ Reinforced boom structure provides enhanced durability for heavy-duty operations.
- ▶ High-strength bucket delivers powerful performance and an extended service life.



ENHANCED PROTECTION, SUPERIOR VISIBILITY

LiuGong prioritises operator safety and visibility to improve awareness and reduce risks on-site.

- ▶ 120° front visibility provides excellent field of view to the front of machine.
- ▶ All-round lighting delivers exceptional visibility for night operations and low-light conditions.
- ▶ Electric adjustable external rearview mirrors with integrated blind spot mirrors ensure optimal side and rear visibility in any job site conditions.
- ▶ Full LED work lights are standard-fitted for enhanced night-time visibility.
- ▶ 360° panoramic view system provides operators with a real-time, all-around view of surroundings, eliminating blind spots.
- ▶ Ergonomically-designed orange steps and handrails safeguard the operator during access, exit and maintenance.



BUILT TO LAST, EASY TO MAINTAIN

To maximize your productive hours, we've made the New 838T even easier to maintain and surrounded it with service back-up and support to make every productive second count.

- ▶ Electric lift tilt-back engine hood provides quick and easy access to both the engine compartment and routine service points for easy maintenance.
- ▶ Centralized greasing system extends bearing life and reduces maintenance time and costs by delivering precise amounts of grease to each bearing at regular intervals.
- ▶ Fluid drains provide environmentally friendly drainage capability and are grouped together for convenient serviceability.
- ▶ Under hood lights facilitate component inspection and maintenance in low-light conditions.
- ▶ Battery master switch is optimally positioned below the cab access ladder for easy operation when entering or exiting the cab.
- ▶ Easy to replace cab filters accessed via secondary access steps.



INTELLIGENT PERFORMANCE, DESIGNED TO WORK SMARTER

Smart control systems ensure precision, efficiency, and adaptability across different applications.

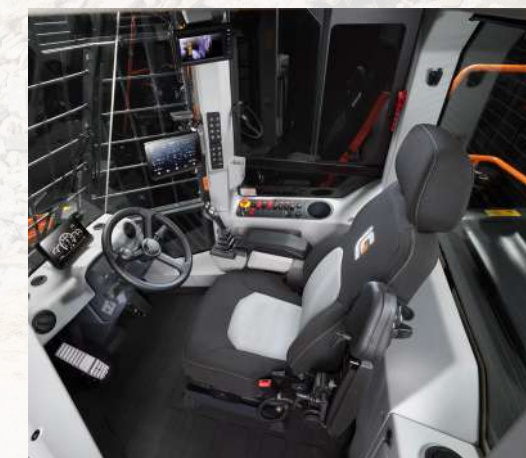
- ▶ Graphical display integrated multiple functions and parameter settings facilitates the machine to handle various applications.
- ▶ Automatic boom height kick-out and bucket leveling can be easily activated with a single touch in the cab.
- ▶ Electric quick coupler enables operators to change attachments in seconds from the cab, enhancing safety and productivity.
- ▶ One-touch engine start/stop allows for effortless operation with a single touch.
- ▶ LiuGong payload system delivers real-time load measurement, optimizing operational efficiency for optimal haulage cost control.



BUILT AROUND YOU

LiuGong machines are designed with the operator at the heart, ensuring all-day comfort and convenience.

- ▶ Pressurized, ROPS/FOPS certified cab is spacious, quiet, and engineered for all-day comfort with ergonomic, intuitive controls.
- ▶ Full LCD instrument panel features a precise, intuitive interface, and user-friendly design, ensuring that all critical parameters are clearly visible at a glance.
- ▶ Advanced climate control system with 12 all-around vents and intelligent temperature control ensures an optimal operating temperature in all conditions.
- ▶ Standard telescopic & tiltable steering column and ergonomic armrest accommodate various operating habits to reduce fatigue.
- ▶ Air suspension seat with adjustable armrests and headrest features electric heating as standard and ventilation & heating functions to further enhance comfort.



838T SPECIFICATIONS

Operating Weight	13,009 - 16,730 kg
Operating weight includes the machine weight with standard work device, no additional equipment or accessories, full fuel, DEF tank and all fluids at required level and an operator 75 kg.	
Bucket Capacity	1.8 - 4.0 m³

ENGINE	
Emission Regulation	EU Stage V
Make	Cummins
Model	B4.5
Engine Output - Max.Gross (SAE J1995 / ISO 14396)	115 kW @ 2,200 rpm
Engine Output - Max.Net (SAE J1349 / ISO 9249)	106 kW @ 2,200 rpm
Peak Torque	712 N·m @ 1,200 rpm
Displacement	4.5 L
Number of Cylinders	4
Aspiration	Turbocharged & Air-to-air intercooled

TRANSMISSION	
Transmission Type	Countershaft, power shift
Torque Converter	Single stage, three elements
Max. Travel Speed Forward / Reverse (20.5R25 tires)	39.8 / 27.8 km/h
Number of Speed, fwd	4
Number of Speed, rev	3

HYDRAULIC SYSTEM	
Main Pump Type	Piston
Main Relief Pressure	26 MPa
Raise	4.8 s
Dump Time	1.9 s
Float Down Time	3.1 s
Hydraulic Cycle Time	9.8 s
Controls	Joystick

BRAKES	
Service Brake Type	Wet discs brake
Service Brake Actuation	Full hydraulic
Parking Brake Type	Drum
Parking Brake Actuation	Electro-hydraulic release

STEERING	
Steering Hydraulic System Type	Large displacement steering
Steering Relief Pressure	18 Mpa
Maximum Articulation	±40°
Smallest Turn (over tires)	5,213 mm

AXLES	
Model	LiuGong (Wet type)-AWL400
Differential Front Type	Differential lock
Differential Rear Type	Conventional
Axle Oscillation	±9°

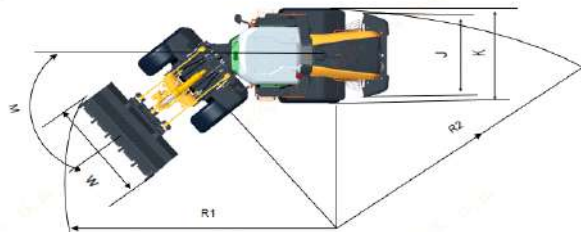
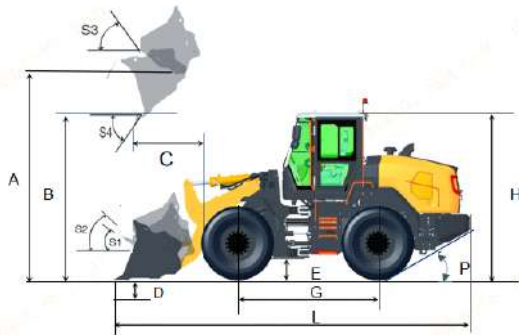
ELECTRICAL SYSTEM	
Voltage	24 V
Batteries	2X12 V
Battery Capacity	120 Ah
Cold Cranking Capacity, approx	850 CCA
Reserve Capacity	224 min
Alternator Rating	2,280 W / 95 A
Starter Motor Output	4.8 kW

SOUND & ENVIRONMENT	
Sound level in cab according to ISO 6396-2008/EN ISO 3744-1995 - Travel mode	69 dB(A)
Sound level in cab according to ISO 6396-2008/EN ISO 3744-1996 - Stationary work cycle mode	69 dB(A)
External sound level according to ISO 6395-2008- Travel mode	105 dB(A)
External sound level according to ISO 6395-2008- Stationary work cycle mode	105 dB(A)
Ventilation	10 m³/min
Heating capacity	7.5 kW
Air conditioning	5.3 kW

SERVICE REFILL CAPACITIES	
Fuel Tank	190 L
Engine Oil	12 L
Cooling System	34 L
Hydraulic System	160 L
Transmission and Torque Converter	40 L
DEF Tank	25 L
Axles, Front/Rear	33 L / 33 L

STANDARD LIFT LOADER ARM PERFORMANCE WITH STANDARD BUCKET AT 1.9 m³ (QC) WITH BOLT-ON CUTTING EDGE AND OPERATING WEIGHT AT 13,378 kg.	
Tipping Load - Straight according to ISO 14397-1:2007	8,732 kg
Tipping Load – Full Turn according to ISO 14397-1:2007	7,487 kg
Bucket Breakout Force	113 kN
A Maximum Hinge Pin Height	3,870 mm
B Dump Clearance at Full Height Discharge	2,804 mm
C Dump Reach at Full Height Discharge	1,154 mm
D Maximum Digging Depth, Bucket Level	83 mm
S ₁ Bucket Rollback at Ground Level	43°
S ₂ Bucket Rollback at Carry	48°
S ₃ Bucket Rollback at Maximum Height	54.5°
S ₄ Maximum Dump Angle at Full Height	45°

STANDARD LIFT LOADER ARM DIMENSIONS	
E Ground Clearance	400 mm
G Wheelbase	2,870 mm
H Cab Height	3,352 mm
J Wheel Tread	1,950 mm
K Width Over Tires	2,420 mm
L Length with Bucket Down	7,404 mm
M Turn Angle, Either Side	40°
P Rear Angle of Departure	28°
R ₁ Turning Radius, Bucket Carry	5,772 mm
R ₂ Turning Radius, Outside of Tire	5,213 mm
W Width over Bucket	2,470 mm



TIRES									
Choosing the right tyres for your machine will become a key competitive advantage to achieve outstanding performance. Through close engineering and development cooperation with renowned and carefully selected suppliers, LiuGong can offer full range of tyres specially tailored for wheel loader.									
Code	Application	Patterns	Size	PR / *	Tube Type	Width	Overall Diameter	Tread Depth	Load Capacity
L3	• in sand operation • in all kind of load/carry operation • The L3-tread is not as open as L2 and has consequently less self-cleansing compared with an L2 tyre		20.5R25	*	/	527 mm	1,480 mm	31 mm	9,500 kg
L5	• in very aggressive material where good protection against cut damages is demanded, e.g. in quarries or mines		20.5R25	**	/	536 mm	1,530 mm	72 mm	+ 2,000 kg
Solid Tire	• Safe, durable, puncture-resistant, economical, maintenance-free, easy to operate • in generally smooth roads, short distance operation		20.5-25	/	Solid Tire	530 mm	1,490 mm	/	+ 400 kg

Note: The radial tire-load bearing capacity is indicated by the number of stars (*). More stars, greater radial tire-load bearing capacity. For the specific radial tire sizes listed in the table above, 2 stars (**) represents the maximum radial tire-load bearing capacity.

Tire	Operating Weight, kg	Tipping Load- Full Turn, kg	
		Standard Arm	Long Arm
L3	-	-	-
L5	+ 476	+ 272	+ 214
Solid Tire	+ 1,896	+ 1,082	+ 1,001

ATTACHMENTS							
LiuGong attachments with pin-on or quick-coupler ensure high quality as the machine. Integrated design of the whole system makes a perfect match to achieve the superior productivity. For more information on other available attachments, please contact your LiuGong dealer for details.							
838T	4-Speed Transmission, L3 Tires	1.8 m³ Bucket (BOCE)	1.8 m³ Bucket (BOT, BOS)	2.0 m³ Bucket (BOCE)	2.0 m³ Bucket (BOT, BOS)	2.3 m³ Bucket (BOCE)	2.3 m³ Bucket (BOT)
Bucket	Bucket Capacity	m³	1.8	1.8	2.0	2.0	2.3
	Bucket Type	/	GP	GP	GP	GP	GP
	Bucket Mounting	/	PIN-ON	PIN-ON	PIN-ON	PIN-ON	PIN-ON
	GET Type	/	BOCE	BOT, BOS	BOCE	BOT, BOS	BOCE
	Bucket Weight	kg	862	860	886	885	1,011
Standard Arm	Operating Weight	kg	13,066	13,064	13,010	13,009	13,215
	Max. Breakout Force	kN	144	144	128	128	116
	Tipping Load - Straight	kg	10,015	10,017	9,798	9,800	9,666
	Tipping Load - Full Turn	kg	8,656	8,658	8,453	8,455	8,333
	Max.Bucket Hinge Pin Height	mm	3,870	3,870	3,870	3,870	3,870
	Dump Clearance	mm	3,008	3,008	2,927	2,927	2,848
	Dump Reach	mm	1,043	1,043	1,108	1,108	1,188
	Overall Length	mm	7,140	7,233	7,287	7,379	7,365
	Overall Width	mm	2,470	2,500	2,470	2,500	2,470
	Overall Height	mm	3,352	3,352	3,352	3,352	3,352
Long Arm	Turning Radius, Outside of Bucket	mm	5,668	5,712	5,716	5,753	5,730
	Operating Weight	kg	13,135	13,214	13,160	13,159	13,284
	Max. Breakout Force	kN	139	139	125	125	112
	Tipping Load - Straight	kg	9,473	9,475	8,985	8,988	9,154
	Tipping Load - Full Turn	kg	8,175	8,177	7,811	7,814	7,879
	Max.Bucket Hinge Pin Height	mm	4,070	4,070	4,070	4,070	4,070
	Dump Clearance	mm	3,216	3,216	3,136	3,136	3,057
	Dump Reach	mm	983	983	1,047	1,047	1,127
	Overall Length	mm	7,284	7,377	7,417	7,509	7,509
	Overall Width	mm	2,470	2,500	2,470	2,500	2,470
Long Arm	Overall Height	mm	3,352	3,352	3,352	3,352	3,352
	Turning Radius, Outside of Bucket	mm	5,707	5,750	5,752	5,782	5,768

ATTACHMENTS

LiuGong attachments with pin-on or quick-coupler ensure high quality as the machine. Integrated design of the whole system makes a perfect match to achieve the superior productivity. For more information on other available attachments, please contact your LiuGong dealer for details.

838T	4-Speed Transmission, L3 Tires		2.7 m³ Bucket (BOCE)	4.0 m³ Bucket (BOCE)	Light Material Bucket
Bucket	Bucket Capacity	m³	2.7	4.0	4.0
	Bucket Type	/	GP	GP	GP
	Bucket Mounting	/	PIN-ON	PIN-ON	PIN-ON
	GET Type	/	BOCE	BOCE	/
	Bucket Weight	kg	1,106	1,524	1,327
Standard Arm	Operating Weight	kg	13,310	13,728	13,531
	Max. Breakout Force	kN	113	81	79
	Tipping Load - Straight	kg	9,444	8,968	10,389
	Tipping Load - Full Turn	kg	8,127	7,660	8,919
	Max.Bucket Hinge Pin Height	mm	3,862	3,862	3,870
	Dump Clearance	mm	2,819	2,556	2,538
	Dump Reach	mm	1,187	1,446	1,503
	Overall Length	mm	7,406	7,778	7,804
	Overall Width	mm	2,700	2,700	2,700
	Overall Height	mm	3,352	3,352	3,352
	Turning Radius, Outside of Bucket	mm	5,852	5,960	5,967
Long Arm	Operating Weight	kg	13,379	13,797	13,600
	Max. Breakout Force	kN	109	78	77
	Tipping Load - Straight	kg	8,950	8,500	9,806
	Tipping Load - Full Turn	kg	7,689	7,244	8,401
	Max.Bucket Hinge Pin Height	mm	4,070	4,070	4,070
	Dump Clearance	mm	3,027	2,764	2,747
	Dump Reach	mm	1,126	1,385	1,442
	Overall Length	mm	7,548	7,920	7,948
	Overall Width	mm	2,700	2,700	2,700
	Overall Height	mm	3,352	3,352	3,352
	Turning Radius, Outside of Bucket	mm	5,889	5,994	5,999

ATTACHMENTS

LiuGong attachments with pin-on or quick-coupler ensure high quality as the machine. Integrated design of the whole system makes a perfect match to achieve the superior productivity. For more information on other available attachments, please contact your LiuGong dealer for details.

838T	4-Speed Transmission, L3 Tires		1.8 m³ Bucket (QC, BOT)	1.9 m³ Bucket (QC, BOCE)	1.9 m³ Bucket (QC, BOT, BOS)	2.1 m³ Bucket (QC, BOCE)	2.1 m³ Bucket (QC, BOT)	4.0 m³ Bucket (QC, BOCE)
Bucket	Bucket Capacity	m³	1.8	1.9	1.9	2.1	2.1	4.0
	Bucket Type	/	GP	GP	GP	GP	GP	GP
	Bucket Mounting	/	QC	QC	QC	QC	QC	QC
	GET Type	/	BOT	BOCE	BOT, BOS	BOCE	BOT	BOCE
	Bucket Weight	kg	804	919	917	976	934	1,711
Standard Arm	Operating Weight	kg	13,343	13,378	13,376	13,435	13,473	14,250
	Max. Breakout Force	kN	121	113	113	113	113	78
	Tipping Load - Straight	kg	8,966	8,732	8,739	8,673	8,819	7,992
	Tipping Load - Full Turn	kg	7,715	7,487	7,493	7,429	7,571	6,744
	Max. Bucket Hinge Pin Height	mm	3,870	3,870	3,870	3,870	3,862	3,870
	Dump Clearance	mm	2,857	2,804	2,804	2,807	2,811	2,502
	Dump Reach	mm	1,142	1,154	1,154	1,155	1,181	1,391
	Overall Length	mm	7,518	7,404	7,495	7,402	7,582	7,846
	Overall Width	mm	2,500	2,470	2,500	2,700	2,740	2,920
	Overall Height	mm	3,352	3,352	3,352	3,352	3,352	3,352
	Turning Radius, Outside of Bucket	mm	5,795	5,772	5,798	5,959	5,922	6,084
Long Arm	Operating Weight	kg	13,412	13,528	13,526	13,585	13,542	14,319
	Max. Breakout Force	kN	117	109	109	109	109	76
	Tipping Load - Straight	kg	8,525	8,192	8,190	8,129	8,384	7,588
	Tipping Load - Full Turn	kg	7,322	7,087	7,081	7,020	7,183	6,383
	Max.Bucket Hinge Pin Height	mm	4,070	4,070	4,070	4,070	4,070	4,070
	Dump Clearance	mm	3,066	3,013	3,017	3,017	3,020	2,711
	Dump Reach	mm	1,081	1,093	1,092	1,094	1,120	1,330
	Overall Length	mm	7,657	7,617	7,625	7,532	7,722	7,983
	Overall Width	mm	2,500	2,470	2,500	2,700	2,740	2,920
	Overall Height	mm	3,352	3,352	3,352	3,352	3,352	3,352
	Turning Radius, Outside of Bucket	mm	5,833	5,810	5,830	5,906	5,959	6,119

STANDARD & OPTIONAL EQUIPMENT

ENGINE	
Cummins B4.5 EU Stage V Engine, output- Max. net power of 106 kW, air-to-air intercooled, 4 cylinders, 4 stroke	☒
High pressure common rail	☒
Exhaust emission control	☒
DC air filter, fuel filter	☒
Hydraulically-driven reversible fan	☒
Grid heater	☒
Programmable auto engine idle stop	☒
EFI (Electric Fuel Injection)	☒
ECM faults inspecting system	☒
Oil bath air filter	☐
Engine block heater	☒
TRANSMISSION	
ZF Ergopower 4BP190 automatic power shift transmission, kick-down function, FNR, F4/R3	☒
CCO (Clutch Cut-Off)	☒
Transmission oil level sight gauge	☒
Secondary oil filter, sight glass	☒
Remote pressure taps for diagnostics	☒
Auto shifting mode by speed	☒
Neutral safety switch	☒
Electronic controlled parking brake	☒
CHASSIS FRAME	
Spacious central articulation arrangement with conic bearing	☒
Articulation locking bar	☒
Tow hitch	☒
Rubber cushion articulation stops	☒
TYRE & RIM	
20.5R25"/L3 radial tire	☒
Full fender	☒
See tires options	☐
Tire protective chain	☐

HYDRAULIC SYSTEM	
Single piston pump with variable displacement. Hydraulic load-sensing according to demand	☒
Electric proportional controller	☒
Third valve and multipurpose lines	☒
4-spool hydraulics for dual auxiliary function	☐
Joystick steering	☐
Easy simultaneous operating of lift & tilt	☒
Boom height kick-out	☒
Bucket positioner	☒
Plug at the port of bucket and boom cylinder for pressure check	☒
Emergency boom lower via pilot accumulator	☒
Load holding valve	☐
Ride control	☒
STEERING SYSTEM	
Load sensing system with flow amplification and steering priority	☒
Emergency steering system	☒
AXLE	
LiuGong wet axle with front-differential lock and rear - conventional	☒
Limited slip differentials	☐
Wet discs service brake system	☒
LINKAGE & ATTACHMENTS	
Z-bar linkage	☒
Bolt-on cutting edge	☒
Bolt-on teeth	☐
Bolt-on teeth & spacer	☐
High lift loader arms	☐
Electric quick coupler	☒
Parallel-lift linkage	☒
Rock bucket	☐
Grapple with aligned or crossed teeth	☐
Pallet forks	☐
Snow blade	☐

STANDARD & OPTIONAL EQUIPMENT

ELECTRIC SYSTEM	
Two front LED headlights with high & low beams and turn signal	☒
Four front, two rear LED headlights on top of cab	☒
Turn signals with flasher	☒
Seat belt indicator	☒
Batteries, free of maintenance	☒
24V power outlet	☒
Electric horn	☒
License-plate bracket and light	☒
Rotating beacon / Multicolor flash light	☒
Reversing warning light, orange/blue	☒
Backup alarm with white noise	☒
Front and rear windshield wiper	☒
Bluetooth radio/player with USB port	☒
Battery reserve capacity	☒
GAUGE GROUP	
Engine coolant temperature	☒
Transmission oil temperature	☒
Fuel level	☒
Hour meter	☒
Voltage	☒
DEF pump working indicator	☒
INDICATOR GROUP	
Air inlet heater	☒
Battery charging	☒
Intake air filter alert	☒
Parking brake applied	☒
Machine emergent stop	☒
Power cut-off	☒
Engine servicing	☒
Turning lights	☒
Engine starter running	☒
Beam of front light	☒

CAB	
FOPS (ISO 3449) and ROPS (ISO 3471) certified cab	☒
Heated and ventilated air suspension seat with 2- inch 3-point seatbelt	☒
Electric heated rear-view mirrors	☒
Dual interior & dual exterior rear-view mirrors, blind spot mirrors	☒
Telescopic & tiltable steering column	☒
Large front glass	☒
Cab with silicone oil damper	☒
Cab fresh air filter	☒
One-touch engine start/stop	☒
Air conditioner	☒
Lunch-box/cooler holder	☒
Cup holder	☒
Cab rear windshield defroster	☒
Front and rear sun visors	☒
Front windshield guarding	☐
All-round lighting	☐
360° panoramic view system	☒
360° surround view with obstacle warning system	☐
Graphic display	☒
Safety hammer	☒
OTHERS	
Automatic central lubrication	☒
Parking wedge	☒
Rear light protective guard	☒
Chassis guard	☒
LiuGong payload system	☒
LiuGong iLink (LiuGong Telematics System)	☒
Fire extinguisher	☒
Remote battery jump posts	☒
Auto loading	☒
Coupler ready	☒
Rear bumper	☐
Hood protective guard	☐
Tire pressure monitoring	☐





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