

# Tipper Trucks

Ruggedness has never been this smooth.



**BHARATBENZ**  
Power Ahead



BharatBenz presents a new trucking experience. Our tipper trucks are powerful workhorses built to maximise your productivity. Superior power and torque make them capable of handling any work and terrain conditions. The higher uptime of our tippers ensures they always earn for you. Our tippers are built to work hard, fast and more. The harsh environment that your fleet operates in will never be a concern with the BharatBenz range of tipper trucks. Our highly reliable and durable trucks are equipped to tackle the most difficult of terrains. Be it going up hairpin bends or travelling down bearing a full load, your driver and truck will perform with ease. BharatBenz tippers are the epitome of power, gradeability and reliability. With this robust range of trucks, your enterprise is bound to scale new heights.

**Power ahead with the BharatBenz range of tipper trucks.**

## GREATER PRODUCTIVITY. GREATER REVENUES.

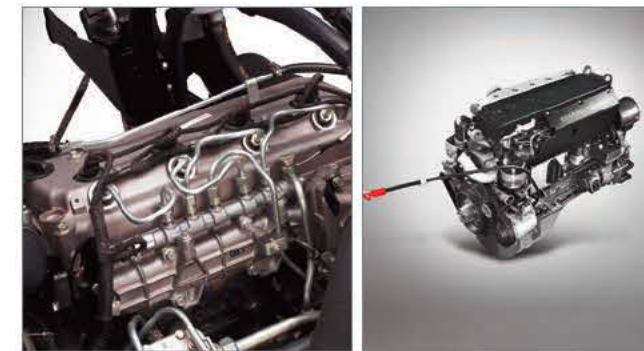
The powerful engine of the tipper trucks makes them resilient and untiring. Higher power and torque translate to more work, faster trips and higher revenues. With the ability to climb steep gradients with full loads, these trucks are a great asset to have in the construction and mining sectors.

### Engine

The powerful engine of our tippers is designed to deliver heavy-duty performance. Higher engine power and high peak torque wherein 90% of it is available even at a low engine speed of 900 rpm give our tippers better pickup, superior gradeability and reduced trip time. This ensures more number of trips in the same time thereby maximising productivity. Other features like unitised fuel injection pump, inductive hardening at crankshaft journals, noise optimal crankcase and Electronic Control Unit enhance the reliability of the engine.

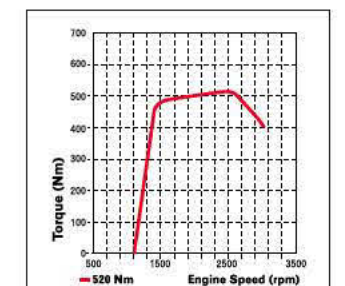
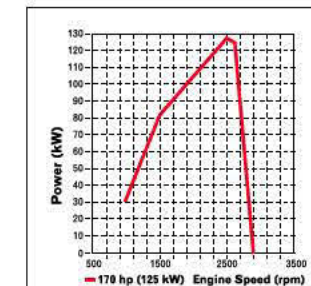


\*In 2528 (6X4)



Engine (1217C)

Engine (2523C, 2528C, 3128C & 3128CM)



Model	Maximum power	Peak torque	Flat torque range
1217 (4X2)	170 hp (125 kW) @ 2500 rpm	520 Nm	1500–2000 rpm
2523 (6X4)	231 hp (170 kW) @ 2200 rpm	810 Nm	1200–1600 rpm
2528 (6X4)	280 hp (205 kW) @ 2200 rpm	1100 Nm	1200–1600 rpm
3128 (8X4)	280 hp (205 kW) @ 2200 rpm	1100 Nm	1200–1600 rpm
3128CM (8X4)	280 hp (205 kW) @ 2200 rpm	1100 Nm	1200–1600 rpm

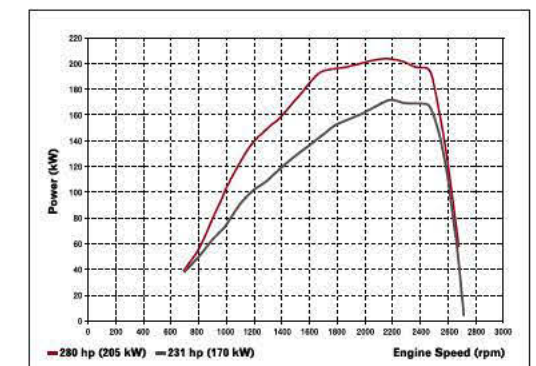
### Gearbox

Heavy-duty 9 G131 gearbox for 25 tonne and 31 tonne, with crawler gear ratio of 14.57:1 and first gear ratio of 9.48:1— provides for more gear options, ensures high torque at wheel end and superior gradeability. Higher centre distance of 142 mm between main shaft

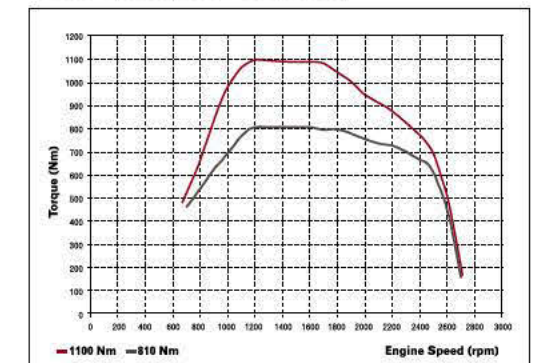


Gearbox (G131)

and counter shaft provides for bigger and stronger gears with more contact area, thereby increasing gear life. Similarly, G85 gearbox in 12 tonne provides a higher centre distance of 130mm.



Power curve (2523C, 2528C, 3128C & 3128CM)



Torque curve (2523C, 2528C, 3128C & 3128CM)



## STURDY BUILD. MORE UPTIME.

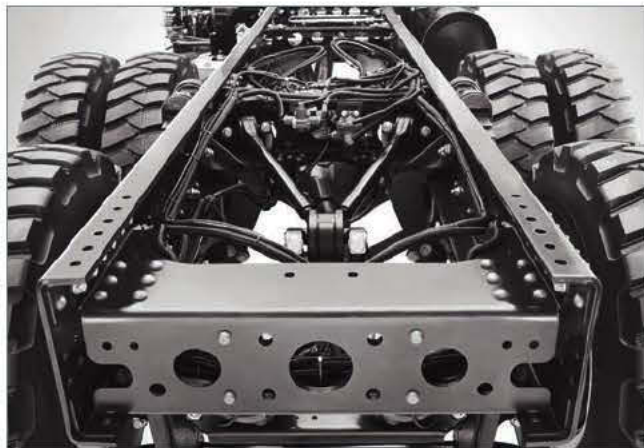
The tipper trucks are meant for hard work in tough conditions. In order to deliver under such harsh conditions, each component has been designed and incorporated with meticulous care. Our highly reliable and durable tipper trucks will always be on the move, thus ensuring maximum asset utilisation.



Clutch

### Clutch

Larger clutch plate diameters of 362 mm for 4x2, 395 mm for 6x4 and 430mm for 8x4 tippers ensure respectively more contact area for better power transmission and lower slippage. Higher wear depth of 3.5 mm means more life and less maintenance. Organic material with cushion segment between friction linings, ensures consistent performance even at high temperatures.



Chassis (2528C 6x4)

### Chassis

A heavy-duty steel frame of 230 mm depth in 12 tonne truck and 288 mm depth in 25 tonne and 31 tonne truck, 9 mm thickness and cross members of full depth provide for greater chassis stiffness. This in turn improves its load bearing, torsional and bending abilities. It has an internal flitch with selective reinforcement on both top and bottom flanges which lends it a robust and an optimum weight design. The shot-blasted and powder-coated frame of the chassis increases its surface strength. This makes it corrosion resistant and therefore last longer.



Bogie suspension at rear

### Rear suspension

Heavy-duty bogie suspension for 25 and 31 tonne and semi elliptical suspension for 12 tonne makes our tippers reliable and durable in tough operating conditions. It also improves stability and load carrying ability of the vehicle. It has lesser number of moving parts, which makes it reliable and low maintenance.



Elevated brake chambers

### Brakes

This heavy-duty braking system has a wider and thicker brake lining, which makes it long lasting. It also ensures the braking response is quick and efficient. The top mounted and elevated positioning of the brake chamber on the rear axle protects it from any external impacts.

### Rear axle

The tippers have a strong and durable heavy-duty banjo type axle; with 3128CM having HL7 hub reduction with a low torque step down ratio of 5.333 and a low reduction ratio. This gives better torque at the wheels and traction, which in turn provides better pickup and increases the life of the crown wheel and pinion. The large face width of its crown wheel provides greater contact area leading to better load distribution.

## SUPERIOR FEATURES TO CONQUER ANY TERRAIN.

Equipped with a host of advanced features, our tipper trucks can easily negotiate sharp turns, lofty hills and narrow roads.

### Engine brakes

The constant throttle valve engine brake cuts off the exhaust path from the engine, thereby slowing down the vehicle. This ensures better control on the loaded vehicle during downhill operations.

### Shorter turning circle diameter

A shorter turning circle diameter of 14,5 m for 4x2, 15,5 m for 6x4 and 19,2 m for 8x4 offers best-in-class manoeuvrability over winding roads and sharp corners.



Winding roads

### Inter-wheel and inter-axle differential lock

These prevent the spinning of wheels in slushy and wet surface operations, leading to better momentum and manoeuvrability.



Slushy roads

### Higher ground clearance

Higher ground clearance of 245 mm for 1217C, 264 mm for 2523C, 2528C, 3128C and 295mm for 3128 CM allows for better manoeuvrability on uneven surfaces.



3128 Higher ground clearance



3128CM Higher ground clearance



# LOW MAINTENANCE. MORE PRODUCTIVITY.

The interval between maintenance checks of our truck sets the new benchmark. In fact, most of the maintenance is preventive. This means more uptime of the vehicle which leads to more earnings for you.

### High durability

All aggregates are designed for higher durability. This ensures a longer and hassle-free productive life for the vehicle and peace of mind for you.

### Human machine interface

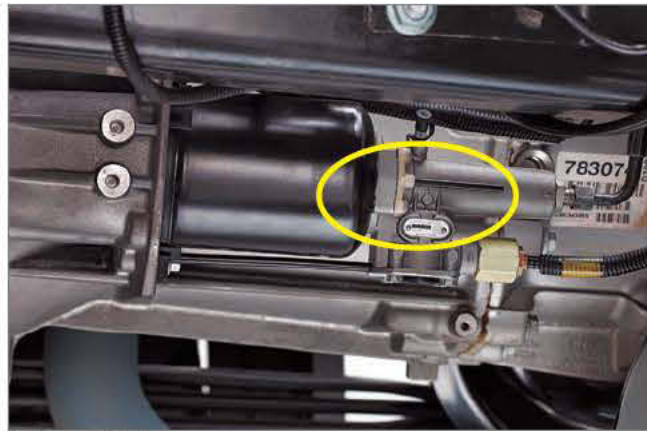
Reliable and intelligent instrument cluster provides warning signals for various parameters and helps in preventive maintenance.

### Clutch wear indicator

Driver-friendly indicators for wear (viz., Clutch wear indicator, Air Filter Choke Indicator) help in preventive maintenance, ensuring trouble-free running.

### Temperature indicator

The warning signal indicating overheating of the engine helps the driver to take corrective measures before any damage is caused.



Clutch wear indicator

### Longer service interval

BharatBenz trucks have longer and synchronised service intervals to make sure you are on the road for more time. An engine oil change interval of 1000 hrs / 30,000 km, a gearbox oil change interval of 2000 hrs / 90,000 km and a differential oil change interval of 2000 hrs / 90,000 km reduce the frequency of lubrication and maintenance costs.



Special mining tyres

### Larger tyre size

Larger tyre size of 11.00 x 20 cross-ply -16 PR in 2523C, 2528C, 3128C and 12.00 X 20 cross-ply - 18 PR mining tyre in 3128CM ensures longer tyre life. Special mining tyre option is available with 2528 (6X4) tipper for light and medium depth mining applications.

Vehicle model	Engine oil change	Gearbox oil change	Rear axle oil change	Front axle & Rear tag axle hub greasing	Rear live axle hub greasing
3128CM (8X4)*	700 hrs/ 60 days	2100 hrs/ 120 days	2100 hrs/ 120 days	1400 hrs/ 120 days	2100 hrs/ 120 days
3128 (8X4)	1000 hrs/ 30,000 km	2000 hrs/ 90,000 km	2000 hrs/ 90,000 km	2000 hrs/ 60,000 km	3000 hrs/ 90,000 km
2528 (6X4) (Mixed)	1000 hrs/ 30,000 km	2000 hrs/ 90,000 km	2000 hrs/ 90,000 km	2000 hrs/ 60,000 km	3000 hrs/ 90,000 km
2528 (6X4) (Heavy)	500 hrs/ 15,000 km	1000 hrs/ 45,000 km	1000 hrs/ 45,000 km	1000 hrs/ 30,000 km	1500 hrs/ 45,000 km
2523 (6X4)	1000 hrs/ 30,000 km	2000 hrs/ 90,000 km	2000 hrs/ 90,000 km	2000 hrs/ 60,000 km	3000 hrs/ 90,000 km
1217 (4X2)	500 hrs/ 18,000 km	2000 hrs/ 72,000 km	2000 hrs/ 72,000 km	1500 hrs/ 54,000 km	1500 hrs/ 54,000 km

\*Hours or days whichever is earlier

# HIGHER MILEAGE. HIGHER SAVINGS.

BharatBenz tippers deliver more with each fueling. An efficient engine combined with advanced engineering ensures the best mileage. Such superior mileage will bring down the cost of each trip and help you earn more.

### Unitised fuel injection pump system

6 individual fuel pumps, one for each cylinder, inject precise quantity of fuel at a high pressure of 1600 bar for 12 tonne and 1800 bar for 25 and 31 tonne tippers. This ensures better combustion of fuel, delivering unmatched fuel efficiency.



Unitised fuel injection pump (in 25 and 31 tonne)

### Flat torque curve

Peak torque is available over a wide range of engine speeds (1200-1600 rpm). And high torque is available even at low engine speeds. These superior torque characteristics reduce the need for frequent gear shifts and also improve the vehicle's fuel efficiency.

### High boost pressure turbo charger

Turbo charger with 1.8 bar boost pressure allows more air through the air inlet, increasing volumetric efficiency and power output.

### Constant throttle valve engine brake

A constant throttle valve on the engine bypasses compressed air when the engine brake is on. The Electronic Control Unit (ECU) senses this and cuts fuel injection into the engine. This prevents the engine from overrunning and also saves fuel when the vehicle runs with its engine brake activated.

### Variable green band

Variable green band (for engine rpm) in the instrument cluster intelligently senses the optimal operating band for the vehicle and gives constant indication to the driver for economical driving. This ensures that the vehicle operates at the most fuel efficient rpm range.



Variable green band



Constant throttle valve engine brake



# SAFE OPERATIONS. ASSURED RESULTS.

BharatBenz tippers are designed keeping the safety and comfort of your drivers in mind. Superior features ensure these vehicles are stable and aid in safe operations. This will help you avoid unforeseen problems and maximise your productivity as well as profitability.

## Anti-roll bar

Anti-roll bars on front and rear axles ensure that tyres are in constant touch with the road, for better road grip and stability of the vehicle, especially during cornering and lane-changing at high speeds.



Rear anti-roll bar (3128CM)



Front anti-roll bar



Brake lining

## Shorter braking distance

Wider brake lining coupled with engine and exhaust brakes ensure efficient braking and shorter braking distance.

## Crash tested cabin design

Ensures survival space for cabin crew in the unfortunate event of a collision.

## Side impact beam and 3 piece steel bumper

For higher driver safety.



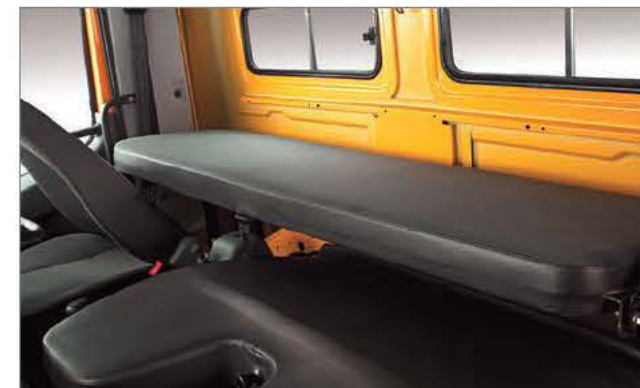
Crash tested cabin

# COMFORTABLE DRIVE. PRODUCTIVE TRIPS.

The cabin design is such that your driver will remain fresh and alert longer, thereby enabling him to complete more trips in the same amount of time. Such increased productivity will result in higher revenues and better staff retention.

## Comfortable cabin

- Ergonomically designed extended day cabin with provision for sleeper berth
- Most comfortable driving position: 3 way adjustable seat (reclining, horizontal and vertical) along with a tiltable and telescopic steering
- Twin co-driver seat
- A fully sealed cabin cuts off vehicle noise and reduces driver fatigue
- Easy entry into cabin with doors opening as wide as 90°



Provision for sleeper berth (for 25 and 31 tonne)



3 way adjustable seat (for 25 and 31 tonne)



Tilt and telescopic steering

## Increased ventilation

- Forced ventilation with blowers and optional air-conditioning: Improved knee level and waist level ventilation
- Rear sliding windows: Bigger rear sliding windows provided for better cross ventilation inside the cabin

## Intelligent instrument cluster

Ideally positioned with clear visibility, the instrument cluster provides plenty of useful information like trip mileage, neutral and reverse gear indication, distance to empty fuel, etc.

## Hydraulically assisted tiltable cabin

Wider tilt angle of 45° for 12 tonne and 67° for 25 & 31 tonne provides ease of inspection.



Tiltable cabin

## Fully suspended cabin with parabolic front suspension

Parabolic suspension with wider mounting span improves drive quality and reduces driver fatigue, thus improving his productivity.

## Easy gear shifting

Simplified gear shift arrangement with ball joint mechanism and double synchrocone ensures smoother, precise gear shifting and gives you a car like driving experience.

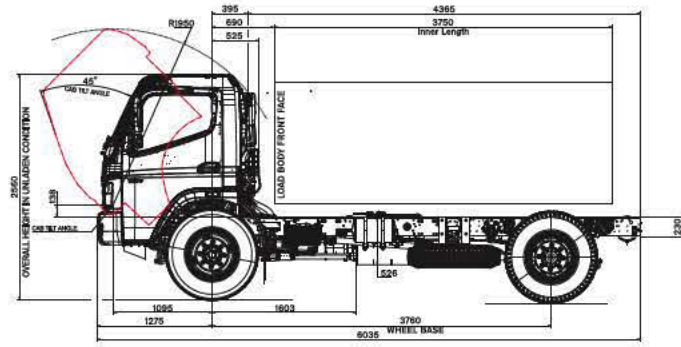


Parabolic front suspension

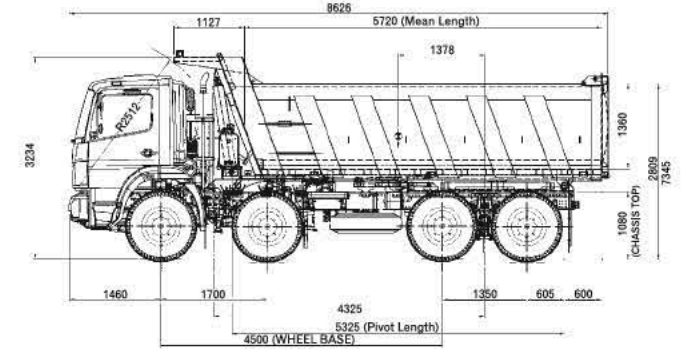




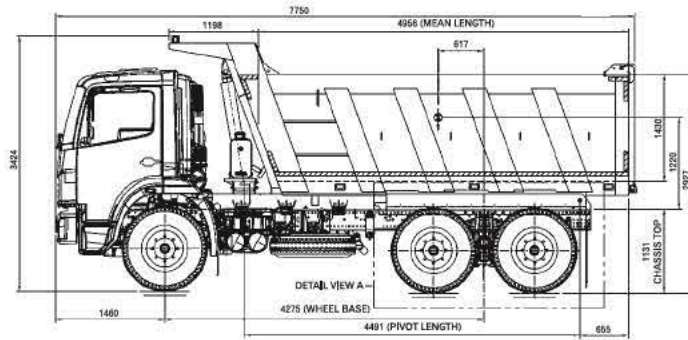
1217 (4x2)



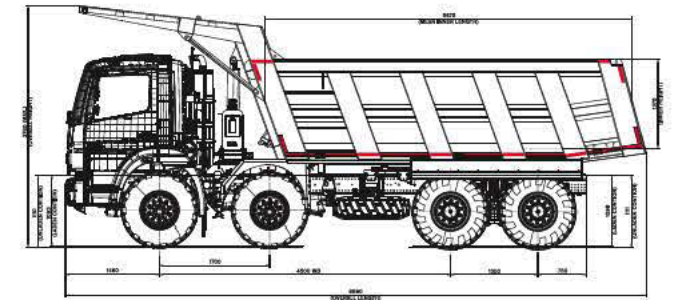
3128 (8x4)



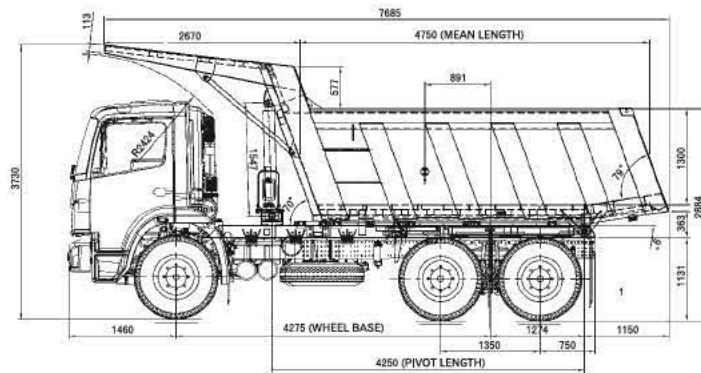
2523 (6x4)



3128CM (8x4)



2528 (6x4)





Technical Specifications	1217 (4x2)	2523 (6x4)	2528 (6x4)	3128 (8x4)	3128CM (8x4)
<b>Dimensions CBC (mm)</b>					
Wheelbase	3760	4275	4275	5175	5175
Overall length	6035	7160 / 7460 (RMC)	7160 / 7460 (RMC)	8060 / 8360 (RMC)	8060
Overall width	2135	2490	2490	2550	2490
Overall height	2455	2975	2975	3000	3030
Front overhang	1275	1460	1460	1460	1460
Rear overhang	1000	750 / 1050 (RMC)	750 / 1050 (RMC)	750 / 1050 (RMC)	750
Minimum ground clearance	245	264	264	264	295
<b>Weight</b>					
Gross vehicle weight (GVW)	13,000 kg	25,000 kg	25,000 kg	31,000 kg	31,000 kg
<b>Engine</b>					
Model	4D34i	DE170BS3	DE205BS3	DE205BS3	DE205BS3
Maximum power	125 kW (170 hp) @ 2500 rpm	170 kW (231 hp) @ 2200 rpm	205 kW (280 hp) @ 2200 rpm	205 kW (280 hp) @ 2200 rpm	205 kW (280 hp) @ 2200 rpm
Maximum torque	520 Nm @ 1500 - 2000 rpm	810 Nm @ 1200 - 1600 rpm	1100 Nm @ 1200 - 1600 rpm	1100 Nm @ 1200 - 1600 rpm	1100 Nm @ 1200 - 1600 rpm
No. of cylinders, Displacement	4 Nos., 3907 cc	6 Nos., 6373 cc	6 Nos., 6373 cc	6 Nos., 6373 cc	6 Nos., 6373 cc
<b>Gearbox</b>					
Gearbox model & Type	G 85 - 6F+1R, Mechanical, Synchronesh gears	G131, 9F + 1R, Mechanical, Synchronesh gears	G131, 9F + 1R, Mechanical, Synchronesh gears	G131, 9F + 1R, Mechanical, Synchronesh gears	G131, 9F + 1R, Mechanical, Synchronesh gears
Clutch type, Diameter	Single dry plate, Hydraulic control with clutch booster, 362 mm	Single dry plate, Hydraulic control with clutch booster, 395 mm	Single dry plate, Hydraulic control with clutch booster, 395 mm	Single dry plate, Hydraulic control with clutch booster, 430 mm	Single dry plate, Hydraulic control with clutch booster, 430 mm
<b>Axle</b>					
Front axle model, Type	IF 5,0, Reverse elliot	VL4, Reverse elliot type	VL4, Reverse elliot type	VL4, Reverse elliot type	VL4, Reverse elliot type
Rear axle model, Type	AAM 10,22, Fully floating, Hypoid gears	RT4, Fully floating, Topoid gears	RT4, Fully floating type, Topoid gears / Hub reduction axle	RT4, Fully floating, Topoid gears	Hub reduction axle
Differential ratio	6,33	4,778	4,778 / 5,39	4,778	5,39 / 6,18
<b>Chassis frame &amp; Suspension</b>					
Chassis type	Ladder type Channel section with cross member	Channel section with cross members	Channel section with cross members	Channel section with cross members	Channel section with cross members
Depth x Flange width x Thickness	230 mm x 80 mm x 7 mm	288 mm x 70 mm x 9 mm	288 mm x 70 mm x 9 mm	288 mm x 70 mm x 9 mm	288 mm x 70 mm x 9 mm
Front suspension	Semi elliptical leaf spring with shock absorbers	Parabolic type leaf spring with 2 hydraulic shock absorbers	Parabolic type leaf spring with 2 hydraulic shock absorbers	Parabolic type leaf spring with 2 hydraulic shock absorbers	Parabolic type leaf spring with 2 hydraulic shock absorbers
Rear suspension	Semi elliptical laminated leaf spring	Inverted semi elliptic (Bogie)	Inverted semi elliptic (Bogie)	Inverted semi elliptic (Bogie)	Inverted semi elliptic (Bogie)
Anti-roll bar	In Front & Rear	In Front & Rear	In Front & Rear	In Front & Rear	In Front & Rear
<b>Brakes &amp; Tyres</b>					
Service brake	Pneumatic, Foot operated, Dual line	Pneumatic, Foot operated, Dual line	Pneumatic, Foot operated, Dual line	Pneumatic, Foot operated, Dual line	Pneumatic, Foot operated, Dual line
Parking brake	Pneumatically operated Spring brake	Hand control valve acting on rear axle	Hand control valve acting on rear axle	Hand control valve acting on rear axle	Hand control valve acting on rear axle
Wheel rims & Tyres	6,50 x 20, 8,25 X 20 - 16PR	7,5" x 20" & Cross-ply 11,00 x 20 - 16PR	7,5" x 20" & Cross-ply 11,00 x 20 - 16PR / (Optional) Mining 11,00 x 20 - 16PR	7,5" x 20" & Cross-ply 11,00 x 20 - 16PR	8,5" x 20" & Mining 12,00 x 20 - 18 PR
<b>Steering &amp; Cabin</b>					
Steering type	Hydraulic power assisted	Hydraulic power assisted	Hydraulic power assisted	Hydraulic power assisted	Hydraulic power assisted
Cabin	Day cabin, Tilttable	Extended day cabin, Tilttable	Extended day cabin, Tilttable	Extended day cabin, Tilttable	Day cabin, Tilttable
<b>Fuel tank &amp; Electricals</b>					
Fuel tank	200 litres	240 litres	240 litres	240 litres	240 litres
Voltage	24 V Electrical system	24 V Electrical system	24 V Electrical system	24 V Electrical system	24 V Electrical system
Battery capacity	2 x 12 V, 75 Ah	2 x 12 V, 120 Ah	2 x 12 V, 120 Ah	2 x 12 V, 120 Ah	2 x 12 V, 120 Ah
<b>Performance</b>					
Maximum gradeability	33%	43,5%	62,7%	47,3%	51,9%
Maximum geared speed	80 km/h	80 km/h	80 km/h	80 km/h	80 km/h
Minimum turning circle diameter	14,5 m	15,5 m	15,5 m	19,2 m	19,2 m
<b>Configuration</b>					
Standard	Fully built 6,5 CuM Box Tipper	Fully built 16 CuM Box Tipper	Fully built 14 CuM Scoop Tipper	Fully built 18 CuM Box Tipper	Fully built 18 CuM Scoop Tipper (Raex)
Optional	Cabin & Chassis		Fully built 16 CuM Scoop Tipper (Raex), Fully built 16 CuM Box Tipper	Fully built 19 CuM Box Tipper	Fully built 23 CuM coal body
Option packs	Comfort Pack (A/C)	Comfort pack (HVAC), RMC Pack	Comfort pack (HVAC), RMC pack	Comfort pack (HVAC), RMC pack	Comfort pack (HVAC), DGMS pack

# COMMITTED FOR THE LONG HAUL.

BharatBenz is committed to Indian trucking. Our rigorous study of the conditions has enabled us to build trucks ready to take on the challenges of the Indian terrain and businesses, head on. Our state-of-the-art manufacturing plant in Chennai is only one of the many steps in our journey on Indian roads.



SERVICE THAT LOOKS AHEAD FOR YOU

Designed to deliver



Dealership

- Most reliable trucks with world-class aggregates to ensure maximum uptime
- Best-in-class warranty period to guarantee complete peace of mind
- Driver-friendly alert signals to ensure preventive maintenance

Experience expertise



Mobile service van

- Highly skilled service staff to ensure quick and perfect service every time

- Online technical information platform – Ascent (After Sales Central) a multilingual, animated system to facilitate information access at all service centres
- Advanced diagnostic systems to aid in troubleshooting and eliminating unforeseen problems
- Mobile service workshops to ensure reach within 4 hours in case of emergency
- Exclusive 24x7 customer support and technical hotline for all service needs. Call on our toll-free no.: 180030012345 or email us at [dicv\\_service@daimler.com](mailto:dicv_service@daimler.com)

Stay a step ahead



Service station

- Maintenance Pack that will take care of all maintenance-related needs
- Extended Warranty to ensure high-cost aggregate repairs be the least of your concerns for up to 5 years
- BharatBenz Insurance, a cashless facility with towing and zero-depreciation features to ensure quick repairs anywhere in India

## BHARATBENZ Financial

- Structured EMI payback options customized to suit your business's cash flow
- Innovative "All in One EMI" provides a fully integrated financing solution for the vehicle, maintenance pack, insurance and extended warranty
- 24x7 customer support to provide hassle-free claims management across India

Your ambitions and goals are higher than the hills and undeterred by massive loads. BharatBenz has built the tipper trucks to help you realise your dreams. Our trucks will work just as hard as you do. These powerful vehicles will negotiate every terrain on the subcontinent and bear incredible loads.

BharatBenz tipper truck is not just a truck, it is a whole new trucking experience that will widen your area of operations in most cost-efficient manner. Our trucks will be the backbone of your operations giving you greater productivity and revenues. Your drivers will enjoy enhanced productivity and take pride in operating this driver-friendly vehicle.

With the BharatBenz tipper truck, you will find every terrain navigable and every trip profitable. The robust and reliable BharatBenz tipper truck will power your business ahead.



Power Ahead



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