

## BEML INDIA NETWORK

Corporate Office, International Business Division, Marketing HQ.  
Manufacturing Plants

Regional Offices  
District Offices  
Activity Centres  
Service Centres



## BEML LIMITED

(A Govt. of India Miniratna Company under Ministry of Defence)

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Defence & Aerospace | Mining & Construction | Rail & Metro

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## Strategic Partner in Defence & Aerospace



## DEFENCE PRODUCTS



## BEML LIMITED

Schedule A Company under Ministry of Defence, Govt. of India

[www.bemlindia.in](http://www.bemlindia.in)

Closed - w10x7h



### BASE VEHICLES



4x4



6x6



8x8



12x12

### MISSILE VEHICLES



PINAKA



PRITHVI



BRAHMOS



AKASH

### GUN & ARMoured VEHICLES



MGS



AK 630



MBPV



MSCPv

### RECOVERY VEHICLES & TANK AGGREGATES



LRV



MRV



6x16 TMC



HRV



ARJUN ARRV



ARV WZT-3



BMP TRANSMISSION



T-72 TRANSMISSION

### MINE PLOUGHS



TWMP – T90



EMP – T90



SMCS



TRAWL

- BEML has supplied over 8000 High Mobility Vehicles, 350 ARV's, 3000 Trailers / Military Wagons, 330 Pontoon Bridge Systems to Defence services.
- 18000 Rail Coaches and 700 EMUs to Indian Railways & 1200 Metro Cars to Metro corporations.
- 30000 Mining & Construction equipments to Defence and Mining.

- **ISO 9001**
- **ISO 14001**
- **BS OHSAS 18001**
- **AS9100C Certifications**

- “**Mini Ratna Category-I**” company
- About 8000 Employees
- Turnover of more than 3500 Crores
- Listed company on BSE and NSE

## VISION

To become a market leader as a diversified Company, supplying quality products and services to sectors such as Defence & Aerospace, Mining & Construction, Rail & Metro and to emerge as a prominent international player.

## MISSION

- Improve competitiveness through collaborations, strategic alliances and joint ventures.
- Grow profitably by aggressively pursuing business and market opportunities in domestic and international markets.
- Adoption of state-of-the-art technologies and bring in new products through transfer of technology and in-house R&D.
- Continue in diversified growth in new products and markets.
- Attract and retain people in a rewarding and inspiring environment by fostering creativity and innovation.
- Offer technology and cost effective total solutions for enhanced customer satisfaction.



Bharat Earth Movers Limited (BEML) is a leading multi-technology and multi-location Mini Ratna Category-I company under the Ministry of Defence. The company manufactures high quality products for diverse sectors of economy such as Defence, coal, mining, steel, cement, power, construction, irrigation, road building, metro, railways and aviation.

It has emerged as the frontrunner in heavy engineering industry with a track record of growth and revenues for over five decades. BEML has its operation under three distinct business verticals; Defence & Aerospace, Mining & Construction and Rail & Metro. Over the years, BEML has demonstrated its engineering strengths and technical expertise by harnessing state-of-the-art technologies.



## Business Verticals & Products



### DEFENCE & AEROSPACE

- Tatra based High Mobility Trucks
- Recovery Vehicles
- Bridge Systems
- Vehicle for Missile Projects
- Tank Transportation Trailers
- Military Rail Wagons
- Mine Ploughs
- Crash Fire Tenders
- Snow Cutters
- Aircraft Towing Tractors
- Aircraft Weapon Loading Trolley

### MINING & CONSTRUCTION

- Bull Dozers
- Excavators
- Loaders
- Pipe Layers
- Wheeled Dozers
- Tyre Handlers
- Rope Shovels
- Dumpers
- Water Sprinklers
- Motor Graders
- Under Mining Equipment

### RAIL & METRO

- Integral Rail Coaches
- Metro Cars
- AC EMUs
- OHE Cars
- Steel & Aluminum Wagons
- Track Laying Equipment
- Utility vehicles
- Treasury Vans
- Spoil Disposal Units
- Broad gauge Rail Bus

## BEML Facilities

### BANGALORE COMPLEX

- Rail & Metro Division

### KGF COMPLEX

- Earth Movers Division
- Research & Development Complex
- Hydraulics & Power line Division
- Rail Coach Unit II
- Heavy Fabrication Unit

### MYSORE COMPLEX

- Truck Division
- Engine Division

### PALAKKAD COMPLEX

- Defence Division

### MARKETING NETWORK

- 12 Regional Offices
- 19 District Offices
- 05 Service Centers

## Armoured Recovery and Repair Vehicle - Arjun ARRV



The fundamental role of an Armoured Recovery and Repair Vehicle (ARRV) is to recover disabled combat tanks and take them to a place, where they can be repaired and replenished to be ready for battle again. Each individual tank is an important combat asset and keeping it battle-fit at the right location is a major logistic effort.

### SALIENT POINTS :

- Power : 1400 hp diesel engine
- Transmission : Fully automatic .
- Recovery : Main Winch - 50 tons Double capstan-type, with pulling capacity up to 150 tons in 3:1 layout formation, Auxiliary winch - 2 tons Double capstan-type, Crane - 20 tons with 3m working radius, Anchor-cum-Dozer
- Repair : Welding, drilling, cutting, grinding, air compressor, APU: 15 kVA 3-phase 415V. 50 Hz, Communications system - Digital Control Harness (DCH) & Radio set
- Navigation system : Advanced Land Navigation System (ALNS), GPSMAP 78sc
- Vision system : Periscopes, Episcopes, Un-cooled Ti, Drivers Night Vision
- Armaments : 12.7 mm AD gun, Crew weapons, Smoke Grenade Discharge (SGD)
- Crew protection system : NBC system, Integrated Fire Detection and Suppression System
- All recovery aggregates are driven by hydraulic system. Hydraulic system has been designed on combination of open and close loop system, first of its kind



## Armoured Recovery Vehicle (ARV - WZT-3)



WZT-3 recovery vehicle is a high-speed, tracked armour vehicle designed to fulfill some activities on a modern battlefield.

### SALIENT POINTS :

- Evacuation & Towing of tracked vehicles
- Immediate participation in vehicle repairs due to rich equipment of tools and instruments; Execution of disassembly & assembly works by means of the down crane; keeping constant two-sided communication among the vehicles by the use of ARV transmitter-receiver.
- Equipped with Four Batteries: 12V / 120Ah, Cruising range 420 - 600 km. High ground clearance for cross country operation.
- Fording depth 1.2 m. Climbing ability (Vertical obstacle) 0.7 m. Trench crossing ability (width) 2.6 - 2.8m. Crane capacity - 15.0 t. Winch capacity - 30 t. Combat weight - 42 t
- Crew - 4 persons. Power to weight ratio - 13.6 kW/t
- Overall length - 8500 mm, Overall height - 2700 mm
- Ground clearance - 395 mm, Width with / without side shields - 3600 / 3370 mm
- Max. speed on road - 60 km/h
- Transmission - 7 Forward 1 Reverse
- Engine - W 46-6, 574 KW, 12 Cyl V type

## Medium Bullet Proof Vehicle (MBPV) - 4x4



MBPV is an indigenous development on BEML 4x4 chassis with all 4 wheel drive. The vehicle is bullet and blast proofed in a manner to conceal the occupants completely from the threats. The vehicle has been designed & developed to meet the requirements of roadworthiness as per QR and trial directives and also meet CMVR norms.

### SALIENT POINTS :

- Vehicle body is fully encapsulated to provide armor protection to occupants at all points
- All wheel drive for maximum traction, Swinging half axles for better cross country mobility
- 235 kW water cooled / fuel efficient BS III emission compliant engine with 235 kW @ 2200rpm
- Automatic (6 forward & 1 reverse) transmission), 80 kmph maximum speed, Fail safe air brake system, Drum brakes with dual circuit with S-Cam type with ABS, High ground clearance for cross country operation, 300 mm.
- Can wade through a water up to 1000 mm, Climbing ability (Vertical step) 400 mm, Trench crossing ability (width) 900 mm, 8 passengers + 2 Crew, 360 degree rotatable - Collapsible Turret
- Suspensions Front: Combination of torsion bar and telescopic shock absorber & Rear: Combination of Air bellows with coil spring and telescopic shock absorbers, Ballistic protection: NATO STANAG 4569 Level-I and upgradable to STANAG level-II
- Approach angle : 40 deg, Departure angle: 45 deg
- Auto close gun ports from inside, 360 deg collapsible rotating Turret, Air conditioning inside cabin, 360 deg Night vision camera / rear view camera with 7" TFT display, 2 + 8 blast & fire resistance seats

## Mounted Gun System (MGS) - 8x8



The MOUNTED GUN SYSTEM is a 155mm/52cal. gun howitzer installed on an 8x8 truck chassis. The MGS provided with greater flexibility in deployment and tactical mobility. It is designed to hold 18 round of fire and typically operated by 07 crew member and approx. firing range of 38 km. The system is integrated with modern FCS system and C4i system. The system is capable of automatic laying by using advance INS system. It's a joint venture project by BEML, Gun Carriage Factory (GCF), Jabalpur & BEL with BEML developing vehicle with platform, stabilizer system and ammunition storage, BEL developed gun electronics including LRF, CDU, gun sights, etc. and GCF supporting with Gun system.

### SALIENT POINTS :

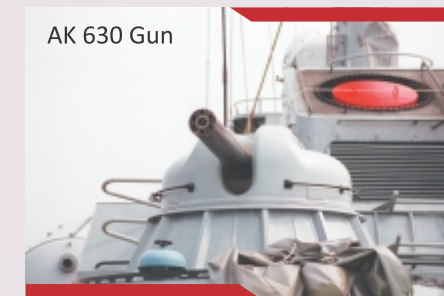
- High Mobility Vehicle 8x8 fitted with gun carrying platform & outriggers to be deployed during firing. Right hand power steering
- Independent wheel suspension with swinging semi-axles, axles sprung by leaf springs. Rough terrain mobility for off-road vocations – better vehicle control and greater cross-country speeds.
- Military truck chassis convenient for operation in the heaviest terrain and climatic conditions, in regions with extremely high and cold ambient temperatures, high humidity and in dusty environments, High ride quality – reduced vibrations and road shocks provide improved driver comfort and safety for transport of sensitive and special goods, equipment and troops
- Long service period design reduces maintenance costs. • Chassis versatility allows bearing any kind of superstructure without special integration precautions. Beml-Tatra 300 kW Engine, Beml-Tatra 10-speed manual transmission with 2-speed transfer case, Planetary wheel hub reductions, Two circuit drum air brakes with wedge type actuator & ABS. 14.00 R20 tactical tyres with bead locks, Manually controlled Central tyre inflation system (CTIS) operable on the move. Maximum Speed – 80 kmph, Cruising Range – 1000 km
- Trench Width – 2 m, Vertical Step – 0.5 m, Shallow Fording – 1.2 m (without preparation)

## AK -630 Mounted Gun System Project



AK 630 Mounted on TATRA 6X6 RRL Vehicle

BEML in collaboration with GSF-Cossipore is developing Mounted Gun System (MGS) based on BEML-TATRA 6x6 RRL vehicle and AK 630 Gun



AK 630 Gun

### SALIENT POINTS :

- AK-630 is a 30 mm artillery gun mount, remotely controlled by the radar firing control system MP-123 “Vympet”, intended for arming the naval ships with the main tasks of:
- Destruction of anti-ship missiles, aircrafts, helicopters, and other air attacks of the enemy. Destruction of small-size marine targets and annihilation of floating mines. Defeat of visible open manpower and firing emplacements of the enemy on the shore. To defeat the potential threat from drones.
- This AK-630 Gun requirement is being envisaged for land application on BEML TATRA vehicle incorporating BEL's Radar and Communication systems. BEML Tatra RRL 6x6 Vehicle is proposed for the Project considering the manoeuvrability and various terrains of operations.
- The project is intended to be executed in three phases. In the first phase it is important to examine the stability of the HDT vehicle during. Firing at PXE- Balasore, for which only the Gun mount shall be engineered (without BEL items) while all other systems could be located outside the vehicle. In the second phase, develop all systems including BEL items on the vehicle and demonstrate to Users by again firing at PXE- Balasore.
- In the third & last phase space optimization will be done. Business potential: AK 630 is an Air defense Gun and once it is proven can be an alternative to other in service AD gun L-70. Mounted gun system will be used for land application and can be deployed in Air Force, Naval & Army bases.



## Sarvatra Bridging System - 8x8 Vehicle



SARVATRA is a wheeled vehicle mounted mechanically launched multi-span mobile bridging system. There is a necessity of speedy erection of bridges over canals, ditches and other man made obstacles for crossing of MBT columns in forward operations. In the context of air threats rapid assembling / retrievals of the bridge column and their dispersal along with the task force is necessary. Comprehensive multi-span mobile bridging system on high mobility wheeled vehicles has been developed for Indian army, under multidisciplinary project 'SARVATRA'.

### SALIENT POINTS :

- Carrier Vehicle • Bridge Superstructure • Launching System
- Hydraulic System • Pier System • Electrical Harness System

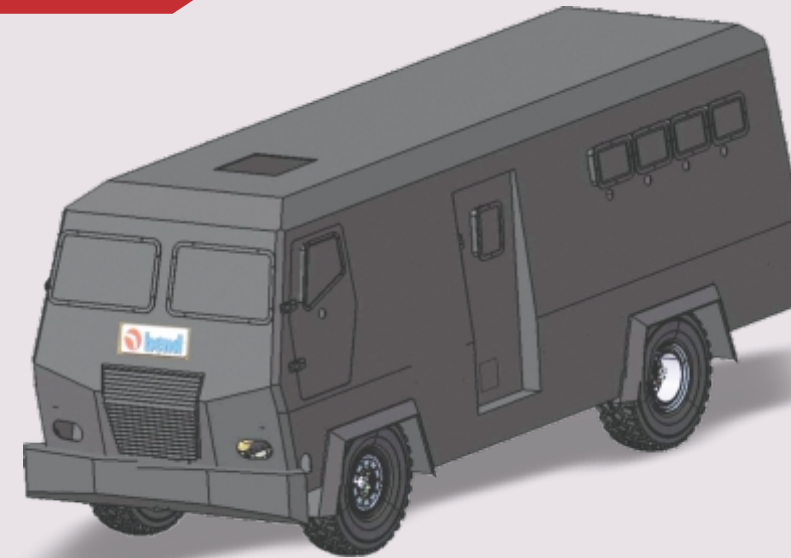
The Launching platform of Sarvatra is a Re-engineered BEML – TATRA T815 27ER96 30 300 8x8.1R / 51T Euro II vehicle. The Chassis is re-engineered & designed for carrying special super structure. The vehicle is capable of operating on highway and has high cross-country mobility.

Technical specifications of the vehicle:

- Engine : 8 - cylinder, turbocharged, air - cooled engine
- Power : 300 kw at 1800 rpm
- Gear box : 10 speed manual synchromesh transmission & 2 speed transfer gearbox.
- Tire monitoring : CTIS, which enables inflation/ deflation of tires based on terrain
- Bridge system : TATRA ER 8x8 re-engineered chassis for mounting 15m Bridging system.
- Additional driver's cabin at rear, to drive the vehicle from both ends.

The chassis has four axles and all the axles are of driven type. The driveline is provided with a moment divider and two inter- axle differentials for front and rear tandem axles. Each axle is provided with an axle differential. The inter-axle differential and axle differential locks are engaged while negotiating difficult terrains.

## Mobile Standby Command Post (MSCP) Vehicle



### SALIENT POINTS :

- Mobile Standby Command Post Vehicle is a high mobility, ballistic and blast resistant vehicle & equipped with on board electronics for standby command and control operations.
- The Mobile Standby Command Post (MSCP) Vehicle is with Bullet proof protection meeting NIJ level 4 Standard.
- Crew and Troops protected against simultaneous blast of 02 hand grenades HE36 (Put together) directly under the vehicle
- MSCP will house 10-12 personnel and sophisticated electronic equipments, UPS, Data Racks etc. along with the air-Conditioners for thermal management of the electronic equipment.
- Furnished with air-conditioning system of 2.0 TR capacity for control room & 4.0 TR for equipment room.
- Towing hooks at the rear to hook up trailer towing generator. The trailer can be easily attached or detached to the hook with a pin.
- Maximum speed – 80 kmph at GVW – 16,500 kgs
- Gradeability - 15°
- Engine – 6 cyl In-line, 127 kW power, 620 Nm torque BS – IV emission
- 6 speed manual transmission
- 14.00 R20 tactical tyre with run-flats
- Brake – two circuit air brake system with ASA & ABS

## High Mobility Vehicle 12x12 (Special Application)



### SALIENT POINTS:

- High Mobility Vehicle 12x12 is designed to carry specific special payloads up to 42 tons with clear platform length of 13m.
- Rough terrain mobility for off-road vocations – better vehicle control and greater cross-country speeds.
- Military truck chassis convenient for operation in the heaviest terrain and climatic conditions, in regions with extremely high and cold ambient temperatures, high humidity and in dusty environments
- High ride quality – reduced vibrations and road shocks provide improved driver comfort and safety for transport of sensitive and special goods, equipment and troops

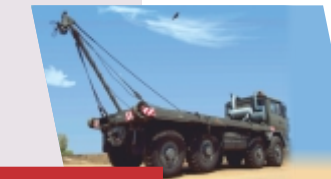
- Long service period design reduces maintenance costs.
- Chassis versatility allows bearing any kind of superstructure without special integration precautions
- Cummins ISM500 EPA99, 373 kW, electronically controlled engine, EPA 1999 norms
- ALLISON 4700 SP PR, 7-speed automatic transmission
- TATRA 2-speed transfer case 12x12 drive, all differentials lockable, independent wheel suspension with swinging semi-axles, planetary wheel hub reductions
- 16.00 R20 tactical tyres with VFI run-flats
- Central tyre inflation system (CTIS) operable on the move
- Maximum Speed – 60 kmph (speed limited) at GVW – 62,000 kgs
- Gradeability - 20°
- Cruising Range – 600 km
- Trench Width – 2 m, Vertical Step – 0.5 m, Shallow Fording – 1.2 m (without preparation)
- Approach angle : 39 deg
- Departure angle : 35 deg

## PMS Bridge Sets



The Pontoon Bridge Set is used by Army to transport military vehicle over water obstacles and marshy grounds. It consists of various members like Midstream and Shore for assembling a bridge over water obstacles. Midstream, Shore and Road laying members are loaded on vehicles thereby allowing for easy transporting of the equipments. The set is fully equipped for unloading the midstream members are joined together to form the floating bridge shore members are connected to the midstream members & serves as the transition section between the floating part and the Bank.

The bulldozer attachment fitted on the road laying truck is used for creating approach road. Removal of obstacles etc. road laying members are used for consolidating on the soft soil Bank to another with the boats pushing it. The boat loaded on the Dolly is towed by a truck. Dolly is equipped with the system for launching the boat as well as for pushing the ferry. The truck mounted crane is used for loading / unloading of various members both at launching site as well as in the maintenance workshop. Various accessories, tools and spares are supplied along with pontoon bridge set.



- MID Stream Pontoon 32 Nos/Set
- Shore Pontoon 6 Nos/Set
- Pavement Laying Truck 6 Nos/Set
- Truck Mounted Crane 2 Nos/Set
- Pontoon Truck
- Dolly 11 Nos/Set
- Boat 11 Nos/Set



## 8x8 Vehicle (Pinaka Variants)



### SALIENT POINTS :

- High Mobility Vehicle 8x8 is designed as a common base vehicle for all four variants of Pinaka Missile System Battery viz., launcher, command post, replenishment and loader cum replenishment vehicle.
- Right hand steering • Permanent 8x8 drive, all differentials lockable
- Independent wheel suspension with swinging semi-axes, axles sprung by leaf springs. • Rough terrain mobility for off-road vocations – better vehicle control and greater cross-country speeds.

- Military truck chassis convenient for operation in the heaviest terrain and climatic conditions, in regions with extremely high and cold ambient temperatures, high humidity and in dusty environments.
- High ride quality – reduced vibrations and road shocks provide improved driver comfort and safety for transport of sensitive and special goods, equipment and troops. • Long service period design reduces maintenance costs. • Chassis versatility allows bearing any kind of superstructure without special integration precautions
- Beml-Tatra 300 kW, BS-III engine • Beml-Tatra 10-speed manual transmission with 2-speed transfer case • Planetary wheel hub reductions • 14.00 R20 tactical tyres • Central tyre inflation system (CTIS) operable on the move • Maximum Speed – 80 kmph at GVW – 34,000 kgs
- Gradeability – 25° • Cruising Range – 700 km • Trench Width – 2 m, Vertical Step – 0.5 m, Shallow Fording – 1.2 m (without preparation)
- Approach angle : 32 deg • Departure angle : 48 deg

## Surface Mine Clearing System (SMCS) – BMP II



The SMCS gives a vehicle the ability to safely clear surface laid mines and munitions on roads and light terrain. The mine free path is prepared by a Vee blade that moves mines from the front of the vehicle safely to each side, well clear of the vehicle tracks. To achieve the necessary action, the Vee blade is divided into several blade segments, each of which is free to move in response to ground contours

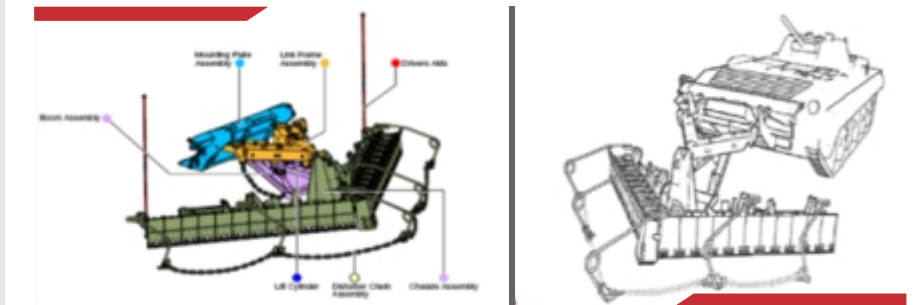
### SALIENT POINTS :

The function of the SMCS is to clear surface laid mines and munitions from in front of the vehicle:

- It fits to the front of the BMP II without modification
- Clears a safe lane approximately 4.25m wide
- Spoil and surface laid mines are pushed to the side
- Disturber chains detonate devices fitted with tilt rod and anti-disturbance fuses

The SMCS can be operated in one of two modes:

- FLOAT mode: Most Surfaces Blades maintained in correct position for effective mine clearance by own weight only
- PRELOAD mode: Hard surfaces with potholes, craters, and ruts Blades pushed down by hydraulic cylinder, forcing them into ground making them more effective



## Engineer Mine Plough – T90



The T-90 Engineer Mine Plough gives a tank the ability to rapidly force a passage through mined obstacles by creating a cleared path for armored fighting vehicles to follow. The mine free path is prepared by a raking action that brings buried or concealed mines to the surface and moves them to the side. To achieve the necessary raking action, mines move through the soil at a constant depth. The geometry of the Engineer Mine Plough and skids provide the depth control means.

### SALIENT POINTS :

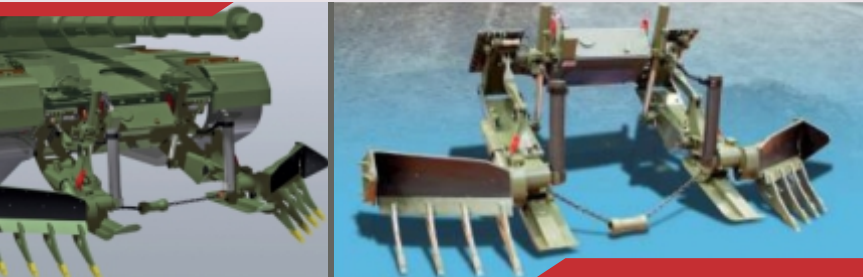
#### Principal Characteristics:

- Clears mines from the track of host vehicle.
- Clears mines buried at depths varying from 175mm to 275mm
- Operates at temperatures ranging from -20°C to +55°C
- No crane required for fitting and removal. Heavy duty jacks mounted on EMP will facilitate easy fitting and removal.
- Operates in a wide range of soils.
- Minimizes tractive effort required.
- Minimize the effects of detonating mines
- May be jettisoned by driver in closed down condition in case of emergency.
- Requires minimal maintenance.
- Replaceable tine tips.
- AMSD to knock out tilt rod mines.

#### General Specifications:

- Cleared Lane Width : 2 x 1.39m
- Center Lane,      • Unclear Width : 1.0m
- Number of Tines : 2 x 7
- Cleared Lane Depth : 175 - 275mm
- Plough Speed Range : 1 to 15 Kmph
- Maximum Weight : 2400 KG
- Operating Voltage : 24 / 48 V DC
- Operating Current (Max) : 240 A
- Minimum Life (Operation) : 30 Km
- Minimum Life (Stow): 1000 Km

## Track Width Mine Plough (TWMP) - Arjun MBT Mk-II



TWMP (A) with MSD

TWMP (A)

The TWMP has been designed to compactly stow on Arjun MBT. The approach angle has been maximized without impeding the operation of the gun even when fully depressed. The TWMP gives the Arjun MBT the ability to rapidly force a passage through a mined obstacle by creating a cleared path for its track to follow.

The cleared lane is prepared by the raking action of the 4 tines mounted on each blade, which bring concealed mines and IEDs to the surface and moves them to the side. Fold out blade extensions ensure that these devices are deposited well beyond the cleared lane. Constant depth control is maintained by skids, which remain in contact with the ground in undulating terrain to ensure the blade accurately conforms to the ground contour. The TWMP performs well in wide variety of different soils and terrain.

### SALIENT POINTS :

- Rapidly clears mines or IEDs from the track width of the host vehicle.
- Designed to minimize the effect of detonating mines.
- Designed to minimize the tractive effort required.
- Capable of operating in a wide range of soil conditions.
- Fully integrated MSD system available to counter magnetically fused mines.
- Replaceable Tines
- Low maintenance

#### General Specifications :

- Weight : 1500 Kg
- Cleared Lane Width : 2 x 725 mm
- Centre Lane Uncleared Width : 2120 mm
- Cleared Lane Depth : 175 to 300 mm
- Ploughing Speed Range : 1 to 15 kmph
- Raise Cycle : 18 seconds
- Lower Cycle : 7 seconds
- Voltage : 28 VDC
- Current(Maximum) : 240A



## Track Width Mine Plough (TWMP)-T90



T-90 TWMP (Track Width Mine Plough) is being developed to meet the demands of the modern Main Battle Tank (MBT). The TWMP gives a tank the ability to rapidly force a passage through mined obstacles by creating a cleared path for the T-90 Main Battle Tank. The system is designed to remove mines from the track width of the host vehicle. The system gives a tank the ability to protect itself from the threat of surface laid or buried AT or AP mines.

The T-90 Track Width Mine Plough is a self-contained unit, the only connections to the vehicle being its mounting arrangement and connection to the tank electrical power system.



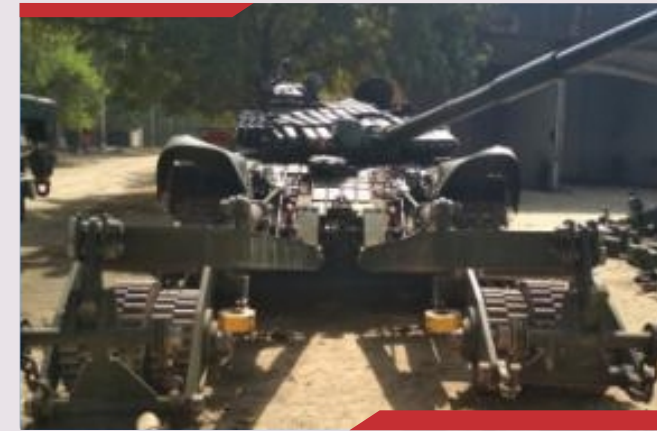
### SALIENT POINTS :

- Clears mines from the track width of the vehicle (tread way type)
- Designed to operate in a wide range of soils including loose sand and loams
- Designed to minimize the tractive effort required
- Designed to minimize the effects of detonating mines requires minimal maintenance

### General Specifications :

- Cleared Lane Width – 2 x 0.725m
- Number of Tines – 2 x 4
- Ploughing Depth – 150-275mm
- Ploughing Speed Range – 1-15 Km/hr
- Maximum Weight – 1500 Kgs
- Operating Voltage – 24/28 Vdc
- Current (Maximum) – 240 A
- Minimum Life (Ploughing) – 30 Kms
- Minimum Life (Raised) – 1000 Kms

## TRAWL Roller & TWMP for T-72



TRAWL roller & TWMP is a demining device mounted on a tank, designed to detonate anti-tank mines. It allows engineers to clear a lane through a minefield which is protected by enemy fire. It is a combination of roller & plough type. The full set of equipment comprises roller sections, plough sections, mounting frames, MSD, electrical equipment, pneumatic system, and a repair kit. Each roller system has metal forged roller, which apply a higher ground pressure than the tank's tracks.



### SALIENT POINTS :

- Trawl Roller Assembly (LH & RH)
- Mine plough (LH & RH)
- Electro –Magnetic Device (EMD)
- Width of Treads cleared : 0.8 m in front of the Track
- Max Speed of TRAWL : 3 kmph
- Max Mass of TRAWL : 7.5 Tonne (Roller) & 1.5 Tonne (Plough)
- Penetration of blades (Max.) : 200 mm Depth
- Explosion resistance : Up to 4 explosions of 7.5 kg TNT

### Terrain :

- Type : Plain, Desert & Semi-Desert
- Slope : Negotiate 150
- Trench : Negotiate up to 2.5 m Width

## BEML – 70T Trailer



Type of Trailer: Full Trailer capable of carrying a 70T payload of tracked vehicles, earthmoving and other heavy equipment on all types of metalled, un-metalled/gravelled tracks.

### SALIENT POINTS :

- Un-laden Weight : 24.5T • Un-laden Weight : 24.5T • Total No. of Axles : 10 Nos. (2 axles in each row ) • Tyres per axle : 4 Nos.
- Max Speed : 40Kmph on Metalled road, 30Kmph on un-metalled road • Tyres : 11 x R20 – 16PR (40Nos. + 4 Spare)
- Gradeability : Min. 14 deg down slope • Side Slope : Min. 9 deg

### Dimensions:

- Overall length with tow bar: 15,295mm
- Overall width : 3840mm
- Distant between axles: 2200mm
- Track area in contact : 8450mm
- Height of platform from ground: 1420mm  $\pm$  300mm

### Brake System:

- Type of brake: Pneumatic brake (air from tractor) • Number of brake drum: 20 Nos. • Parking brake: Provided at front side (2 button) • No. of air storage tanks: 12 Nos. (20 lit each)
- Brake pressure regulation: Mechanical Load control valve with Full load, Half Load & No load Total No. of Axles : 10 Nos. (2 axles in each row )

## AEROSPACE



### EXCELLENCE IN PRECISION MANUFACTURING & TECHNOLOGY



### Aerospace - Making A Mark

The Aerospace Division of BEML Limited was set up in Mysuru, Karnataka to take advantage of the domestic and global opportunities in the ever-expanding aerospace market and benefit from the 'Off-Set' policy laid down for defence procurement by Government of India.

BEML is shaping its vision to reach new frontiers and in association with OEM's aims to be a significant player in the international aerospace industry.

### SALIENT POINTS :

- Precision Machining
- Fabrication of Exotic alloys
- NDT & Inspection
- Airborne Sheet Metal Structures
- Design & Development of GHE & GSEs

Rocket Motor casings for :

- AKASH & QRSAM Missile Program
- PSLV Program
- Assembly & Manufacture of Airborne Sheet Metal Structures