



National Technology Day

Dear Colleagues,

The Government of India has officially declared 11th May as National Technology Day in India to commemorate the first of the five nuclear tests that were carried out on 11 May 1998.

As all of you are aware, technology has transformed the way the mankind lives and works and brought about the complete transformation in life style of the people. Technology enabled the humans to pursue higher goals in life. It has also brought about connectivity between nations and people opening up many new possibilities for the humanity.

It is a well-established fact that Technology is a great enabler and a game changer, which empowers people, societies and nations in transforming the living standards. Starting with the second half of the millennium with the invention of steam engine, muscle power started getting replaced with mechanical power and subsequently by electrical power. These technologies made large scale agriculture possible that could feed increasing populations across the world.

Subsequent innovations transformed the mobility, connectivity, communications, medical technology and digital technology etc in a such a way that whole world became a connected world.

In this backdrop it is apt for us to remember and recollect the important role that technology plays in our life as well for our products and for the nation on this day which is celebrated as Technology day.

Our country has made a significant progress since Independence. The nation moved with a great pace in it's technological journey. The entire core sectors of economy namely Steel, Coal, Energy, Rail, Ports and Air ports were set up mostly with technology tie-up with foreign countries.

Indigenisation and local manufacturing under license helped in proliferation of technology to larger number of technicians, engineers, which steadily lifted the manufacturing eco system in the country. As engineers absorbed these technologies over a period of time, local industries and R&D establishments started coming out with their own homegrown technologies. Pioneering efforts by organisations like ISRO, BARC and DRDO who made the first satellite, Nuclear power plants and Nuclear weapons and Missiles under technology denial from foreign powers helped boost countries penetration into critical technological areas like servo controls, guidance systems, GPS, Sensors, Titanium alloy components etc.

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Major highlights are:- India making its own super computer for weather prediction, when the same was denied and the development of Nuclear powered sub marine. Development and introduction of PSLV and GSLV series launch vehicles helped show case the technological might of the country to the world by launching satellites of even developed countries.

Today the global image of India and Indians stands transformed on the back of progress made by our IT engineers all over the world. The big tech companies of the world like Google and Microsoft are headed by Indian engineers and many forerunners for future technologies are being incubated by India.

Today in the middle of the pandemic, India has succeeded in developing and launching its own Vaccine and India with its reputation as pharmacy of the world could help many countries who were going thru their second wave earlier than us. The image and goodwill created due to these efforts have come in handy, when we are fighting the second wave.

We, at BEML, feel proud that the National Technology Day coincides with our Foundation Day. BEML was established with an aim of learning, adopting and developing product/ process technologies, critically required for the nation.

BEML strongly believes that the indigenized technologies will lead to creation of a strong, healthy and robust organization. BEML has significantly invested in establishing critical infrastructure, vital for design, development and testing activities.

Our R&D Expenditure as a percentage of total Sales at 2.64 % is among the highest of Public Sector Undertakings.

The efforts of our Technology teams, namely R&D and Product Design Teams, have resulted in successful addition of technologically superior products to our Product-Portfolio. The sales from in-house R&D developed products was at 68% at total turnover in 2020-21.

Some of the successful products developed by our R&D are :-

- 150 Ton, 205 Ton Electric Rear Dump Trucks
- 180 ton Electric and Diesel Excavator
- 860 HP Dozer
- Medium Bullet Proof Vehicle
- First Driverless Metro Train for MRS1
- 3 Phase MEMU

Towards protecting the Intellectual property of the Company, the Innovation Cell has succeeded in filing 55 Patents last year covering innovations in product design, manufacturing and operations. The total IPR filed stand at 210 with 8 Patents granted till date.

We need to stay focused and strategize to leverage our ability to deliver on the Country's promise of 'Make in India' and contribute significantly to crank up the growth Engine.

BEML is proud to be recognised for its manufacturing competence and technological capabilities by our customers and even the Ministry of defence. BEML was entrusted with the task of manufacturing 150 oxygen plants when is nation is facing a crisis of oxygen shortage.

Our customers like DMRCL, MMRCL, KMRCL and BMRCL have reposed their confidence in BEML technological abilities by qualifying us for manufacturing new Metro train configurations including driverless Metro trains.

Coal India limited has entrusted BEML with the task of developing and supplying 150 ton, 200ton dumpers and we will be shortly in the race for developing 240 ton dumper as well. Further development of high end equipment like 860 HP dozer, 10 Cum class shovel have been entrusted to BEML as import substitution products which will contribute in a big was to Atma Nirbharata. of the country.

BEML has been entrusted with the prestigious task of development of 1500HP engine for the futuristic main battle tank for the India Army by DRDO which speaks volumes about our capability to develop new technologies.

Stay safe, stay healthy, stay fit. - Stay informed, stay learned, stay ahead.

M V Rajasekhar

Chairman & Managing Director

11th May 2021