

## BD30W-1 WHEELDOZER

### SALIENT FEATURES

- **Productivity:** High power engine, rugged transmission featuring three forward and three reverse speeds, heavy duty planetary axles for high tractive effort and gradeability at all operating conditions.
- **Reliability:** Attention free wet multiple disc brakes for front and rear axle, and box type chassis for uniform stress distribution. The cutting edges, end bits, pins and bushings are highly reliable and durable.
- **Manoeuvrability:** Articulation with power steering, optimum combination of travel speed turning radius and wheel base ensures very high level of manoeuvrability.
- **Serviceability & Maintainability:** Electronic display and monitoring system helps to prevent minor problems from becoming major ones.
- **Comfort:** Roomy walk-through cab, with ergonomically arranged feather touch control lever instruments, cushioned suspension adjustable seat and excellent visibility assure easy dozing and levelling.
- **Electronic Monitoring System:** The EMS is designed to monitoring the health of the equipment and to provide an audio visual warning to prevent equipment breakdown through early detection. The entire operator controls, warning displays and control switches are fitted on a FRP dashboard with a high degree of ergonomics and comfort. Besides gauge and electronic hour meter, other warning parameters are monitored to provide audio-visual signal. Also a “SYSTEM CHECK” facility stimulates all faults together to check proper functioning of the electronic unit and warning lamp assemblies.

Blade capacity : 5.9 m<sup>3</sup>






Net power : 224kW (300fhp) @ 2100 r/min

Operating mass : 30000 kg



## BD30W-1 WHEEL DOZER SPECIFICATIONS



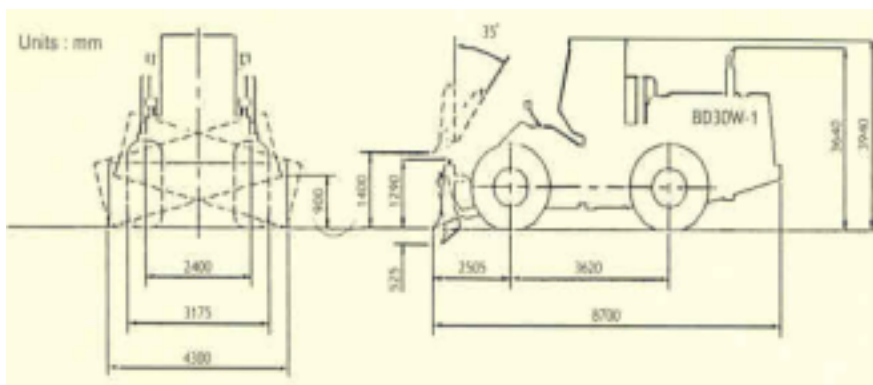
 <b>Engine</b>		 <b>Transmission</b>		
Make	BEML	Torque converter	3 element single stage, single phase.	
Model	BSA6D140-1	Stall torque ratio	3.23:1	
Type	Diesel, 4 cycle, water cooled, direct injection.	Transmission	Full power shift planetary gear type, 3 forward, 3 reverse.	
Aspiration	Turbo charged	<b>Travel speeds (km/h)</b>		
Net power	224kW (300 fhp)	Range	Forward	Reverse
Maxmium torque	1247.8 Nm (127.2 kg-m) @ 1500 r/min	1st	8.5	8.2
No. of Cylinders	6	2nd	16.5	16.0
Bore & Stroke	dia 140 x 165 mm	3rd	31.5	30.2
Piston Displacement	15.24 litres	Max. drawbar pull	31,000 kg.	
Compression Ratio	15.0:1	 <b>Final Drive &amp; Axles</b>		
Governor	Mechanical	Drive system	4 Wheel drive	
Lubrication system	Forced lubrication, gear pump	Front & Rear axles	Full floating type	
Air cleaner	Dry type	Reduction & Differential gear	Spiral bevel gear reduction	
<b>Electricals</b>		Final drive	Planetary gear	
Alternator	24V, 45A	Oscillating angle	15 degrees both sides (total 30 degrees)	
Starting motor	24V, 7.5kw	 <b>Blade Controls</b>		
Battery	(2 x 12V,200 Ah)	Minimum effort is required to operate the blade control mono-lever assuring responsive smooth blade action.		
 <b>Steering</b>		<b>Control positions</b>		
Type	Center pivot frame articulation	Blade lift	Raise, hold, lower and float.	
Steering mechanism	Full hydraulic power steering system independent of engine speed.	Blade tilt	Tilt left, hold, tilt right	
Steering pump	Gear pump	<b>Operating Parameters</b>		
Capacity	193 litres / min @ 2100 r / min.	Blade type	Straight	
Relief Pressure	17.2 MPa (175kg / cm <sup>2</sup> ).	Blade capacity	5.9 m <sup>3</sup>	
Steering angle	Wide articulation of 30 degrees on each side.	Blade width (over end bits)	4500 mm.	
Turning radius	6990 mm.	Blade height	1540 mm.	
Steering cylinders	Two, double acting type	Max.lift above ground	1510 mm.	
Bore x Stroke	dia 110 x 547.5mm.	Max.depth of cut	470 mm.	
		Max.tilt adjustment	800 mm	
		Min. ground clearance	450 mm	

## BD30W-1 WHEEL DOZER SPECIFICATIONS



<b>Hydraulic System</b>		<b>Brake</b>	
Main pump	Gear pump	Service brakes	4 wheel, enclosed, air over hydraulically actuated, outboard mounted, wet multiple disc brakes. Independent front & rear brakes.
Capacity	410 litres / min. @ 2100 r / min.		
Relief pressure	13.73 MPa(140 kg/cm <sup>2</sup> )		
Lift Cylinder	Two, Double acting type		
Bore x Stroke	140dia x 990 mm	Parking brake	Dry disc type applied on intermediate drive shaft.
Tilt	One, Double acting type	Emergency brake	Automatically actuates the parking brake when the air pressure goes below the rated value.
Bore x Stroke	225dia x 160 mm		
<b>Refill Capacity</b>		<b>Blade</b>	
System	Litres	A large capacity 5.9 m <sup>3</sup> blade results in higher and fast production while dozing stock piled material and while general earth moving. The complete unit consists of blade, push arms, trunion mounting, reversible cutting edges and hydraulic lift and tilt cylinders. Mono lever at operator's right to control dozer lift and tilt.	
Engine Oil Pan	32		
Fuel Tank	445		
Cooling System	80		
Hydraulic System	181		
Front axle	53		
Rear axle	42		
Brake oil tank	1.5		
Transmission & torque converter	62	<b>Operating Mass (approximate)</b>	
<b>Tyre</b>		Operating mass including rated capacity of lubricant, coolant, fuel, 29.5 x 29-28PR(L-3) tyres, 5.9 m <sup>3</sup> capacity blade and the standard equipment	30000 kg

## BD30W-1 DIMENSIONS



## **BD30W-1 WHEEL DOZER SPECIFICATIONS**



<b>BD30W-1 WHEEL DOZER STANDARD ACCESSORIES</b>
<b>Engine</b>
Starter , Alternator
<b>Lights</b>
Head lights ,Rear working lights, Turn indicators (front & rear) ,Stop & tail lamp, Back-up lamp
<b>Gauges</b>
Fuel level, Engine oil pressure,Coolant temperature, T/M oil temperature, RPM Meter, Trans oil pressure, Ammeter, Air pressure, Hour meter
<b>Pilot Lamps</b>
High beam , Turn indicators
<b>Caution Lamps</b>
Engine oil pressure ,Transmission oil pressure, Air Pressure, Coolant temperature, Parking brake applied, Battery charging .
<b>Others</b>
Steel cab,Wind shield wiper & washer, Tool kit, Dust indicator, Parking and emergency brake, Tyres 29.5 x 29-28PR(L-3) , Straight blade (5.9 m <sup>3</sup> ),Fire Extinguisher-2 kg, Back-up alarm, Sight guage. Seat belt, Floor mat, Sunvisor, Fan, Rear view mirror, Roof lamp.
<b>BD30W-1 WHEELDOZER OPTIONAL EQUIPMENT</b>
ROPS Canopy, Coal blade, ROPS cabin, Air conditioners, Heater, Defroster, Fire Extinguisher- 5kg, Canopy, Tyre inflation kit, Pre- heater Rear view mirrors,Sun visor,Wind Shield wiper, Pre-heater.

### 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.