

# ZOOMLION TECHNOLOGY WITH INGENUITY AND CARE



## The world's leading full-process smart mining machinery manufacturing factory

Zoomlion Mining Machinery Company possesses globally leading intelligent production lines featuring smart, environment-friendly and internationalized technologies, covering high-end machinery for the full process of open-pit mining, including "drilling, digging, loading, hauling and crushing". Built with advanced processing and assembly techniques and rigorous quality control, each machine delivered embodies the highest level of quality.



**ZOOMLION**

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# ZOOMLION ELECTRIC WIDE- BODY DUMP TRUCK ZT118EV



**ZOOMLION**

Zoomlion ZT118EV series pure electric off-road mining dump truck is equipped with CATL 801kWh battery and CED21000H powertrain. It features a gross axle load of 125t, curb weight of 45t, and rated load capacity of 80t. Standard configurations include eddy current + emergency steering, welded box-type frame, full hydraulic steering, full air-oil suspension, and mining U-shaped cargo box, adopting 6×4 drive form.



*Rated Power/Peak Power:*  
**540 KW/800 KW**

*Battery capacity:*  
**801kW-h**

*Curb Weight:*  
**45000 kg**

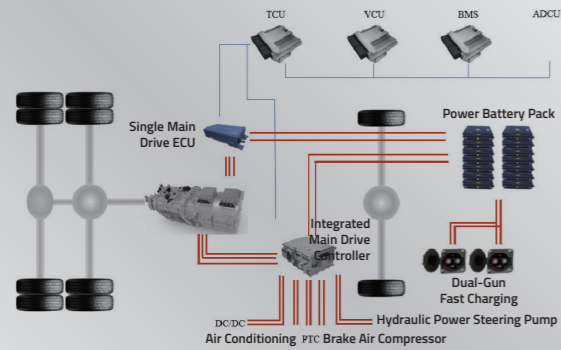
*Body Capacity:*  
**Struck 41 m<sup>3</sup> / Heaped 50 m<sup>3</sup>**

*Rated Payload:*  
**80000 kg**

\*The figure shows the previous generation model.

# CONFIGURATION & EFFICIENCY

## Dual-motor coupled drive mode

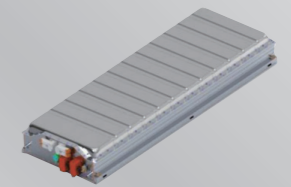
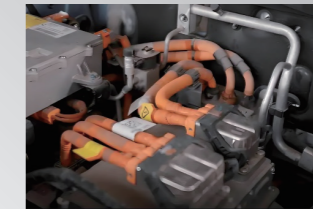


The ZT118EV is equipped with a permanent magnet synchronous dual-winding motor, featuring high power density and stronger power performance. It adopts an integrated electric drive system that integrates the drive motor, shifting

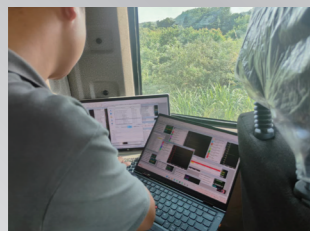
TCU controller and gearbox into one unit with a compact structure, specially designed for pure electric mining trucks. The continuous/peak total drive power of the ZT118EV can reach 540/800 kW.

## Mining-Specialized Power Battery

Mine-specific high-density LiFePO4 T-series battery, ultra-high-strength casing (300,000km reliability), moisture/explosion-proof + moisture control sheets (anti-condensation), IP68 dustproof, 4500+charge-discharge cycles, hundreds of tests certified, shock-resistant and safe.



## Zoomlion independently developed Intelligent-Control

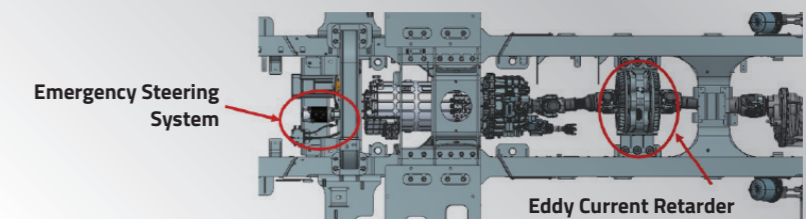


Zoomlion's fully independent VCU, with over 80 safety function tests, more than 2,000 mining condition data collection and calibration, and over 60 vehicle performance tests (including braking, steering, stability, visibility, vibration detection, current detection, thermal balance, etc.). When power is lost, the VCU automatically activates emergency steering for enhanced safety.

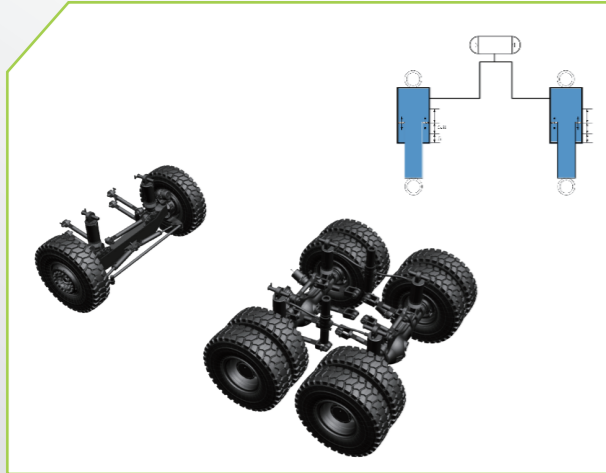


## Mining specialized multiple-braking system

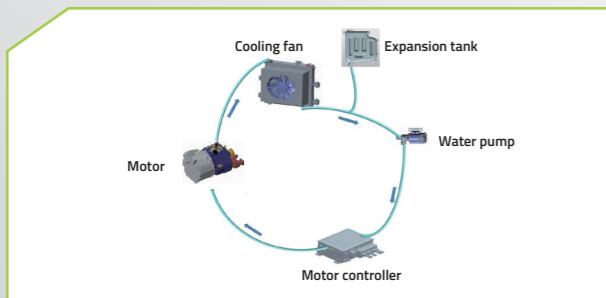
Multiple braking systems (dual-circuit drum + electric braking + eddy current + emergency braking) ensure driving safety. Electric braking recovers kinetic energy, reduces wear and extends service life. Equipped with EBS, it features ABS, ASR and HSA functions for high braking reliability. Eddy current braking: consumes potential energy when fully charged to achieve electrical balance, preventing electric brake failure due to full charge, with fast engagement, shorter braking distance and enhanced safety.



# SAFE AND RELIABLE



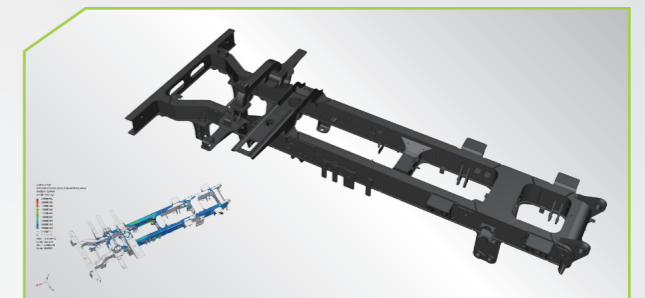
Axles are made of high-quality cast steel, featuring strong load-bearing capacity, long fatigue life and durability. The front axle is integral; key welds of middle and rear axle housings undergo 100% ultrasonic inspection. Bearings for major parts are from well-known domestic brands. Equipped with full hydro-pneumatic suspension with variable spring stiffness, it resists impact during loading, has fewer faults, enhances driving comfort and reliability, and offers better reliability and durability than leaf spring suspensions of the same class.



The power battery is matched with a 20kW thermal management unit that adjusts the battery temperature in real time, ensuring reliable output within the optimal temperature range (25°C-40°C). The motor and electronic control system adopt a dual high-flow water pump design, paired with a high-power radiator with four fans, enabling normal operation in high-temperature environments, guaranteeing driving safety, and meeting the operating temperature range of -30°C to 45°C.



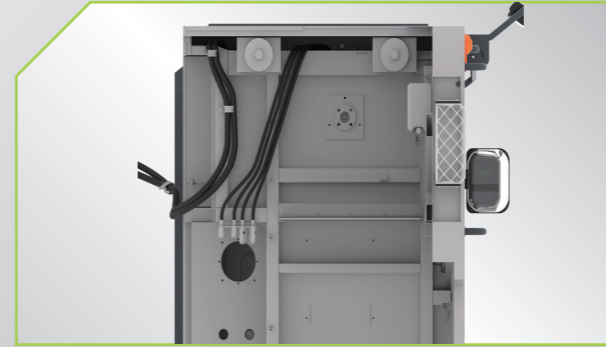
Full hydraulic power steering, with double acting steering cylinder, make steering more flexible, greatly reduce the driver's handling intensity, bring better driving experience, Equipped with emergency steering to ensure emergency steering function and timely escape in case of power loss.



Adopting a "fully enclosed integrated large cross-section" high-strength welded frame made entirely of high-strength steel, combined with full-condition simulation and analysis, while also conducting a comprehensive analysis of the weak points of competitor models

Torque resistance ↑ 20%  
 Safety factor > 3.5  
 Service life > 6 years

# COMFORTABLE CONTROL



## Cab understructure reinforcement

Reduction of resonance noise



## Soundproof glass

All-round noise isolation, Measure according to GB/T 25615-2010 fixed position working condition, the noise at the empty driver's position shall be less than 79dB.

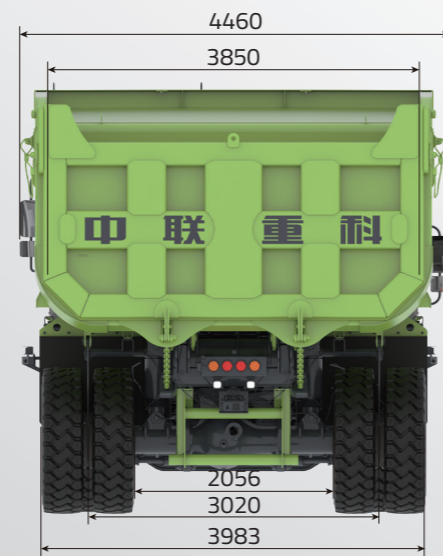
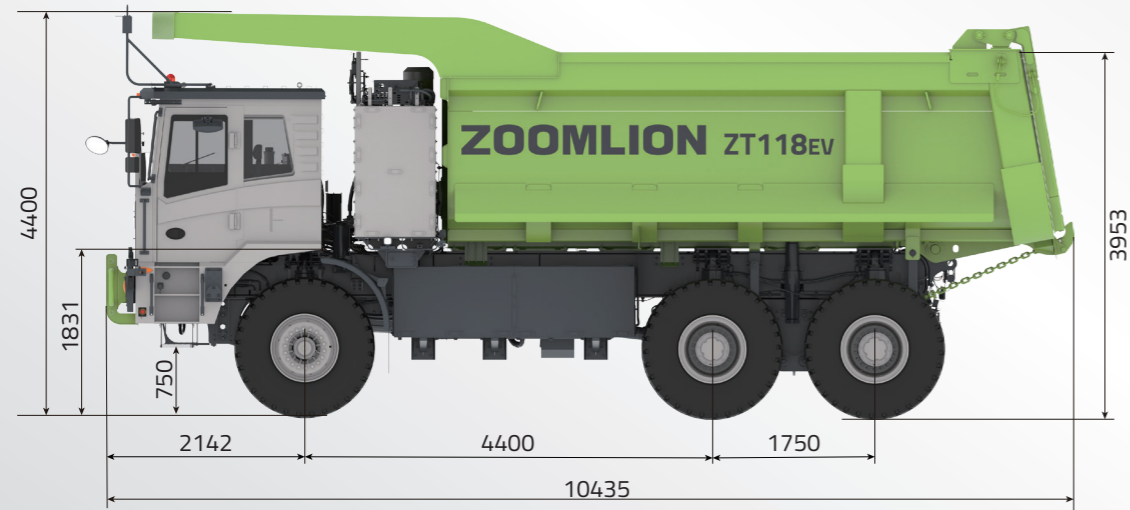


## Optional driver fatigue monitoring system



## Optional automatic fire extinguishing system

# TECHNIC PARAMETERS



Items	Unit	ZT118EV	
Drive form	/	6×4	
Curb Weight	kg	45000	
Rated Payload	kg	80000	
Total Axle Load	t	125	
Overall dimension	mm	10435×4460×4400	
Wheelbase	mm	4400+1750	
Min Turning Radius	m	12	
Max.Gradeability	%	35	
Min Ground Clearance	mm	415	
Max Speed	km /h	43	
Axle Load	t	35+45+43	
Tires	/	16.00R25	
Current vortex	/	standard	
Emergency steering	/	standard	
internal body dimensin	mm	6520×3850×1887	
Capacity	Flat Load	m <sup>3</sup>	41
	SAE 2:1	m <sup>3</sup>	50

System	Features	ZT118EV	
Power system	Power train	LvkonCED21000H	
	Rated/Peak Power(KW)	540/800	
	Battery capacity (kW.h)	●801	
Electrical system	Backup alarm	●	
	Emergency stop button	●	
	24V Power port	●	
	Monitoring+entertainment (Select one)	Rearview camera	●Reversing video camera +multimedia screen
		Cameras (Front, rear, left and right)	○Four channel monitoring +multimedia screen
	Roading lighting	●	
	Rotating beacon on the cab top	●	
	Backup lighting (Left, right and rear)	●	
	Fog lights (Front and rear)	●	
	GPS	●	
Battery	180Ah*2		
Hydraulics	Lift cylinder (single cylinder front lift)	●	
	Full hydraulic steering	●	
	Emergency steering system	●	

● Standard  
○ Optional

Category	Features	ZT118EV
Drive train	Axle	ZOOMLION 35t+45t+45t
	Tire (Select one)	●16.00R25-302MAX
		○16.00R25-Heat-resistant
		○16.00R25-Hard rock
Lubrication-free drive shaft	●	
Braking system	Service brake	●Front and rear independent dual-circuit air control
	Parking brake	●Drum brake
	Electric retarder	●
	Eddy current	●
Body assembly	Body (select one)	●Struck 41m <sup>3</sup> ,Heaped 50m <sup>3</sup>
		○Struck 41m <sup>3</sup> ,Heaped 50m <sup>3</sup>
		○Struck 38m <sup>3</sup> ,Heaped 47m <sup>3</sup>
		○Struck 38m <sup>3</sup> ,Heaped 47m <sup>3</sup>
	Tire guard	●

● 标配 Standard  
○ 选配 Optional

Category	Features	ZT118EV	
Cab	Narrow body left-hand drive cab	●	
	FOPS	●	
	0.5kg fire extinguisher	●	
	Seat (select one)	Mechanic suspension seat	●
		Air suspension seat	○
	Air conditioner (cool & warm)	●	
	Emergency hammer	●	
	7-inch LCD instrument	●	
	Glass defrosting	●	
	Three-point seat belt	●	
	Rear seat	●	
Covering parts	Rock ejector	●	
	2*5 kg fire extinguisher	●	
Suspension system	Front suspension	●Hydro-pneumatic suspension	
	Rear suspension	●Hydro-pneumatic suspension	
Others	Attached tools (one set for five vehicles)	●	
	Specialized tools (one set dor ten vehicles)	●	
General Optional Configuration	Driver fatigue detection system	○	
	Customized painting	○	
	High voltage proximity alarm	○	

● Standard  
○ Optional

Category	Features	ZT118EV
General Optional Configuration	Guardrails	○
	Front bumper beam assembly	○
	Cab oxygen generator	○
	Centralized lubrication system	●
	Intelligent weighing system	●
	One spare tire (including rim)	●
	Radio station	○
	First-aid kit	○
Cold areas optional package(Ambient temperature $\geq -20^{\circ}\text{C}$ )	Cold -temperature hydraulic oil	○
	Cold -temperature gear oil	○
Extreme cold areas optional package (Ambient temperature $\geq -40^{\circ}\text{C}$ )	Low-temperature battery	○
	Ultra-low temperature hydraulic oil	○
	Ultra-low temperature gear oil	○
	Low-temperature hydraulic rubber hose	○
High-temperature areas optional package (Ambient temperature $\geq 40^{\circ}\text{C}$ )	Heat-resistant tire	○
	68 Hydraulic oil	○
	85w-140 Gear oil	○
Highland package	Expansion tank pressure cap	○

● Standard  
○ Optional