

LT90SHEV | SOLID AND RELIABLE FLEXIBLE UNIVERSITIES

Gross vehicle weight (kg):90000

Overall dimensions (L×W×H) (mm):9900×3650×4190

Curb weight (kg): 37200

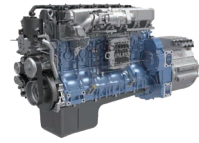
LT90SHEV

DUMP MINING
TRUCK

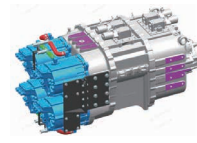
SPECIFICATIONS

VEHICLE PARAMETER	
Gross vehicle weight (kg)	90000
Curb weight (kg)	37200
Payload mass (kg)	60000
Overall dimensions (L×W×H) (mm)	9900×3650×4190
Wheelbase (mm)	4300+1780
Tread (mm)	2734 (Front2610)
Max. gradeability (%)	30
Min. turning diameter (m)	26
Min. ground clearance (mm)	390
Max. vehicle speed (km/h)	45
AXLE LOAD	
Laden (t)	20/35/35
ENGINE	
Model	WP12G460E310
Power (kW)	338
Speed (r/min)	2100
Torque (N*m)	2000/ (1200-1600)
CLUTCH	
Model	/
TRANSMISSION	
Model	4TR180
Gear position	15.491 、 10.812 、 7.594 、 4.073
Max. input torque (N.m)	1840
Comprehensive speed ratio	/
DRIVE AXLE	
Type	Central, hub planetary two-stage reduction with inter-axle differential lock
Overall gear ratio	18.385
Rated axle load (kg)	35000
Brake type	Cam drum brake
FRONT AXLE	
Rated axle load (kg)	20000
Brake type	Cam Drum Brake
AIR FILTER ASSEMBLY	
Model	Multi-stage dust air filter
WHEEL	
Tyre Size	16.00R25 ★★ ★
Rim Size	11.25-25-12
RANGE EXTENDER GENERATOR	
Rated Power (kW)	300
DRIVER MODULE	
Total rated power of motor (kW)	130×4
Motor controller model	WMC21×2

RADIATOR	
Structure	Plate-fin Radiator
FUEL SYSTEM	
Volume (L)	420L
STEERING SYSTEM	
Booster type	Full Hydraulic Steering
System pressure(Mpa)	17
Flow(L/min)	40
BRAKING SYSTEM	
Service brake	Double Circuit Drum Air Brake
Parking brake	Spring energy-storage air-break braking with emergency braking
Auxiliary brake	Engine exhaust braking+WEVB
System pressure (bar)	10
Parking slope (%)	30 (uphill)/20 (downhill)
SUSPENSION	
Front suspension	Longitudinal leaf spring
Thickness / width / number of leaf springs	20/100/13
Rear suspension	Leaf spring balance suspension
Thickness / width / number of leaf springs	32/100/13
DUMPING LIFT MECHANISM	
Type	Front lift-196
Rated pressure (MPa)	20
Max. dumping angle (°)	46
DRIVER'S CABIN	
Type	Right hand drive, semi-floating , forward 46°
Shock-absorbing seat	Upward/downward, forward/rearward adjustable, backrest angle adjustable
FRAME	
Type	High-strength steel flexible frame (1200×450×130(12+1 2+8))
CARGO COMPARTMENT	
L×W×H(mm)	6600×3300×1550
Carriage box volume capacity (m3) (Flat carriage)	32
late thickness	D16 (NM400) 、 B10 (T700)
ELECTRICAL SYSTEM	
Power supply	24V single wire system, negative earth
Starting method	Key switch
BATTERY	
Electricity consumption (kW · h)	40
Drive Battery	
Type	Lithium Titanate Battery
Battery Capacity	60



Strongly Power Train
Popularity of the WEICAIHI 12L engine.



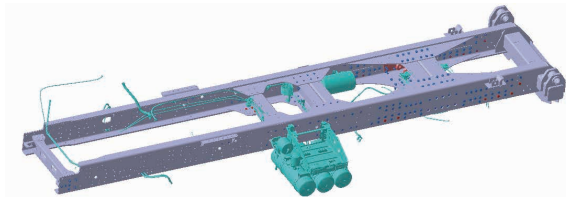
AMT 4 Transmission Gear Box Provide The
Good Performance to Operator



Long Travel by Extend-range Power
From 60kwh Driving Battery

Main Braking System

- **The use of the German VOSS quick insertion system for the brake pipeline system provides higher safety:** multiple error prevention designs and good assembly process of the VOSS quick insertion structure; Longer pressure resistance: All models use O-ring seals for better sealing performance and no air leakage;
- **Highly modular design:** The series of product components are universal and modular, resulting in more reliable product quality.
- **Reliable valve products:** One car three relay valve, independent control of each bridge, faster braking response, and better braking performance.



Steering System

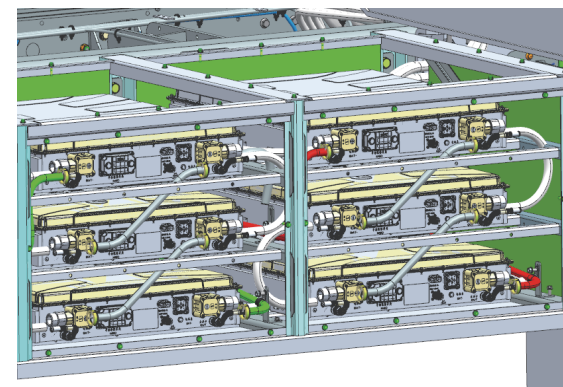
The combination of steering pump and lifting pump is more stable and reliable! The structure of the split chamber pump is intermittent, with low heat generation and energy consumption, and stable operation.

Main Braking System

The differential pressure condenser and air dryer are arranged on the inside of the vehicle frame. The auxiliary gas storage cylinder is arranged below the lower wing surface of the frame. The braking system is equipped with a water removal device (automatic drain valve).

Motor Cooling System

The radiator is equipped with 6 sets of electronic fans, with a maximum power of 500W and a maximum heat dissipation capacity of 155kW for the system;



Battery Heat Dissipation

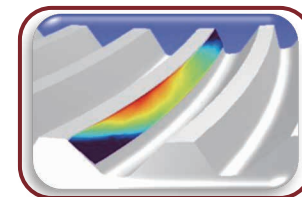
Adopting Zhefu 8KW single cooling unit and dual electronic fans; Two sets of battery thermal management units independently dissipate heat from three battery packs.

Power Battery

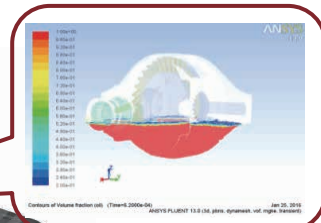
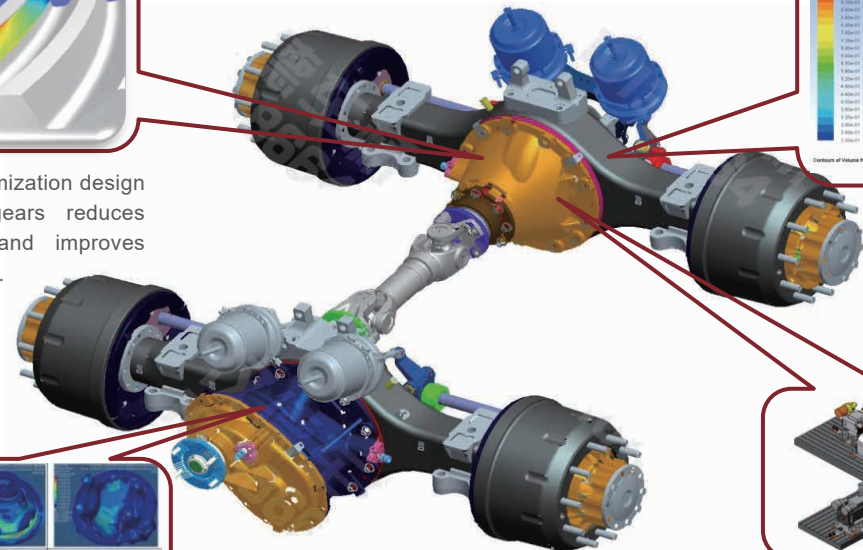
The power battery is fixed on the right side of the longitudinal beam of the frame, with a slant support frame structure, which is firm and reliable. The high-voltage wiring harness and water pipeline inside the box are arranged neatly and concisely. The battery box has a ground clearance of 800mm and good passability.

Safe and Comfortable

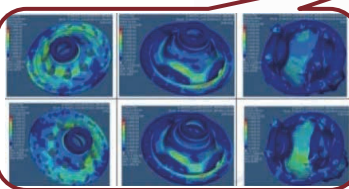
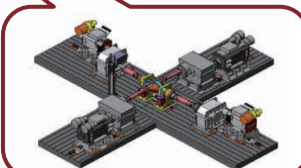
Protection support by Full-lap cab; Standard mining seats which large space to operator; The door adopts the overall double seal structure with superior sealing effect, sound insulation and noise reduction performance.



The forward optimization design of hyperbolic gears reduces product noise and improves meshing strength.



Optimize the design of the lubricating oil passage to improve the lubrication of the main reducer assembly.



Optimize the design of components such as bearings and differentials.

By improving product processing accuracy, optimizing assembly processes, and increasing transmission efficiency to over 97%.