

## BD355X BULL DOZER

### SALIENT FEATURES






- **BEML BS6D170-1 diesel engine:** Turbo charged engine for superb fuel economy and generous power to weight ratio for powerful dozing.
- **Torqueflow transmission:** Smooth and responsive power shift with single-lever control for instant speed and directional changes.
- **Pilot operated hydraulic system:** Offers effortless fine control of blade through joy stick
- **Operator Comfort:** Conveniently located arm chair steering control for enhanced operator comfort.
- **Electronic Monitoring System:** Introduction of state of the art electronic monitoring system, fitted with cluster gauges.
- **Steering clutch & Brakes:** Track-roller frames are made of high tensile steel for maximum rigidity. The blade incorporates high-tensile steel at all key points to improve outstanding resistance to wear
- **Sturdy construction:** High tensile steel blades of different configurations available for varying types of working conditions and applications . The work attachment is sturdy in construction to withstand adverse ground conditions.
- **Sprockets:** Bolt-on type segmented sprocket permits quick on site replacement. Special grooved type floating seals and unique dust seals provide extended undercarriage life.
- **Reduced noise levels:** Radiator, fuel tank, floor frame and the cabin are mounted on anti-vibration rubber cushions to isolate vibration and to reduce noise levels.

Flywheel power(net) : 310kW (416HP)@ 2000 r/min  
Operating mass : 43850 kg  
(with straight tilt dozer)





## BD355X BULLDOZER SPECIFICATIONS





 <b>Engine</b>		 <b>Power Train</b>		
Make	BEML	<b>Torque converter</b>		
Model	BS6D170-1	Type	3 element, single stage single phase.	
Type	Diesel, 4-stroke, water cooled, turbo-charged, direct injection.	Stall ratio	2.6	
Flywheel power ISO:9249	310 kW(416 HP) @ 2000 r/min	<b>Transmission</b>		
Maximum torque	1780 N-m (181.5 kg-m) @ 1400 r/min	Type	Planetary power shift, 4 forward, 4 reverse.	
No. of Cylinders	6, inline	<b>Bevel Gear</b>		
Bore & Stroke	dia 170 mm x 170 mm	Type	Spiral bevel gear, single reduction, splash lubricated	
Displacement	23.15 litres (0.02315 m <sup>3</sup> )	 <b>Steering Clutch (Arm Chair Control)</b>		
<b>Electrical</b>		Type	Wet, multiple disc steering clutches are hydraulically actuated and require no adjustment	
Alternator	24V, 30A	Turning radius	3.1 m (Tractor only)	
Starting motor	24V, 9kW	Steering Control	Feather touch arm chair steering control for ease of operation	
Battery	(2 x 12V,200 Ah)	 <b>Final Drive</b>		
 <b>Filtration</b>		Type	Spur and planetary gear, double reduction.	
Engine	Double element dry type with pre-cleaner and automatic dust ejector for intake air. Cartridge type filters for oil and fuel.	Lubrication	Splash type.	
Transmission	Magnetic oil strainer and pressure line filter.	Total reduction	33.74	
Steering & Brake	Magnetic oil strainer and pressure line filter.	Travel speeds km/h (m/sec)		
Hydraulic System	Magnetic iron particle separator and return line.	Range	Forward	Reverse
		1st	0-3.3 (0.92)	0-3.2 (0.89)
		2nd	0-5.1 (1.42)	0-5.0 (1.39)
		3rd	0-8.50 (2.36)	0-8.4 (2.33)
		4th	0-12.7 (3.53)	0-12.6 (3.50)


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 <b>Hydraulic System</b>	
<b>Hydraulic Pump</b>	
Type	Pilot operated system
Main pump	Gear pump
Capacity	419.3 litres / min. @ 2000 rpm
Relief pressure	13.73 MPa(140 kg/cm <sup>2</sup> ) Main pump
<b>Hydraulic cylinders</b>	
Type	Double acting piston type
Blade Lift	2 cylinders
Bore x Stroke (mm)	dia 160 mm x 1440 mm
Blade Tilt	1 cylinder
Bore x Stroke	dia 250 mm x 180 mm
 <b>Fluid Capacity (in litres)</b>	
System	Litres
Cooling System	180
Fuel Tank	760
Engine Lub.Oil	43
Torque converter, Transmission, bevel gear & steering system	190
Final Drive (each side)	68
Hydraulic tank	142

 <b>Instrumentation</b>	
Dash Board	Aesthetically designed instrument panel provides good visibility of gauges mounted on dash board during day & night operation.
Guages / Warning indicators	Modular, analogue gauges provided for easy installation and field servicing.
Wire harness	Newly designed wire harness with blade fuse links, drip proof connectors and bicolor coded cables to improve safety and reliability of electrical systems.

 <b>Brakes</b>	
Type	Wet cotracting band.
Actuation Type	Foot operated, mechanical linkage assisted by hydraulic booster for light-touch and easy actuation. Brakes and clutches are hydraulic for easy steering.
Parking brake	Hand operated with mechanical linkage.

 <b>Under Carriage</b>	
Suspension	Semi-rigid equaliser bar type
Track Frame	Box section, high tensile strength steel construction
Track Pitch	2260 mm
Track Rollers	7 nos each side
Carrier Rollers	2 nos each side
Track Shoes	No. of shoes : 39 nos each side
Grouser Height	88mm
Shoe width	610mm (standard)
Ground Pressure	82.58 kPa(0.84 kg/cm <sup>2</sup> )
Ground contact area	4.099 m <sup>2</sup>

 <b>Cabin</b>	
Hexagonal shaped, sound suppressive cabin provides excellent visibility and operator comfort	

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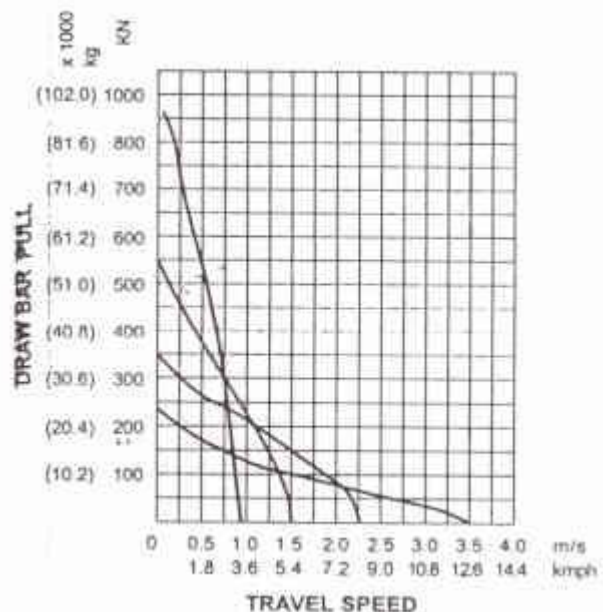


<b>Dozer Equipment</b>					
	Straight tilt dozer	Angle dozer	Semi-U dozer	U dozer	Coal dozer
Overall length with dozer (mm)	7120	7215	7163	7600	7540
Blade length x height (mm)	4315 x 1875	5230 x 1350	4315 x 1875	4715 x 1875	5530 x 2125
Max. lift above ground (mm)	1545	1640	1545	1545	1565
Max. drop below ground (mm)	700	720	700	700	650
Max. tilt adjustment (mm)	1000	550	1000	1000	*
Additional ground pressure kPa(kg/cm <sup>2</sup> )	20.6 (0.21)	19.6 (0.20)	20.6 (0.21)	23.54 (0.24)	19.62 (0.20)
<b>Mass in kgs</b>					
Dozer Attachment	7830	7200	7840	8830	7660
Hydraulic Control Unit	880	870	880	880	680

\* Tilt cylinder for coal dozer is optional.

<b>Mass (approximate)</b>	
Operating mass (Standard equipment with straight tilt dozer)	43850 kg
Shipping mass (Basic tractor with lubricants, hydraulic system, cooling system and 10% of fuel tank capacity)	34560 kg

### DRAW BAR PULL VS TRAVEL SPEED

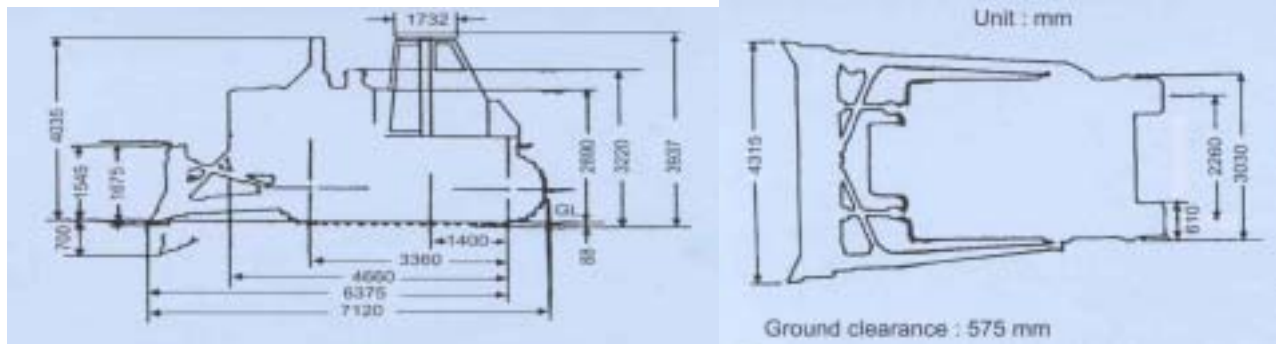


Note: Usable pull depends upon Traction & Equipment weight

# BD355X BULLDOZER SPECIFICATIONS



## BD355X BULLDOZER DIMENSIONS (Straight Tilt Dozer)



<b>STANDARD ACCESSORIES</b>	
<ul style="list-style-type: none"> <li>- Pilot operated Hydraulic System</li> <li>- Arm Chair Steering levers</li> <li>- Steel Cabin</li> <li>- Hydraulic track adjusters</li> <li>- Wear resistant pulley</li> <li>- Track roller guard (each side)</li> <li>- Final drive case wear guard</li> <li>- Electronic Monitoring with audio visual warning</li> </ul>	<ul style="list-style-type: none"> <li>- Fixed type drawbar</li> <li>- Lower guard (5 pieces)</li> <li>- Lighting system including one rear and 2 front lights)</li> <li>- Front pull hook</li> <li>- In-line radiator</li> <li>- Tool kit</li> </ul>
<b>OTHER ACCESSORIES</b>	
<p><b>METERS &amp; GAUGES</b></p> <ul style="list-style-type: none"> <li>- Engine oil pressure gauge &amp; warning lamp</li> <li>- Engine coolant temperature gauge &amp; warning lamp</li> <li>- Engine oil temperature gauge &amp; warning lamp</li> <li>- Converter oil temperature gauge &amp; warning lamp</li> <li>- Fuel level gauge</li> <li>- Voltmeter &amp; battery charge warning unit</li> <li>- Tacho-hour meter</li> <li>- Preheater signal</li> <li>- Dust indicator</li> <li>- Smart reverse alarm with flasher unit</li> <li>- Lighting system (including 2 front &amp; 1 rear lights)</li> <li>- Engine oil filter clogging caution lamp</li> <li>- Radiator water level caution indicator</li> </ul>	<p><b>CONTROL LEVERS</b></p> <ul style="list-style-type: none"> <li>- Gearhift</li> <li>- Steering clutch (left)</li> <li>- Steering clutch (right)</li> <li>- Blade</li> <li>- Ripper</li> <li>- Safety lock for blade and ripper levers</li> <li>- Pin-puller</li> <li>- Fuel control</li> </ul> <p><b>SWITCHES</b></p> <ul style="list-style-type: none"> <li>- Starting</li> <li>- Preheater</li> <li>- Headlight</li> </ul> <p><b>CONTROL PEDALS</b></p> <ul style="list-style-type: none"> <li>Brake</li> <li>Decelerator</li> </ul> <p><b>SWITCHES</b></p> <ul style="list-style-type: none"> <li>Starting</li> <li>Preheater</li> <li>Headlight</li> </ul>
<b>OPTIONAL EQUIPMENT &amp; ATTACHMENTS</b>	
<ul style="list-style-type: none"> <li>- Thermally insulated ROPS guard</li> <li>- AC Cabin with Heater</li> <li>- ROPS guard</li> <li>- Pin puller eqpt. (for gaint ripper)</li> <li>- Scoria disposal blade</li> </ul>	<ul style="list-style-type: none"> <li>- Pusher plate for st. tilt dozer</li> <li>- Towing winch</li> <li>- Multi shank ripper</li> <li>- Giant ripper</li> </ul>

Note:

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