

# BD14W

WHEEL DOZER



## Salient Features :

- Turbo charged BS6D105-1 BEML engine
- Electronic Transmission
- Articulated Power steering
- Limited slip differential
- Center point articulation
- Better Tractive effort



# BD14W

Blade Capacity	: 2.4m <sup>3</sup>
Gross Power	: 110 kW(148 HP) @ 2000 r/min
Fly Wheel Horse Power (Net)	: 94kW(126 HP) @ 2000 r/min
Operating Mass	: 15000 kg

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# BD14W

## WHEEL DOZER

### Salient Features :

Sturdy direct injection type, turbo charged BEML Diesel Engine for sustained power and fuel economy.

Articulated power steering for higher maneuverability and faster cycles.

Limited slip differential front and rear axles for positive traction while loading.

Rear axle oscillation offers stability to the machine on rough and uneven terrains.

Centre point articulation for safer steering operation. The rear wheels always track the front wheels.

Neutral starter switch in the circuit to avoid engine starting when transmission gear shift lever is not in neutral.

Greater drawbar pull and faster cycle time for higher production.



### ENGINE

Make	BEML LTD.
Model	BS6D105-1
Type	Water cooled 4 cycle, over head valve, direct injection type, turbo charged diesel engine.
No. of Cylinders	6
Bore & Stroke	∅ 105 x 125 mm
Displacement	6.5 ℓ (6,499 cc)
<b>HORSE POWER</b>	
Gross Power	110 kW(148 HP) @ 2000 rpm
Net Power	94 kW(126 HP)@ 2000 rpm(As per ISO:9249)
Maximum Torque	565 Nm (58 kgm) @ 1400 rpm
<b>FUEL SYSTEM</b>	
Type	BOSCH Inline FIP system
Governor	Mechanical, all speed control
<b>LUBRICATION SYSTEM</b>	
Method	Gear pump, forced lubrication
Cooler	Water cooled
<b>ELECTRICALS</b>	
Starting Method	Electric
Starting Motor	24V, 4.5kW
Alternator	24V, 45A
Battery	24V (2x12V), 150 Ah

### TRANSMISSION

<b>TORQUE CONVERTER</b>	
Model	W340
Type	Hydrodynamic
Stall Ratio	3.095 : 1
<b>Transmission</b>	
Model	4WG190 ERGO POWER
Type	Rear mounted multi speed power shift electronic control transmission with four forward & three reverse speeds
Controls	Manual Range Selector

### AXLES & FINAL DRIVE

Type	Front axle is fixed, and Rear axle oscillates up Or down by 10°, (total 20°) for greater machine stability.
<b>Final Drive</b>	
Type	Four wheel drive, full floating with planetary reduction in each wheel.

<b>Travel Speeds</b>	
Forward km/h (m/s)	Reverse km/h (m/s)
1st 6.28 (1.74)	1st 6.61(1.84)
2nd 11.66 (3.24)	2nd 12.24 (3.4)
3rd 21.43 (5.95)	3rd 22.34 (6.2)
4th 31.4 (8.72)	---

### STANDARD ACCESSORIES

Ammeter, Engine oil pressure gauge, Water temperature gauge, Transmission oil temperature gauge, Engine hour meter, Horn, Starter key switch, Working and traveling lights, Foot Throttle, Fenders, Starting motor, Alternator, Regulator, Batteries, Canopy, Reverse light and alarm, Side indicator lamps, Fire extinguisher, Tool box, Brake and Tail lamp, Battery charging indicator, High beam indicator, Parking brake applied indicator, Low air pressure warning.

### OPTIONAL ACCESSORIES

Steel Cabin  
Tyre Inflation Kit  
Pre heater



## HYDRAULIC SYSTEM

Pump Type	Vane Pump
Capacity	176 litres/min @ 2000 rpm
Relief Pressure	13.73 MPa (140 kg/cm <sup>2</sup> )
Control Valve Type	Double spool type
<b>Positions</b>	
Lift System	Raise, Hold, Lower and Float
Bore x Stoke	∅ 90 x 883 mm - 2 No.



## FILTRATION

Engine	Replaceable micro paper element filter for lubrication as well as for fuel line is provided.
Transmission	Replaceable element type of filter is provided.
Hydraulic System	Magnetic plug and replaceable element type filter is provided.



## STEERING SYSTEM

Type	Articulated, full power steering 25° on either side.
<b>Steering Pump</b>	
Type	Vane Pump
Flow	176 l/min @ 2000 rpm
Relief Valve Setting Pressure	12.25 MPa (125 kg/cm <sup>2</sup> )
Turning Radius	7200 mm (Minimum)
Bore x Stoke	∅ 90 x 535 mm - 2 No.

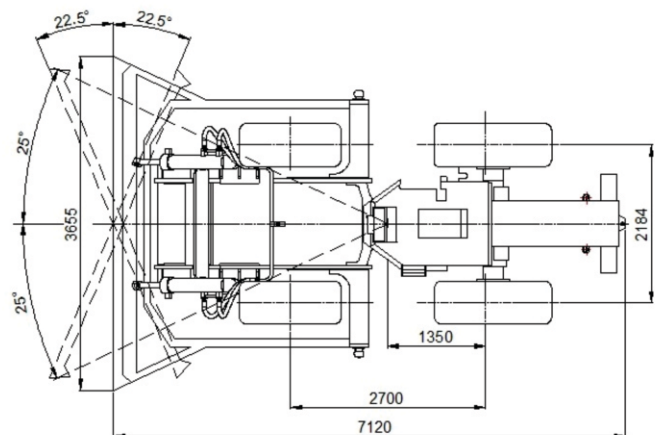
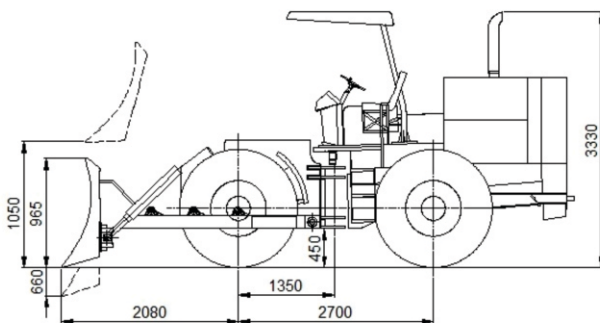


## TYRES AND RIMS

<b>Tyres</b>	
Standard	18.00 x 25-24 PR, L-4 (Tube less)
<b>Rims</b>	
Type	Flange type
Size	13.00 x 25
Max. gradeability	25% (~14°)



## DIMENSIONS mm



TOP VIEW



## SERVICE CAPACITIES

System	(litres)
Cooling system	45
Fuel tank	185
Crank case engine	25
Transmission (inclusive of drop box)	27
Front axle	35
Rear axle	35
Brake oil tank	2.4
Hydraulic tank	195



## COOLING SYSTEM

Radiator	Continuous finned flat tube de-aeration type tank
Pump	Centrifugal pump
Fan	Blower type
Air cleaner Type	Dry, 2-stage, horizontal
Air Compressor	
Capacity	160 CC



## BRAKES

Service Brakes	Wet multiple disc type. Air over Hydraulic actuated.
Parking Brake	Disc type, spring applied and hydraulic released operating pressure @ 126 kg/cm <sup>2</sup> .



## BLADE

Type	Angling & tilting
Mass (kg)	1645
Digging angle	55°
Blade angle	25.5°
Blade length x height (mm)	3655 x 965
Max. lift above ground (mm)	1050
Max. drop below ground (mm)	660
Max. tilting adjustment (mm)	400
Blade capacity	2.4m <sup>3</sup>



## OPERATING MASS

Operating mass	15,000 kg approx.
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Material and specifications are subject to change without notice, Illustrations may include optional equipment & accessories

# BD14W

## WHEEL DOZER

## TECHNICAL SPECIFICATIONS

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