

# BD50HST

**CRAWLER DOZER**



## Salient Features :

- BEML - BSAA4D105EG Electronic Governor Engine
- Hydrostatic Transmission
- Arm Chair Steering Controls
- Hydrostatic Joy Stick Controls PAT blade-operations
- Track Link Dust Seals
- Adjustable Operator's Seat for excellent comfort
- Integral ROPS - FOPS Cabin
- Advanced Electronic Monitoring System with LED display



Operating Mass : 10,000 kg

Gross power : 85 kW (117hp) @ 2200 r/min

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# BD50HST

## CRAWLER DOZER

### Salient Features :

- BEML make Electronic Governor diesel engine for sustained power and fuel economy.
- Hydrostatic transmission.
- 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.
- Adjustable Operator's seat for excellent comfort.
- Advanced Electronic Monitoring System with LED display.



### ENGINE

Make	BEML
Model	BSAA4D105EG
Type	Water cooled, 4 cycle turbo charged direct injection diesel engine
No. of Cylinders	4, inline
Bore & Stroke	φ 105 x 125 mm
Displacement	4,327 cc
<b>Horse Power</b>	
Rated Net power*	79.6 kW (107hp) @ 2200 rpm
Flywheel power***	74.6 kw (100hp) @ 2200 rpm
Maximum torque	48.2 kg-m @ 1200 rpm
<b>Fuel System</b>	
Type	Bosch type, FIP system
Governor	Electronic
<b>Lubrication system</b>	
Method	Forced lubrication
Pump	Gear pump
Filter	Spin-on cartridge paper element
Oil Cooler	Water cooled
<b>Cooling system</b>	
Type	Centrifugal water pump pusher type fan
<b>Air Cleaner</b>	
Type	Dry, horizontal type
<b>Electricals</b>	
Alternator	24 V, 45A
Starting motor	24 V, 7.5 kW
Battery	2 x 12 V, 150 Ah

\* Rated Net power is the output of the engine as installed in the machine at governed rpm and with engine manufacturer's approved fuel setting. Accessory losses included are water pump, fuel pump and lube oil pump. Out put guaranteed with ± 5%

\*\* Flywheel power is the rated BHP less the average accessory losses. Accessories included are fan, alternator & pump at no load.



### POWER TRAIN

#### Hydrostatic Transmission

Dual - path, hydrostatic Transmission provides infinite speeds 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 planeraty gear reduction. Compact in-shoe mount reduces risk of damage by debris. Bolt on sprocket ring.

Max. Drawbar pull 15,654 N

### STANDARD ACCESSORIES

Hourmeter	Key switch
Ammeter	Back - up switch
Engine Oil Pressure Gauge	High water temperature indicator
Water temperature Guage	Light switch
Head lamps & rear lamp	Low engine oil pressure indicator
Charger indicator	4st, relay, battery relay
Back-up alarm	Tool kit
24 V. (12 V x 2) 150 Ah batteries	Canopy

### OPTIONAL ATTACHMENTS

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

## HYDRAULIC SYSTEM

### Hydraulic pump Implement (Blade Control)

Capacity	98 ℓ / min. @ 2200 rpm
Relief pressure	280 kg / cm <sup>2</sup> )

### Hydraulic cylinders

Cylinder	Qty.	Bore x Stroke (mm)
Blade lift	2	90 x 262
Blade Angle	2	90 x 444
Blade tilt	1	90 x 132

## STEERING

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

## UNDER CARRIAGE

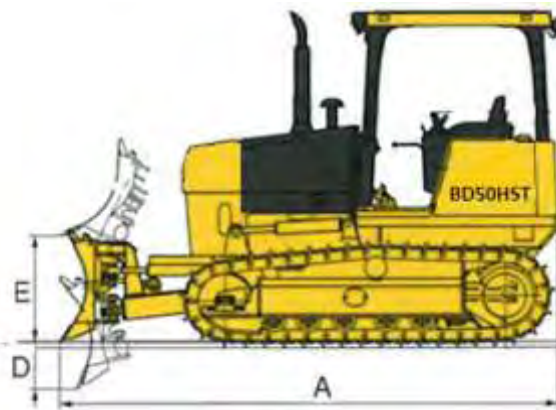
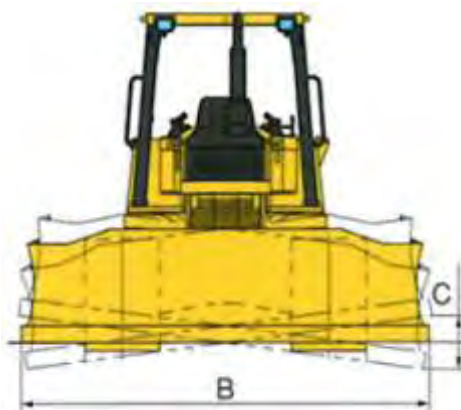
Suspension	Rigid type
Track frame	Box section, high tensile strength steel construction.
Track rollers	6 no. each side
Carrier rollers	2 no. each side

### Track shoes

Type	Assembled, single grouser
Shoe width	460 mm
No. of shoes	42 each side
Ground pressure (Tractor only)	0.4 kg / cm <sup>2</sup>
Gradeability	30°

## BLADE ATTACHMENT

	PAT DOZER
Overall length with dozer (mm) <b>A</b>	4400
Blade length x height (mm) <b>B</b>	2750 x 1000
Max. tilt adjustment (mm)	372
Max. drop below ground (mm) <b>D</b>	450
Max. lift above ground (mm) <b>E</b>	910
Digging angle (degrees)	13.3
<b>Mass (kg)</b>	
Dozer attachment	1200



Ground Clearance : 350 mm

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

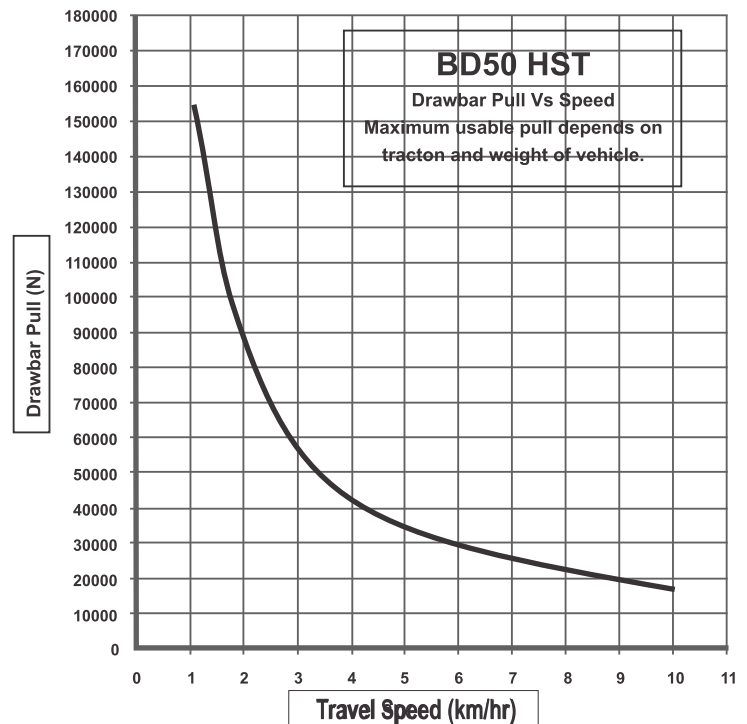
## OPERATING MASS

Mass of Tractor only (including rated capacity of lubricant, coolant and fuel)	8,800 kg
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## COOLANT & LUBRICANT CAPACITY (Refill)

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

## TRACTIVE EFFORT Vs TRAVEL SPEED



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