# LOVOL HYBRID(SHEV)

## **MAKE WORLD BETTER**



Curb weight (kg):50600 Max. gradeability (%):30 Engine Power (kW):426

### WE AIM AT CUSTOMERS' SATISFACTION



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# DUMP MINING TRUCK

LOVOL HEAVY INDUSTRY GROUP CO., LTD.



#### PRODUCT FEATURES

#### 130 Ton Fuel Range-Extended Mining Truck

- Weichai Premium Powertrain: Equipped with Weichai Power WP14T + Weichai New Energy 430KW alternator + 4 drive motors 4-speed gearbox (520kw) + 60 K.Wh power battery, the shifting power is uninterrupted, and the whole vehicle control is independently developed.
- Strongest Flexible Main and Auxiliary Frame Structure: Double-layer beam structure, frame size 1300×450×130 (12+12), high bending and torsional resistance, wider frame for more stable driving and faster unloading.
- Original Front Suspension Technology: The front suspension adopts a five-link non-independent hydro-pneumatic suspension, which is more reliable, durable, has a longer service life, and offers better comfort.
- Revolutionary Rear Suspension: Integrated maintenance-free balance shaft with safety rod + pin structure thrust rod, completely solving the maintenance of the axle head and the problem of thrust rod bolt fracture.
- Extra-Large Capacity: The cargo box volume reaches 50m<sup>3</sup>, providing high transportation efficiency.
- Comfortable Driving and Riding Experience: Brand-new semi-floating cab design, noise reduction and sound insulation, space utilization 30% higher than competitors.
- Transverse Full Hydraulic Steering System: Reliable performance, lighter double steering, and better handling.
- Brand-New High-Power Mechanical Air Conditioning: Cooling power of 4800w, tested in the high temperatures of Hami, Xinjiang region, ensuring better reliability.
- German VOSS Braking System + Military Aviation Quick-Connect Electrical System, providing better overall vehicle safety.

#### PRODUCT FEATURES

#### Powertrain

- WP14T range extender assembly, high-elasticity coupling, dual-input dual-output single main drive controller, simplified control.
- Four-motor four-speed gearbox, uninterrupted power during shifting, achieves motor torque decoupling to better utilize the motor's optimal efficiency range.
- 30-ton front axle, 50-ton drive axle (ratio: 18.722), proven primary reduction, providing the mining truck with highly reliable transmission performance.
- Fuel range-extended hybrid, highly efficient and energy-saving, low operational costs, transportation efficiency increased by 15.4%, operational cost savings of 15%!



High thermal efficiency engine + range extender



High-rate 60KWh lithium titanate battery HDZ high-strength axles

Cab



- Robust Framework: Mine-specific cab framework and skin, with a 30% increase in space utilization compared to competitors, spacious and comfortable.
- More Comfortable: The sound insulation noise reduction performance reaches industry benchmark levels (noise test sound insulation effect is comparable to coach bus standards, with side ear noise at 74dB at the highest gear of 40km/h).
- High Seal: The vehicle doors use an integral double-seal structure, and stringent smoke test evaluations effectively prevent dust entry, offering superior sealing effects!

	VEH			

VEHICLE PARAMETER	
Gross vehicle weight (kg)	1 30000
Curb weight (kg)	50600
Payload mass (kg)	90000
Overall dimensions (L×W×H) (mm)	10650× 4000×4450
Wheelbase (mm)	4600+1840
Tread (mm)	3100/2850/2850
Max. gradeability (%)	30
Min. turning diameter (m)	30
Min. ground clearance (mm)	41 0
Max. vehicle speed (km/h)	45
AXLE LOAD	
Laden (t)	30/50/50
ENGINE	
Model	WP14TG765E304
Power (kW)	426
Speed (r/min)	1900
Torque (N*m)	2700/ (1200-1400)
CLUTCH	
Model	/
TRANSMISSION	
Model	4TR180
Gear position	15.491/10.812/7.594/4.073
Max. input torque (N.m)	1840
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Max. input torque (N.m) DRIVE AXLE	1840
	1840 Central, hub planetary two-stage reduction, with inter-axle differential lock
DRIVE AXLE	Central, hub planetary two-stage reduction,
DRIVE AXLE Type	Central, hub planetary two-stage reduction, with inter-axle differential lock
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## SPECIFICATIONS

RADIATOR					
Structure	Plate-fin Radiator				
FUEL SYSTEM					
Volume (L)	700L fuel tank				
STEERING SYSTEM					
Booster type	Full Hydraulic Steering				
System pressure(Mpa)	17				
Flow(L/min)	40				
BRAKING SYSTEM					
Service brake	Double-circuit drum type air brake				
Parking brake	Spring energy-storage air-break braking with emergency braking				
Auxiliary brake	Engine exhaust braking+WEVB				
System pressure (bar)	11				
Parking slope (%)	30 (uphill)/20 (downhill)				
SUSPENSION					
Front suspension	Five-thrust rod hydro-pneumatic suspension				
Thickness / width / number of leaf springs	180/150-220				
Rear suspension	leaf spring balanced suspension				
Thickness / width / number of leaf springs	34/100/15				
DUMPING LIFT MECHANISM					
Туре	Front lift-214				
Rated pressure (MPa)	20				
Max. dumping angle (°)	46				
DRIVER'S CABIN					
Туре	Left hand drive, semi-floating				
Shock-absorbing seat	Upward/downward, forward/rearward adjustable, backrest angle adjustable				
FRAME					
Туре	High-strength steel flexible frame (1300×450×130 (12+12) )				
ELECTRICAL SYSTEM					
Power supply	24V single wire system, negative earth				
Starting method	Key switch				
CARGO COMPARTMENT					
L×W×H(mm)	7200*3700*1700				
Carriage box volume capacity (m3) (Fla	t carriage) 45				
Plate thickness	DH (NM400) 、 B10 (T700) D:Bottom plate thickness H:Back door thickness B:Front plate and side plate thickness				

