



## CMD's Message



**W**e are back to work after an unprecedented lockdown due to COVID-19 crisis and hope that all of you and your families are safe

and healthy.

The COVID-19 crisis presented an extraordinary level of challenges both in complexity and uncertainty that has impacted every aspect of our daily lives. The business environment has changed and is changing in nature that one cannot foresee.

We have over Rs. 9,750 crs. orders on hand and set ourselves a sales target of over Rs. 4,000 crs. for FY 2020-21. However, due to spread of Covid-19 pandemic and subsequent closure of our plants, production was impacted and performance upto 1st QTR was far below vis-à-vis our plan. We are making

our best efforts to make up this shortfall and an action plan has been put in place. We are also trying to optimize cost through various cost optimization strategies and austerity measures so as to minimize the impact on the bottom line.

In line with the clarion call of our Hon'ble Prime Minister for Atmanirbhar Bharat Abhiyaan to help mitigate ongoing Covid -19 crisis, we need to accelerate our efforts towards self-reliance. Towards this, we have recently issued an EoI for manufacturing and partnerships under 'Make In India' for all our three verticals and the response has been quite enthusiastic. We hope to take it forward with few fruitful ventures, to expand / diversify our business.

With our leadership position in the domestic market for rolling stock for Metro applications, we are now focusing on export of rolling stock to the neighbouring countries and with the support and focus of GoI on Defence

exports, we are targeting exports under defence lines to friendly countries in addition to Mining & Construction equipment. Strategies have been drawn for widening distributor network, setting up offices abroad, Joint Ventures, EXIM bank opportunities – through Indian Lines of Credit and exploring opportunities through Chambers of Commerce, Embassies and Defence Attaché.

It is in times of great disruption that our ability to stay grounded with a sense of purpose, the values of the company and remain true to our identity is of utmost importance. We believe that the trust of our customers is the most vital factor setting us apart, from our competitors. I am glad to share with you that we have extended full support to our customers even during the lockdown period which is promptly appreciated.

Stay safe, Stay healthy.

Jai Hind !

**Dr. Deepak Kumar Hota**  
Chairman & Managing Director

## BEML @ DEFEXPO 2020

**B**EML had a mega presence in the DEFEXPO Show 2020, the biennial defence exhibition held in Lucknow, U.P., from 5<sup>th</sup> Feb to 9<sup>th</sup> Feb. 2020. BEML showcased some of its new products at the indoor and outdoor pavilions.

India's Chief of the Army Staff Gen. M. M. Naravane PVSM, AVSM, SM, VSM, inaugurated the BEML Stall in the presence of Dr. Deepak Kumar Hota, CMD, Directors, CVO, and other senior officials of the Company.

Dr. Hota briefed Gen. Naravane on BEML's ongoing projects related

to Defence products.

Host of VVIPs visited BEML's stall including Shri Rajnath Singh, Hon'ble Defence Minister, Shri Shripad Y. Naik, Hon'ble Minister of State for Defence, Gen. Bipin Rawat, UYSM, AVSM, YSM,

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Chief of Army Staff inaugurating BEML Pavilion

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## Mobile Standby Command Post Vehicle (MSCPV)

**B**EML launched Armoured Troop Carrier which is a Bullet Proof Mobile command & control vehicle, on high mobility 4x2 chassis and carries up to 24 troops.

Integrated with all security systems connected through wireless technology, is capable of functioning as a parallel and independent command & control centre. It is fitted with a high-end camera that can rotate 360 degree.

It is highly useful for urban and rural police operations, including crowd control and riot prevention. It can act as a surveillance vehicle for borders &

remote areas. It has a light weight steel composite hull on a robust 4x4 chassis fitted with 360 HP engine, maximum speed of 110 kmph, 60% gradeability with 25 degree side slope and high ground clearance enables it to travel through fields, over ditches and obstacles, as well as hilly and rocky terrains. It easily traverses mud, snow, gravel and sand while it speeds over dirt and paved roads. It is also equipped with a DG set with UPS as emergency backup for electronic subsystems.



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## BEML @ DEFEXPO 2020



Chief of Defence Staff in discussion with CMD at BEML Stall



Hon'ble Minister of Heavy Industries, GoK at BEML stall

SM, VSM, ADC, Chief of Defence Staff, India, Shri. Mohammed Ahmed Al Bowardi, Minister of State for Defence Affairs of the UAE, Shri Jagdish Shettar, Hon'ble Minister of Heavy Industries, GoK, apart from high level defence teams from Czech Republic, Bangladesh, Thailand and other countries.

The main focus at DEFEXPO 2020 was to display BEML's capability, promote defence products, interact with probable customers to understand their requirements for supplying of specific products and to explore collaborations with foreign companies.

Moreover, it was also an opportunity to network with MSME and start-ups for maximizing localization.

## HST Dozer



**B**EML introduced a new in-house designed & developed state-of-the-art Heli-portable Hydrostatic Drive Crawler Dozer with Advanced Power Angle Tilt feature. It has advanced Electric Monitoring System for accurate and smooth operation and adjustable operator seat for excellent comfort.

This Dozer can be used mainly for clearing debris, making roads, apart from an exclusive use for the Army in tough terrains. It can withstand extreme temperature variations from high temperature to minus temperatures.



**NEW PRODUCTS @ DEFEXPO 2020**

## Medium Bullet Proof Vehicle 'Gaur'

**M**edium Bullet Proof Vehicle, MK II an advanced version of Medium Bullet Proof Vehicle (MBPV) and christened as 'Gaur' was showcased at the DEFEXPO 2020 at Lucknow.

Launching the vehicle Dr. Deepak Kumar Hota, CMD, BEML said, "BEML MBPV-MARK II, 'Gaur' was designed and developed indigenously with added safety features, that also showcases our



commitment towards realising the mission of 'Make In India'.

The vehicle is equipped with night vision camera, blast resistant seats, GPS navigation, radio and intercom system. The vehicle shields security personnel from arm fire, hand grenade and can carry upto 12 persons.

BEML 'Gaur' is a 4x4 wheel RH drive, heavy duty all-weather off-road mobility vehicle and specially designed for easy manoeuvrability, operability and maintainability.

## AI Powered Medical Health Diagnostic Systems

**B**EML's 'AI' Powered Medical Health Diagnostic System (MHDS) was displayed at DEFEXPO 2020. This will meet the medical diagnostic needs of troops in forward posts, especially in high altitude areas.

The station housed in a 20 feet container on a high mobility platform (BEML TATRA 8x8/6x6) with artificial intelligence (AI) powered diagnostic system for troops in field, who are away from expert medical advice and attention.

MHDS also consists of Artificial Intelligence based Chest X-Ray Diagnosis, Artificial Intelligence based diagnosis of Eye Analysis and Diabetic

Retinopathy, Computer based diagnosis (CAD), Digital Radiology, Cardiograph, Pathology Laboratory, etc.

It provides for computer aided diagnosis using AI and can also obtain expert consultation from higher echelon hospitals or from a cloud based tele consultation system. It can be remotely connected to a medical data base too. The unit is provided with a dust free clinical environment, air conditioning and generator back up.

"This is the first of its kind in India and BEML is proud to be associated with Indian Army during disasters. It shows BEML's capability in making indigenous products under 'Make in India'



initiative", said a delighted Dr. D.K. Hota, CMD, BEML.

## 20 T Trailers



**B**EML has developed Trailer, which is a 'Medium Capacity Low Deck Full Trailer', suitable for on-road & off-road applications and used for transporting construction equipment, weighing up to a max of 20T capacity, for the Indian Army.

The Trailers are provided with ABS system, has hinged type foldable mechanical ramps and loose ramps for loading/unloading operations.



## MoUs

During DEFEXPO 2020, BEML entered into MoUs with several companies under 'BANDHAN' a joint initiative of the Ministry of Defence and Govt. of UP.

**Research & Development Establishment Engineers (R&DE Engrs.), DRDO** and BEML Ltd. committed to a long-term partnership through a 'License Agreement Transfer of Technology' for indigenous development of new 'Technology of Mine Field Marking Equipment MK II (MFME MK II)'. This product will be used by the Indian Army for marking the entire perimeter of the mine area in remote locations and fence it through a semi-automatic system on a high mobility multi terrain platform.

Accepting the Licence of Agreement for Transfer of Technology from DRDO Dr. DK Hota, CMD said, "With the signing of the MoUs, BEML is upbeat and would like to establish itself further towards building the nation's capability and create a footprint in UP as well. We are optimistic of the future that augurs well for the defence industries."

**With Pearson Engineering Ltd, UK :** For manufacturing, supply, integration, provide training, Spares & Services for 'Track Width Mine Plough' for T-90 Tanks. The commitment is to localise to the maximum extent. This de-mining equipment is time tested for different soil conditions in Indian



Dr. Deepak Kumar Hota, CMD, BEML receiving the Licence Agreement for ToT from Dr. G Satheesh Reddy Chairman, DRDO in the presence of Shri Rajnath Singh, Hon'ble Minister of Defence, Shri Shripad Y. Naik, Hon'ble Minister of State for Defence, Shri Yogi Adityanath, Hon'ble Chief Minister of U.P and Shri Ajay Kumar IAS, Secretary, Defence, Gol.

desert and customized to Indian operations.

**With Bharat Forge Ltd, Pune :** For collaborative programmes viz. Development of Mounted Gun System on a 4x4 High Mobility Vehicle, critical armoured machined forgings for Recovery vehicles, Power train components for 1500 HP Engine and explore potential export markets for APCs.

**With Prognosys Medical Systems Pvt Ltd, Bangalore :** For jointly explore emerging opportunities in AI based

Medical Health & Diagnostic Systems on High Mobility Platform for military applications. This product gives operational advantage to Indian Army in deploying at remote locations for faster diagnosis of wounded soldiers by a paramedical or Junior Doctors. The prescription / recommendation of treatment from Specialists is through AI based technology.

**With Texmaco Rail & Engineering Private Limited, Kolkata :** To jointly address development of systems / subsystems, manufacture, maintenance of existing systems of Russian OEMs in India for T series Tanks and also special Rail Wagons for Indian Railways.

**With Punj Corporation Pvt Ltd, New Delhi :** To jointly explore development of Russian components for T-72/T-90 tanks for upgradation and overhauling programs under the policy initiatives of the Government of India.

**With Si2 Microsystems Pvt Ltd, Bangalore:** To jointly explore business opportunities for technology requirements in Defence forces in electronic systems, sub-systems, electronic fencing and surveillance systems.



CMD, BEML seen with Distinguished Guests and Industrial Body during the MoU signing



MAJOR ORDER

## Major Order from Coal India



**B** EML bagged a major order from Coal India Limited for supply of 7 nos. 150-E and 8 nos. 205E Tons Electric Dump Trucks under trial-cum

sale, along with 8 years spare parts contract. These Dumpers will be deployed at Coal India subsidiaries viz., SECL Gevra Project, M/s. NCL Amlohri and Nigahi Projects. The total value is Rs. 398 cr.

Indigenously designed and developed by BEML, these Dump Trucks are being manufactured at its Mysore complex. These products will address the growing demand for higher

capacity equipment in the Mining Industry and will enhance the production substantially.

These trucks have ecofriendly emission certificate engines with electronic fuel management system to deliver maximum power. Its wide body design, higher value metric capacity and low body weight ensures high stability and productivity. State-of-the art AC drive system has been engineered to provide exceptional road performance with reduced maintenance.

## Suburban Train (MEMU) for Indian Railways

**B** EML has dispatched prototype of Mainline Electric Multiple unit (MEMU) to Indian Railways. The Main line electrical multiple unit (MEMU) with 3 phase onboard Propulsion system, is an existing Indian Railways approved carbody design that has been adopted, re-engineered and developed by BEML on a contract from Indian Railways.

The 3 phase Propulsion system is state-of-the-art system consisting of IGBT based microprocessor controlled 3 phase drive with VVVF (Variable Voltage Variable Frequency) control. The train has regenerative braking system for energy saving, and saves around 30% of energy, thus reducing the carbon

footprint. Energy saving LED lights are also used for illumination in the Coaches.

The train is equipped with GPS based Public Address (PA) and Passenger Information system (PIS) with Cab to Cab communication. Fire retardant furnishing materials are provided in the Coaches for passenger safety. The train has pre interfacing with Auxiliary Warning System (AWS) and Train Protection Warning System (TPWS). The prototype train consisting of 12 cars (3 Driving motor Coaches and 9 Trailer



MEMU Train

coaches) have been successfully inspected at factory by RDSO and cleared for Oscillation trials. BEML will be supplying 300 nos. of MEMU coaches to Indian Railways.

## APPOINTMENT

### A.K.Srivastav

Director, Defence Business, BEML



**S** hri A.K. Srivastav assumed charge as Director, (Defence Business) and Member of the Board of BEML on 1<sup>st</sup> June 2020.

Shri Srivastav graduated from IIT Kharagpur in Mechanical Engineering in 1987. He joined BEML as an Engineer Trainee and in his professional career

spanning over three decades in BEML and worked in various critical functions in the company.

He played a significant role in phased indigenization of key products and also created a vendor ecosystem in incorporating MSMEs.

## BEML Metro Cars Starts Operation on East West Line, Kolkata



Hon'ble Railway Minister being greeted by CMD, BEML during metro ride.

The first 5.7 Km section of Kolkata's second metro line was formally inaugurated by Shri Piyush Goyal, Hon'ble Minister of Railways &

Commerce on 13<sup>th</sup> Feb. 2020 in the presence of Shri Babul Supriyo, Union Minister of State for Environment, Forest & Climate Change at Kolkata. BEML has supplied a batch of 14 six car train sets each of which has a capacity of 2068 passengers. Manufactured at BEML's Bangalore Complex, the high-end train set has a body shell made of stainless-steel. The light weight highly energy-efficient trains are monitored and selectively controlled by a micro-processor-based Train Control and Management System (TCMS).

While taking a ride in the metro car the Hon'ble Minister lauded BEML for introducing a world class metro car to the 'City of joy'

Speaking on this occasion, Dr. Hota said, "BEML is responsible for most of the technological support and the nitty-gritty, like training the drivers in Communication Based Train Control System (CBTC)."



## BEML Flags Off Final Train Set for Kolkata Metro

BEML flagged off the last train set for Kolkata Metro (East - West) project from its Metro Coach factory at Bangalore Complex on 17<sup>th</sup> June 2020. Dr. Deepak Kumar Hota, Chairman & Managing Director, BEML has flagged-off the metro train set in the presence of Company Directors and other senior officials of BEML.



Flagging off the final Metro Train set for KMRCL

BEML built KMRCL Train Sets are operating satisfactorily since Feb. 2020.

Further, 6 train sets are ready for deployment in revenue operation.

On the occasion Dr. Deepak Kumar Hota, CMD, BEML said, "We are on track, as we despatched the last of the 14 train sets for Kolkata Metro (East - West) project for KMRCL. We have proved our capabilities and expertise in supply of Metro coaches. An epitome of successful 'Make in India' initiative in the rolling stock industry."



CMD, BEML seen with MMRDA & DMRC Officials

BEML celebrated the completion of the 1st body shell for the rolling stock of Mumbai Metro (MMRDA). The function held at

## 1<sup>st</sup> Shell of the Proto Train Set for MRS-1

Bangalore on 20<sup>th</sup> Feb, 2020 was attended by Dr. Deepak Kumar Hota, CMD, BEML, Dr. Sonia Sethi, IAS, Additional Metropolitan Commissioner, MMRDA, Mumbai, Shri SS Joshi, Director RS, DMRC, other officials from the Delhi Metro Rail Corporation (DMRC) and Mumbai Metropolitan Region Development Authority (MMRDA).

BEML began manufacturing these coaches and will supply a total of 504

lightweight, fully-furnished, modern metro coaches for MRS 1, MMRDA.



1<sup>st</sup> Shell of the Proto Train set for MRS - 1 Project



## International Women's Day

International Women's Day (8<sup>th</sup> March) is aimed to help eliminate worldwide discrimination against women. It also focused on helping women to gain full and equal participation in global development.

### Bangalore Complex

The day was celebrated at BEML by all women employees and executives with



At Bangalore Complex

enthusiasm across the company. Smt. Sreela Roy Hota, Chief Patron of BEML Ladies Club was the Chief Guest at Bangalore Complex and addressed the gathering on the gender equality and realising women's rights.

The day marked essay writing, slogan writing and painting competition for women personnel and their children. Prizes were distributed to the winners.

International Women's Day is a day when women are recognised for their achievements. It is an occasion for looking ahead to the untapped potential and opportunities that await future generations of women.

### KGF Complex



At KGF Complex

At KGF Complex Shi B Shankar, ED, was the Chief Guest and graced the occasion. Dr. Rekha Sethi, Principal, Shri Bhagwan Mahaveer Jain College, KGF who was the guest of honour, spoke on the achievements of prominent women personalities. Earlier Dr. Komala welcomed the gathering.

### Palakkad Complex

At Palakkad Complex, the lamp was lit to mark the beginning of International Women's Day. Shri P. Sivakkumar Chief of the Complex was the Chief Guest, Smt. Mridula, Counsellor, Kudumbasree Dist. Mission, Palakkad, who spoke on the occasion, highlighted various opportunities available for the women



At Palakkad Complex

towards development and growth.

Slogan writing and poster competition were organised for the women employees. The family members were also invited and sweets were distributed. Entertainment programmes were also held on the occasions.

### Mysore Complex

At Mysore complex, Dr. Dharani Devi Malagatti, IPS, Superintendent of Police & Principal, Police Training School, Mysuru was the Chief Guest. During her speech she stressed upon the importance of creating a world of gender equality and the role of every citizen in it.

Dr. Asna Urooj, Professor & Chairperson, Department of Food Science & Nutrition, was invited as a Guest Speaker and spoke on legal rights of women in India.



At Mysore Complex

Shri H.S. Ranganath, Chief of Complex graced the occasion.

Apart from the above, slogan competition in English, Hindi & Kannada and poster competition were conducted on the International Women's Day Theme. The winners of the competition were given prizes.



Womens Day at BEML, R.O. Hyderabad

## Leadership Award



CMD BEML, has been awarded Governance Now 7<sup>th</sup> PSU Leadership Award, in the category of 'Efforts & Achievements', at a function held at New Delhi recently.



## Combat COVID 19

**A**s a socially responsible organization, BEML initiated quite a few steps to help the people during the Covid 19 lockdown period.

The Company organised supply of food for migrants, villagers in neighbouring areas of its units. It also supported and assisted self-help groups to manufacture home made mask and with the help of BEML Ladies Club and

Associations distributed to hospitals, corona warriors around the complexes.

BEML propagated good health practices by putting up banners and other related information materials. Social media platforms were used to spread awareness about precautionary measures to stay safe & healthy.

Apart from this, BEML implemented the Standard Operating Procedure (SOP) to provide guidelines to eliminate the chain of corona virus and to resume work in its plants and townships.



Poster Campaign



Walk through sanitizer



Area Sanitization



Distribution of Food



Distribution of Masks



BEML Social Media Campaign



Providing Clean Water