

# BD65-1

**BULLDOZER**



## Salient Features :

- BEML - B6D125-1
- Power Shift Transmission
- Wet Steering Clutches and Brakes
- Arm Chair Steering Controls
- Joy Stick Controls for work attachment
- Long Track
- Floating Seals
- Dust Seals
- Comfortable Operator's Seat
- Simple Maintenance
- Hexagonal ROPS Cabin



# BD65-1

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Flywheel horsepower (net) : 123 kW (165 hp) @ 1850 rpm

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Operating mass : 16800 kg  
(with straight blade)

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# BD65-1 BULLDOZER

## Salient Features :

### BEML - B6D125-1

Diesel engine delivers 123 kW (165hp). Direct - injection system for high fuel efficiency and for cleaner exhaust. Can work upto 2800 meter altitude without fuel adjustment.

### Power Shift Transmission

For smooth power shifting and make instant speed and directional changes by a single lever.

### Wet Steering clutches and brakes

For long service life. They are interconnected to perform quick steering actions.

### Arm Chair Steering Controls

Controls for operator ergonomics

### Joy Stick Controls for work attachments

Pilot operated joystick for all blade operations.

### Long Track

For high machine balance cum stability and powerful traction even on soft terrains.

### Floating seals

In idlers and rollers for preventing entry of dirt for durable life

### Dust Seals

Between link, bushing, and pin to prevent abrasive dirt or mud entry and ensure longer track life.

### Comfortable operator's seat

Is adjustable in fore/aft for operator's convenience

### Simple Maintenance

Spin-on type full flow fuel filters, air cleaner with automatic dust evacuator and dust indicator, external control valve and cable linkages.

### Hexagonal ROPS Cabin

For better visibility and operator safety



## ENGINE

Make	BEML
Model	B6D 125-1
Type	Diesel, 4-stroke, water cooled, direct injection
Net Power	123 kW (165hp) @ 1850 rpm
Maximum torque	765 Nm (78 kgm) @ 1000 rpm
No. of cylinders	6, inline
Bore & Stroke	f 125 x 150 mm
Displacement	0.01104 m <sup>3</sup> (11.04ℓ)

### Electricals

Alternator	24V, 55A
Starting motor	24V, 7.5 kW
Battery	2 x 12V, 200 Ah



## POWER TRAIN

### Torque Converter

Model	TCS 38 - 2F
Type	3 element, single stage, single phase
Stall Ratio	2.9:1

### Transmission

Model	Planetary power shift 3F/3R
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### Final Drive

Type	Spur gear, double reduction
Lubrication	Splash type
Total Reduction ratio	16.66:1

### Travel Speeds m/sec (km/h)

Range	Forward	Reverse
1st	0-1.08 (0-3.9)	0-1.39 (0-5.0)
2nd	0-1.89 (0-6.8)	0-2.39 (0-8.6)
3rd	0-3.03 (0-10.9)	0-3.81 (0-13.7)

## STANDARD ACCESSORIES

Power shift transmission  
 Hydraulic track adjusters  
 Dry horizontal type air cleaner with pre-cleaner  
 Track roller guard (each side)  
 Final drive case wear guard brakes  
 Lighting System (Two Front & One rear)  
 Fixed type drawbar  
 Segmented sprockets  
 Belly guard (3 pieces)  
 Hydraulic oil cooler  
 In-line radiator  
 Adjustable operator's seat  
 Tool Kit and Back-up Alarm with flasher unit  
 Hexagonal cabin

### CONTROL PEDALS

Brake (Left)  
 Decelerator Pedal  
 Brake (Right)

### SWITCHES

Starting switch  
 Horn switch  
 Light switch

### CONTROL LEVERS

Steering (Right)  
 Steering (Left)  
 Gear-shift  
 Safety lock for gear shift  
 Blade control (Joy stick)  
 Fuel control  
 Brake lock lever  
 Safety lock for Blade

### METERS & GAUGES

Oil temperature gauge (Torque convertor)  
 Engine oil pressure gauge  
 Engine water temperature gauge  
 Engine oil pressure indicator  
 Tacho hour meter  
 Battery charging indicator (lamp)  
 Dust indicator  
 Preheater indicator

### OPTIONAL ATTACHMENTS

Canvas Canopy  
 AC with heater  
 Multi shank ripper  
 Rake dozer  
 Cabin

## HYDRAULIC SYSTEM

Hydraulic pump	
Type	Gear pump
Capacity	250l/min. @ 1850 rpm
Relief pressure	13.73 MPa (140 kg/cm <sup>2</sup> )
Hydraulic cylinders	
Type	Double acting piston type
Blade Lift	2 cylinders
Bore x Stroke	f 110 x 1026 mm
Control Valves	
Type	Pilot operated with joystick control
Position	Raise, hold, lower, float

## STEERING

Type	Wet, multiple disc
Control	Hand operated steering clutches are hydraulically boosted for light touch and actuation.
Minimum Turning radius	3.2 m

## FILTRATION

Engine	Replaceable cartridge type filter for lubrication as well as for fuel line.
Transmission	Replaceable element type filter.
Steering & Braking	One magnetic oil strainer and a filter with replaceable element for both steering and braking
Hydraulic System	Magnetic plug & replaceable element type filter.

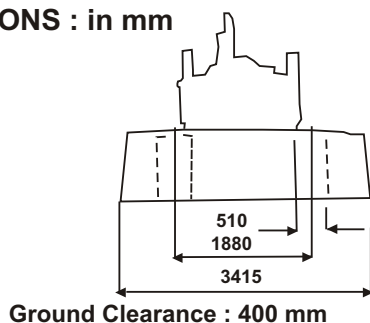
## UNDER CARRIAGE

Suspension	Oscillation type, equalizer bar
Track frame	Box section, high tensile strength steel construction.
Track rollers	7 no. each side
Carrier rollers	2 no. each side
Track shoes	39 nos. each side
Track pitch	1880 mm
Grouser height	65 mm
Shoe width	510 mm (Standard)
Ground pressure	60.8 kPa (0.62 kg/cm <sup>2</sup> )
Ground contact area	2.688 m <sup>2</sup>

## OPERATING MASS

<b>Shipping mass</b> (Basic tractor with lubricant hydraulic, Cooling system and 10% of fuel Capacity)	13720 kg
<b>Operating mass</b> (Standard equipment with angle dozer)	16800 kg

## DIMENSIONS : in mm



Material and specifications are subject to change without notice, Illustrations may include optional equipment & accessories

## BLADE ATTACHMENT

	Optional Angle Dozer	STD Straight tilt dozer	Optional Straight dozer	Optional Coal dozer
Over length with dozer (mm)	5360	5230	5230	5455
Blade length x height (mm)	3970x 1050	3415x 1150	3415x 1150	4450x 1540
Max. lift above ground (mm)	1250	1130	1125	1240
Max. drop below ground (mm)	540	585	585	615
Max. tilt adjustment (mm)	400	860	500	*
Additional mass (kg)				
Dozer attachment	2680	2740	2450	3660
Hydraulic control unit	400	520	400	400
Pressure kPa (kg/cm <sup>2</sup> )	Standard	11.77 (0.12)	10.79 (0.11)	9.8 (0.10)

\* Tilt cylinder for coal dozer is optional

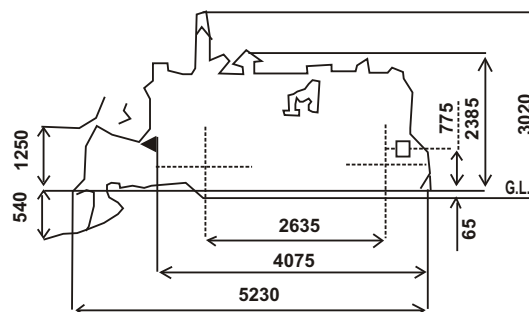
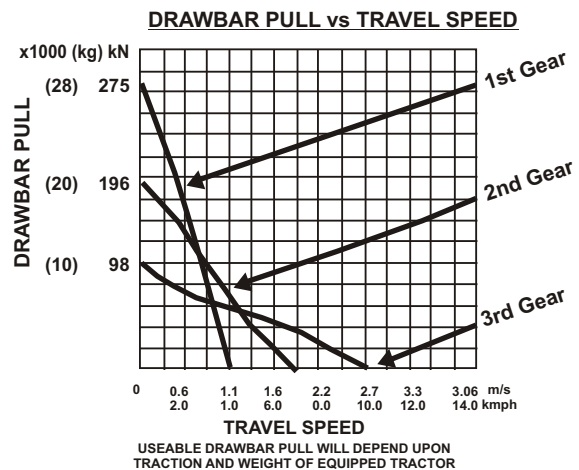
## COOLANT & LUBRICANT CAPACITY

System (Refilling)	Litres
Cooling System	52
Fuel Tank	320
Engine Lub. Oil	26
Transmission, torque convertor	47
Bevel gear case and steering system	65
Final drive (each side)	31
Hydraulic Tank	130

## BRAKE

Type	Wet, contracting band.
Control	Foot operated, steering brakes with hydraulic booster for light touch actuation and long service life. Brakes and clutches are interconnected for easy steering.
Parking brake	Hand operated with mechanical linkage.

## PERFORMANCE



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