

BD50HST CRAWLER DOZER



Salient Features:

- BEML BSAA4D105EG Electronic Governor Engine
- **Hydro-static Transmission**
- Arm Chair Steering Controls
- Hydraulic Joy Stick Controls PAT blade operations
- Adjustable Operator's Seat for excellent comfort
- Integrated ROPS FOPS Cabin
- Advanced Electronic Monitoring System with colour display



Flywheel horsepower : 75kW (100 hp) @ 2200 rpm

(As per ISO 9249)

Operating mass : 10,500 kg

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BD50_{HST}

CRAWLER DOZER

Salient Features :

- BEML make Diesel Engine with Electronic Governor for sustained power and fuel economy.
- Continuously variable Hydrostatic transmission for smooth dozing and travel.
- I High maneuverability with counter rotation of tracks to enable pivot steering.
- Main frame and Track frame are of rigid welded Construction.
- Job proven undercarriage.
- Electronic proportional control joystick for Travel & Steering and Hydraulic joystick for PAT blade control ensure smooth &precise operation.
- CLSS hydraulic system
- Modular construction of engine, cooling system, pump and final drive for ease of serviceability and maintainability.
- Lubricated Rollers and Idlers ensure reduced maintenance time and costs of undercarriage.
- Track Link Dust seals prevent entry of abrasive dirt or mud and enables long track life.
- Integral ROPS FOPS Cabin with ergonomically located controls.
- 1 Tiltable Cabin for easy serviceability.
- Adjustable Operator's seat for excellent comfort.
- Advanced Electronic Monitoring System with colour display .
- I GPS system for remote tracking & GEO fencing
- Trademark applied for: BRAWNY





Make	BEML
Model	BSAA4D105EG
Туре	Water cooled, 4 cycle turbo charged, direct
	injection diesel engine
No. of Cylinders	4, inline
Bore x Stroke	i 105 x 125 mm
Displacement	4327 cc
Horse Power	
Flywheel power	75 kW (100 hp) @ 2200 rpm
	As per ISO: 9249
Maximum torque	48.2 kg-m @ 1200 rpm
Fuel System	
Туре	Bosch inline FIP
Governor	Electronic
Lubrication syste	m
Method	Forced lubrication
Pump	Gear pump
Filter	Spin-on cartridge paper element
Oil Cooler	Water cooled
Cooling system	
Туре	Centrifugal water pump & pusher type fan
Air Cleaner	
Туре	Dry, horizontal type
Electricals	
Alternator	24 V, 45 A
Starting motor	24 V, 7.5 kW
Battery	2 x 12 V, 150 AH



POWER TRAIN

Hydrostatic Transmission

Dual-path, Hydrostatic Transmission provides infinite speed changes upto 8.5 kmph. The variable capacity travel motors allow the operator to select the optimum speed to match specific jobs using Travel control lever.

Final Drive

In-shoe mounted axial piston type Travel motors with integrated two stage planetary gear reduction. Compact in-shoe mount reduces risk of damage by debris. Bolt on sprocket ring.

Max. Drawbar pull 15,760 kg

STANDARD ACCESSORIES

Hourmeter
Ammeter
Engine Oil Pressure Gauge
Water temperature guage
Head lamps & rear lamp
Charger indicator
Back - up alarm
24 V, (12 V x 2) 150 Ah batteries

Key switch
Back - up switch
High water temperature indicator
Light switch
Low engine oil pressure indicator

4st relay, battery relay

Tool kit

ROPS & FOPS Cabin

OPTIONAL ATTACHMENTS

500 mm shoe Towing winch Multi - shank ripper Heater Cold start kit AC



Hydraulic Pump Implement (Blade Control)			
Capacity	40 ∮ / min @ 2	40 ℓ / min @ 2200 rpm	
Relief pressure	250 kg / cm²		
Hydraulic Cylinders			
Cylinder	Qty	Bore x Stroke(mm)	
Blade lift	2 cylinders	Ø 90 x 262 mm	
Blade Angle	2 cylinders	Ø 90 x 444 mm	
Blade tilt	1 cylinders	Ø 90 x 132 mm	



Electronic joystick control for all directional movements. Pushing the joystick forward results in forward machine travel. while pulling it rearward reverses the machine. Simply tilt the joystick to the left or right to make a turn. Tilting the joystick fully to the left or right activates counter rotation. The buttons provide on the joystick increases / decreases the speed.

Turning radius at rear tail corner - R 2124 mm



UNDER CARRIAGE

Suspension	Rigid type
Track Frame	Box section, high tensile strength steel construction
Track Rollers	6 No. each side
Carrier Rollers	2 No. each side
Track Shoes	
Туре	Single grouser
Shoe width	460 mm
No. of shoes	42 each side
Ground pressure	0.4 kg / cm ²
(Tractor only)	
Gradeability	Longitudinal 30°



BLADE ATTACHMENT

	PAT Dozer
Overall length with dozer (mm) A	4550
Blade length x height (mm) B	2750 x 1000
Max. tilt adjustment (mm) C	372
Max. Drop below ground (mm) D	450
Max. lift above ground (mm) E	910
Overall Height (mm) F	2950
Grouser height (mm) G	50
Digging angle (degrees)	13.3
Mass (kg)	
Dozer attachment	1150

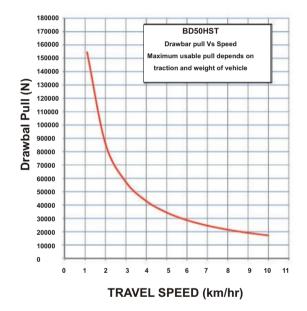


Mass of tractor only (including rated capacity of lubricant, coolant and fuel) 9,350 kg

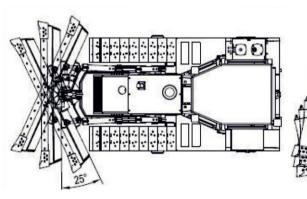
COOLANT AND LUBRICANT CAPACITY (Refill)

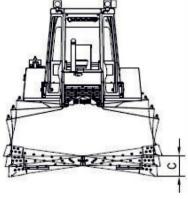
System (refilling)	Capacity in ∮	
Cooling System	35	
Engine oil pan	16	
Fuel Tank	200	
Final Drive (each side)	5	
Hydraulic tank	65	

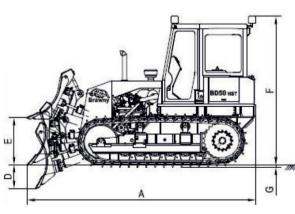
DRAWBAR PULL Vs TRAVEL SPEED



DIMENSIONS: in mm







Ground Clearance: 400 mm

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



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