

BD65-1 PAT

(POWER ANGLE TILT)

CRAWLER BULLDOZER



Salient Features :

- BEML - BS6D125-1
- Power Shift Transmission
- Wet Multiple disc steering clutches and brakes
- Arm Chair Steering Controls
- Hydraulic control valve mounted beside hydraulic tank for easy service and maintenance
- High efficient hydraulic filtration system enhances service life of hydraulic system components and performance
- Feather touch joysticks controls for blade lift/lower, tilt up/down, and angling RH/LH gives fatigue free comfort for operator
- The parallel circuit hydraulic system design for precise and responsive control and for efficient simultaneous operation
- Power angle tilt blade and C-Frame with box section structure frame for high durability and strength



Flywheel Power (FHP)	: 134kW (180HP)
Operating Mass	: 19700 kg (With Power Angle Tilt Dozer with Canopy)

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(POWER ANGLE TILT)

CRAWLER DOZER

Salient Features :

Diesel Engine : Direct-injection with turbo charger for high fuel efficiency and for cleaner exhaust at high altitude.

Power Shift Transmission : For smooth power shifting and make instant speed and directional changes by a single lever.

Wet Steering clutches and brakes : For long service life. They are interconnected to perform quick steering actions.

Arm Chair Steering Controls:

Controls for operator ergonomics

Joy Stick Controls for work attachments:

It offers effortless Pilot control for all blade operations.

Long Track :

For high machine balance cum stability and powerful traction even on soft terrains.

Floating seals :

In idlers and rollers for preventing entry of dirt for durable life

Dust Seals :

Between link, bushing, and pin to prevent abrasive dirt or mud entry and ensure longer track life.

Comfortable operator's seat :

Is adjustable in fore/aft for operator's convenience

Simple Maintenance :

Spin-on type full flow fuel filters, air cleaner with automatic dust evacuator and dust indicator, external control valve and cable linkages.

Hexagonal ROPS Cabin :

Sound suppressed spacious, better visible cabin and ergonomically positioned control for comfortable and easy operation of Dozer.

Durable Structures :

All structural parts and systems are well proven for different working environments for maximum equipment availability and for more productivity



ENGINE

Make	BEML
Model	B6D125-1
Type	Diesel, 4-stroke, water cooled, turbo charged, direct injection
Fly wheel Power	134 kW (180 HP) @ 1850 rpm
Gross Power	144 kW (196HP) @ 1850 rpm
Max. Torque	765 N-m (78 kg-m) @ 1000 rpm
No. of cylinders	6, inline
Bore & Stroke	φ 125 x 150 mm
Displacement	11.04ℓ (0.01104 m ³)
Electricals	
Alternator	24V, 55A
Starting motor	24V, 7.5kW
Battery	2 x 12V, 200 Ah

POWER TRAIN

Torque Converter	
Model	TCS 38 - 2F
Type	3 Element, Single Stage, Single Phase
Stall Ratio	2.9:1
Transmission	
Model	Planetary power shift 3F/3R

FINAL DRIVE

Type	Spur gear, double reduction	
Lubrication	Splash Type	
Total Reduction	16.66:1	
Travel Speeds m/sec (km/h)		
Range	Forward	Reverse
1st	0-1.08 (0-3.90)	0-1.39 (0-5.0)
2nd	0-1.89 (0-6.80)	0-2.39 (0-8.60)
3rd	0-3.03 (0-10.9)	0-3.81 (0-13.7)

STEERING

Type	Wet, multiple disc
Min. Turning radius	3.3 m
Steering Control	Hand operated steering clutches are hydraulically boosted for light touch and activation

STANDARD ACCESSORIES

- Power shift transmission
- Hydraulic track adjusters
- Dry horizontal type air cleaner with pre-cleaner
- Track roller guard (each side)
- Final drive case wear guard brakes
- Lighting System (2 Front, 1 Rear)
- Fixed type drawbar
- Segmented Sprockets
- Belly guard (3 pieces)
- Hydraulic oil cooler
- In-line radiator
- Adjustable operator's seat
- Tool kit and back-up alarm with flasher unit
- Canvas Canopy

CONTROL PEDALS

- Brake (Left)
- Decelerator pedal
- Brake (Right)

SWITCHES

- Starting Switch
- Horn Switch
- Light Switch

CONTROL LEVERS

- Steering (Right)
- Steering (Left)
- Gear-shift
- Safety lock for gear shift
- Blade control (Joy stick)
- Fuel control
- Brake lock lever
- Safety lock for blade

METERS & GAUGES

- Oil temperature gauge (Torque converter)
- Engine oil pressure gauge
- Engine water temperature gauge
- Engine oil pressure indicator
- Tacho hour meter
- Battery charging indicator (lamp)
- Dust indicator
- Preheater indicator
- Dip Stick for checking Fuel level

OPTIONAL ATTACHMENTS

- Hexagonal ROPS cabin
- AC with heater
- Multi shank ripper
- Semi-U
- Coal dozer
- Straight tilt
- Rake dozer
- Sanitary Land fill blade
- LCD Display is also available

HYDRAULIC SYSTEM

Hydraulic pump	
Type	Gear pump
Capacity	245l/min.
Relief pressure	13.73 MPa (140 kg/cm ²)
Hydraulic Cylinders	
Type	Double acting piston type
Blade Lift / Angling Tilt	2 / 2 / 1 Cylinders
Control Valves	
Type	Pilot operated with joystick control

UNDER CARRIAGE

Suspension	Oscillation type, Equalizer bar
Track Frame	Box section, high tensile strength steel construction.
Track pitch	1880 mm
Track rollers	7 no. each side
Carrier rollers	2 no. each side
Track shoes	39 nos. each side
Grouser height	65 mm
Shoe type	Single grouser
Shoe width	510 mm
Ground pressure	72.1 kPa (0.73 kg/cm ²)
Ground contact area	2.688 m ²

FILTRATION

Engine	Replaceable cartridge type filter for lubrication as well as for fuel line.
Transmission	Replaceable element type filter.
Steering & Braking	One magnetic oil strainer and a filter with replaceable element for both steering and braking
Hydraulic System	Magnetic plug & replaceable element type filter.

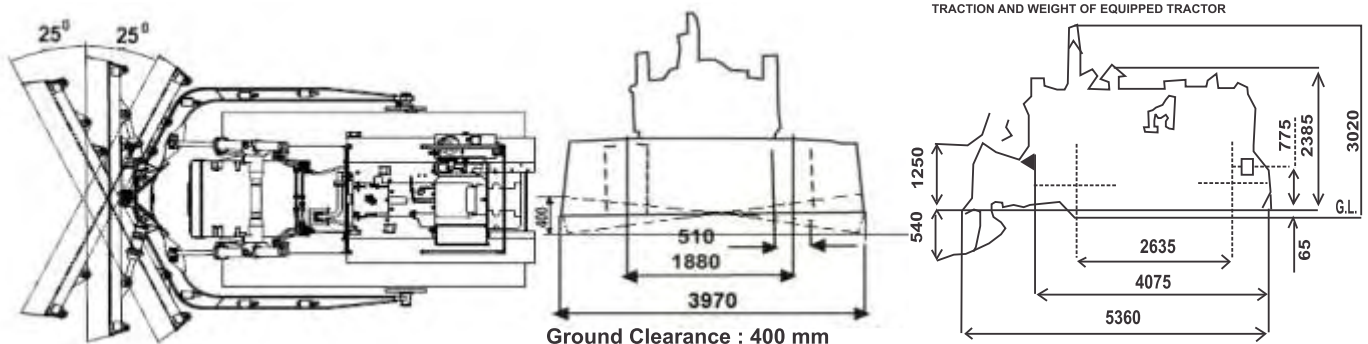
MASS (approximate)

Operating Mass (Standard equipment with PAT dozer & Canvas Canopy)	19700 kg
Shipping Mass (Basic tractor with lubricants, Hydraulic system, cooling system and 10% of fuel tank capacity)	16750 kg

BRAKE

Type	Wet, contracting band.
Actuation Type	Foot operated steering brakes with hydraulic booster for light touch actuation and long service life. Brakes and clutches are inter connected for easy steering.
Parking Brake	Hand operated with mechanical linkage

DIMENSIONS : in mm



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

DOZER ATTACHMENT

Dozer type	Straight	Angle	Coal	PAT
Over length with dozer (mm)	5230	5360	5455	5360
Blade length x height	3415 x 1150	3970 x 1080	4450 x 1540	3970 x 1080
Max. lift above ground (mm)	1130	1250	1240	1250
Max. drop below ground (mm)	585	540	615	540
Max. tilt adjustment (mm)	860	400	-	400
Max. Angle adjustment (deg)	-	25 Manual	-	25Hyd
Blade Capacity (Cum)	3.6	3.43	10.1	3.43
Additional ground pressure kPa (kg/cm ²)	11.77 (0.12)	-	9.8 (0.1)	--
MASS in kg				
Dozer Attachment	2420	2500	2910	2750
Hydraulic control unit	520	400	400	650

SYSTEM FLUID CAPACITY

System	Refill Capacity lts.
Cooling System	52
Fuel Tank	425
Engine Oil Pan	26
Bevel Gear case and Steering	65
Torque Converter, Transmission	47
Final Drive (each side)	31
Hydraulic Oil	110

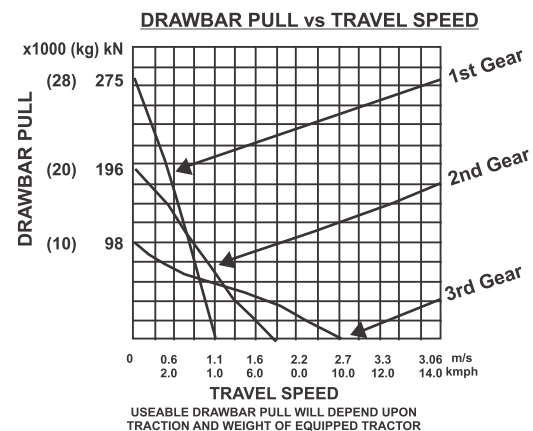
CABIN

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

INSTRUMENTATION

Dash Board	Aesthetically designed instrumentation panel provides good visibility of guages mounted on dash board
Guages/Indicator	Modular, analogue guages provided for easy installation and field servicing.

PERFORMANCE



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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, Sirgitti Industrial Area, P.O: Tifra, Bilaspur - 495 223. Chattisgarh.

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 / 28220844
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

Hegrabani 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, Uchhab 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, 4th Lane, China Waltair Colony, Visakhapatnam - 530 003

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

www.bemlindia.com

Represented by :

Form No. BD65-1/001/11/2015

बी ई एम एल लिमिटेड

BEML LIMITED

A Govt. of India Miniratna Company Under Ministry of Defence