

# B40D 6x6 Underground ARTICULATED DUMP TRUCK Mk VI



Gross Power: 315 kw (422 hp)  
Gross Torque: 2 000 Nm (1,473 lbft)  
Rated Payload: 37 000 kg (81,571 lbs)

# B40D ARTICULATED DUMP TRUCK 6x6 Underground Mk VI

**ENGINE** Mercedes Benz V6, turbocharged, intercooled, low emission diesel engine

Gross power 315 kW (422 hp) @ 1,800 rpm

Net Power 308 kW (413 hp) @ 1,800 rpm

Gross torque 2,000 Nm (1,473 lbf) @ 1,300 rpm

Net torque 1,974 Nm (1,453 lbf) @ 1,300 rpm

Displacement 11,95 litres (730 cu.in)

Fuel tank capacity 485 litres (128 US gal)

Auxiliary Brake Automatic exhaust brake Engine Valve Brake (EVB)

Certification Non Regulated OM 501 LA.E2/1-00 meets Europe (EU) step2;

Regulated OM 501 LA.E3A/1 meets Europe (EU) step 3

**TRANSMISSION** Engine mounted, fully automatic Allison planetary transmission with six forward gears and one reverse gear.

Torque Converter Hydrodynamic with lock-up in all gears.

Model 4500R ORS

Control Type Electronic

**TRANSFER BOX** Remote mounted

Manufacturer VGR

Model 17100

Layout Three in-line helical gears.

Output Differential Interaxle 33/67 proportional differential, Pneumatically lockable whilst stationary or on the move

**AXLES** High strength steel fabricated with spiral bevel type gears on the Controlled Traction differential and heavy duty outboard planetary gears.

Model Bell 25T

**BRAKING SYSTEM**

SERVICE BRAKES Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles.

Max brake force 218 kN (49,010 lbf)

PARK & EMERGENCY Spring applied, air released driveline mounted disc.

Max brake force 440 kN (98,920 lbf)

AUXILLIARY BRAKE Automatic exhaust brake and Engine Valve Brake (EVB)

Variable Adjustable Hydraulic Retarder

Maximum Retardation 575 kW (771hp)

**WHEELS** Earthmover

Tyre 26.5R25

**FRONT SUSPENSION** Semi-independent, leading A-frame supported by nitrogen/oil struts

**REAR SUSPENSION** Pivoting walking beams equalize the load on each axle with laminated suspension blocks. Each axle is coupled to the chassis by a Tri-Link system of four rubber-bushed links for ideal vertical movement and a transverse link for lateral restraint.

**HYDRAULIC SYSTEM** Variable displacement with load sensing system incorporating a ground driven emergency steering pump.

Flow 300 l/min (79,26 gal/min)

Pressure 25 Mpa (3,626 psi)

Filter 5 micron

**STEERING SYSTEM** Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns 4.7

Steering Angle +-42°

**DUMPING SYSTEM** Two double-acting, single stage, dump cylinders

Raise Time 13 s

Lowering Time 7,6 s

Tipping Angle 70°

**PNEUMATIC SYSTEM** Air drier with heater and integral unloader valve, serving park brake and auxilliary functions

System Pressure 810 kPa (117 psi)

**ELECTRICAL SYSTEM**

Voltage 24 V

Battery Type Two maintenance free permanently sealed

Battery Capacity 2 X 105 Ah

Alternator Rating 28 V 100 A

**VEHICLE SPEEDS**

1st	7,4	4.6
2nd	15,7	9.8
3rd	22,8	14.3
4th	34,8	21.8
R	6,3 km/h	3.9 mph

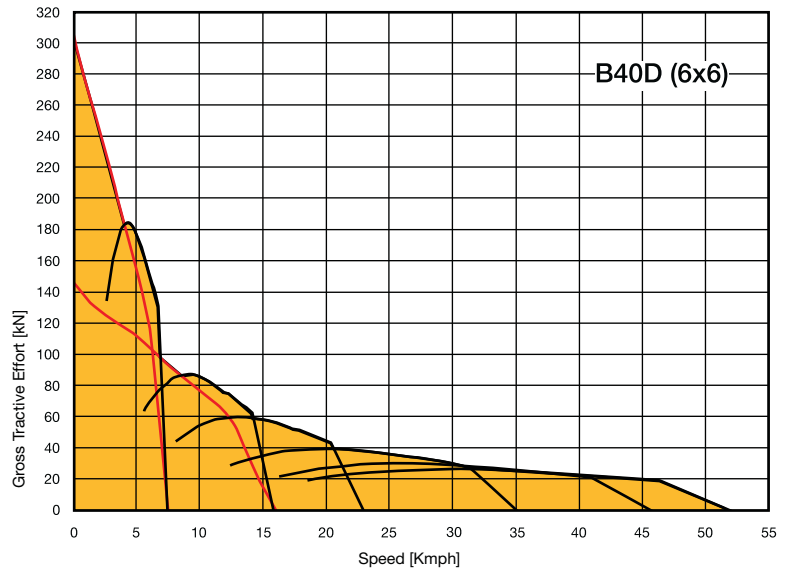
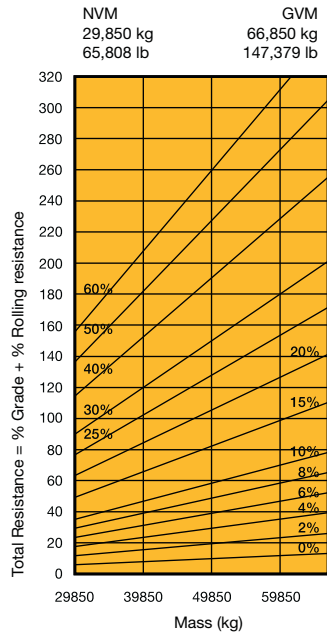


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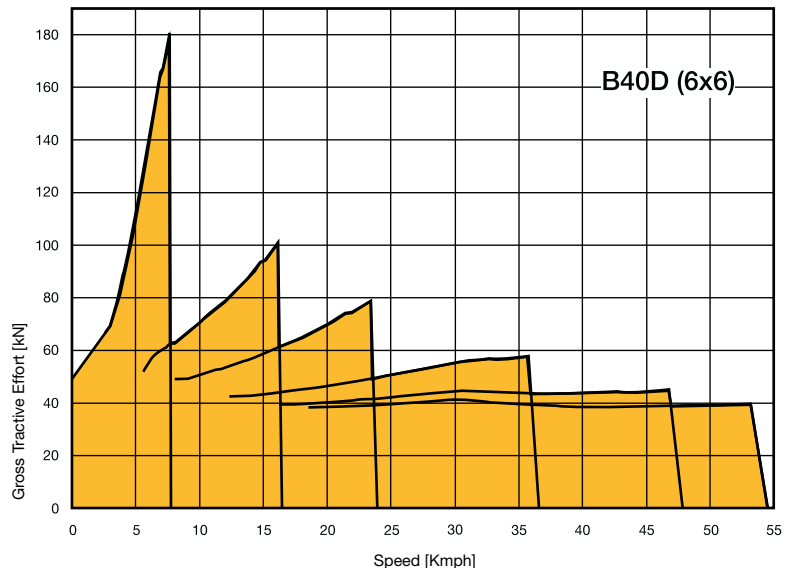
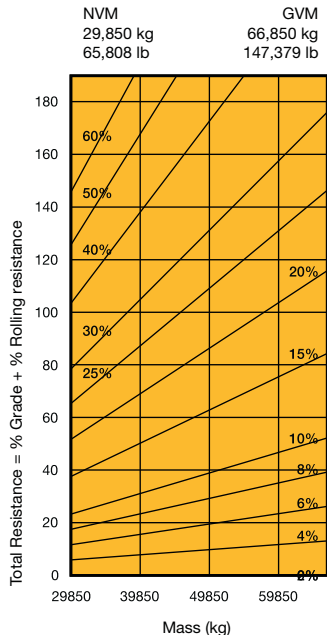
## LOAD CAPACITY & GROUND PRESSURE

WEIGHTS			GROUND PRESSURE			LOAD CAPACITY		
UNLADEN	kg	lbs	UNLADEN	kPa	psi	BODY	m <sup>3</sup>	cu.yd
Front	14,650	32,298	Front	232	14	Struck Capacity	19	24.9
Middle	7,810	17,218	Middle	238	7	SAE 2:1 Capacity	23	30
Rear	7,390	16,292	Rear	238	7	SAE 1:1 Capacity	27,5	36
Total	29,850	65,808	Total			SAE 2:1 Capacity with Autogate	24	31.4
LADEN			LADEN					
Front	19,587	43,182	Front	254	37			
Middle	23,842	52,563	Middle	316	46	<b>Rated Payload</b>	37,000 kg	81,571 lbs
Rear	23,422	51,637	Rear	314	46			
Total	66,851	147,381						

## GRADEABILITY/RIMPULL

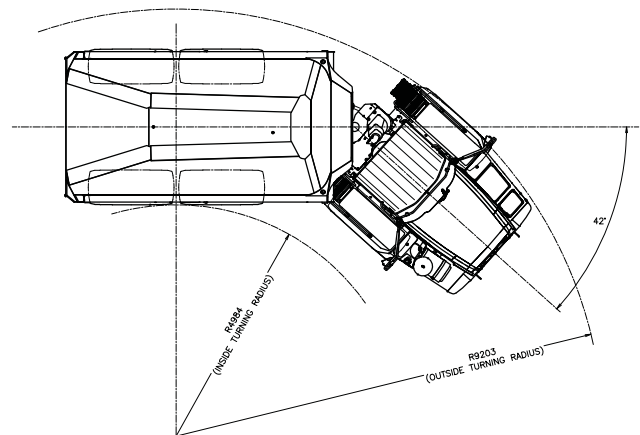
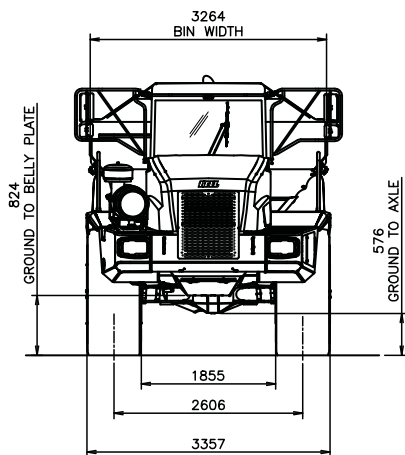
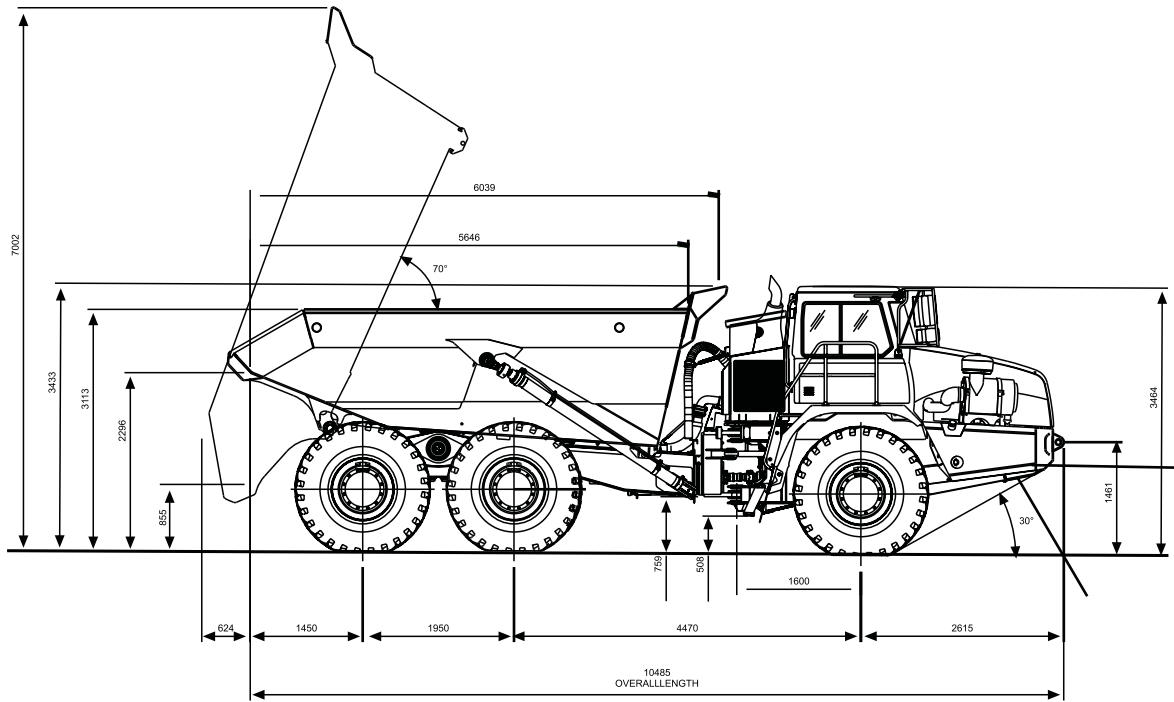


## RETARDATION



# B40D 6x6 Underground ARTICULATED DUMP TRUCK MkVI

## DIMENSIONS



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## AVAILABLE EQUIPMENT\*

### Cab

- ROPS/FOPS certification
- Protective rear window guard
- Tilt cab for service access
- Gas strut supported door
- Tinted safety glass
- Sliding windows
- Rear view mirrors- regular and wide angle
- Electrically adjustable rearview mirrors - one per side
- Sun visor
- Wiper/washer with intermittent control
- Tilt and telescoping steering wheel
- Adjustable, air suspension seat with retractable seat belt
- Fold-away trainer seat with retractable seat belt
- HVAC climate control system with filtered and ducted air
- Rotating beacon
- 12 V power outlet/12 V cigarette lighter
- Ash tray
- Drinks holder
- Cooled/heated lunch box
- I-Tip programmable bin tip
- Sound insulated to 76 dB(A) to ISO 6396
- Radio/CD/Tape
- Memory Module
- Air horn

### MDU Features

- Operator / Site selected speed control
- Tipping counter
- Trip timer
- Trip distance
- On Board Weigh System (OBW)
- Transmission gear selection
- Fuel Consumption
- Diagnostics
- Intermittent wiper timing control
- Speedo calibration for alternative tyre sizes

### Gauges

- Metric /Imperial unit selection
- Warning lights with audible buzzer

### Vehicle

- Engine coolant temperature
  - Engine oil pressure
  - Transmission oil temperature
  - Fuel
  - Tachometer
  - Battery voltage
  - Hourmeter
  - Odometer
  - System air pressure
- Ground driven emergency steering
  - Bin safety prop
  - Articulation lock
  - Integral transmission output retarder with 6 settings

### Other

- (Factory or field installed)
- Groeneveld auto greasing system
  - Retractable sun visor
  - Exhaust body heating
  - Autogate
  - Body liners
  - Fleetmatic Satellite Monitoring System
  - Driver ID and immobiliser
  - Forward working lights
  - Artic reverse light
  - Fuel heater
  - External windshield visor
  - Headlight protection grills
  - Rear window wiper
  - Antenna mounting bracket
  - System for reverse camera
  - Wiggins quick fuelling system
  - Comfort ride suspension system
  - Tyre pressure monitoring
  - Full handrail kit

\*standard specification for machines may vary according to region



## What makes the B40D a great performer...

- **With a highly efficient power and drivetrain combined with low rolling resistance, The Bell B40D delivers superior fuel efficiency**
- **High performance engine with increased power and torque and long service intervals**
- **Powerful hydraulic transmission retarder drastically cuts brake use, extending pad life up to a factor of five**
- **Fewer scheduled service requirements**
- **Supreme driver comfort from a nitrogen over oil strut independent suspension system**
- **Deluxe cab - setting new standards in comfort, sound levels and simplicity in operation**
- **Electronic component protection**
- **Easy service access**
- **Fast tip cycles**
- **Low ground pressure to work jobs other trucks can't**
- **Comfort Ride option with adaptive front suspension and dual stage rear suspension**

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All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. Photographs featured in this brochure may include optional equipment.

**Strong Reliable Machines  
Strong Reliable Support**

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