MINING TRUCK

SET150S

Diesel Electric Power

Nominal Payload	Gross Vehicle Weight (GVW) up to	Gross Power
136tonnes/150tons	241tonnes/266tons	≥1,400kW/1,877hp

Technical Data

Overall Parameters	Unit	Value
Overall dimensions: L × W × H	mm/in	11,812×7,723×6,184 /465×304×243
Wheelbase	mm/in	5,300/208
Front track width	mm/in	5,725/225
Rear track width	mm/in	4,874/192
Ground clearance	mm/in	490/19
Max. steering angle of front wheels	°	40
Min. steering radius	mm/in	13,200/519
Engine	-	Weichai WP7 (2×565kW)/ (2×758hp)
Gross power	kW/hp	≥1,400/1,877
Max. speed	km/h/ mph	65/40
Struck SAE	m^3/yd^3	60/78.5
Heaped SAE 2:1	m^3/yd^3	78/102

Weight Distribution

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

- The maximum gross vehicle weight (GVW) includes optional equipment, all accessories, fully filled fuel tank, loadings, etc.

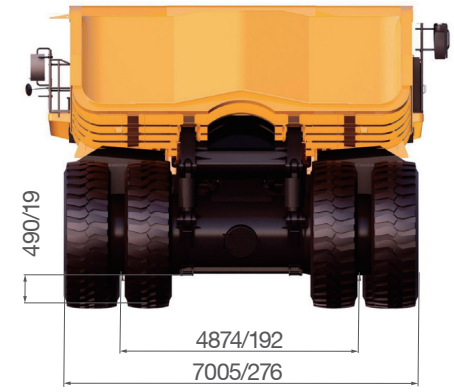
Fluid Capacities

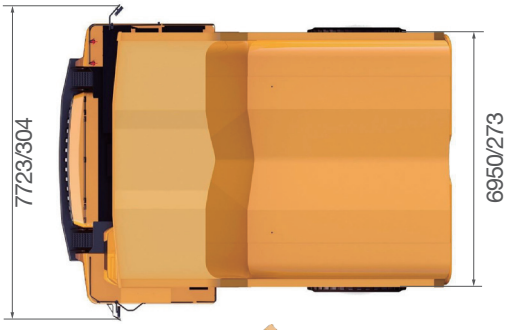
Fluid Capacities	L /US gal
Engine crankcase and filter	90×2/24×2
Hydraulic oil tank	378/100×2
Engine cooling system	85×2/22.5×2
Battery cooling system	13/3.5×2
Fuel tank	1,700/450
Front suspension system	29×2/7.5×2
Rear suspension system	25×2/6.5×2
Motorized wheel reducer of rear axle	46×2/12×2

Weight Parameters

Item	kg	lb
Chassis with lifting cylinder mechanism	83,800	184,360
Standard body	18,200	40,040
Empty vehicle weight	105,000	231,000
Payload	136,000	300,000
Gross vehicle weight	241,000	531,000

Overall Dimensions (mm/in)





Main Configurations

Engine ×2

- Model:Weichai WP17
- Type: 4-cycle, turbocharged, intercooled
- Max. net power:565kW/758hp
- Engine speed:1,900rpm
- Max. net torque:3,000Nm/1,500rpm
- Number/type of cylinders: 8/V shape,turbocharging
- Cylinder bore × stroke:Φ127mm×165mm/Φ5.''×6.5''
- Displacement:16.72L/1020in³.

Steering System

- The isolated hydraulic system is equipped with two large capacity energy accumulators. Even under extreme conditions, such as the engine loses power, the full hydraulic accumulators can also supply emergent steer to provide operating safety backup.
- Min. turning radius:13,200mm/520''
- The steering system meets the SAE1151/5010 standard.

Electric Drive System

- Alternator：2×565KVA.
- Traction motor：2×550/750kW.
- Wheel reduction ratio：30.36:1.
- Control module：tPower-TC42.
- Battery pack:128KWh.
- 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.

Braking Systems

- Front brakes: Single disc per side, dual caliper per disc Dia. of brake disc:988mm(39in) Total area of brake lining:2,512cm²(390in²)
- Rear brakes: Single disc per side, dual caliper per disc Dia. of brake disc:704mm(28in) Total area of brake lining:2,512cm²(390in²)
- Dynamic brake system: It utilizes full-hydraulic brake control system. The braking power is supplied by the pressure cutoff type plunger pump. Both front and rear independent control circuits are equipped with accumulators to store the energy and provide emergency braking.
- Parking brake system: The spring forces brakeage and releases hydraulically.
- Loading brake system: Switch on/off to control
- Emergency brake system: The service brake is applied automatically once the pressure of hydraulic system is below the set value.
- Max. power of electric brake:1,800kW(2,412hp)
- Max. rated power of continuous braking:1,400kW (1,876hp)
- 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 ISO3450.

Suspension System

- The front suspension adopts independent suspension system. The smaller swing arm motion reduces the lateral displacement of tires and prolongs the lives of tires.It features extended life and maintenance period.
- Travel of front suspension：280mm(11.02 in).
- Travel of rear suspension：200mm(7.87in).

Frame

- The compartment type variable section torsion-resistant frame welded from high-strength alloy steel plates and steel castings pairing with low alloy steel casted high stressed structures is to achieve excellent bending capacity, strong distortion resistance, endurant impact ductility and extended life.

Hoist System

- It adopts large displacement, high pressure plunger pump and independent hydraulic system. Two three-stage, double-acting hoist cylinders are installed on the outer side of the frame to realize faster and more stable lifting.
- Flow of lifting hydraulic pump:(1,900rpm)500L/min (132USgal/min).
- Lifting≤20; Lowering≤19s.

Body

- The W-type body enables high structual strength and high impact resistance
- The body base adopts high strength, high hardness and high wear resistance steel plates which features extended life.
- Struck :60m³ (78.5yd³).
- Heaped :78m³ (102yd³).

Cab

- The cab is certified with FOPS/ROPS. 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 for the driver.
- The cab conforms to the requirements of ISO 3471. With doors and windows closed, the measured sound level in cab is ≤78dB(A).

Tires

- Standard：33.00R51.
- Specification of wheel rim：24.00/5.0-51.
- Under special working conditions, if the specified value of the standard tire TKPH (ton-Km/h) exceeds the limits, please kindly consult with the tire manufacturer for optimal selections.

Other Standard Equipment

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

Optional Equipment	Note
Engine	Volvo/Deutz
Exhaust heated body	Engine exhaust gas heating structure
Low-temperature start-up system	Suitable for extremely low temperature regions
Adaptive Cruise Control	Suitable for long transport distance condition
Chain type stone deflector	Clearing of stones from rear tires
360° imaging camera system	For wraparound safety of vehicle
Enlarged body	Suitable for lighter weight material
Heavy-duty body	Suitable for heavier weight material
Wear-resistant truck body liners	Suitable for very abrasive material
Automatic fire-suspension system	Automatic fire suspension system for engine and rear axle case
Tire pressure monitor	Realtime tire pressure and temperature monitoring

*Overload will seriously deteriorate the lives of the components and the truck.

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