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.
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.

Note: Photographs and other images are for illustration purposes only and may display non-standard equipment, and other equipment not supplied by Powertrans.
**Off-the-shelf running gear**
Proven, robust, off-the-shelf suspension is used for affordability and to avoid costly delays waiting for parts.

**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.

**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.

**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.
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
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
- Forward 2: 1.91:1
- Forward 3: 1.43:1
- Forward 4: 1.00:1
- Forward 5: 0.74:1
- Forward 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 Paramaax 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**

<table>
<thead>
<tr>
<th></th>
<th>litres</th>
<th>US gallons</th>
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<tbody>
<tr>
<td>Engine</td>
<td>49</td>
<td>13</td>
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<tr>
<td>Transmission</td>
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<td>Drive axles</td>
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<td>Steering system</td>
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<td>Hydraulic (fan and tipper)</td>
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<tr>
<td>Fuel</td>
<td>700</td>
<td>185</td>
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**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.