



Innovative Transport Systems

T1244 MINE DEVELOPMENT TRUCK

NET HORSEPOWER

373 kW/500 hp

HAULAGE CAPACITY

30 metric tonnes/36 US tons

Cost-effective and powerful, the Powertrans T1244 Mine Development Truck is designed to haul large quantities of material quickly and efficiently in underground mining operations.



Using proven technology in innovative ways to produce reliable, productive, cost-effective transport solutions for industry



Purpose-built for underground work

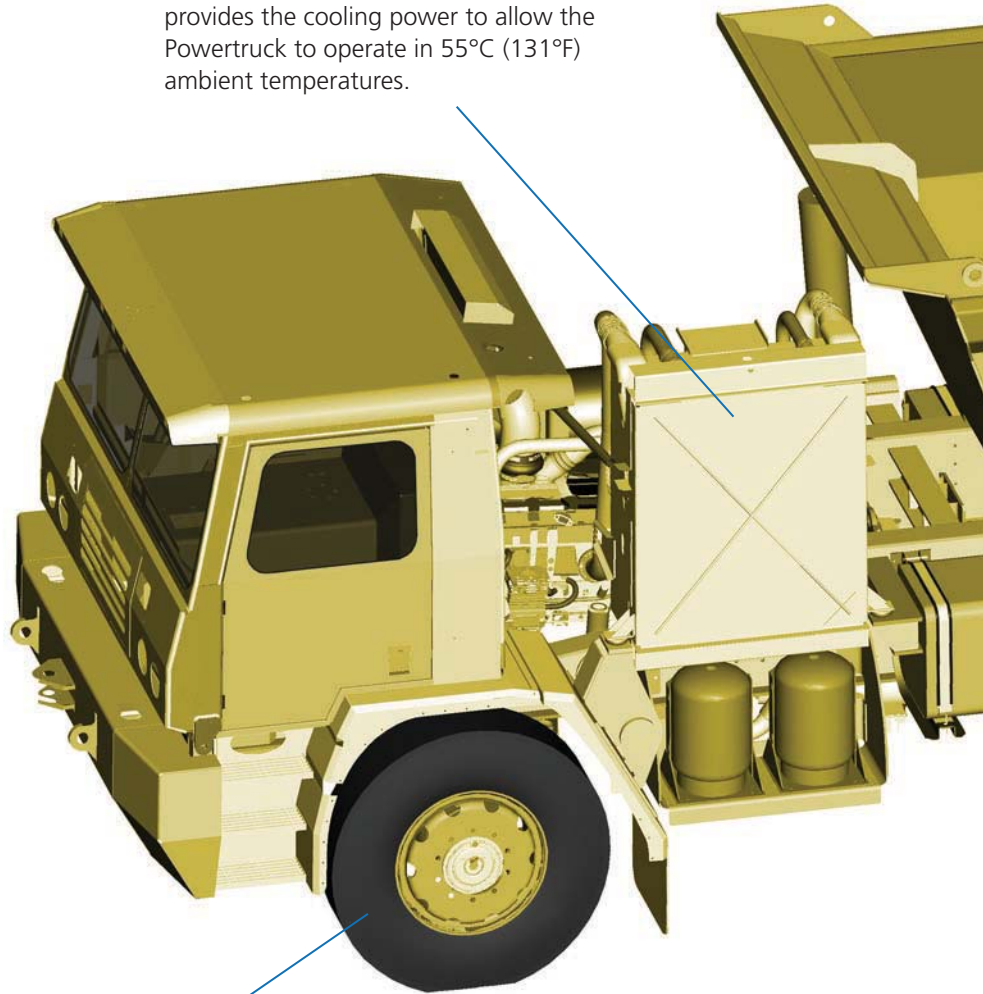
The Powertruck™ is built with only one thing in mind: working around the clock to haul material around and out of underground mines.

The low entry height ROPS/FOPS cab incorporates controls and engine monitoring for the Powertruck™, a hydraulic pump and oil reservoir, and tipping controls. A single driver controls all operations from the safety of the truck cab.



Keeping cool under pressure

Large transverse-mounted radiator and temperature-sensitive hydraulic fan provides the cooling power to allow the Powertruck to operate in 55°C (131°F) ambient temperatures.



Readily available off-highway light earthmoving tyres

Powertrans underground mining haulage systems use multiple axles with standard 12.00 24PR tyres all round, which are readily available, easily handled and fitted; and economical.

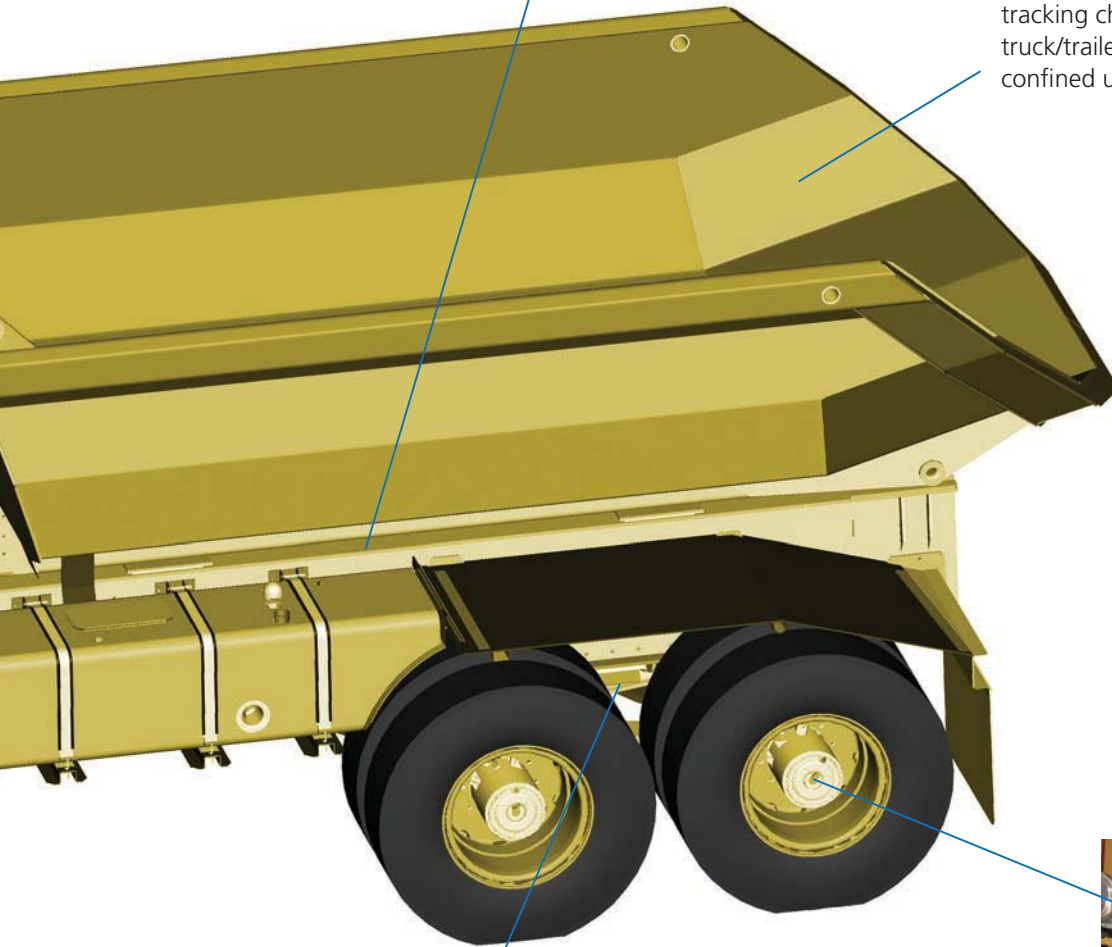
A strong backbone

All chassis are built on 650 mm (26 in) deep chassis rails designed to take the punishment of around-the-clock operation in a harsh underground environment.



Strong, low profile end-tipping body

The low dump body makes for easy loading, while the compact envelope of the underground haulage train and tracking characteristics of trailers allow truck/trailer combinations to work in confined underground conditions.



Off-the-shelf running gear

Proven, robust, off-the-shelf suspension is used for affordability and to avoid costly delays waiting for parts.



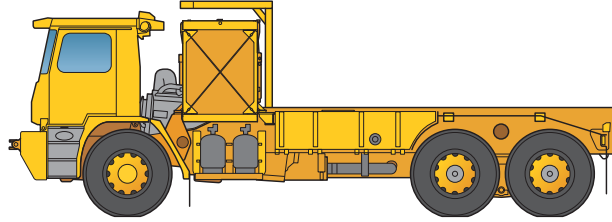
Getting the power to the ground

A robust Sisu tandem drive assembly with planetary hub reduction (used by many heavy-duty truck manufacturers) is used to get the power of the truck engine to the ground.

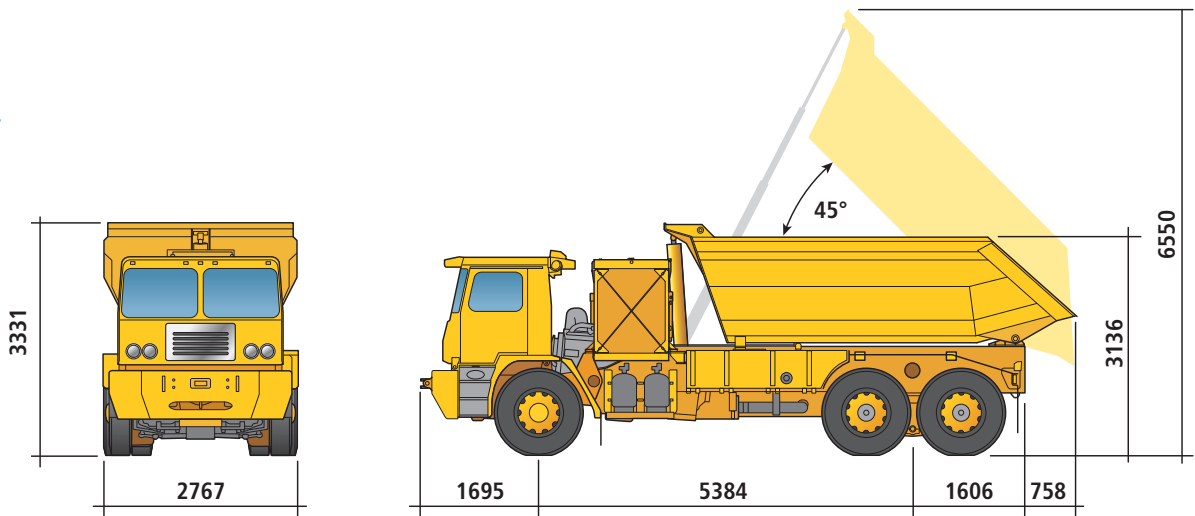
Options

A wide range of haulage and body options is available for the T1244 Mine Development Truck, both when used in the minesite development phase, and for post-development during production. In addition to adding extra Powertrailer™ units, these options include:

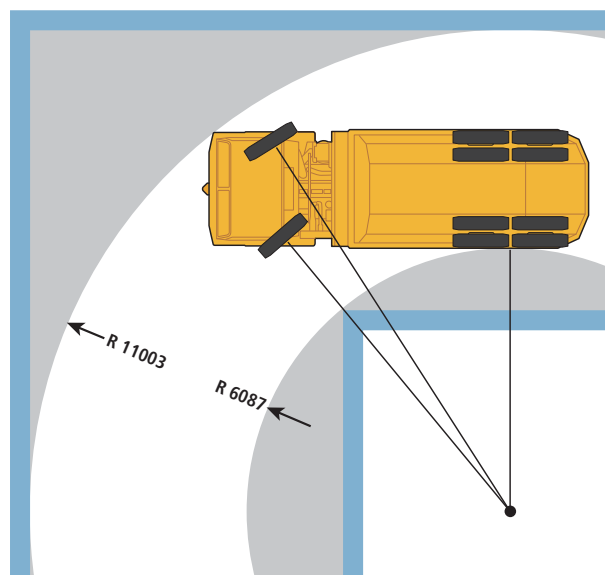
- 20 ft container carrier
- Cement agitator
- Explosives truck
- Service truck
- Water truck



Dimensions



Turning Circle





Note: Specifications are for a standard track width, single Powertruck™. Other body styles and trailer combinations can be supplied to suit specific requirements.

SPECIFICATIONS

T1244 Mine Development Truck

Engine

Caterpillar® C15
 15.2 litre (930 cu.in) 6 cylinder turbocharged, aftercooled diesel
 Power (2100 rpm) 373 kW 500 HP
 Torque (1200 rpm) 2400 Nm 1650 lb-ft

Transmission

Allison HD4000 Automatic
 Forward 1 3.51:1
 2 1.91:1
 3 1.43:1
 4 1.00:1
 5 0.74:1
 6 0.64:1
 Reverse 1 4.80:1

Average Speeds (30 tonne payload capable of 16% gradient)

Unladen (all capacities) 50 km/h 31 mph
 30 t cap, laden 8% gradient 25 km/h 14.3 mph

Steering

Orbitrol hydraulic steering
 Max. inside wheel cut angle 42 degrees

Front Steer Axle/Suspension

Hendrickson steer axle
 Load rating 12,000 kg 26,880 lbs
 Hendrickson Paramax 300 air bag suspension
 Load rating 12,000 kg 26,880 lb

Rear Drive Axle/Suspension

Sisu Tandem FR2P-20 with planetary ends
 Ratio 12.52:1
 Load rating 40,000 kg 89,000 lbs
 Hendrickson walking beam RS850 tandem suspension
 Load rating 44,000 kg 98,560 lb

Cooling

A patented transverse-mounted cooling module is located behind the cab on the Powertruck™ and incorporates radiator, charge air and hydraulic cooling. The hydraulic fans of the radiator and charge air cooler are controlled by the Engine Control Module, and are temperature-sensitive for economy.

Radiator

Core Area 1.25 sq m 1,937 sq in
 fan Diameter 1,016 mm 40 in

Fuel, Lubricant and Coolant Capacities

	litres	US gallons
Engine	49	13
Transmission	28	7.4
Drive axles	48	12.7
Cooling system	150	39.6
Steering system	15	4.0
Hydraulic (fan and tipper)	260	58.7
Fuel	700	185

Cab

Forward control, low entry height
 Panels Stainless steel
 Structure ROPS/FOPS
 Glass 6.3 mm AS2080 laminated glass for other windows
 Seats Driver – T-back
 Passenger – fixed
 Seat belts fitted
 Lights 7 inch round Hella H4 headlights
 Sealed turn/tail/stop lights

Safety

Fully certified ROPS/FOPS underground mining cab
 SDS Ausminco fire suppression on engine
 Dry powder hand-held fire extinguisher
 Emergency stop switch in cab and at rear of chassis.

Chassis

Web depth 650 mm 26 in
 Flange thickness 16 mm 0.63 in

Brakes

Dual circuit air-actuated drum brakes designed for road train operation, with S-cam actuation.
 Steer 419 mm (16½ in) dia x 152 mm (6 in) wide, 24 chambers on 140 mm (5½ in) slack adjusters
 Drive 419 mm (16¼ in) dia x 210 mm (8¼ in) wide, 30/36 chambers on 165 mm (6½ in) slack adjusters
 Dolly 419 mm (16¼ in) dia x 178 mm (7 in) wide, 30/36 chambers on 140 mm (5½ in) slack adjusters
 Spring-operated failsafe emergency and parking brakes.
 Engine brake.

Wheels/Tyres

Steer
 Wheels Disc wheel steel 5 piece 10 stud 335 PCD
 Tyres 12.00 24 tube type
 Drive
 Wheels Disc wheel steel 5 piece 10 stud 335 PCD
 Tyres 12.00 24 tube type
 Tyre quantities
 Powertruck: 2 x steer, 8 x drive (total 10).

Couplings

Front: 40 mm (1½ in) towing pin; 50,000 kg (112,000 lb capacity); two towing eyes 50,000 kg (112,000 lb).

Electrical

24 volt DC system.

Body

Rear tipping, controlled from the truck cab.

Note: Due to Powertrans policy of constant product improvement, specifications may be subject to change without notice.



Powertrans Products and Services

The Powertrans team has a history of developing and operating innovative bulk haulage systems, as well as developing the concept further as a separate commercial operation.

We have developed expertise in building these systems, as well as in evaluating the most appropriate option for a site, and correctly operating and maintaining road train combinations.

Products

In addition to our Pit Hauler mining transport systems, Powertrans manufactures truck and powered and unpowered trailer systems for use in both underground and surface mining. Our Powerspares™ division supplies a range of spare parts for the heavy-duty haulage industry.

Powertrans appreciates the critical role that haulage systems play in a mining operation, and provides 24-hour product support.

Services

Powertrans provides a consultancy service to assist customers to be aware of bulk haulage options, and to select the most appropriate option for a site. It has a proven history of developing new options where appropriate.

Training is offered for operators and maintenance personnel working with Powertrans haulage systems, and service and maintenance schedules can be recommended.

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