

BD155

CRAWLER DOZER



Salient Features :

- BEML BS6D170-1 Engine
- Power shift Transmission
- Sturdy construction of Track frames & Mainframe
- Operator Comfort with Arm Chair steering
- Pilot Operated Hydraulic System for work attachment
- Wet Multiple disc steering clutches and brakes
- Durable work attachment
- Segmented sprockets
- Reduced vibration and noise levels
- Hexagonal Cabin for better visibility



BD155

Flywheel Power (FHP) : 242 kW (324 HP) @ 2000 rpm

Operating Mass : 36,020 kg
(With Straight tilt Dozer)

BD155

CRAWLER DOZER

Salient Features :

Electronically Controlled BEML BS6D140EG Engine: Engine is environment friendly as it ensures low level of vibration, noise and smoke.

Powershift Transmission : Smooth and responsive gear shifts with single lever control for instant speed and directional changes.

Operator Comfort : Conveniently located armchair steering control for enhanced operator comfort with Hexagonal sound suppressive cabin.

Pilot Operated Hydraulic System : It offers effortless fine control blade through joystick.

Wet multiple disc steering clutches and brakes : Hydraulically inter linked steering clutch and brakes provide excellent manoeuvrability during gradual and pivot turns.

Sturdy construction : Track roller frames are made of high tensile steel for maximum rigidity.

Durable work attachment : High tensile steel blades of different configurations available for varying types of working conditions and applications. The attachment is sturdy in construction to withstand adverse ground conditions.

Segmented sprockets : Bolt-on type segmented sprocket permits quick on site replacement. Special grooved type floating seals and unique dust seals provide extended undercarriage life.

Reduced vibration and noise levels : Radiator, fuel tank, floor frame, Engine and cabin are mounted on anti-vibration rubber cushions to isolate vibration and reduce noise levels.

Groove type floating Seals : These special seals are used in the idlers, track and carrier rollers to keep dirt out and lubricant in for extended undercarriage life, as well as reduced maintenance cost.



ENGINE

Make	BEML
Model	BS6D140EG
Type	6 inline, Diesel 4 stroke, water cooled, turbo charged, direct injection
Fly wheel Power	242 kW (324 HP) @ 2000 rpm
Max. Torque	1456N-m (148.5 kg-m) at 1400 rpm
No. of Cylinders	6, inline
Bore x Stroke	Dia.140 x 165 mm
Displacement	15.24ℓ (0.01524m ³)
ELECTRICALS	
Alternator	24V, 100A
Starting Motor	24V, 9.0kW
Battery	2 x 12V, 200Ah / 160Ah



POWER TRAIN

TORQUE CONVERTER	
Stall ratio	2.4
Type	3 element, Single Stage, Single phase,
TRANSMISSION	
Type	3F/3R, Planetary Powershift Transmission



FINAL DRIVE

Type	Spur gear, Double reduction	
Lubrication	Splash Type	
Total Reduction	40.104	
TRAVEL SPEEDS m/sec (km/h)		
Range	Forward	Reverse
1st	0-1.03 (0-3.70)	0-1.25 (0-4.50)
2nd	0-1.89 (0-6.80)	0-2.30 (0-8.20)
3rd	0-3.28 (0-11.8)	0.3.81 (0-13.7)



HYDRAULIC SYSTEM

Hydraulic Pump	
Type	Gear pump
Capacity	335 lpm
Relief Pressure	13.73 MPa (140 kg/cm ²)
Hydraulic Cylinder	
Type	Double acting piston type
Blade Lift	2 Cylinder
Bore x Stroke	Dia 140 mm x 1346 mm
Blade Tilt	1 Cylinder
Bore x Stroke (In)	Dia 225 mm x 160 mm
Bore x Stroke (Out)	Dia 225 mm x 500 mm

STANDARD EQUIPMENT

- Hydraulic Track Adjusters
- Air cleaner inner element lock
- Track roller guard (each side)
- Decelerator pedal
- 7 Roller Track frame
- Lower guard (3 pieces)
- Fixed type draw bar
- Joystick for work attachment
- Adequate lighting system
- Front pull hook
- In-line radiator
- Tool kit
- Audio visual backup alarm
- Lighting system (including 4 front and 1 rear lights)
- Safety lock for blade lever
- Straight Tilt Blade
- Hex. Cabin

OPTIONAL ATTACHMENTS

- AC with heater
- ROPS/FOPS guard
- Semi-U Blade
- U-Blade
- Angle Blade
- Coal Blade
- Gaint Ripper
- Pin-puller equipment (for gaint ripper)

METERS & GAUGES

- Engine oil Pressure
- Engine water temperature
- Torque converter oil temperature
- Engine tachohour meter
- Voltmeter
- Transmission oil pressure
- Fuel level
- Engine oil temperature

WARNING INDICATORS

- Engine oil filter clog
- Battery Charging (Indicator only)
- Engine oil pressure
- Torque converter oil temperature
- Engine coolant level
- Engine coolant temperature
- Engine oil temperature
- Dust indicator
- Engine Auto shut off for low engine oil pressure and high water temperature abnormalities

- Pusher plate for straight tilt dozer
- Towing winch
- Scoria Disposal
- Multi shank Ripper
- Rake Dozer
- Auto Lubrication system
- Auto fire suppression system
- Automatic temperature control unit for AC

STEERING

Type	Wet, multiple disc hydraulically actuated 3 required no adjustment
Min. Turning radius	3.8 m
Steering Control	Feather touch single joy-stick control for transmission and steering operation.

UNDER CARRIAGE

Suspension	Semi rigid Equalizer bar type
Track Frame	Box section, high tensile strength steel construction.
Track Pitch	2140 mm
Track Rollers	7 no. each side
Carrier Rollers	2 no. each side
Track Shoes	41 no. each side
Grouser Height	80 mm
Shoe Type	Single grouser
Shoe width	560 mm
Ground Press	79.46 kPa (0.81 kg/cm ²)
Ground contact Area	3.528m ²

FILTRATION

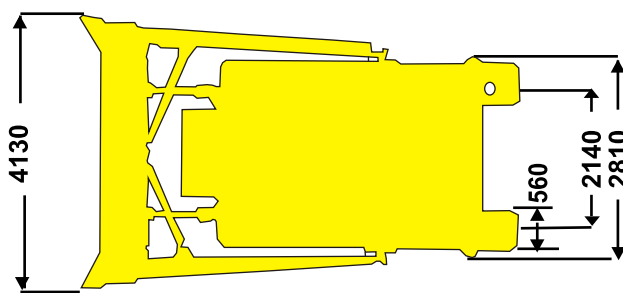
Engine	Double element dry type with pre-cleaner & automatic dust ejector for intake air. Cartridge type filter for oil & fuel.
Transmission	Magnetic oil strainer & pressure line filters.
Steering & Brake	Magnetic oil strainer & pressure line filters.
Hydraulic System	Magnetic iron particles separator & return line filters.

MASS (approximate)

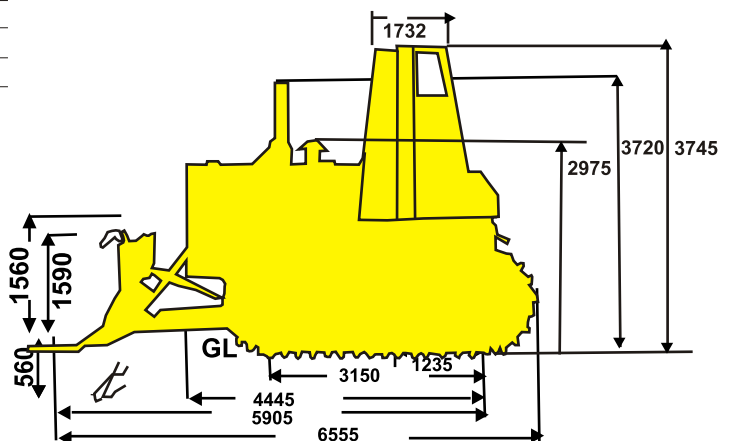
Operating Mass (Standard equipment with straight tilt dozer)	36020kg
Shipping Mass (Basic tractor with lubricants, Hydraulic system, cooling system and 10% of fuel tank capacity)	29480kg

DOZER ATTACHMENT

Dozer type	Straight	Angle	Semi-U	U	Coal
Overall length with dozer	6555	6630	6560	6970	7015
Blade Length x Height	4130 x 1590	4850 x 1140	4130 x 1790	4225 x 1590	5260 x 1795
Max. Lift above ground	1560	1475	1560	1560	1625
Max. drop below ground	560	625	560	560	545
Max. tilt adjustment	1000	400	1000	1020	-
Blade Capacity (Cum)	7.9	4.2	9.7	10.1	17.4
Additional ground pressure kPa (kg/cm ²)	18.15 (0.185)	15.15 (0.185)	18.54 (0.189)	20.11 (0.205)	17.66 (0.180)
MASS in kg					
Dozer Equipment	5780	5770	5930	6480	5625
Hydraulic Control Unit	760	750	760	760	770



Ground clearance : 500mm



SYSTEM FLUID CAPACITY

System	Refill Capacity Its.
Cooling System	141
Fuel Tank	525
Engine Oil Pan	42
Trx. Bevel Gear	135
Torque Converter Steering	
Final Drive (each side)	55
Hydraulic Oil	134

BRAKE

Type	Wet, Contracting Band
Actuation Type	Foot operated Mechanical linkage assisted by hydraulic booster for light touch and easy actuation. Brakes and steering clutches are hydraulically interconnected for easy steering.
Parking Brake	Hand Operated with mechanical linkages.

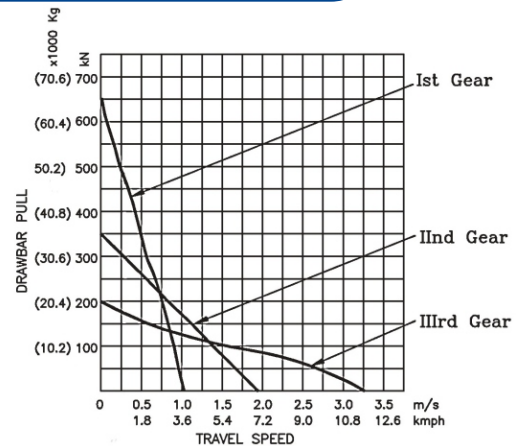
CABIN

Hexagonal shaped, sound suppressive cabin provides excellent visibility and operator comfort.

INSTRUMENTATION

Dash Board	Aesthetically designed instrumentation panel provides good visibility of gauges mounted on dash board during day & night operation.
Gauges/Indicator	Modular, analogue gauges provided for easy installation and field servicing.

Drawbar pull Travel Speed



Note : Usable pull will depend upon traction and weight of Equipped tractor



SINCE 1992

TOSH WORLDWIDE JLT

**1509, JBC 2 Tower,
Jumeirah Lake Towers
Dubai, UAE**

Tel: +971 4 4511166

Fax: +971 4 4511167

Email: beml@toshgroup.com

Website: www.toshgroup.com