

 **LIUGONG**

**856HE**



<b>BATTERY TYPE</b>	LFP
<b>RATED STORAGE ENERGY</b>	423 kWh
<b>OPERATING WEIGHT</b>	22,280 kg
<b>STANDARD BUCKET SIZE</b>	3.5 m <sup>3</sup>
<b>STANDARD BREAKOUT FORCE</b>	162 kN
<b>STANDARD DUMP CLEARANCE</b>	2,977 mm



**B A T T E R Y   E L E C T R I C   V E H I C L E**

**TOUGH WORLD. TOUGH EQUIPMENT.**



# CHANGE FOR THE BETTER

## LET'S TALK CHANGE

If you are reading this, then in all probability you are considering making the change to electric machines.

But how do you go about it? Who offers the best machines, support and advice? Who offers the best total cost of ownership? What kind of return on investment can you expect?

As a leader in electric machine and infrastructure technology, we believe we can guide you through every step of your change to electric.

## WHY ELECTRIC?

Fully electric? Hybrid? Alternative fuel transmissions?

Making the change from diesel presents a number of options and LiuGong have fully evaluated all of the above and more before deciding on electric as the best option.

### DECARBONIZATION

Reaching our target with electric technology

# CO<sub>2</sub>

### BETTER EFFICIENCY

Work efficiency increases by

# 20%

compared with the diesel alternative

### BETTER ECONOMY

**1** electric unit can save

**150 L** of fuel per day\*

That equates to over **37,500 L** of fuel per year\*\*, saving up to

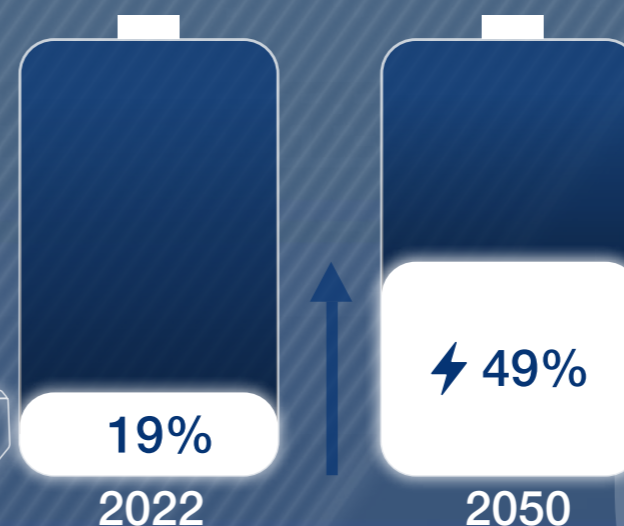
**99.5 t** of carbon emissions.

\*based on 10 hours at 15 L/hour.  
\*\*based on 2,500 hours

## WHY CHANGE NOW?

Our global priorities for energy are changing rapidly, with the adoption of electric power accelerating beyond all other sources. For our customers, changing to electric is a strategic change for the better.

At LiuGong, we can relate to this. We want to be a better global citizen and help make life better for everyone. This thinking has shaped our investment and transformation into a leader in electric capability.



Our energy priorities are changing fast.

Now is the time to change for the better. Together we can help reduce CO<sub>2</sub> emissions by over

# 50 MILLION TON



# A WORLD LEADING BEV RANGE

WITH MORE THAN 90 PRODUCTS ALREADY LAUNCHED,  
WE OFFER **A WORLD LEADING BEV RANGE.**

As a leader in BEVs, we have launched over 90 electric products, offering a solution for nearly every application and segment, including mining machinery, industrial and port equipment, agricultural machinery, and more.

## WE HAVE AN ELECTRIC SOLUTION FOR EVERY APPLICATION

Covering 11 product lines, including loaders, excavators, mining trucks, aerial work platforms, industrial vehicles, and agricultural machinery, our BEVs fully encompass the three major technological routes including pure electric, extended-range, and battery swap.

## THE WORLD TRUSTS OUR GREEN MACHINES

With over 13,000 machines already sold globally in regions such as Asia-Pacific, Europe, North America and Latin America, our BEV machines are building a reputation for simplicity, reliability and performance.



WHEEL LOADERS



EXCAVATORS



MINING TRUCKS



MOTOR GRADERS



ROLLERS



SKID STEER LOADERS



REACH STACKERS



FORKLIFTS



AERIAL WORK PLATFORMS

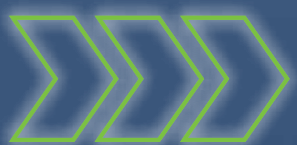


HYBRID TRACTORS



TELESCOPIC HANDLERS

# LET'S MEET THE GREEN 856HE



Please confirm the availability of product lines and models with your local dealer.



# NEW 856HE



## AN INTELLIGENT SOLUTION FOR A TOUGH WORLD

To justify the change to electric, BEVs must outperform conventional machines. Our new 856HE is all the justification you need. It's a machine with proven performance in the areas you really care about.



### POWER & BATTERY PERFORMANCE

Working with world-leading battery manufacturer CATL, the 856HE is powered by a 423 kWh large capacity lithium iron phosphate battery.

- Intelligent battery management system
- 10-hour working time capability (light applications) & 6-hour working time capability (heavy applications)
- 90-min charging time capability (240 kW charging power, SOC12%~95%)



### PLUG & PLAY SIMPLICITY

We help you change to electric by offering a simple a plug & play solution, perfectly matched to deliver the optimum performance, economy and safety.

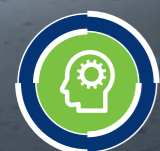
- BEV machine
- Charging infrastructure
- Health and safety training and support



### GUARANTEED RELIABILITY

We already have over 1,000 electric wheel loaders operating in the toughest conditions, so we go further to give you peace of mind.

- 5-year or 10,000-hour warranty (for battery, motor, controller) as standard
- IP67 rated wiring harness
- Waterproof integrated battery package



### INTELLIGENCE & CONTROL

Our intelligent, human centric design creates a superior operator experience.

- Load-sensing hydraulics
- EAT700 transmission with electro-proportional valve for fast and smooth shifting
- Independent control of dual-motor drive for full hydraulic lift



### SAFETY & COMFORT

- Designed around the operator our cab provides the highest levels of safety, visibility and comfort.
- Micro-pressurized cab significantly reduces dust and noise contamination
- ROPS protection



### ENVIRONMENTALLY FRIENDLY

Heavyweight performance with environmental responsibility.

- Zero Fuel
- Zero Emissions
- Lower noise & vibrations

Machine's runtime data is based on a comprehensive evaluation and is provided for reference only. The actual runtime performance may vary depending on specific operating conditions.

# CHANGE FOR INTELLIGENT PERFORMANCE



**WORK SMARTER. NOT HARDER**

The 856HE gives you the option to specify LiuGong's Intelligent Shovelling System. This smart technology automatically carries out repetitive shovelling cycles reducing operator fatigue.



**AUTOMATIC CONTROL**

LiuGong's electric control box linked to an electric proportional transmission with a direct connection to the travel motor delivers the optimum torque with minimum energy. This smart solution improves transmission efficiency by more than 20% compared with conventional machines.



**BETTER BATTERY PERFORMANCE**

The 856HE is powered by a 3-battery pack developed with world-leading manufacturer CATL. But we've used our intelligent design to make the best even better.

Batteries deliver their optimum performance when operating at temperatures of between 20°C and 35°C. Our battery pack uses LiuGong's Intelligent Thermal Management System to keep the working temperature at its optimum. Better design. Better performance. That's intelligence.



**HIGHER LOADING POWER. FOR +10% LESS FUEL**

The 856HE benefits from LiuGong's new, intelligent hydraulics. This smart, fully electric system eliminates bypass throttling and overflow loss, improving hydraulic control and reducing energy consumption by more than 10% compared with conventional technologies.



**MAKING THE MOST OF EVERY CHARGE**

For BEVs, fuel consumption may no longer be an issue, but energy efficiency is still a top priority for LiuGong. Our machines are required to work in the toughest, most remote locations, so it's essential that they use their battery power intelligently. Our smart approach differentiates our BEVs and makes the most of every charge.



**MAXIMUM COOLING. MINIMUM ENERGY**

With intelligent temperature control, the 856HE cools and protects with unrivalled efficiency. Each fan has independent control and can operate automatically in forward and reverse rotation. Cleaner, cooler, more efficient. That's smart.





# CHANGE FOR A SAFER SOLUTION



## SAFETY WITHOUT COMPROMISE

With active and passive safety protection our aim is to create the safest working environment yet. Designed around the operator, our cab provides the highest levels of safety, visibility and comfort. ROPS protection, advanced battery technology and excellent overall construction all combine to create zero tolerance for accidents in or around the machine. No one protects you or the environment more.



## SAFE AND SECURE

Our approach to battery management is simple. We keep our batteries safe, secure and in top condition to give you performance you can rely on.



## SAFETY FIRST

Our charging gun has been designed with simplicity and safety in mind and prevents the operator from potential electrical hazards such as shocks, short circuits and over-charging. It's a simple, safe solution that gets you back on the job, fast.



## IP67 ASSURANCE

Every electrical component on the 856HE meets the IP67 standard for dust-proof and waterproof performance, and has a wading depth of 750 mm.

As you would expect, the 3 battery packs easily meet the IP67 standard and have been designed to withstand the harshest working environments of extreme heat and humidity.





# CHANGE FOR COMFORT



## ENVIRONMENTALLY FRIENDLY

Changing to electric brings you the obvious benefits of zero emissions and zero diesel costs. But our new design for the 856HE goes even further.

'Silent' is a bold claim, but noise performance tests prove that internal and external noise and vibrations are negligible, compared with traditional machines. Zero noise is our aim, and the new 856H comes within a whisper of achieving that.



## NO VIBRATIONS

Shock absorption technology protects the battery system even in the toughest conditions, whilst charging and discharging technology maintains and extends battery life.





# CHANGE FOR 'PLUG & PLAY' SIMPLICITY



## PLUG & PLAY SIMPLICITY

We help you change to electric by offering a simple plug-and-play solution, perfectly matched to deliver the optimum performance, economy and safety.



## POWER & BATTERY PERFORMANCE

We've made the change to electric easy with an 'all-in-one unit' powertrain, designed for optimum simplicity and performance, and an intelligent battery management system for a safe and easy charging solution.



## ALL IN ONE POWERTRAIN

Our All-In-One Powertrain seamlessly integrates controller, travel motor, transmission, drive axle controller, and hydraulic motor and pump into a single system. That means maximum power with minimum efficiency.



## SUPERIOR BATTERY PERFORMANCE

Working with world-leading battery manufacturer CATL, the 856HE is powered by a 423 kWh large capacity lithium iron phosphate battery. Delivering:

- 10-hour working time capability (light applications) 6-hour working time capability (heavy applications)
- 90-min charging time capability (240 kW charging pile, SOC12% ~ 95%)



up to  
**10 HOURS**  
working time in  
light applications



up to  
**6 HOURS**  
working time in  
heavy applications



**1.5 HOURS**  
240 kW  
charging power



Machine's runtime data is based on a comprehensive evaluation and is provided for reference only. The actual runtime performance may vary depending on specific operating conditions.



# CHANGE WITH CONFIDENCE



## GUARANTEED RELIABILITY

As you would expect, the 856HE has reliability built in. The machine has been proven to be reliable in harsh working conditions such as 5000m above sea level, sub-sea tunnels, ports, and sand and coal fields, meeting the needs of various working conditions. In addition, the IP67-rated wiring harness adds extra protection to the battery, motor and electronic control system and a waterproof integrated battery package keeps the battery safe in wet conditions or during jet wash cleaning.

But we go further to guarantee your peace of mind. Our new 856HE comes with a 5-year or 10,000-hour (for battery, motor, controller) warranty as standard.

This is not a sales gimmick. This guarantee underlines the confidence we have in our electric machines, born out of real-life controller) perience in tough, commercial job sites.

**5 YEARS**  
**10,000 HOURS WARRANTY**



TUNNELS



INDUSTRY



COAL



CEMENT PLANTS



QUARRY



AGRICULTURE



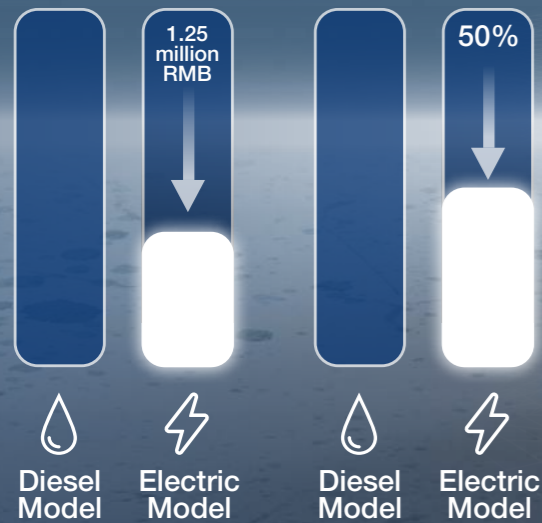
# CHANGE FOR BETTER RETURN ON INVESTMENT

## DIESEL VS ELECTRIC?

This is the big question. In a straight cost-per-ton comparison, changing to electric makes sense on the job site and on the balance sheet. Diesel wheel loaders use 1 litre of oil, while electric wheel loaders use only 3 kWh of electricity.

## LOW TOTAL COST OF OWNERSHIP

- Permanent magnet synchronous motor
- Maintenance-free battery



## SLASHES OPERATIONAL & MAINTENANCE COSTS

Not guesswork – but cold, hard fact, gleaned from over 200 customer job sites. Our detailed analysis proves that our electric machines reduce 5-year operational costs by up to 70% and maintenance costs by up to 50%.

Add to the five-year or 10,000-hour warranty of Liugong (for battery, motor, controller) and the New 856HE promises exceptional return on investment.



## RECHARGES WHILE YOU WORK

It would be impossible for a conventional machine to create its own diesel, but Liugong's intelligent energy recovery system actually charges the battery as you work. This smart technology saves up to 20% of energy and keeps you working longer between charges.



# NEW 856HE



**AN INTELLIGENT SOLUTION  
FOR A TOUGH WORLD**



# 856HE

## SPECIFICATIONS >>>

<b>Operating weight</b>	<b>22,280 kg</b>
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Operating weight includes the machine weight with standard work device, no additional equipment or accessories, full fuel tank, all fluids at required level and an operator 75 kg.

<b>Bucket capacity range</b>	<b>2.7-6.1 m<sup>3</sup></b>
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### POWER BATTERY

#### Description

Battery Type: lithium iron phosphate batteries  
 Drive motors & hydraulic motors: Made by INOVANCE  
 Ambient Temperature: -40~85°C .

Manufacturer	CATL
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Model	LFP
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Rated Storage Energy	423 kWh
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Nominal Voltage	618 V
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Protection class of battery system	IP68
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Cooling method	Intelligent temperature control, liquid cooling
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DC Charging	CCS2, 300 kW
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Charging time (160 kW charging pile)	≤ 130 min (SOC12% ~ 95%)
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Charging time (240 kW charging pile)	≤ 90 min (SOC12% ~ 95%)
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### TRANSMISSION

#### Description

Transmission: LiuGong EAT700 planetary, power shift transmission, with an integrated pilot single joystick and FNR. The electric proportional valve provides a smooth and continuous variation in flow ensuring fast response when shifting. Number of Speeds: Forward 2, reverse 1

Transmission type	Planetary electronically controlled shift
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Maximum travel speed, fwd	40 km/h
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Maximum travel speed, rev	13 km/h
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Number of speed, fwd	2
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Number of speed, rev	1
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### HYDRAULIC SYSTEM

#### Description

System supply: Two load-sensing axial piston pumps with variable displacement. The steering function always has priority.

Valves: Double-acting 3-spool valve. The main valve is controlled by a 3-spool pilot valve.

Lift function: The valve has four positions: lift, hold, lower, and float. Inductive/magnetic automatic boom kick-out can be switched on and off and is adjustable to two positions: bucket at ground Level andimum reach full lifting height.

Tilt function: The valve has three functions: rollback, hold and dump.

Cylinders: Double-acting cylinders for all functions.

Filter: Full-flow filtration through 12 micron (absolute) filter cartridge.

Brake: Dual-circuit full hydraulic brake system.

Main pump type	Variable displacement pump
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Controls	Electric praportional joystick control
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Main relief pressure	26 MPa
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Raise	5.2 s
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Dump time	1.5 s
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Float down time	2.3 s
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Fastest total cycle time	9.0 s
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3rd function valve maximum flow	380 L/min
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4th function valve maximum flow	380 L/min
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### STEERING

Steering configuration	Articulated
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Steering relief pressure	21 MPa
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Maximum flow	100 L/min
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Steering cylinders	2
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Cylinder bore	90 mm
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Rod diameter	50 mm
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Stroke	395 mm
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### DRIVE MOTOR

Power	160 kW
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Ambient temperature	-40~85°C
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Adaptive altitude	≤5,000 m
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### AXLES

Front and rear axle reduction ratio	23.3
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Axle oscillation	±9.5°
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### ELECTRICAL SYSTEM

#### Description

The central warning system includes central warning light and buzzer for the following functions: power battery fault alarm, motor fault alarm, insulation fault alarm, charger connection alarm, shutdown alarm, etc.

When working, the central warning light and buzzer are used for the following functions: power battery & travel motor & hydraulic motor temperature display, battery power display, brake low pressure alarm, parking brake indicator, transmission oil pressure alarm, etc.

Voltage	DC 24 V
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Batteries	2×12 V
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Battery capacity at 20h rate	120 Ah
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Cold cranking capacity at -18°C	850 A
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Reserve capacity	224 min
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### SOUND & ENVIRONMENT

The emission sound pressure level at the operator's station	68 dB(A)
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Guaranteed sound power level	104 dB(A)
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Ventilation	600 m <sup>3</sup> /h
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Heating capacity	7 kW
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Refrigerating capacity	5.5 kW
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### BRAKES

#### Description

New electro-hydraulic proportional braking system

Service brake type	Full hydraulic
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Parking brake type	Drum
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Parking brake actuation	Hydraulic cylinder brake
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### CAB

#### Description

Instrumentation: All important information is centrally located in the central instrument panel and operator's field of vision. Large curved front window glass and rear mirrors ensure great visibility.

Adjustable steering column, high back seat, armrest box and A/C with all-around air outlets are provided as standard.

Pressurized cab with lower interior noise. The cab is tested and approved according to ROPS (ISO 3471), FOPS (ISO 3449).

### DIMENSIONS

E Ground clearance	431 mm
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G Wheelbase	3,525 mm
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H Cab height	3,500 mm
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J Wheel tread	2,280 mm
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K Width over tires	2,880 mm
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L Length with bucket down	8,665 mm
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M Turn angle, either side	38°
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P Rear angle of departure	28°
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R1 Turning radius, bucket carry	7,214 mm
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R2 Turning radius, outside of tire	6,625 mm
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W Width over bucket	2,970 mm
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### SERVICE CAPACITY

Cooling system	45 L
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Hydraulic system	230 L
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Transmission and torque converter	23 L
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Axles, front/rear	50 / 48 L
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### STANDARD LIFT LOADER ARM PERFORMANCE WITH STANDARD BUCKET AT 3.5 m<sup>3</sup> WITH BOLT-ON TEETH AND OPERATING WEIGHT AT 22,280 kg.

Tipping load - straight (ISO 14397-1:2007)	17,800 kg
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Tipping load - full turn (ISO 14397-1:2007)	15,600 kg
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Bucket breakout force	162 kN
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Aimum hinge pin height	4,156 mm
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B Dump clearance at full height discharge	2,977 mm
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C Dump reach at full height discharge	1,230 mm
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D Maximum digging depth, bucket level	50 mm
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S1 Bucket rollback at ground level	45°
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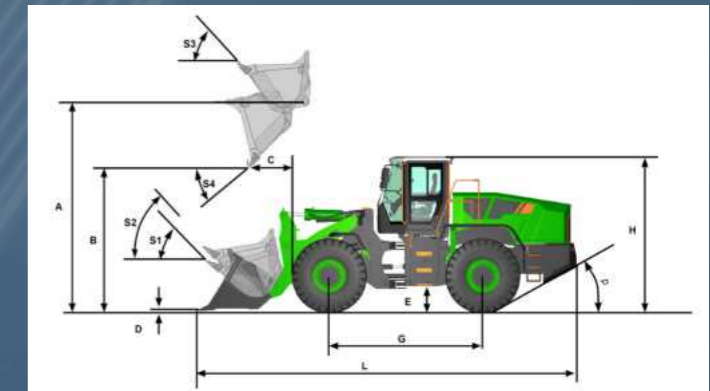
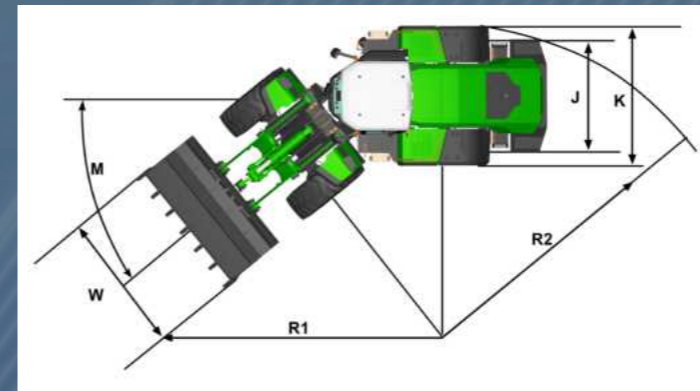
S2 Bucket rollback at carry height	49°
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S3 Bucket rollback atimum height	56°
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S4imum dump angle at full height	45°
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### TIRES

Tire size	23.5R25 ★ L-3
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**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	<ul style="list-style-type: none"> <li>In sand operation</li> <li>In all kind of load/carry operation</li> <li>The L3-tread is not as open as L2 and has consequently less self-cleansing compared with an L2 tyre</li> </ul>		23.5R25	*	TL	595 mm	1,615 mm	31.5 mm	7,100 kg / 12,150 kg (50 km/h / 10 km/h)
L4	<ul style="list-style-type: none"> <li>In very aggressive material where good protection against cut damages is demanded, e.g. in quarries or mines</li> </ul>		23.5R25	**	TL	595 mm	1,622 mm	50 mm	9,250 kg / 14,500 kg (50 km/h / 10 km/h)
L5	<ul style="list-style-type: none"> <li>In very aggressive material where good protection against cut damages is demanded, e.g. in quarries or mines</li> </ul>		23.5R25	**	TL	595 mm	1,662 mm	78.5 mm	9,250 kg / 14,500 kg (50 km/h / 10 km/h)
Snow tire	<ul style="list-style-type: none"> <li>Snow pattern with good traction and wear-resistance</li> </ul>		23.5R25	**	TL	595 mm	1,615 mm	35 mm	9,250 kg / 14,500 kg (50 km/h / 10 km/h)
Solid Tire	<ul style="list-style-type: none"> <li>Safe, durable, puncture-resistant, economical, maintenance-free, easy to operate</li> <li>In generally smooth roads, short distance operation</li> </ul>		23.5-25	/	Solid Tire	600 mm	1,590 mm	/	11,000 kg (10 km/h)

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.

Tires	Operating Weight, kg	Tipping Load- Full Turn, kg		
		Standard Arm	Long Arm	Extra Long Arm
L3	-	-	-	-
L4	+108	+70	+60	+54
L5	+628	+413	+355	+319
Snow Tire	-20	-10	-8	-7
Solid Tire	+3,452	+2,272	+1,951	+1,504

Counterweight	Operating Weight, kg	Tipping Load- Full Turn, kg		
		Standard Arm	Long Arm	Extra Long Arm
Standard	-	-	-	-
Additional	+280	+539	+463	+416

**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.

856HE	Type		3.5 m³ bucket (BOT)	3.5 m³ bucket (BOCE)	3.5 m³ bucket (BOT, BOS)	3.7 m³ bucket (BOCE)
Bucket	Bucket Capacity	m³	3.5	3.5	3.5	3.7
	Bucket Type	/	GP	GP	GP	GP
	Bucket Mounting	/	PIN-ON	PIN-ON	PIN-ON	PIN-ON
	GET Type	/	BOT	BOCE	BOT, BOS	BOCE
	Bucket Weight	kg	1,528	1,658	1,674	1,676
Standard Arm	Operating Weight	kg	20,041	20,171	20,187	20,189
	Breakout Force	kN	187	178	178	178
	Tipping Load - Straight	kg	17,823	17,721	17,696	17,660
	Tipping Load - Full Turn	kg	15,577	15,466	15,443	15,411
	Max.Bucket Hinge Pin Height	mm	4,156	4,156	4,156	4,156
	Dump Clearance	mm	2,977	2,919	2,919	2,919
	Dump Reach	mm	1,230	1,243	1,243	1,243
	Overall Length	mm	8,665	8,505	8,665	8,505
	Overall Width	mm	2,970	2,920	2,970	2,920
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,214	7,149	7,214	7,149	
Long Arm	Operating Weight	kg	20,151	20,281	20,297	20,299
	Breakout Force	kN	185	177	177	177
	Tipping Load - Straight	kg	15,370	15,255	15,237	15,201
	Tipping Load - Full Turn	kg	13,400	13,278	13,261	13,230
	Max.Bucket Hinge Pin Height	mm	4,557	4,557	4,557	4,557
	Dump Clearance	mm	3,380	3,320	3,320	3,320
	Dump Reach	mm	1,175	1,187	1,187	1,187
	Overall Length	mm	8,983	8,824	8,983	8,824
	Overall Width	mm	2,970	2,920	2,970	2,920
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,338	7,270	7,338	7,270	
Extra Long Arm	Operating Weight	kg	20,317	20,447	20,463	20,465
	Breakout Force	kN	179	171	171	171
	Tipping Load - Straight	kg	13,851	13,731	13,718	13,682
	Tipping Load - Full Turn	kg	12,044	11,917	11,905	11,873
	Max.Bucket Hinge Pin Height	mm	4,799	4,799	4,799	4,799
	Dump Clearance	mm	3,621	3,563	3,563	3,563
	Dump Reach	mm	1,188	1,201	1,201	1,201
	Overall Length	mm	9,221	9,064	9,221	9,064
	Overall Width	mm	2,970	2,920	2,970	2,920
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,430	7,361	7,430	7,361	



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.						
856HE	Type		3.0 m³ bucket (QC, BOT)	3.2m³ bucket (QC, BOCE)	3.5 m³ bucket (QC, BOT)	3.5m³ bucket (QC, BOCE)
Bucket	Bucket Capacity	m³	3	3.2	3.5	3.5
	Bucket Type	/	GP	GP	GP	GP
	Bucket Mounting	/	QC	QC	QC	QC
	GET Type	/	BOT	BOCE	BOT	BOCE
	Bucket Weight	kg	1,350	1,465	1,437	1,536
Standard Arm	Operating Weight	kg	20,298	20,413	20,352	20,484
	Breakout Force	kN	181	175	162	155
	Tipping Load - Straight	kg	16,385	16,306	16,318	16,073
	Tipping Load - Full Turn	kg	14,284	14,197	14,219	13,983
	Max.Bucket Hinge Pin Height	mm	4,156	4,156	4,156	4,156
	Dump Clearance	mm	2,919	2,909	2,818	2,800
	Dump Reach	mm	1,193	1,253	1,294	1,363
	Overall Length	mm	8,732	8,519	8,877	8,674
	Overall Width	mm	2,970	2,920	2,970	2,920
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,238	7,153	7,276	7,192	
Long Arm	Operating Weight	kg	20,408	20,523	20,462	20,594
	Breakout Force	kN	181	174	162	155
	Tipping Load - Straight	kg	14,223	14,101	14,133	13,879
	Tipping Load - Full Turn	kg	12,363	12,240	12,279	12,036
	Max.Bucket Hinge Pin Height	mm	4,557	4,557	4,557	4,557
	Dump Clearance	mm	3,321	3,310	3,220	3,201
	Dump Reach	mm	1,136	1,196	1,237	1,306
	Overall Length	mm	9,044	8,838	9,188	8,993
	Overall Width	mm	2,970	2,920	2,970	2,920
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,363	7,274	7,405	7,316	
Extra Long Arm	Operating Weight	kg	20,574	20,689	20,628	20,760
	Breakout Force	kN	175	168	157	150
	Tipping Load - Straight	kg	12,862	12,727	12,763	12,511
	Tipping Load - Full Turn	kg	11,147	11,012	11,054	10,814
	Max.Bucket Hinge Pin Height	mm	4,799	4,799	4,799	4,799
	Dump Clearance	mm	3,563	3,553	3,462	3,443
	Dump Reach	mm	1,150	1,211	1,251	1,320
	Overall Length	mm	9,278	9,078	9,423	9,233
	Overall Width	mm	2,970	2,920	2,970	2,920
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,458	7,365	7,501	7,409	

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.						
856HE	Type		3.7 m³ bucket (QC, BOCE) (Refuse)	3.7 m³ bucket (QC, BOCE)	4.2 m³ bucket (QC, BOT, BOS)	6.1m3 High Dump (QC)
Bucket	Bucket Capacity	m³	3.7	3.7	4.2	6.1
	Bucket Type	/	GP	GP	GP	GP
	Bucket Mounting	/	QC	QC	QC	QC
	GET Type	/	BOCE	BOCE	BOT, BOS	\
	Bucket Weight	kg	1,576	1,598	1,728	3,283
Standard Arm	Operating Weight	kg	20,524	20,688	20,964	22,113
	Breakout Force	kN	155	148	141	118
	Tipping Load - Straight	kg	16,271	13,706	15,378	14,434
	Tipping Load - Full Turn	kg	14,153	11,875	15,378	12,356
	Max.Bucket Hinge Pin Height	mm	4,156	4,558	4,156	4,156
	Dump Clearance	mm	2,800	3,113	2,647	2,380
	Dump Reach	mm	1,363	1,293	1,368	1,684
	Overall Length	mm	8,674	8,760	8,967	9,228
	Overall Width	mm	2,920	2,920	3,210	3,360
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,192	7,218	7,406	7,545	
Long Arm	Operating Weight	kg	20,634	20,688	21,074	22,223
	Breakout Force	kN	154	148	140	112
	Tipping Load - Straight	kg	14,009	13,706	13,222	12,150
	Tipping Load - Full Turn	kg	12,146	11,875	11,398	10,327
	Max.Bucket Hinge Pin Height	mm	4,557	4,557	4,557	4,557
	Dump Clearance	mm	3,201	3,112	3,048	2,782
	Dump Reach	mm	1,306	1,293	1,312	1,628
	Overall Length	mm	8,993	9,075	9,283	9,544
	Overall Width	mm	2,920	2,920	3,210	3,360
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,316	7,344	7,535	7,678	
Extra Long Arm	Operating Weight	kg	20,800	20,854	21,240	22,389
	Breakout Force	kN	149	143	134	107
	Tipping Load - Straight	kg	12,606	12,350	11,875	10,740
	Tipping Load - Full Turn	kg	10,892	10,663	10,712	9,068
	Max.Bucket Hinge Pin Height	mm	4,799	4,799	4,799	4,799
	Dump Clearance	mm	3,443	3,355	3,290	3,024
	Dump Reach	mm	1,320	1,307	1,326	1,642
	Overall Length	mm	9,233	9,312	9,520	9,781
	Overall Width	mm	2,920	2,920	3,210	3,360
	Overall Height	mm	3,500	3,500	3,500	3,500
Turning Radius, Outside of Bucket	mm	7,409	7,439	7,629	7,774	

# STANDARD EQUIPMENT

## POWER SYSTEM

- CATL battery, INOVANCE drive motor and pump motor
- Intelligent temperature-controlled liquid cooling
- Electronic controlled fan with automatically speed adjustment, and auto reversing functions

## TRANSMISSION

- LiuGong EAT700 automatic planetary electric control transmission

## AXLE

- LiuGong wet axles
- Front & rear limited slip differentials
- Parking brake service as secondary

## HYDRAULIC SYSTEM

- Closed-center variable displacement load sensing system
- 3-spool main valve
- Integrated pilot single joystick with FNR
- Ride control
- Load holding valve

## STEERING SYSTEM

- Load sensing system with flow amplification and steering priority
- Secondary steering system

## TIRE & RIM

- Radial tire, 23.5R25 ★ L-3

- Tire nozzle protection

## CHASSIS FRAME

- Spacious central articulation arrangement with bevel bearing
- Articulation locking bar
- Tow hitch

## OPERATOR STATION

- Pressurized cab, with FOPS&ROPS
- Steering column, up & down, front & rear multiple direction adjustable
- Air-suspension seat, electrically heated, high back, armrest, headrest, multi-direction adjustable
- Full LCD front instrument panel
- Indicators: high & low beams, locking status, parking brake, direction, lubrication system, battery charging, operation ready, etc.
- AC system
- Instrument: voltage, motor speed, fault code, SOH/SOC, battery temperature, hour meter, etc.
- Fresh air circulation system
- Electrically heated rearview mirrors
- Front and rear sun visors
- Back-up alarm
- Rear view camera
- Electric horn
- Fire extinguisher
- Cab rear windshield defroster
- Rotating beacon

## OTHERS

- Automatic centralized lubrication
- Fenders
- Liugong telematics
- Light protective guard
- Boom supporting brackets

# OPTIONAL EQUIPMENT

## HYDRAULIC SYSTEM

- 4 SPL valve
- 3 SPL valve

## TYRE & RIM

- Bias, tube tire
- Wide base tire

## OPERATOR STATION

- Cab dust removal device
- One button start
- 360 panoramic view camera
- Backup radar
- Steering joystick
- Payload

## LINKAGE & ATTACHMENTS

- Quick coupler
- High/extra-high linkage
- Snow pushing device
- Rock bucket
- Side dump bucket
- High dump bucket
- Grapple

## PROTECTIVE DEVICE

- Chassis guard
- Protection guard of cab
- Tire chain

## OTHERS

- Low temperature package
- Landfill package
- HID lamp (Top of cab)



LiuGong standard and optional equipment may vary from region to region. Please consult your LiuGong dealer for information specific to your area.



# A TEAM YOU CAN TRUST



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