

BH35-2

REAR DUMP TRUCK



Salient Features

The Robust Truck

Top Performance :

- High power engine, rugged AVTEC CLT 754 transmission with automatic lock - up clutch and heavy duty planetary axle provide optimum combination of speed and tractive effort.

Enhanced Productivity :

- High power to weight ratio gives ample reserve power for faster cycle time. Wide target area, large volumetric body & low loading height ensures high productivity.

Increased Reliability :

- Adjustment-free wet multiple disc brakes for rear axle and dry caliper disc brakes for front axle offer longer life.

Excellent Serviceability :

- Low maintainability and repairability index, evaluated through SAE J817A, compared to any other dumper in its class.

Exceptional manoeuvrability :

- Orbitrol full time Power steering with a good combination of steering angle, shorter turning radius, wheel tread and wheel base provide high degree of manoeuvrability.

Superior operating comfort :

- Human-engineered cabin with ergonomically designed operator's compartment & controls offer maximum comfort and operational ease.

Improved safety :

- Features include Integral ROPS cabin, emergency steering, dual braking system to meet relevant safety standards.



Max. Payload	: 31,752 kg
Capacity (heaped) SAE / ISO 2:1	: 22.5m ³
Flywheel Power (net)	: 280 kW (375 hp) @ 2100 rpm

BH35-2



beml
NEW FRONTIERS. NEW DREAMS

BH35 - 2 REAR DUMP TRUCK

Technical Specifications

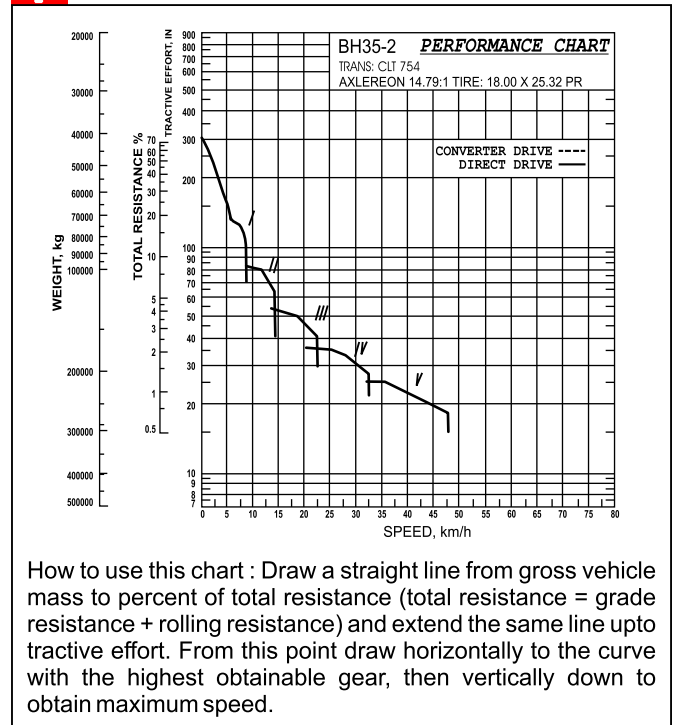


Engine

Make	Cummins (India)	BEML
Model	NTA-855-C	BSA6D140-1
Type	IC-Diesel, 4-stroke, turbocharged, after cooled, direct injection, water cooled.	IC-Diesel, 4-stroke, turbo charged, after cooled direct injection, water cooled.
Number of cylinders	6, inline	6, inline
Bore & Stroke (mm)	∅ 140 x 152 mm	∅ 140 x 165 mm
Displacement	14.0 l	15.2 l
Fly wheel power	280 kW (375hp) @2100 rpm	280 kW (375hp) @2100 rpm
Maximum net torque	1627 N-m (166 kg-m) @ 1400 rpm	1628 N-m (166 kgm) @ 1400 rpm
Meets SAE J 1349		
Electricals		
Starting motor	24V DC, 7.5 kW	24V DC, 7.5 kW
Battery	2 X 12V, 200 Ah	2 X 12V, 200 Ah
Alternator	24 V 30 A	24 V 45 A



Performance Chart



Power Train

Transmission					
Model	AVTEC CLT 754				
Type	Power shift with automatic Lock up clutch				
Drive axle					
	Full floating				
Differential					
Type	Traction sensing, automatic				
Ratio	3.23 : 1				
Final drive					
Type	Planetary reduction type				
Ratio	4.58 : 1				
Total reduction	14.79 : 1				
Travel speeds (km/h)					
Range	1st	2nd	3rd	4th	5th
Forward	9.12	14.82	22.40	34.25	47.30
Reverse			4.76		



Frame

Type	Box section construction made of high tensile strength steel
------	--



Brakes

Service brakes	
Front	Air-over-hydraulic, dry caliper disc
Rear	Air-over-hydraulic, wet multiple disc
Emergency	Air-over-hydraulic, automatic application through relay emergency valves
Parking brake	Spring actuated, air released, dry caliper disc on axle input flange
Retarder brakes	Rear brake serves as retarder brake
Meets ISO 3450 performance requirements	



Steering System

Type	Orbitrol, full time power steering
Cylinder	
Type	Double acting, piston type
Quantity	Two
Bore x stroke	∅ 110 x 435 mm
Relief pressure	12.4 MPa (126 kg/cm ²)
Emergency steering	Electrically driven hydraulic Pump and motor
Performance	
Turning radius	8.0 m
Vehicle clearance Dia	18.18 m



Hydraulics

Hydraulic pump	
Type	One no, tandem gear pump for hoist, steering and brake oil cooling
Capacity	213 l/min @ 2100 rpm (Hoist & Steering) 70 l/min @ 2100 rpm (Brake oil cooler)
Relief pressure	
Hoist	17.2 MPa (175 kg/cm ²)
Brake oil cooler	0.54 MPa (5.5 kg/cm ²)
Hoist cylinders	Twin, 3- stage, double acting, telescopic type
Body hoist time	16 ± 1.5 sec.



Suspension

Type-front	Frame mounted, hydropneumatic integral rebound control	
Rear	Axle mounted, inverted hydropneumatic, Integral rebound control	
Cylinder	Front	Rear
Quantity	2 nos	2 nos
Bore x stroke	Ø 216 x 365 mm	Ø 216 x 170 mm
Charging pressure	2.8 MPa (28.12 kg/cm ²)	1.9 MPa (19.5 kg/cm ²)
Load/deflection rate		
Empty	482 kg/cm ²	408 kg/cm ²
Loaded	1132 kg/cm ²	5504 kg/cm ²



Body

Plate thickness	
Bottom	16 mm
Side	8 mm
Front	12 mm
Target area (Length x width)	5015 mm x 3475 mm
Depth	1350 mm
Volumetric capacity	
Struck	16.0 m ³
Heaped- SAE/ISO(2:1)	22.5 m ³

Guards

Engine & Transmission belly guard, cab spill guard, drive line protector, radiator fan guard and hand rails (Meets ISO 3457 requirements)

Standard Accessories

General

ROPS cabin, Electronic Diagnostic system, Vandalism Protection Cap (Fuel tank), Head and tail lights, Air horn, Turn signal lights, Alternator, Electric starter, Key-switch, Wiper motor, Manual emergency steering, Windshield washer, Dump brake, Right & left Hand mirror, Portable fire extinguisher, Tool kit, Parking brake valve, Tilttable steering wheel and column, Exhaust heated body, Central warning lamp & buzzer, Battery relay, Backup Alarm with flasher, Catwalk, Mudflaps, Bodylock pins, Rock ejectors, Cabin floor mat, Safety seat belt, Co-operator seat, Air dryer, Front brake cut-off switch, Emergency brake, Engine shut-off switch, Twin fresh air fans, Fog lights, Dial gauge on fuel tank, Auto retarder, Blind spot mirror & steering locking, Reflective stickers on all sides.

Guages

Ammeter, voltmeter, Air pressure, Engine oil pressure, Water temperature, Transmission oil temperature & pressure, Brake oil temperature, Air cleaner restriction, Speedometer, Tachometer, Electrical hour meter, Fuel level.



Tyres

Size	18.00 x 25, 32PR(E-4) tubeless-standard	
(Front & Rear)	18.00 x 25, 36PR(E-4) tubeless-optional	
	18.00 x 25, 40 PR(E-4) tubeless-optional	
Rim size	13.00 x 25	
BEML recommends the user to evaluate all job conditions and consult the tyre, manufacturer to make proper tyre selection.		



Masses

Net vehicle mass	27,808 kg	
Rated payload	31,752 kg	
Gross vehicle mass	59,560 kg	
Mass distribution	Empty	Loaded
Front axle, kg	13,070 (47%)	19,655 (33%)
Rear axle, kg	14,738 (53%)	39,905 (67%)

System refill capacities

Systems	Capacity (ℓ)
Cooling system	120
Fuel tank	540
Engine lub. oil	26
Transmission	36
Differential	45
Final drive (each side)	18
Hydraulic tank	225
Air tanks	150
Suspension	17
- Front	17
- Rear	8.8



Cabin

Type Sound suppressed, Integral ROPS cabin with electronic Diagnostic system
Meets ROPS performance criteria as per ISO 3471

Indicators

Hi-beam, Reverse, Turn signal, Body-up, Lube oil pressure, Water temperature, Parking brake and emergency steering "ON", Alternator warning, Transmission Oil temperature and pressure, Fuel level, Transmission filter clogging, Air pressure and hydraulic oil temperature.

Alarms

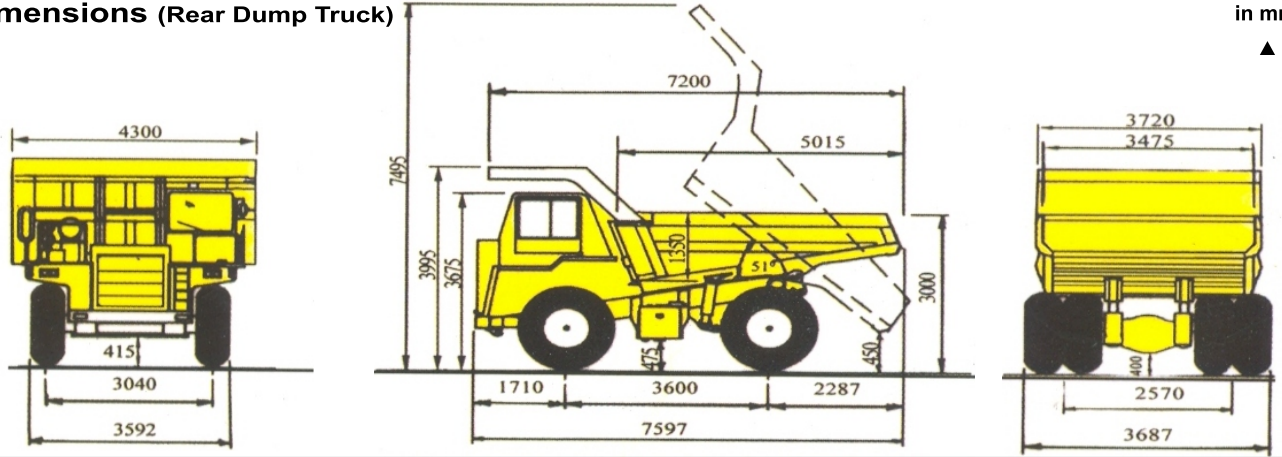
Air pressure, Water temperature, Transmission oil temperature & pressure, Lube oil pressure, Hydraulic oil temperature, Transmission filter clogging, Body-up and parking brake "ON", Low fuel level.

Optional Accessories

Tyre inflation kit, Suspension charging kit, Auto emergency steering, Air conditioner and Heater unit, exhaust muffler (Non exhaust heated body), Fast fill system for fuel, Automatic centralised lubrication system, Parking brake interlock, Radial tyres, Auto fire suppression system, Body wear bars, Coal body.

Dimensions (Rear Dump Truck)

in mm



1. Illustrations may include optional equipment & accessories and may not include all standard accessories.
2. Materials and specifications are subject to change without notice.
3. All the specifications meet relevant ISO standards.



MARKETING NETWORK

BEML LIMITED

- Corporate Office** : BEML Soudha, 23/1, 4th Main, SR Nagar, Bangalore-560 027. PH: +91-80-22963240 FAX: +91-80-22963164
Email: edc@beml.co.in; agmpr@beml.co.in
- International Division** : BEML Soudha, 23/1, 4th Main, SR Nagar, Bangalore-560 027. Ph. No. +91-80-22233350, 22222730
Fax No. +91-80-22224874 Email: office@export.beml.co.in
- Marketing Division** : 5th floor, Unity Building, J C Road, Bangalore-560 002. Ph. No. +91-80-22963501/02/05, 22963507/09/10
Fax No. +91-80-22963541 Email: mmoffice@sales.beml.co.in

REGIONAL OFFICES

BILASPUR :

1/A, Sector C, Sirgitti Industrial Area, PO: Tifra,
Bilaspur - 495 223. Ph. No. 07752-252082,
Fax No. 07752-252065. E-mail: bilaspur@rm.beml.co.in

CHENNAI :

Flat No. 10 & 11, Supriya Estates, Sterling Road,
Nungambakkam Road, Chennai - 600 034
Telefax No. 044 - 28257319 E-mail: chennai@rm.beml.co.in

HYDERABAD :

3-6-114, Himayat Nagar, Hyderabad - 500 029.
Ph. No. : 040-23227032, Fax No. : 040-23221794
E-mail : hyderabad@rm.beml.co.in

KOLKATA :

Flat No. 9, 10 & 11, 5A, Lord Sinha Road, Kolkata - 700 071.
Ph. No. 033-22826314, Fax No. 033 - 22821033
E-mail : kolkata@rm.beml.co.in

MUMBAI :

Rajmahal, 1st Floor, 84, Veer Nariman Road, Churchgate,
Mumbai-400 020. Ph. No. : 022-22852017,
Fax No. : 022 - 22852633. E-mail: mumbai@rm.beml.co.in

NAGPUR :

33, Cement Road, Shivaji Nagar, Nagpur - 440 010.
Ph. No. 0712 - 2248435, Fax No. 0712 - 2248343
E-mail : nagpur@rm.beml.co.in

NEW DELHI :

Flat No. E,F,G,H, 'Vandana', 11, Tolstoy Road,
New Delhi - 110 011. Ph. No. : 011-23316500
Fax No. 011-23325085
E-mail : delhi@rm.beml.co.in

RANCHI :

712C, Circular Road, Ranchi - 834 001.
Ph. No. 0651 - 2560370, Fax No. 0651 - 2560197
E-mail : ranchi@rm.beml.co.in

SAMBALPUR :

BEML Complex, NH-6, Baraipalli, Sambalpur - 786 150
Ph. No. 0663 - 2521604, Fax No. 0663 - 2521603
E-mail : sambalpur@rm.beml.co.in

SINGRAULI :

PB No. 5, Jhingurdha Colliery, PO : Sidhi, Singrauli - 486 889.
Ph. No. 07805 - 266668, Fax No. 07805 - 267282
E-mail : singrauli@rm.beml.co.in

DISTRICT OFFICES

AHMEDABAD :

266-1, Dilbaug Villa, Darshan Society Road, Navrangpura,
Ahmedabad - 380 009, Ph. No. 079 - 26445523,
Fax No. 079-26423950, E-mail : ahmedabad@rm.beml.co.in

ASANSOL :

3, Bumpur Road, Asansol - 713 304, Ph. No. 0341-2252480,
Fax No. 03410-2250601 E-mail:asansol@rm.beml.co.in

BHILAI :

Room No. 22/C, BSP Building, Near Ispat Bhavan,
Bhilai - 490 001 (C.G), Ph. No. 0788-2223882
Fax No. 0788-2250055, E-mail : bhilai@rm.beml.co.in

BHUBANESWAR :

91/A1, Shaheed Nagar, Bhubaneswar - 751 007,
Telefax No. 0674-2545227
E-mail : bhubaneswar@rm.beml.co.in

CHANDRAPUR :

Mamidwar Tiles Factory Compound, Ghugus Road,
Padoli, Chandrapur - 442 406(MS) Ph. No. 07172-287230
Fax No. 07172-287760, Email : chandrapur@rm.beml.co.in

DHANBAD :

Kamal Kunji, Kola Kusuma, Saraidhela, Dhanbad - 828 127,
Ph. No. 0326-2208982, Fax No. 0326-2200182.
E-mail : dhanbad@rm.beml.co.in

GUWAHATI :

RG Baruah Road, 9, Bylane (West), Thinali,
Guwahati-781 024, Telefax No. 0361-2454696,
E-mail:guwahati@rm.beml.co.in

HOSPET :

No. 243, Sri Daruka Nilaya, No. 42, 1st Main Road,
Basaveswara Badavane, Hospet-583 201(Karnataka)
Mobile No. 09448489606

JAMMU :

62C, Block D/C, Gandhinagar, Jammu Tawi - 180 004,
Ph. No. 0191-2430447, Fax No. 0191-2450764
(PP), E-mail : jammu@rm.beml.co.in

KOTHAGUDEM :

5-25/1, Balaji Complex, Lakshmidivipalli, Kothagudem-507 101 (AP),
Ph. No. 08744-242489, Fax No. 08744-245572,
E-mail : kothagudem@rm.beml.co.in

MADURAI :

9 - 4/49, Kalai Nagar, 2nd Main Road, Madurai - 625 017.
Tele No. 0452-2649458 / 2649125 / 2649125

NEYVELI :

F4, Rajendra Prasad Road, Block 27, Neyveli - 607 803,
Telefax No. 04142-268517, E-mail : neyveli@rm.beml.co.in

PANJIM :

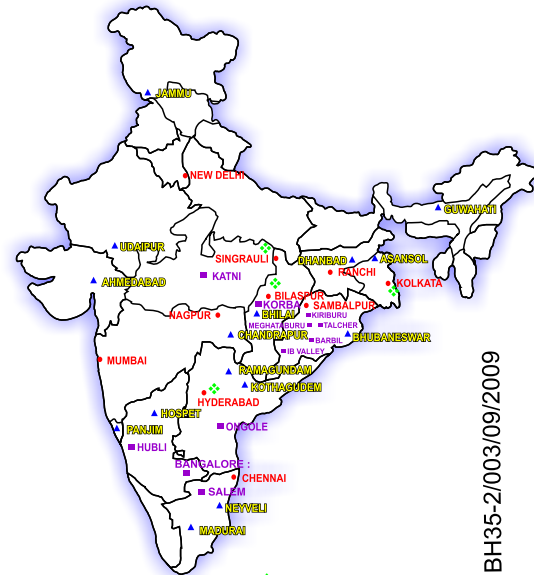
67-12, Dattaprasad Building, III Floor, MG Road, Panjim-403 001,
Telefax No. 0832-2225135, E-mail : goa@rm.beml.co.in

RAMAGUNDAM :

Opp. SCCL 11 A Mines, (PO) Jallaram, Godavari Khani - 505184,
(via-Manthani), Karimnagar Dist (AP),
Telefax No. 08728 - 244578, E-mail : ramagundam@rm.beml.co.in

UDAIPUR :

No - 20 - B, Uchhab Bhavan, Bedla Road, Fatehpura,
Udaipur - 313004, Rajasthan,
Ph. No. 0294-2452053/2452055, Telefax No. 0294-2452054



- ◆ Zonal Offices
- Regional Offices
- ▲ District Offices
- Activity Centres

Form No. BH35-2/003/09/2009