

BELAZ SERIES 7560

320mt/ 360t payload capacity



Engine

Model MTU 20V4000
Four-cycle gas-turbocharged and intercooled direct injection diesel engine with V-type cylinders arrangement and electronic control system. The engine meets Tier2 emission requirements.

	Metric	SAE
Gross power @ 1900 rpm, kW/ hp	2610	3500
Maximum torque @ 1500 rpm, N.m/ ft lbs	13771	10158
Number of cylinders	20	20
Cylinders displacement, l/ cu in	95.4	5822

Air cleaning is performed by three-stage filter with dry-type elements. Engine exhaust routed through body and mufflers. Circulating lubrication system is pressurized and designed with wet crankcase. Double-loop fluid cooling system with forced circulation. Oil cooling is performed by oil-to-water heat exchanger. Cooling system impeller is actuated by electrohydraulic friction coupling with automatic control. Fluid preheating system.

Electric starter.		
Air pressure in starting system, MPa/ psi	0.8-1.0	116-145
Electric equipment system voltage, V		24

Electric Drive

Equipped with AC/AC drive with traction alternator, two traction motors, planetary double-row reduction units, microprocessor-based control system and control devices.

Transmission ratio		39.32:1
	Metric, km/h	SAE, mph
Maximum speed	64	40

Traction alternator	Kato
Traction motor	Siemens
Reduction gear	Belaz

Suspension

Suspension is conventional for front axle and drive axle, equipped with trailing arms, central joints and transverse rods. Cylinders are pneumohydraulic (nitrogen and oil) and equipped with built in hydraulic shock absorber. Two cylinders are on the front axle and two cylinders are on the rear axle.

	Metric, mm	SAE, in
Cylinder piston stroke		
- front	300	12
- rear	170	7

Steering

Hydrostatic steering with steerable front wheels.

	Metric, m	SAE, ft
Steering angle, degree	37	37
Turning radius	17.2	56
Overall turning diameter	38	125

The steering meets ISO 5010 requirements.

Brakes

Dump truck brake system meets ISO 3450 international safety regulations and requirements. The system is equipped with service, parking, retarding and emergency brake systems.

Service brake system

Front wheel brakes- disc type with four brake calipers per one disc. Rear wheel brakes- double-disc type with one brake caliper per each disc and automatic slack adjustment. Discs are installed on the traction electric motor shafts.

Brake drive- hydraulic, separate for the front and rear wheels.

Parking brake system- with two brake units per side, normally closed.

Brake actuation- by spring.

Brake control- hydraulic.

Retarder system- retarding by electric motors in generator mode with forced air cooled resistors.

Emergency brake system- parking brake system combined with operating service brake system circuit.

Grid resistors		Siemens
Power, kW/ hp	3760	5042

Body

Welded bucket-type body with FOPS safety system, protective canopy, engine exhaust heating, device for mechanical fixing in raised position and rock-ejectors.

Body capacity:

struck	heaped 2:1
Metric, m³	SAE, yd³
139	182
Metric, m³	Metric, m³
199	260



Frame

Frame is welded of high-strength low-alloy steel with castings at maximum loading points with box-section variable-height side-members interconnected by cross-members.

Hydraulic Drive

Hydraulic system is combined for body dumping gear, steering and brakes actuator. The system is equipped with two-section variable-displacement axial-piston oil pump and two-stage telescopic body lifting cylinders with one stage of double action.

Body lifting time, sec	31
Body lowering time, sec	20
Maximum pressure in hydraulic system, MPa	21
Maximum pump delivery @ 1900 rpm, dm ³ /min/ gal/min	948/ 250
Filtration degree, mcm	10

Cab

Two-man two-door cab is equipped with air-suspension adjustable driver seat, additional passenger seat and adjustable steering column. The cab meets EN 474-1 and EN 474-6 requirements for levels of in-cab noise, vibration, and dust.

Cab meets ROPS safety requirements.

In-cab noise level is not more than 80 dB(A).

Local vibration level is not more than 126 dB(A).

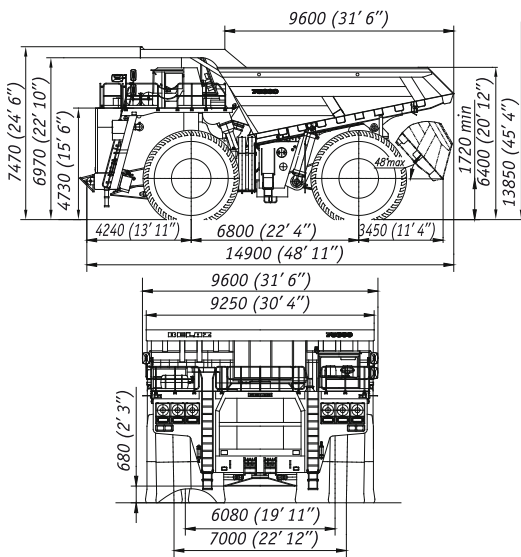
Overall vibration level is not more than 115 dB(A).

Tires

Radial tubeless air tires with quarry tread pattern.

Tire designation	56/80R63; 59/80R63
Inflation pressure, MPa/ psi	0.6/ 87
Rim designation	41.00-63/5.0; 44.00-63/5.0

Overall dimensions, mm*



*Overall dimensions are specified for truck with standard options

Capacities

	Metric, l	SAE, gal
Fuel tank	4360	1152
Engine cooling system	890	235
Engine lubrication system	300	79
Hydraulic system	1410	372
Reduction gear (2)	300	79
Suspension cylinders:		
- front (2)	123.2	33
- rear (2)	125.8	33

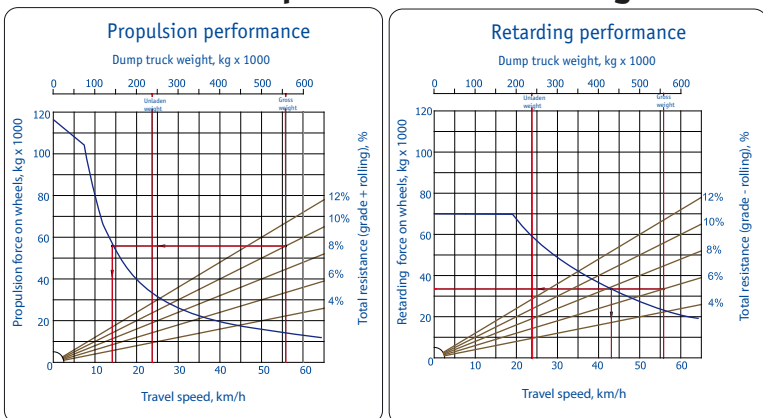
Weight

	Metric, kg	SAE, lb
Maximum payload capacity	320000	705479
Unladen weight	240000	529110
Gross weight	560000	1234589
Dump truck weight distribution on axles, %:		
unladen		laden
- front	49	33
- rear	51	67

Special equipment

- Automatic fire-fighting system (standard)
- Starting preheater (standard)
- Heating and ventilation system (standard)
- Automatic lubrication system (standard)
- Loading and fuel control system (standard)
- Telemetering tire-pressure monitoring system (standard)
- Video-observation system (standard)
- Body floor lining (standard)
- Warning device for high-voltage line (optional)
- Diagonal stairs (optional)
- Exhaust routed undertruck (optional)

Propulsion and Retarding



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