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.
**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*
**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.

**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.

**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
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 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>Component</th>
<th>Litres</th>
<th>US Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>49</td>
<td>13</td>
</tr>
<tr>
<td>Transmission</td>
<td>28</td>
<td>7.4</td>
</tr>
<tr>
<td>Drive axles</td>
<td>48</td>
<td>12.7</td>
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<tr>
<td>Cooling system</td>
<td>150</td>
<td>39.6</td>
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<tr>
<td>Steering system</td>
<td>15</td>
<td>4.0</td>
</tr>
<tr>
<td>Hydraulic (fan and tipper)</td>
<td>260</td>
<td>58.7</td>
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<tr>
<td>Fuel</td>
<td>700</td>
<td>185</td>
</tr>
</tbody>
</table>

**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.

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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.