

BP70

PIPE LAYER

Salient Features :

- BEML BS6D170-1 Diesel Engine
- Powershift Transmission
- Wet type inter-connected steering clutches and brakes
- Sturdy construction
- Segmented sprockets
- Grooved type floating seals
- Hydraulically actuated counter weights
- Automatic Kickout device for Boom
- Pilot operated work attachment



Flywheel Power (net) : 242 kW (324 hp) @ 2000 rpm

Max. Lifting Capacity : As per lifting performance curve.

BP70

PIPE LAYER

Salient Features :

BEML B6D170-1 Diesel Engine : Features a generous HP to weight ratio for wide range of pipelaying work.

Powershift transmission :

Smooth and responsive power shift with single-lever control for instant speed and directional changes.

Wet type inter-connected steering clutches and brakes :

Interconnected wet-type steering clutches and brakes for easy operation and long service life. Steering clutches requires no adjustment

Sturdy construction :

The boom is welded box section and operated by wire cables. Track roller frames are made of high tensile steel of maximum rigidity.

Segmented sprockets :

Sprockets with bolt on rim segments permit quick onsite replacement without track removal.

Grooved type floating seals :

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

Faster operation due to 2 raise and lowering speeds.

Automatic kickout device for Boom

Hydraulically actuated counter weights for increased stability

Lifting Performance :

Maximum lifting capacity as per lifting performance curve to cater wide range of pipe laying work with joystick control.



ENGINE

Make	BEML
Model	BS6D170-1
Type	Diesel, 4 stroke, water cooled, direct injection, turbocharged
Net Power (fhp)	242 kW (324 hp) @ 2000 rpm (ISO-9249)
Maximum torque	1456 N-m (148.5 kg-m) @ 1400 rpm
No of cylinders	6, inline
Bore & Stroke	∅ 170 x 170 mm
Displacement	0.023150 m ³
Electricals	
Alternator	24 V, 55 A / 140A
Starting motor	24, 9.0 kw
Battery	2 x 12 V, 200 Ah

TRANSMISSION

Torque Converter		
Model	TCS43-4C	
Type	3 element, single stage, single phase	
Stall ratio	2.4	
Transmission		
Model	Planetary gear, Power Shift 3 forward / 3 reverse	
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 (0-3.7)	0-1.25 (0-4.5)
2nd	0-1.89 (6.8)	0-2.3 (0-8.2)
3rd	0-3.3 (0-11.8)	0-3.8 (0-13.7)

BRAKES

Type	Wet contracting band. 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.

STEERING SYSTEM

Type	Wet, multiple-disc steering clutches are hydraulically actuated and require no adjustment
Turning radius	3.0 m

FILTER SYSTEM

Engine	Replaceable cartridge type filter for lubrication as well as for fuel line.
Transmission	One magnetic oil strainer and one replaceable element bypass filter is provided
Steering & Braking	Magnetic oil strainer is common to transmission, steering & braking system. Separate replaceable element type filter is provided for steering & braking
Hydraulic System	Magnetic plug & replaceable element type filter is provided

MASS

Shipping Mass (Basic tractor with lubricating hydraulic, cooling systems and 10% of fuel capacity)	46,000 kg
--	-----------

STANDARD EQUIPMENT

- Hook & Boom Winches
- Counter weight mechanism
- 6.2m boom with cables
- Hydraulic track adjusters
- Bottom Guards (3 pieces)
- Adequate lighting system

OPTIONAL ATTACHMENTS

- Rops Cabin
- Insulated Canopy
- Safe Load Indicator System
- Air conditioner with heater
- Longer Length Boom (7.3m)

HYDRAULIC SYSTEM

Hydraulic Pump (which)	
Type	Gear pump
Capacity	335.5 l/min
Relief pressure	13.73 MPa (140kg/cm ²)
Hydraulic pump (Counter weight)	
Type	Tandem pump
Capacity	85 l/min
Relief pressure	13.73 MPa (140kg/cm ²)
Hydraulic Cylinder	
Type	Double acting piston
No. of cylinders	2 cylinders
Bore x Stroke	∅ 120 x 475 mm

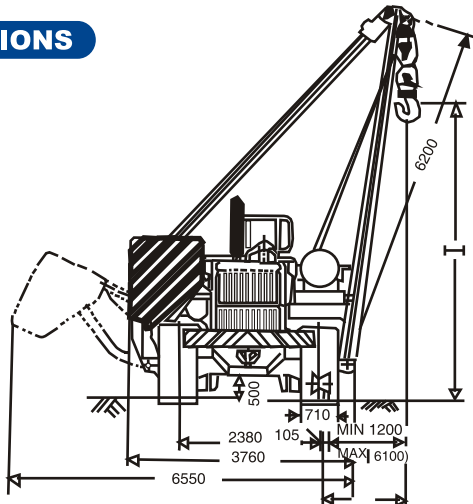
DIMENSIONS & OPERATING DATA

Overall length	5660 mm
Overall width	3760 mm
Overall height	3640 mm
Operating data	
Pipe Laying equipment	
Crane	See chart
Boom overhang	1.2 m to 6.1 m
Hook speed (1st layer)	
Basic - 1st	6.5 m/min
- 2nd	13.0 m/min
Lower - 1st	6.5 m/min
- 2nd	13.0 m/min

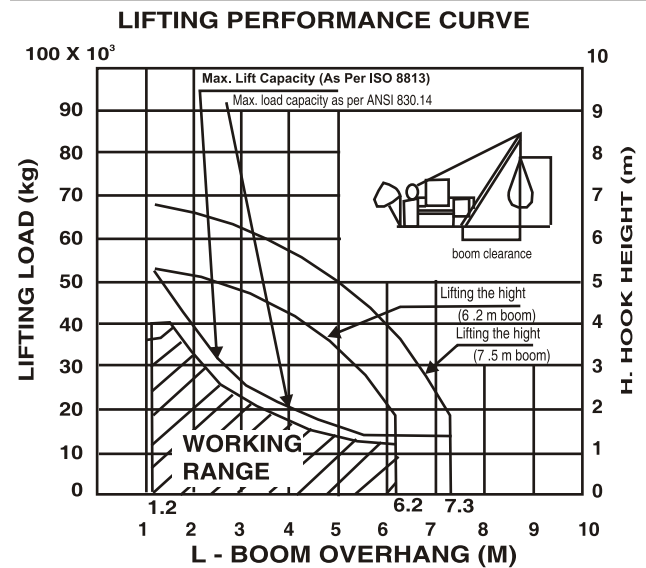
Boom	
Type	Welded box section and operated by wire cables
Length	6200 mm (Optional 7300 mm)
Weight	1600 kg
Winch	
Type	Hydraulically operated, two speed, reversible
Driving System	Powered continuously by hydraulic pump
Drum brake	Automatic braking system
Transmission	Built in planetary system

Winch drum	
Hook (dia x width)	∅ 323.85 x 431.8 mm
Boom (dia x width)	∅ 323.85 x 431.8 mm
Wire rope	
Hook (dia x width)	∅ 20 mm x 100 m
Boom (dia x width)	∅ 20 mm x 55 m
Counter weight	
Type	Segmented plate type, Hydraulically actuated
Weight (Incl. bracket)	9500 kg ± 6%
No. of plates	10
Safety Equipment boom	Automatic max. kick-out device

DIMENSIONS



CHART



Lifting Performance (as per ISO 8813)

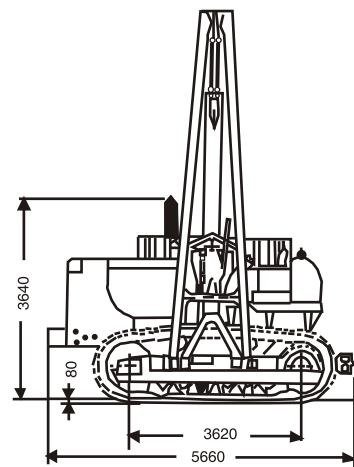
Based on the firm level ground operation and standard 9500 kg counter weight fully extended, 6.2 m boom, 20 mm dia wire rope, 27000 kg min. breaking strength 3-part load line.

UNDER CARRIAGE

Suspension	Non-Oscillation type equalizer bar
Track Frame	Box section, high tensile strength steel construction
Track Rollers	8 nos. each side
Carrier Rollers	2 nos. each side
Track Shoes	45 nos. each side
Track Pitch	2380 mm
Grouser-Height	80 mm
Shoe width	710 mm (std)
Ground Pressure	80.4 kPa (0.89 kg/cm ²)
Ground contact area	5.140 m ²

COOLANT & LUBRICANTS CAPACITY (Refill)

System	Litres
Fuel Tank	600 (600)
Cooling System	165 (165)
Torque converter, Transmission, Bevel gear case, steering case	
	185 (135)
Final drive case (each side)	55 (55)
Hydraulic tank	185
Engine lub oil	58 (43)



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