

BD355

CRAWLER DOZER



Salient Features :

- Environmental friendly BEML BS6D170-1
- Powershift Transmission
- Operator Comfort with Arm chair steering
- Pilot Operated Hydraulic System
- Wet Multiple disc steering clutches and brakes
- Durable work attachment
- Segmented sprockets
- Grooved type Floating Seals
- Reduced vibration and noise levels
- Pilot operated Hydraulic System
- Hexagonal ROPS Cabin for better visibility



BD355

Flywheel horsepower (net) : 310 kW (416HP) @
2000 rpm

Operating mass : 44470 kg
(with Semi-U dozer)

BD355

CRAWLER DOZER

Salient Features :

BEML BS6D170-1 Diesel Engine: Features a generous power to weight ratio for dynamic dozing performance.

Powershift Transmission : Smooth and responsive gear shifts with single-lever 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 maneuverability 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.

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.

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.



ENGINE

| | |
|-----------------------------|---|
| Make | BEML |
| Model | BS6D170-1 6 inline, Diesel 4 stroke, water cooled, turbo charged, direct injection |
| Flywheel power (ISO : 9249) | 310 kW (416 hp) @ 2000 rpm |
| Maximum torque | 1780 N-m (181.5 kg-m) @ 1400 rpm |
| No. of Cylinders | 6, inline |
| Bore & Stroke | φ 170 mm x 170 mm |
| Displacement | 23.15 ℓ (0.02315 m³) |
| Electrical | |
| Alternator | 24V, 100 A / 140 A |
| Starting motor | 24V, 9kW |
| Battery | 2 x 12V, 200 Ah |



TRANSMISSION

| | | | |
|--------------------------------------|-----------------|---|-----------------|
| Torque Converter | Model | TCS-46 - 1A | |
| | Type | 3 element, single stage single phase | |
| | Stall Ratio | 2.6 | |
| Transmission | Type | 4F/4R, Powershift Transmission | |
| Final Drive | Type | Spur and planetary gear, double reduction | |
| | Lubrication | Splash type | |
| | Total reduction | 33.74 | |
| Travel Speeds m/sec (km/h) | Range | Forward | reverse |
| | 1st | 0-0.92 (0-3.30) | 0-0.89 (0-3.20) |
| | 2nd | 0-1.42 (0-5.10) | 0-1.39 (0-5.00) |
| | 3rd | 0-2.36 (0-8.50) | 0.2.35 (0-8.47) |
| | 4th | 0-3.53 (0-12.7) | 0-3.50 (0-12.6) |



STEERING

| | |
|---------------------|---|
| Type | Wet, multiple disc steering clutches are hydraulically actuated and require no adjustment |
| Min. Turning Radius | 3.7 m |

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
Semi-U Blade
Hex. ROPS Cabin

OPTIONAL ATTACHMENTS

AC with heater
Steel top Canopy
Straight tilt Blade
U-Blade
Angle Blade
Coal Blade
Giant Ripper
Pin-puller equipment
(for Giant ripper)

Electronic engine is also available
Electronic transmission with joystick control for steering and Transmission is also available.
Electronic Display is also available

METERS & GAUGES

Engine oil Pressure
Engine water temperature
Torque converter oil temperature
Engine tachometer
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



HYDRAULIC SYSTEM

| | |
|---------------------------------------|-------------------------------------|
| Hydraulic pump | |
| Type | Gear pump |
| Capacity | 419.3 ℓ / min. |
| Relief pressure | 13.73 MPa (140 kg/cm ²) |
| Hydraulic Cylinders | |
| Type | Double acting piston type |
| Blade Lift | 2 cylinders |
| Bore x Stroke (mm) | φ 160 mm x 1440 mm |
| Blade Tilt | 1 cylinder |
| Bore x Stroke | φ 250 mm x 180 mm |
| For optional ripper attachment | |
| Ripper lift | 2 Cylinders |
| Bore x Stroke | φ 225 mm x 600 mm |
| Ripper tilt | 2 Cylinders |
| Bore x Stroke | φ 225 mm x 500 mm |



FILTRATION

| | |
|------------------|---|
| Engine | Replaceable cartridge type filter for lubrication as well as for fuel line. |
| Transmission | One magnetic oil strainer and one replaceable element pressure line filter. |
| Steering & Brake | Magnetic oil strainer is common to transmission, steering & braking system. Separate replaceable element type pressure line filters are provided. |
| Hydraulic System | Magnetic plug & replaceable element type filter is provided. Pilot filter with cleanable Element. |



UNDER CARRIAGE

| | |
|---------------------|--|
| Suspension | Oscillation type equalizer bar |
| Track frame | Box section High tensile strength steel construction |
| Track roller | 7 No. Each side |
| Carrier Rollers | 2 No. Each side |
| Track Shoes | 39 No. Each side |
| Track pitch | 2260 mm |
| Grouser height | 88 mm |
| Shoe width | 610mm (standard) |
| Ground Pressure | 84.20 kPa (0.85 kg/cm ²) |
| Ground contact area | 4.099 m ² |



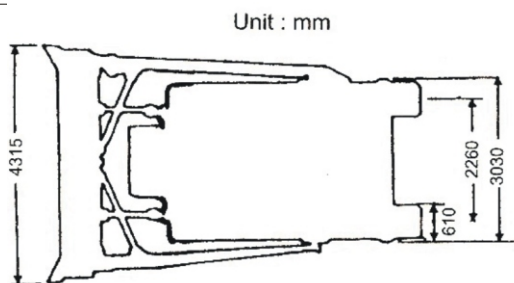
MASS

| | |
|---|----------|
| Operating mass (Standard equipment with Semi-U dozer) | 44470 kg |
| Shipping mass (Basic tractor with lubricants, Hydraulic system, cooling system and 10% of fuel tank capacity) | 35000 kg |

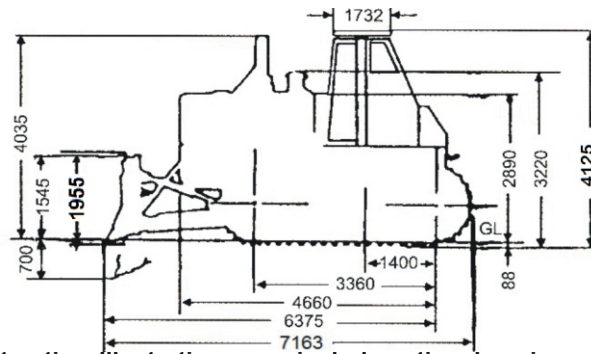


BRAKE

| | |
|---------------|--|
| Type | Wet, contracting band, |
| Control | Foot operated steering brakes with hydraulic booster for light-touch actuation and long service life. Brakes and steering clutches are interconnected for easy steering. |
| Parking brake | Hand operated with mechanical linkage. |



Ground clearance : 575 mm



DOZER ATTACHMENT

| Dozer type | Straight tilt dozer | angle dozer | Semi-U dozer | U dozer | Coal dozer |
|--|---------------------|-------------|--------------|--------------|--------------|
| Overall length with dozer (mm) | 7120 | 7215 | 7163 | 7600 | 7540 |
| Blade length x height (mm) | 4315 x 1875 | 5230 x 1350 | 4315 x 1955 | 4715 x 1875 | 5530 x 2125 |
| Max. lift above ground (mm) | 1545 | 1640 | 1545 | 1545 | 1565 |
| Max. drop below ground (mm) | 700 | 720 | 700 | 700 | 650 |
| Max. tilt adjustment (mm) | 1000 | 550 | 1000 | 1000 | * |
| Additional ground pressure kPa (kg/cm ²) | 20.6 (0.21) | 19.6 (0.20) | 20.6 (0.21) | 23.54 (0.24) | 19.62 (0.20) |
| Blade Capacity (m ³) | 11.6 | 5.9 | 13.0 | 15.6 | 24.5 |
| Mass in kgs | | | | | |
| Dozer Attachment | 7830 | 7200 | 8590 | 8830 | 7660 |
| Hydraulic Control Unit | 880 | 870 | 880 | 880 | 680 |

*Tilt Cylinder for coal dozer is optional

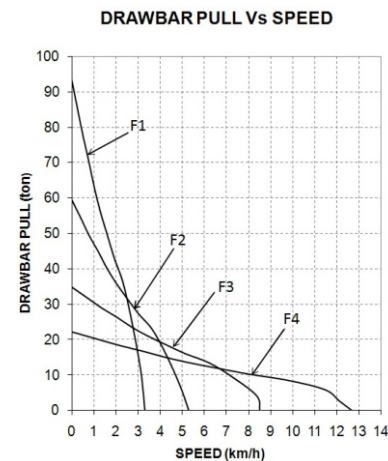


COOLANT & LUBRICANTS CAPACITY (Refill)

| System | Specific amount | Refill capacity |
|--|-----------------|-----------------|
| Cooling System | 180 | - |
| Fuel tank | 760 | - |
| Engine Lub oil | 58 | 43 |
| Transmission, bevel gear torque converter & steering | 230 | 190 |
| Final Drive (each side) | 68 | 68 |
| Hydraulic System | 350 | 185 |



BD355 DRAWBAR PULL Vs TRAVEL SPEED



NOTE: Usable pull will depend upon traction and weight of equipped Tractor

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

बी ई एम एल लिमिटेड

BEML LIMITED

A Govt. of India Miniratna Company Under Ministry of Defence

Business Network

Corporate Office

BEML Soudha, 23/1, 4th Main,
S.R. Nagar, Bangalore-560 027

T + 91 80 22963240, 22963250

F + 91 80 22963278/516/280/164

E-mail: office@cpd.beml.co.in
office@pr.beml.co.in

International Business Division

BEML Soudha, 23/1, 4th Main,
S.R. Nagar, Bangalore-560 027

T + 91 80 22222730, 22233350
22963187, 22963215

F + 91 80 22224874

E-mail: office@export.beml.co.in

Marketing Division

5th Floor, Unity Building,
J.C. Road, Bangalore-560 002

T + 91 80 22963501/02/07/510/553

F + 91 80 22963541

E-mail: m@beml.co.in
bemldealer@dealer.beml.co.in

Global Service HQ

C-6, Central Hingna Road,
MIDC Industrial Area, Hingna,
Nagpur-440 028

T + 91 7104 287097/287098

F + 91 7104 287099

E-mail: ss.servicehq@gmail.com
ss@servicehq.beml.co.in

REGIONAL OFFICES

Bangalore

No -23/1, Haudin Road Cross,
Ulsoor Road, Bangalore - 560008
Karnataka

T + 91 080 22963590/92/93/94
F + 91 080 2558156
E-mail: mg@beml.co.in

Bilaspur

1/A, Sector-C, Srigitti Industrial Area,
P.O: Tifra, Bilaspur - 495 223.
Chhattisgarh.

T + 91 7752 252745, 252598
F + 91 7752 252065
E-mail: bilaspur@rm.beml.co.in

Chennai

Flat No. 10&11, Supriya Estates,
Sterling Road, Nungambakkam,
Chennai - 600 034, Tamil Nadu

T + 91 44 28276576 / 22820844
F + 91 44 28257319
E-mail: chennai@rm.beml.co.in

Dhanbad

Kamal Kunj, Kola Kusuma,
Saraidhela, Dhanbad - 828 127
Jharkhand

T + 91 326 2200180 / 2208982/5827
F + 91 326 2200182
E-mail: dhanbad@rm.beml.co.in

Hyderabad

3-6-114, Himayat Nagar,
Hyderabad - 500 029
Andhra Pradesh

T + 91 40 23225250 / 7032 / 2166
F + 91 40 23221794
E-mail: hyderabad@rm.beml.co.in

Kolkata

35/1, Taratala Road,
Kolkata - 700 088.
West Bengal

T + 91 33 24015286 / 87 / 98 / 99
F + 91 33 24015288
E-mail: kolkata@rm.beml.co.in

Mumbai

C/o Richardson & Cruddas (1972) Ltd.
3rd Floor, Corporate Office Building
Sir J.J Road Byculla, Mumbai - 400 020

T + 91 22 23781457 / 23781382
F + 91 22 23780915
E-mail: mumbai@rm.beml.co.in

Nagpur

33, Cement Road,
Shivaji Nagar,
Nagpur - 440 010, Maharashtra.

T + 91 0712 2248435 / 2248343
F + 91 0712 2249997
E-mail: nagpur@rm.beml.co.in

New Delhi

Flat EFGH, 'Vandana', 11th Floor,
Tolstoy Marg,
New Delhi - 110 001

T + 91 11 23310035 / 23316500
F + 91 11 23325085
E-mail: delhi@rm.beml.co.in

Ranchi

206/D-1, Bhagirathi, (Behind NCC Campus),
Rameshwaram Colony, Bariatu Road,
Ranchi, Jharkhand - 834009

T + 91 651 2540710 / 2540791
F + 91 651 2540624
E-mail: ranchi@rm.beml.co.in

Sambalpur

BEML Complex, NH-6, Baraipalli,
Sambalpur - 768 150
Orissa.

T + 91 663 2521604 / 2520393
F + 91 663 2521603
E-mail: sambalpur@rm.beml.co.in

Singrauli

PB No. 5, Jhingurdha Colliery,
Sidhi, Singrauli - 486 889
Madhya Pradesh.

T + 91 7805 268260 / 266668
F + 91 7805 267282 / 318
E-mail: singrauli@rm.beml.co.in

DISTRICT OFFICES

Ahmedabad

266-1, Dilbaug Villa,
Darshan Society Road, Navrangpura,
Ahmedabad - 380 009. Gujarat

T + 91 79 26445523
F + 91 79 26423950
E-mail: ahmedabad@rm.beml.co.in

Asansol

3, Bumpur Road,
Asansol - 713 304
West Bengal

T + 91 341 2252480
F + 91 341 2250601
E-mail: asansol@rm.beml.co.in

Bacheli

Behind Central Stores
of NMDC Ltd., Depot 5, Bacheli - 494 553.
Chhattisgarh

T + 91 7857 200518
F + 91 7857 230005
E-mail: bacheli@rm.beml.co.in

Bhopal

Ground Floor, Hall No.1, Chittod Complex
Zone-1, Maharana Pratap Nagar (MP Nagar)
Bhopal - 462 023

T + 91 755 2550711
E-mail: bemlbhopal@gmail.com

DISTRICT OFFICES

Bhubaneswar

252/A, LEWIS Road,
Bhubaneswar - 751 014
Orissa

T + 91 674 2434428
T/F + 91 674 2434427
E-mail: bhuvaneshwar@rm.beml.co.in

Chandrapur

Mamidwar, Tiles Factory Compound,
Ghugus Road, Padoli,
Chandrapur - 442 406 Maharashtra

T + 91 7172 287230
F + 91 7172 287072
E-mail: chandrapur@rm.beml.co.in

Cochin

No. 55/845, Chittor Road, Ernakulam South
Cochin-682 016

T + 91 484 2375138
E-mail: bemlkochi@gmail.com

GOA

67-12, Dattaprasad Building, 3rd Floor, MG road
Timphoni School, Panjim, - 403001, Goa

T + 91 832 2225135
E-mail: goa@rm.beml.co.in

Guwahati

Hegrabari Road, House No. 11,
Ganesh Puri, Dispur,
Guwahati - 781 006 Assam

T + 91 361 2232966
F + 91 361 2232967
E-mail: guwahati@rm.beml.co.in

Hospet

No. 1431, Manjunatha Complex, New Ward No. 31,
Bhagat Singh Nagar, Opp. KSSIDC Indl. Estate,
Dam Road, Hospet - 583 203, Karnataka

T + 91 8394 230173
F + 91 8394 230172
E-mail: hospet@rm.beml.co.in

Jammu

62C, Block D/C, Gandhi Nagar,
Jammu tawi - 180 004
Jammu and Kashmir

T + 91 191 2430447
F + 91 191 2477469
E-mail: jammu@rm.beml.co.in

Kothagudem

Old Project Planning Department,
Near SCCL Corporate Office,
Kothagudem - 507 101, Andhra Pradesh

T + 91 8744 245572
F + 91 8744 245530
E-mail: kothagudem@rm.beml.co.in

LEH

#135, Fort Road, Sheynam
LEH, Ladakh, 194 101

T + 91 9622973460
E-mail: bemlleh@gmail.com

Madurai

9-4/49, Kalai Nagar, IInd Main Road,
Madurai - 625 017, Tamil Nadu.

T/F + 91 452 2649458
E-mail: madurai@rm.beml.co.in

Neyveli

F-4, Rajendraprasad Road, Block-27
Neyveli - 607 803, Tamil Nadu

T/F + 91 4142 268517
E-mail: neyveli@rm.beml.co.in

Panjim

67-12, Dattaprasad Building, III Floor, MG Road,
Timphoni School, Panjim - 403 001, Goa

T/F 91 832 2225135
E-mail: goa@rm.beml.co.in

Ramagundam

Opp. SCCL 11A Mines, Manthani,
(PO) Jallaram, GK - 505 184
Karimnagar Dt. Andhra Pradesh

T + 91 8728 248299
F + 91 8728 247423
E-mail: ramagundam@rm.beml.co.in

Udaipur

20-B Uchhaba Bhawan, Bedia Road,
New Fatehpura, Udaipur - 313 001.
Rajasthan

T + 91 294 2452053, 2452055
F + 91 294 2452054
E-mail: udaipur@rm.beml.co.in

Vijayawada

District Manager : Mr Rambabu

Mob +91 8330930990

Visakhapatnam

No. 8-45-11, 4h Lane, China Waltair Colony,
Visakhapatnam - 530 003

T/F 0891 2754608
E-mail: vizag@rm.beml.co.in

www.bemlindia.com

Represented by :

बी ई एम एल लिमिटेड

BEML LIMITED

A Govt. of India Miniratna Company Under Ministry of Defence