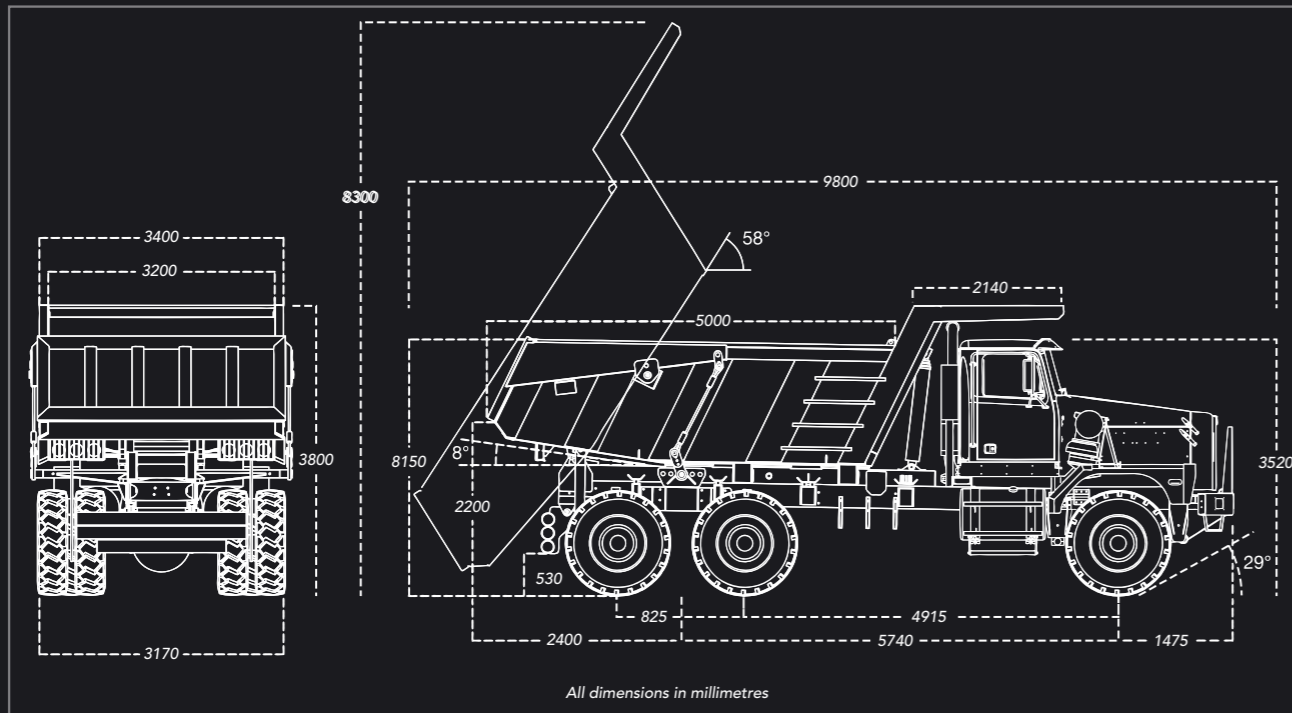
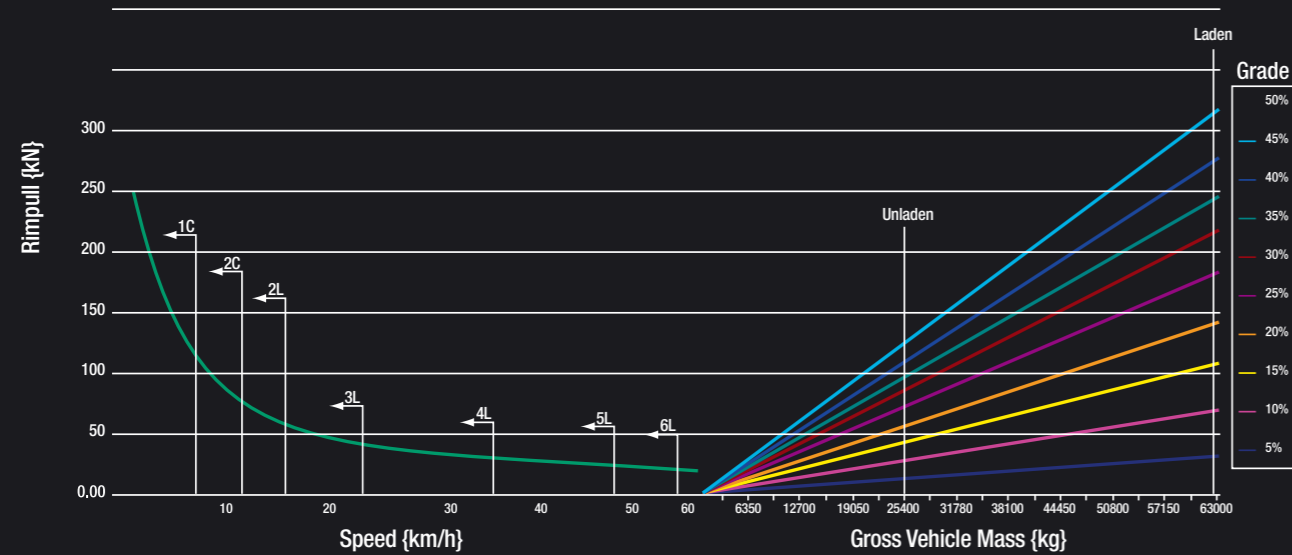


Body Dimensions



Rimpull



- Steps to find the maximum speed a truck is capable of with a certain load on a grade:
1. On the graph above, draw a vertical line up from the expected total vehicle weight.
 2. Find the intersection of this line with the expected grade line.
 3. From this intersection, draw a horizontal line over to the left hand graph.
 4. Where this line intersects the Rimpull curve draw a vertical line down to find the maximum truck speed.



Serious trucks.™

6900XD 40-Ton Dump



Western Star 6900XD 40-Ton Off-Road Hauler
 Load Capacity: 37 000kg (40 US-Tons)
 Heaped Capacity: 23.5 m³ SAE 2:1
 Gross Power: 373Kw



Liebherr Africa, Vlaktefontein Road, Fulcrum Industrial Area, Springs, 1560.
 Tel: +27 (0) 11 365 2000 Fax: +27 (0) 11 817 3884 Website: www.westernstar.co.za

Western Star is a Daimler Trucks Brand. Specifications correct at time of printing. Specifications are subject to change without prior notice.





The Western Star 6900XD 40-ton dump truck delivers what matters most: Return on Investment. As soon as possible.

ROI ASAP

The Western Star 6900XD is designed to minimise cost-per-ton hauled as compared to traditional articulated dump trucks (ADT) and rigid frame off-road dumps. These savings are achieved by lower maintenance costs and high productivity. The efficient and purpose-built design of the 6900XD hauler allows for speed and stability while providing outstanding fuel efficiency. The end result is increased productivity per cycle and maximum profit per ton hauled.

Built for the Long Haul

The longer the haul, the better the Western Star 6900XD performs when compared to traditional off-road haulers. On maintained terrains, and hauls that exceed 1km, the Western Star 6900XD is up to 30% more fuel efficient than competitive ADT and rigid dumps in the same payload class. On longer hauls the fuel savings are even greater.

Key Design Features

Drivetrain Simplicity: The heavy-duty Allison 4500RDS automatic transmission, in combination with robust Axletech planetary gear drive axles, puts power on the ground efficiently. This results in less reduction gearing, power loss and heat increase in the transmission compared to inefficient and high maintenance drop boxes and transfer cases typically used in competitive products.

High Pressure Tyres: (10) 14R25 tyres with earthmoving tread provide maximum stability allowing the 6900XD to comfortably travel at a top speed of up to 70km/h. The smaller diameter tyres with a reduced rolling resistance provide for superior fuel efficiency and cycle speed when compared to larger diameter low pressure flotation tyres. All for about 40% of the replacement cost, should a tyre fail prematurely.

Braking System: The 6900XD employs a durable and low-cost dry drum brake design, rather than wet disc brakes that consume higher amounts of fuel due to the inherent drag from rotating discs in oil. The 6900XD is equipped with a standard engine compression brake,

providing 373kW of retardation. An optional hydraulic transmission retarder provides 600bhp (447kW).

Heavy-Duty Dump Box: The dump box is constructed from HARDOX 400 steel and is designed to handle the most extreme materials. The low profile sides are designed for easy and efficient loading with a scowed end to secure large boulders and reduce hydraulic cylinder stress upon boulder impact. The auto lift tailgate maximises material loading while the full cab guard protects the operators cab from falling debris.

Superior Operator Comfort:

The 6900XD truck is built for work, but the operators cab is built for comfort. From the air-ride cab, a premium insulation package, adjustable air-ride seat with active air lumbar, an expansive dash with highly visible LED lighting, the 6900XD can't shorten the hours on the job, but it can make the time spent more comfortable and ultimately much more productive.

Specifications

Vehicle

Engine and Equipment

- Model: Cummins ISX
- Configuration: 15.0L, 4-cycle, inline, 6 cylinder diesel
- Emissions Certification: EPA 98, Euro 2
- Aspiration: Turbocharged/Aftercooled
- Gross Power: 500Hp(373kW)@1700rpm
- Maximum Torque: 2237Nm@1200rpm
- Dual Donalson air cleaner with two-stage filtration and safety element for heavy dust conditions
- Standard Cummins Interbrake Compression Brake
- Cooling: Heavy Duty 1450 Square Inch Copper Brass Radiator
- Serviceability: LH and RH Full Butterfly Hood for engine access
- 600 litres of on board fuel capacity

Transmission

- Model: Allison 4500RDS Fully Automatic Transmission
- Lock up feature in all forward gears
- Controls: Allison WTEC Calibration with Push Button Shift Control
- Options: Optional Transmission Retarder (600/447 bhp/kW)

| Gear | Forward | | | | | | Reverse |
|------|---------|------|------|------|------|------|---------|
| | 1 | 2 | 3 | 4 | 5 | 6 | R |
| km/h | 6.1 | 16.3 | 24.0 | 37.1 | 49.2 | 58.1 | 7.0 |

Axles and Suspension

- 6x4 Configuration
- 28,000lb capacity non driving single front axle
- Flat leaf slippered spring low maintenance front suspension
- 110,000lb capacity heavy duty drive axles with fully floating axle shafts and outboard planetary reduction gearing (The robust axle design includes a heavy duty box section housing)
- Standard Driver Controlled Interaxle Differential Lock
- The tandem rear axle is accompanied by a heavy duty Chalmers 800 series suspension to provide maximum articulation and traction (Overall Drivetrain Ratio: 12.69:1)

Braking System and Equipment

- Dual circuit air brake system with dry brake drum configuration
- 16.5 CFM compressor with in-line heated air dryer for moisture removal
- Standard Cummins Engine Compression Brake
- Optional Hydraulic Transmission Retarder

Tyres and Wheels Equipment

- Tyres: 14R25 Earthmover Tyres
- Rim: 25x10 Compactor
- Wheel: 12 Spoke 25" Heavy Duty

Electrical System

- System Voltage 12V
- Battery Type: (2) 1850 CCA Maintenance Free Batteries
- Alternator: 153 Amp Brushless Alternator
- Diagnostic Interface: 6 PIN Connector SAE J1587/J1708 Located Under Dash

Operators Cab

- Spacious severe duty galvanized steel cab construction for extreme durability
- Air-ride cab mounting for soft ride performance
- Standard heater, defroster and air conditioner for operator comfort in all climates
- Premium Insulation Package for noise abatement and temperature control
- Exterior Sun Visor and large two piece tinted curved windshield for optimal visibility and ease of serviceability
- Expansive operator's dash with a full array of highly visible LED back lit gauges to monitor vehicle performance
- Waterproof marine grade heavy duty instrument panel rocker switches
- Adjustable air-ride driver seat with active air lumbar, armrests and tilt/telescopic steering for operator size flexibility and comfort
- Standard Star Gauge Package - Fuel Gauge - Axle Temperature Gauges - Transmission- Temperature Gauge - Engine Coolant Temperature Gauge - Air System Pressure and Air Restriction - Speedometer and Tachometer

Body

Weight Distribution and Payload

| | KG |
|-------------------------------|--------|
| Front Axle (Tare): | 8 600 |
| Tandem Rear Axles (Tare): | 17 000 |
| Total Unladen Vehicle Weight: | 25 600 |
| Available Payload Capacity: | 37 000 |
| Total Laden Vehicle Weight | 62 600 |

Load Capacity

| | Cubic Meters |
|-----------------|--------------|
| Struck Capacity | 18.3 |
| Heaped Capacity | 23 |

Dimensions

| | Millimeters |
|---------|-------------|
| Length: | 5 639 |
| Width: | 3 251 |
| Height: | 1 220 |

Material

| | |
|------------|--|
| Sides: | 8mm HARDOX 450 |
| Floor: | 16mm HARDOX 400 with 16mm Liner Strips |
| Tailgate: | 10mm HARDOX 450 |
| Cab Guard: | 6mm HI-TEN |

Hoist and Hydraulics

- Front mounted single acting four stage hydraulic cylinder
- Hydraulic System Flow: 109 Litres/minute @ 800rpm
- Hydraulic System Pressure: 250 BAR
- Body Tip: 58 Degrees
- Body Raise Time: 25 Seconds at 1000rpm
- Body Lower Time: 18 Seconds at 1000rpm

Safety

- Dual West Coast type cab mounted mirror and down view for optimal visibility
- Daytime Running Lights
- 87 to 112 db Backup Alarm
- Bumper Sight Rods and Grille Guard mounted onto Heavy Duty Front Bumper with Removeable Tow Pin
- Amber beacons on roof

Optional Components

- Automatic Greasing System
- Optional wheelbase and coal bodies also available