



## INDUSTRIAL VISIT TO MIDHANI & BDL

An Industrial visit to MIDHANI and BDL was held on the 18<sup>th</sup> of December 2021 on the occasion of Azadi Ka Amrit Mahotsav, celebrating 75 years of Indian Independence. IEEE MVSR SB PES Student Chapter planned the event to give the students a real time exposure about various equipment used and products produced by these organisations.

### Student Branch Mentor:

Dr. Atul Negi,  
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### Student Branch Executive Committee:

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Treasurer	Ms. Addu Vandana
Women in Power	Ms. B. Rajya Laxmi

### WIE Student Branch Advisor:

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### CASS Student Branch Advisor:

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### Computer Society:

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**Event Details:****Date:** 18<sup>th</sup> December 2021**Timings:** 11:00 am to 4:30pm**Venue:** Mishra Dhatu Nigam Limited & Bharat Dynamics Limited, Kanchan Bagh.**Number of IEEE Volunteers: 7****Number of Students Attended: 123****Number of Faculty: 5****Volunteers List:**

S.No	Name	Roll Number	Mail-ID	Branch
1	Mr. G Surya Teja	2451-18-734-074	Suryatej4153@gmail.com	EEE
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7	Ms. B Rajya Laxmi	2451-20-734-033	bollurajyalaxmi16@gmail.com	EEE

**Faculty List:**

S.No	Name	Designation	Branch
1	Dr. D Hari Krishna	Associate Professor	EEED
2	Mr. N Bharat Mohan	Assistant Professor	EEED
3	Mrs. G Sirisha	Assistant Professor	EEED
4	Mr. N Ravi	Assistant Professor	EEED
5	Mr. B Ramakrishna	Assistant Professor	EEED

During the Covid-19 Pandemic, students had little to no opportunity for a live industrial visit to understand the operations of a large industry. In view of recent drop in cases IEEE MVSRSB PES Student Chapter has organized an industrial visit for interested students at MIDHANI & BDL. All the Covid-19 precautionary measures were taken, and the students were instructed to mask up and properly sanitize themselves during all times. Mishra Dhatu Nigam Limited (MIDHANI) and Bharat Dynamics Limited (BDL), on the occasion of India's 75<sup>th</sup> year of Independence in 2022 has organized an event called Azadi Ka Amrit Mahotsav, showcasing all the various products produced by them and the equipment used in the process of production.



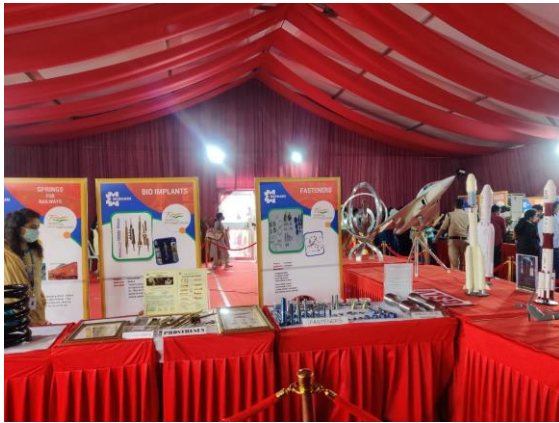
**Corporate video shown by MIDHANI**



**Corporate video shown by BDL**

The initiative for the industrial visit was taken up by the PES ExCom and necessary arrangements were made. On the morning of 18<sup>th</sup> December 2021, all the students who were interested were informed to arrive at the college by 10:00 am. The students boarded the college buses and started by 10:30 am. On reaching MIDHANI at 11:00 am all the students and faculty first had to go through a thorough security check and were then allowed inside. Then, a corporate video was shown by the staff of MIDHANI which explained the various industrial processes and equipment used like Electric Arc Furnace (EAF), Electro Slag Refining (ESR), Electron Beam Melting (EBM), Air Induction Melting (AIM), Vacuum Induction Refining (VIR), Vacuum Arc Remelting (VAR), Vacuum Induction Melting (VIM) i.e, melting under vacuum of  $1 \times 10^{-6}$  bar , a 1500 Tonne Forge Press , 6000 Tonne Forge press etc.

It was shown that MIDHANI has a capability of melting the raw materials like Mild Steel scrap, Alloy scrap, Ferro alloys and virgin materials like Nickel, Cobalt, Molybdenum, Tungsten etc, then casting them into ingots and finally converting them into slabs, bars, rods, wires, plates etc. MIDHANI was also involved in the production of Bio Implants, Armour Steel, High Temperature Alloys, Aircraft Engine Alloys, Nuclear capability materials and can also make materials which are used in space exploration to the materials used in deep oceans.



**Equipment produced by MIDHANI**

Students were then given a lunch break from 1:00 pm to 2:00 pm. After the break the students all the students gathered at one place and then were taken to Bharat Dynamics Limited (BDL). Here too the students were first shown a corporate video of BDL which provided

information like what does the company actually produce , when was it established etc. It is India's one of the major manufacturers of ammunitions and missile systems.

Students were given a brief description on various missiles like VLSR-SAM, LR-SAM, MR SAM, Submarine Fired Decoy (SFD), ASTRA, Garudastra, Heavy Weight Torpedo (Varunastra), Fagot Launcher Adapted to Milan Equipment (FLAME), AMOGHA-III etc. Real sized models of NAG ATGM, a third generation Anti-Tank Guided Missile with Fire and Forget top attack capability and KONKURS-MATGM, a second generation, mechanized infantry ATGM, to destroy armored vehicle equipped with Explosive Reactive Armour, moving and stationary targets was also displayed to the students.



**Missiles designed by BDL**

At last a group picture was taken and all the students were taken back to the College at 4:30 pm. Students from the second, third and final year had a wonderful and informative

experience on various equipment used and products produced by these organisations.



**Reported By:**  
**IEEE MVSR SB.**



