

Optional Equipment	Note
Engine	Volvo TAD1643
Heating type body	Engine exhaust gas heating structure
Low-temperature start-up system	Suitable for extremely low temperature regions
Cruise Speed Control	Suitable for long transport distance condition
Chain type stone deflector	Clearing of stones from rear tires
360° Full View Monitor System	For wraparound safety of the truck
Enlarged body	Suitable for lighter weight material
Wear-resistant truck body liners	Suitable for very abrasive material
Automatic fire-extinguishing system	Automatic fire extinguishing for engine and rear axle case
Tire pressure monitor	Realtime tire pressure and temperature monitoring

# OFF-HIGHWAY MINING TRUCK

# SET240S

## DIESEL ELECTRIC POWER



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Reminder:  
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Nominal Payload  
**220tonnes/240tons**

Gross Vehicle Weight (GVW) up to  
**390tonnes/410tons**

Gross Power  
**≥ 2,091kW**



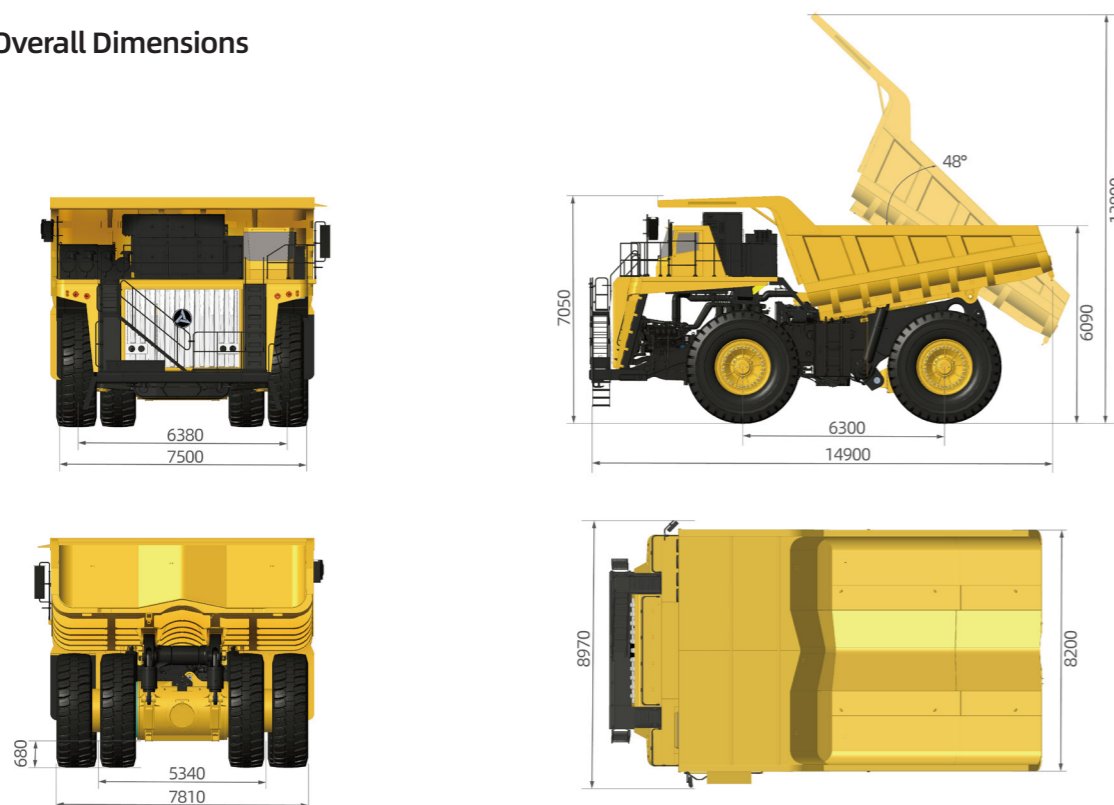
### Technical Data

Overall Parameters	Unit	Value
Overall dimensions: L × W × H	mm/in	14,900×8,200×7,050(13,800) /587×323×278(543)
Wheelbase	mm/in	6,300/248
Front track width	mm/in	6,380/251
Rear track width	mm/in	5,340/210
Ground clearance	mm/in	680/27
Max. steering angle of front wheels	°	42
Min. steering radius	mm/in	14,500/571
Gross power	kW/hp	≥2,091/2,803
Max. speed	km/h/ mph	65/40
Max. Gradeability	%	30
Struck SAE	m <sup>3</sup> /yd <sup>3</sup>	105/137
Heaped SAE 2:1	m <sup>3</sup> /yd <sup>3</sup>	147/192

### Weight Distribution

Axle Load	Front Axle	Rear Axle
Unloaded	51%	49%
Loaded	33%	67%

### Overall Dimensions



Dimension Unit:mm

\* Dimensions may vary due to different configurations. The specific parameters are subject to actual conditions.

### Fluid Capacities

Fluid Capacities	L
Engine crankcase and filter (engine oil)	46×3
Hydraulic oil tank (Sany exclusive)	750
Engine cooling system (antifreeze)	258
Battery cooling system (antifreeze)	12
Fuel tank (diesel)	2,500
Front suspension system (engine oil)	72×2
Rear suspension system (engine oil)	43×2
Motorized wheel reducer of rear axle (gear oil)	40×2

### Weight Parameters

Item	kg	lb
Chassis, with hoists	138,200	305,000
Body, standard	31,800	70,000
Net weight	170,000	375,000
Rated payload	220,000	485,000
Max. gross weight	390,000	860,000

\* The maximum gross vehicle weight (GVW) includes optional equipment, all accessories, fully filled fuel tank, loadings, etc; Overload will seriously deteriorate the lives of the components and the truck!

### Main Configurations

#### Engine × 3

- Model: Weichai WP17;
- Type: 4-cycle, turbocharged, intercooled;
- Rated power: 565kW/1,900rpm;
- Max. torque: 3,000Nm/1,500rpm;
- Number/type of cylinders: 8/V shape, turbocharged;
- Bore stroke: Φ127mm×165mm/Φ5"×6.5";
- Displacement: 16.72L/1020in<sup>3</sup>.

#### Electric Drive System

- Alternator: 3×560KVA;
- Traction motor: 2×800/1250kW;
- Wheel reduction ratio: 31.875:1;
- Control module: tPower-TI84.240/CJPR3;
- Battery pack: 79.5KWh;
- Max. travel speed: 65km/h/40mpf;
- Note: The performance of drive system depends on the gross vehicle weight, gradient and length of transport road, rolling resistance, engine power, and other parameters. The drive system can adjust to the actual working conditions to realize the optimal performance of the mining dump truck.

#### Brakes

- Front: Single disc per side, four caliper per disc;
- Dia. of brake disc: 1,168mm(46in);
- Total area of brake lining: 3,922cm<sup>2</sup>(608in<sup>2</sup>);
- Rear: Dual disc per side, dual caliper per disc;
- Dia. of brake disc: 635mm(25in);
- Total area of brake lining: 2,632cm<sup>2</sup>(408in<sup>2</sup>);
- Service brake: All hydraulic brake system control. Transmission PTO mounted pressure compensating piston pump provides hydraulic pressure for brakes and steering. Independent circuits front and rear. Each circuit incorporates accumulator which stores energy to provide instant braking response;
- Parking brake: Rear brakes applied by spring loaded opposing piston on disc pack, hydraulically released;
- Loading brake: Switch on/off to control;
- Emergency brake: The service brake is automatically applied when the pressure of hydraulic system is below the set value;
- Max. power of electric brake: 2,920kW(3,971hp);
- Max. rated power of continuous braking: 2,500kW(3,400hp);
- The electric brake is equipped with continuous air-cooled resistance grid, electric retarder brake, loading brake, and standard reversing brake system;
- The brake systems conform to the requirements of ISO 3450.

#### Steering

- Independent hydraulic steering with closed-center steering valve, pressure compensating piston pump and accumulator. Accumulator provides uniform steering regardless of engine speed. In the event of loss of engine power, it provides emergency power to system for steering;
- Min. turning radius: 14,500mm;
- The steering system meets the SAE 1151/5010 standard.

#### Frame

- Dual variable-section box structures welded from high-strength alloy steel plates and steel castings, integrated with the FOPS/ROPS structures to achieve excellent bending capacity, strong distortion resistance, endurant impact ductility and extended life.

#### Suspension

- Independent front suspension. The smaller swing arm motion reduces the lateral displacement of tires and prolongs the lives of tires. It features extended life and maintenance period.
- Front suspension travel: 350mm(13.78 in);
- Rear suspension travel: 300mm(11.81in).

#### Hoist

- Independently hydraulic system with retarders at limiting positions. Two 3-section hoist cylinders are mounted on both sides of the frame rails to keep stable of body while raises the body.
- Body hydraulic pump flow rate: (1,700rpm)2×410L/min (216USgal/min);
- Liftings ≤ 21s, Lowerings ≤ 19s.

#### Body

- The body is W-shape structures. The side plates are constructed from extra wide high tensile strength abrasion-resistant steel. The body is highly impact resistance and needs lower load height. Tilted angle 49°;
- Standard thickness:  
Floor: 20mm; Side: 12mm; Front: 16mm;
- Struck: 105m<sup>3</sup>(137.4yd<sup>3</sup>);
- Heaped 2:1 (SAE std): 147m<sup>3</sup>(192.3yd<sup>3</sup>).

#### Cab

- FOPS/ROPS certified. Equipped with integral four-pillar tipping protection design, adjustable cushioned seat, luxury upholstery, and tiltable and telescopic steering wheel to provide a comfortable operating space;
- The cab conforms to the requirements of ISO 3471. The cab provides a sound exposure Leq (equivalent sound level) of less than 78 dB(A) when tested with doors and windows closed.

#### Tires

- Standard: 40.00R57;
- Specification of wheel rim: 57-29.00/6.0;
- Under certain working conditions, TKPH(ton-Km/h) capabilities of standard tires could be exceeded. Please kindly consult tire manufacturers for optimum tire selection.

#### Other Standard Equipment

- Automatic lubrication system;
- Automatic weighing system;
- Fast fuel fill;
- Engine muffler.