

BELAZ

MINING DUMP TRUCK BELAZ-7540B

30 TONS



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SPECIFICATIONS

Engine

Rated power at 2100 rpm, kW (hp)	265(360)
Maximum torque at 1500 rpm, N*m	1275
Number of cylinders	12
Cylinder displacement, l	22.3
Cylinder diameter, mm	130
Piston stroke, mm	140
Specific fuel consumption at rated power, g/kW*h	230
Air purification - two-stage with dry type filter elements. Exhaust gases are released through the body. The lubrication system is mixed, based on the «wet» sump principle. Oil cooling - water-oil heat exchanger. The cooling system is liquid, with forced circulation. The starting system is electric starter.	
Voltage in the electrical system, V	24

Steering

Complies with the requirements of the ISO 5010 standard.	
Turning radius, m	8.7
Overall turning diameter, m	20

Transmission

Hydromechanical transmission with a matching gearbox, a complex single-stage torque converter, a shaft gearbox with friction clutches, a hydrodynamic retarder, an automatic and command control system.			
Maximum dump truck speed, km/h			50
Gearbox ratios:			1,0
gearbox			
	gear	forward	reverse
	1	2,46	1,60
	2	1,43	
	3	0,70	

Suspension

Dependent for the front axle and drive axle with longitudinal and transverse rods. Pneumohydraulic cylinders (oil and nitrogen) with a built-in hydraulic shock absorber, two per front axle and rear axle.	
cylinder piston stroke, mm:	
-front	200
-rear	265

Hydraulic system

Combined for body tipping mechanism and steering.
Oil pumps are gear-type.
The bodylift cylinders are telescopic, three-stage with one double-acting stage.

Bodylifting time, s	16
Bodylowering time, s	20
Maximum pressure in the hydraulic system, MPa	13,5
Maximum pump performance at 2100 rpm, dm ³ /min	168
Filtration degree, microns	10

Cabin

Single, with an additional side seat, the driver's seat is air-sprung, adjustable. Meets the requirements of standards (EN 474-1 and EN 474-6) establishing levels of internal noise, vibration, concentration of harmful substances and air dust. Sound level in the cabin no more than 80 dB(A).

Brake system

Brake system - complies with international standards and safety requirements ISO 3450 and is equipped with working, parking, auxiliary and spare brake systems.

Working system: brake mechanisms - shoe, drum type for front and rear wheels. Drive - pneumatic, separate for the front wheels.

Parking system: shoe brake mechanism, permanently closed type on the drive shaft of the main gear. Drive - spring, pneumatic control.

Auxiliary system: hydrodynamic brake-retarder, on the drive shaft of the gearbox, control - electrical.

Spare system: The parking and service brake circuits are used.

Cardan gear

Two open-type cardan shafts with hinges on needle bearings connecting the hydromechanical transmission to the engine and drive axle. An elastic coupling is installed between the front driveshaft and the engine.

Body

Bucket type, with a FOPS and ROPS safety system, welded, with a protective canopy and heating with engine exhaust gases, equipped with a device for mechanical locking in the raised position, stone chippers and stone ejectors.

Body capacity, m ³ :	
flush with the sides	stroke «heaped» 2:1
15.1	19.2

Chassis

Welded, made of high-strength low-alloy steel. The longitudinal spars are box-shaped, of variable height, connected to each other by cross members.

Weight

Maximum cargo weight (carrying capacity), kg	30000	
Dump truck weight without load, kg	22600	
Total weight, kg	52600	
Distribution of dump truck weight along axes, %:		
front	without load 48.5	with load 33.0
rear	51.5	67.0

Refilling tanks

Fuel tank, l	420
Engine cooling system, l	80
Engine lubrication system, l	46
Hydromechanical transmission	60
Hydraulic system	115
main gear	22
Wheel gears	22(11x2)
Suspension cylinders:	
front	9.0 (4.5x2)
rear	9.0 (4.5x2)

Tires

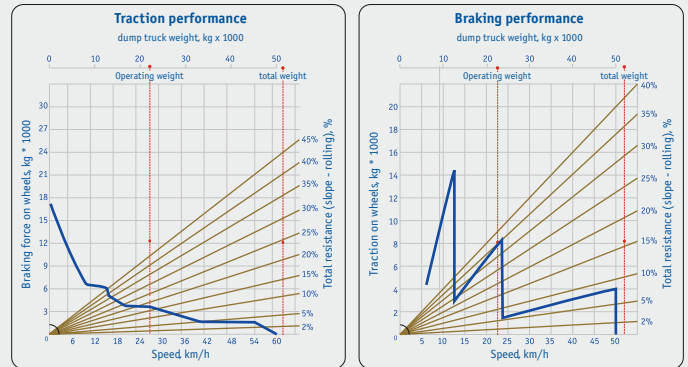
Pneumatic, tread pattern - quarry.

Designation	18.00R25; 18.00-25 HC 32 (E-3)
Internal pressure, MPa	as recommended by the tire manufacturer
Rim designation	13.00-25/2.5

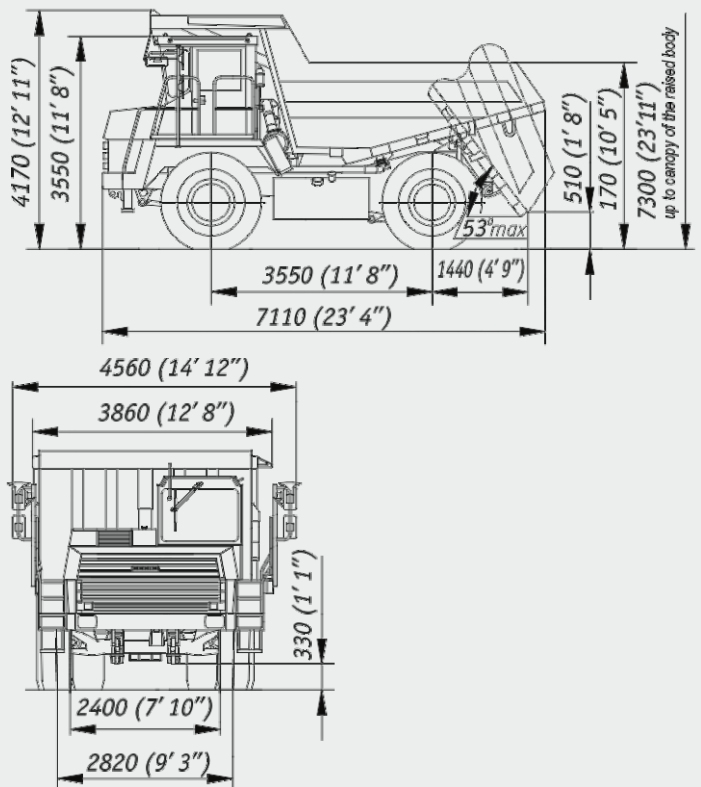
Application

Designed for transportation of rock mass in difficult mining conditions of deep quarries, in open-pit mining of mineral deposits along technological roads in various climatic operating conditions (at ambient temperatures from -50°C to +50°C).

Traction and braking specification



Dimensions, mm



Overall dimensions are indicated for the basic equipment. Due to continuous improvements in technology, specifications provided are subject to change without notice.

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