

DEPARTMENT OF MECHANICAL ENGINEERING



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**GANGA INSTITUTE OF TECHNOLOGY
AND MANAGEMENT, KABLANA**





GANGA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

DEPARTMENT OF MECHANICAL ENGINEERING

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DIRECTOR'S MESSAGE



DR. AMAN AGGARWAL

GITAM, KABLANA

“ ‘Mech G Connect’ (ME newsletter), vol.1 is a testament to the collaborative spirit and passion of faculty and students of Mechanical Engineering Department. We aim to foster a strong sense of belonging, connecting students, faculty, and alumni on a common platform. I extend my gratitude to the editorial team and all contributors for their dedication in making this newsletter possible. I encourage all readers to engage with the enriching content and stay connected with our ever-evolving community. Wishing you an enjoyable read and looking forward to the continued growth and success of ‘Mech G Connect’.

HOD'S MESSAGE



MR. VIVEK

GITAM, KABLANA

“

I am thrilled to announce the release of our Departmental Newsletter, “MECH G CONNECT.” This publication showcase our achievements and student accomplishments. I extend my gratitude to the Newsletter Committee for their hard work and contributors for enriching the content. The newsletter will be a continuous project, welcoming your future contributions. Congratulations to all for making this newsletter a reality!

”

VISION MISSION OF INSTITUTE

VISION

GITAM aims to be an outstanding Institute in India through academic excellence in the field of Technology and Management to fulfill the need of the Industry and serve the society.

MISSION

- To Provide healthy environment to our students as well as faculty members.
- To achieve excellence in technical education
- To promote holistic development of students through interaction with alumni, academia, Industry and expert lectures.
- To attract nurture and retain the best faculty and technical manpower.
- To promote research and development Initiatives.
- To contribute to the society by inculcating professional ethics in the students.

DEPARTMENT OF MECHANICAL ENGINEERING

VISION

“To become a center of excellence in the field of Mechanical Engineering, committed to address societal challenges and evolving needs of industry.”

MISSION

- To achieve excellence in mechanical engineering by providing outcome-based education in a healthy learning environment.
- To enhance the student’s technical and entrepreneurial skills by providing advanced learning facilities and co-curricular activities.
- To inculcate professional ethics, leadership qualities, and moral and social values among students through interaction with alumni and experts from industry and academia.
- To encourage students to research and innovate through project works, workshops, conferences, training sessions, etc.

PROGRAM OUTCOMES

Engineering Graduates will be able to:

- ⇒ **PO-1 Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- ⇒ **PO-2 Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- ⇒ **PO-3 Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- ⇒ **PO-4 Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- ⇒ **PO-5 Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitation.
- ⇒ **PO-6 The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- ⇒ **PO-7 Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ⇒ **PO-8 Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ⇒ **PO-9 Individual and Teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

- **PO-10 Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO-11 Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply the set to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments.
- **PO-12 Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PEO (PROGRAMME EDUCATIONAL OUTCOMES)

The students will be able to:

- **PEO-1** To produce competent Mechanical Engineers, capable of applying the knowledge of contemporary Science and Technology, to meet the challenges in Mechanical and allied Engineering fields.
- **PEO-2** To prepare the Mechanical Engineering graduates to work in diverse fields in different capacities involving individual and teamwork.
- **PEO-3** To inculcate among the students a sense of ethics, morality, creativity, leadership, teamwork, and professionalism.
- **PEO-4** To instill in the students, the ability to take up innovative research projects and to conduct investigations of complex Mechanical Engineering problems using research-based methods.

PSO (PROGRAMME SPECIFIC OUTCOMES)

The students will be able to:

- **PSO-1** Solve the real life problems by integrating design, thermal and manufacturing areas of Mechanical Engineering.
- **PSO-2** Adapt to rapid changes in the field of Mechanical Engineering and excel in a multidisciplinary work environment.

ABOUT MECHANICAL ENGINEERING

The Department of Mechanical Engineering was established in 2010 with the aim to provide the best knowledge and environment to ensure complete success in whatever field the students choose. This Department is one of the key strength of the Institute. It is making very sincere efforts to produce excellent Mechanical Engineering graduates to meet the present day needs of organizations and the Industry. The experienced and dedicated faculties along with its excellent facilities provide the necessary resources to keep the students updated with the latest industrial trends. The department has created state-of-the-art infrastructure in terms of Workshops, Laboratories and other facilities.

PROGRAMME	DURATION	INTAKE
B.TECH MECHANICAL ENGINEERING	4 YEARS	120
B.TECH MECHANICAL ENGINEERING (LEET)	3 YEARS	12
M.TECH MACHINE DESIGN	2 YEARS	12
M.TECH MANUFACTURING AND AUTOMATION	2 YEARS	18

ABOUT ME MANUFACTURING COMPANY



CERTIFICATE COURSE

The Department of Mechanical Engineering conducted a five days certificate course on “INDUSTRIAL ROBOTICS” from 17/07/2023 to 21/07/2023. Mr. Parveen Kumar was the resource person of this interactive session.

Objective: This course is designed to develop student’s skills in kinematics analysis of robot systems, trajectory planning and robot control.

Course Outcomes:

- Demonstrate an ability to apply spatial transformation to obtain forward kinematics equation of robot manipulators.
- Demonstrate an ability to solve inverse kinematics of simple robot manipulators.
- Demonstrate an ability to obtain the Jacobian matrix and use it to identify singularities.
- Demonstrate an ability to generate joint trajectory for motion planning



CERTIFICATE COURSE

The Department of Mechanical Engineering conducted a five days certificate course on “SUPPLY CHAIN MANAGEMENT & LOGISTICS” from 26/12/2023 to 30/12/2023. Mr. Sumit Verma was the resource person of this interactive session.

Objective: The Supply Chain is to make products available to meet customer demand that includes delivery to the appropriate location, on time, in sufficient quantity. Supply Chain Management is focused on doing that in the most efficient and effective way.

Course Outcomes:

- Understand the fundamentals of Supply Chain Management Concepts.
- Apply knowledge to evaluate and manage an effective supply chain.
- Understand the foundational role of logistics as it relates to transportation and warehousing.
- Analyze and improve supply chain processes.



INDUSTRIAL VISIT AT “MV INTERNATIONAL”

Objective: The purpose of the visit was to provide an opportunity for the students to have real insight into manufacturing processes and experience the working environment on the shop floor area. So that students will be able to compare their theoretical knowledge with the practical one.

MV International is a leading manufacturer and exporter of a wide range of Industrial Ovens & Batch Ovens. We have been catering to various industries with our wide range of superior-quality Industrial Drying ovens.

MV International: In the company, there is a team of more than 200 highly qualified and experienced professionals in all the relevant Technical and Engineering Disciplines. MV International is an ISO 9001:2008 certified company established as a trustworthy name in the field of Industrial Ovens. We have set certain parameters for our success. Our customized range of products includes motor heating ovens, Varnish baking ovens, Electric industrial ovens, Electric drying ovens, Drum heating ovens, Core ovens, Paint baking ovens, top loading ovens, Motor drying ovens, Electric ovens for HT LT motors, Transformer heating oven, Infrared conveyor oven, Teflon coating oven, Industrial batch ovens, etc., is attributed with the latest technology. We also have a well-knitted network along the vertical supply chain - both with the manufacturers and distributors to fulfill timely delivery of products and spares.

In this company, a wide range of Industrial Ovens is widely appreciated by our clients in domestic and international markets. Manufactured as per industrial standards, these are widely used in industries like Heavy engineering, Refineries, chemicals, petrochemicals, Fertilizer, Steel plants, Mining, offshore, Railways, Defense, Aerospace, and Nuclear.

CONCLUSION: This industrial visit will benefit the students in terms of learning the working culture in an industrial oven manufacturing unit. The students understand the basics of design and manufacturing steps in making ovens. During the plant visit, students passionately interacted with the senior retired engineer to learn all the basics of the concerned processes and clear their doubts. Overall it was very nice, knowledgeable, and fruitful to visit at Ms./MV International.



INDUSTRIAL VISIT AT "SUPERTECH EV LTD, BAHADURGARH "

Objective: The purpose of the visit is to give the students an opportunity to interact with Industry Experts, gain firsthand knowledge of production procedures and observe the working atmosphere on the shop floor. Industrial visit helps students to combine their theoretical knowledge of operations with the practical knowledge of its actual functioning.



About Supertech EV Ltd.: The well-known private sector company Supertech EV Ltd, run by Mr. Yetender Sharma and Mr. Vaibhav Singh, specializes in sheet metal and tubular parts. They were founded in 2010, and as of this writing, they can produce 36,000 sets of electric vehicle components annually using cutting-edge machinery. They handle the full production process, from manufacture to distribution, with a focus on cutting-edge, intelligent electric vehicles that have received "Pilot" certification from the International Centre for Automotive Technology. Dedicated to pushing the limits of electric vehicle technology and producing top-notch goods, Supertech EV Ltd.

Supertech EV Ltd. intends to create reasonably priced electric and hybrid automobiles. To undertake market analyses, evaluations, and technological comparisons, we use task groups. We have opened shops all over India to give our dealers trustworthy information on hybrid and electric vehicles. Making electric vehicles available to everyone is our aim.



Outcomes :

- Students gained practical knowledge of the design and manufacturing process of various sheet metal and tubular parts of electrical vehicles.
- Students observed and learnt to apply quality control measures and inspection methods in EV component manufacturing.
- Students interacted with the workshop supervisor to learn all the basics of manufacturing processes and modern tools.
- Students explored potential career paths in manufacturing, quality control, research and development, and other related fields.

CONCLUSION: The students gained knowledge of the workplace culture in an industrial assembly line for electric vehicles as a result of this industrial visit. The fundamental manufacturing processes used to create electric vehicles are understood by the students. Students passionately engaged with the engineer during the plant tour to learn all the fundamentals of the relevant processes and to get their questions answered. Overall, visiting supertech EV Ltd. was pleasant, educational, and beneficial.

INDUSTRIAL VISIT AT “LPS BOSSARD, ROHTAK”

Objective: Purpose of visit was to provide an opportunity to the students to have real insight into manufacturing processes and experience the working environment on the shop floor area. So that students will be able to compare their theoretical knowledge with the practical one.

Bossard India (LPS Bossard Pvt Ltd) is an Indo-Swiss JV, providing single window solutions for complete fasteners & C parts management. Global presence in 19 countries & 75 locations since 1831. Leading Fastener house is providing assembly technology solutions for customers globally. We’re surrounded by products fastened by things you can see screws, nuts and bolts but we at LPS Bossard help customers boost their productivity by surfacing the hidden potential of fastening.



About LPS Bossard Pvt Ltd: In the company, there are a team of more than 250 highly qualified and experienced professionals in all the relevant Technical and Engineering Disciplines. Our key Personnel, who are the brain trust of LPS Bossard Pvt. Ltd., have assimilated extensive experience by working on shop floors during early stages of their careers in reputed private sector Nut & Bolt manufacturing plants in India.

In the company, there were two floors - ground floor and the first floor. At the ground floor, the design department was there and the first floor manufacturing unit was there. Senior retired people and young engineers from various PSUs and private company engineers guided our students enthusiastically and passionately. They visited every corner of the company and gave meaningful knowledge about the design and manufacturing of the industry.



Outcomes:

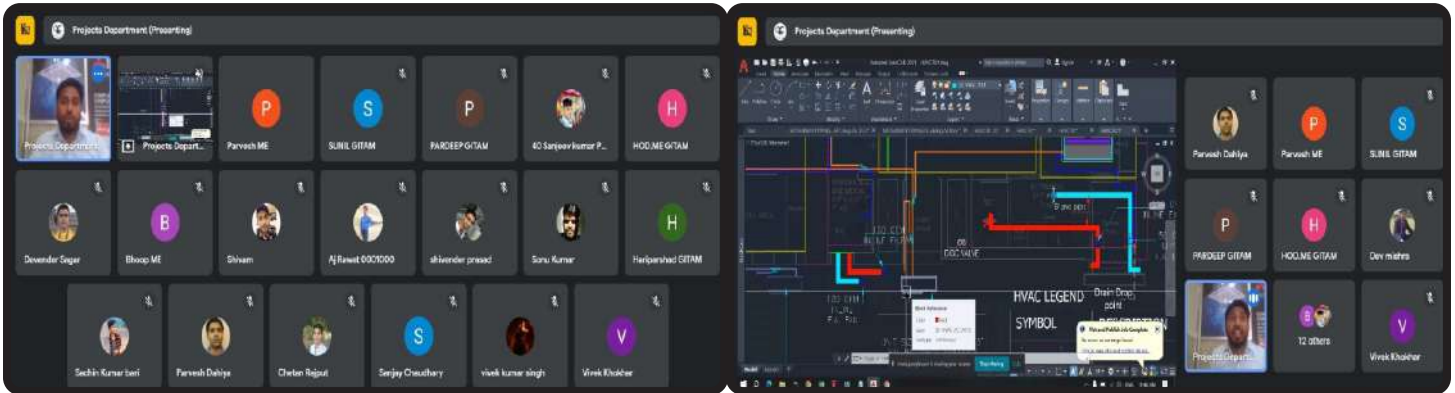
- Students gained practical knowledge of the design and manufacturing process of various machine components.
- Students observed and learnt to apply quality control measures and inspection methods in machine component manufacturing.
- Students interacted with the workshop supervisor to learn all the basics of manufacturing processes and modern tools.
- Students explored potential career paths in manufacturing, quality control, research and development, and other related fields.

CONCLUSION: This industrial visit will benefit the students in terms of learning working culture in a Nut & Bolt manufacturing unit. The students understand the basics of design and manufacturing steps in making Nut & Bolt. During plant visit, students passionately interacted with the Senior retired engineer to learn all the basics of concerned processes and cleared their doubts. Overall it was very nice, knowledgeable and fruitful to visit LPS Bossard Pvt Ltd.

ALUMNI TALKS



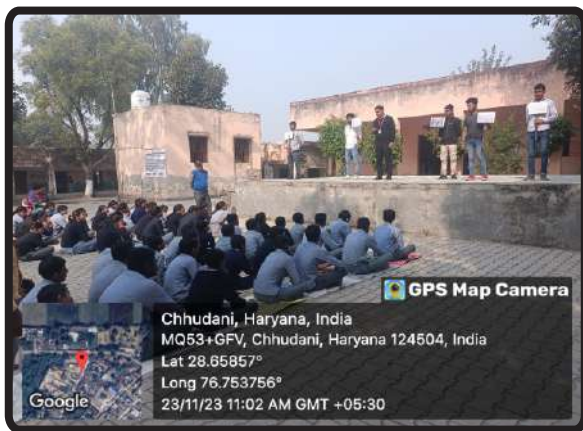
Objective: Alumni talk helps the student to better understand their curriculum and the use of curriculum during their job. Alumni talks become an eye opener for the students on how to enter a company after completion of their course and use their skill for better performance.



Mr. Rahat Madni was invited for Alumni Talk. He interacted with the students and gave career guidance regarding higher studies and jobs in mechanical engineering field. The alumni provided course-specific information to the students.

EXTENSION ACTIVITY ON "DIGITAL PAYMENT AWARENESS PROGRAM"

An extension activity on Digital Payment Awareness Program was organized by "MECHFUSION" (Technical club of Mechanical Engineering Department) on 23.11.2023 at Govt. Senior Secondary School, Chhudani. Knowledge about digital payments (i.e. what is digital payments, what are various modes of digital payments, benefits and losses) was shared with the students.



OBJECTIVE:

- Raise awareness about the security measures in place for digital payments.
- Educate about common types of fraud in digital payments.
- Inform about rights and responsibilities when making digital payments.
- Highlight the environmental benefits of digital payments.
- Encourage more people to adopt digital payment methods by highlighting their convenience.

OUTCOMES:

- Become known to environmental benefits of digital payments
- Adopted to digital payment methods by highlighting their convenience.
- Become more adept at recognizing various types of fraud schemes prevalent in digital payments.
- Educated about common types of fraud in digital payments.
- Increased awareness to adopt a more vigilant approach when engaging in digital transactions.

RESEARCH AT MECHANICAL ENGINEERING

2023 International Conference on Intelligent Computing, Simulation and Optimization (ICICSO)

(PERFORMANCE ANALYSIS STRUCTURAL CHARACTERISTICS OF BAMBOO FIBER- REINFORCED CONCRETE)

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Abstract— Bamboo has been utilized as a building material since prehistoric times. Bamboo can be used for both useful and useless purposes. In the past, bamboo was utilized for construction work and is now used to build struts, poles, buildings, and other structures when building a house. Concrete has a high compressive strength despite having a low tensile strength. Hence, unlike steel, which is usually utilized as reinforcement in concrete to produce tensile strength, bamboo is resistant to compression and friction. Everything becomes considerably easier when bamboo is used in building. It is comparable in weight and strength to steel, concrete, and wood, but it has a low strength and a great degree of flexibility. The drawback is that compared to its neighboring areas, it is more expensive and labor-intensive to include. The use of bamboo for testing tests on an experimental model and cement concrete reinforcement is covered in this article.

Keywords— Tensile Test, Flexural Test, Bamboo Immersion, Heat-up.

1. INTRODUCTION

It should be simple to find the materials needed to build a bamboo house. Traditional building materials are taken into consideration. Because the bamboo-based home is so light, walls, roof, bamboo beds, and chicken steel mesh are combined to create wall panels, which are then coated with cement mortar. Affordable priced building materials include cement, chicken wire, bamboo, wire and bolts. Because of its high elasticity, bamboo can tolerate sizable deformations in the elastic range. Therefore, properly constructed bamboo dwellings may bamboo poles can tremble during an earthquake without being harmed. About a year is needed for bamboo to reach its full size. The plant needs another two or three years to reach its peak strength. Even on ground that has been damaged, bamboo can thrive. Bamboo building materials need to be treated if they're going to last. Low-energy materials like steel and cement are used as little as possible. As a result, using bamboo in house construction helps to protect the environment. The bamboo's tensile strength is 40% of its compressive strength. Additionally, the flexural member test was carried out. Based on the results, treated bamboo exhibited a somewhat higher bending compared to raw material. Immersion Bamboo poles that have just been cut are submerged in water for 28 days to 84 days. Insects inside the poles lose their food sources during this period. Ponds or streams are suitable. Ponds should have a water circulation system. Immersion in saltwater is a bad

method. Based with variety, hardwood is 3 to 5 former. Generation is ideal for construction. The dry season is the greatest time to collect bamboo to prevent fungus growth and excessive pole moisture. Use the species that are best suited for the task at hand. Avoid placing the bamboo poles in the direct sunlight, wetness, or rain. For construction poles, only use straight bamboo Column sections. Poles need to be treated for fungus and insects. The experiments listed below are run in order to evaluate bamboo's performance as reinforcement in reinforced cement concrete specimens. Heat-up Shells are heated to 150°C for a brief period of time in kilns using this technique. As an alternative, the canes can be boiled (cooked) for 23 minutes in a big container. A technique of boiling bamboo in a solution of caustic ash has been utilized in Japan. Keying Construction Grade Bamboo Poles Checklist

II. MATERIAL & METHODOLOGY

The bamboo tensile test was performed under universal testing machine because it will be utilized to support tensile loads in flexural elements. The bamboo strip was 522 mm long and 13 mm wide on average. Such requirements were developed as specimens. To improve grip in the universal testing machine, both ends of the specimen were roughened. The bamboo sample strip is display in Fig. 1 & 2 as such as



Fig. 1. Bamboo Specimens ready

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ANALYSIS OF NACA 5 SERIES AIRFOIL

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ABSTRACT: Airfoil is basically a Surface which prepared both lift and drag. It is used to make turbomachinery like compressor and turbines, that airfoil plays an important role in turbomachinery due to airfoil shape and size other parameters like Cl and Cd also changed. In airfoil no of factors which include coefficient of lift, coefficient of drag, coefficient of momentum, angle of attack analysis. In this we are study About analysis and behaviours of 5 Digit Airfoil, which analysis the behaviour of airfoil by the change in Angle of Attack which get effect in Coefficient of lift and attack. Coefficient of lift, Coefficient of Drag, Angle of attack and Reynolds no are considered for Study. For analysis the variables we use Reynolds no change and show the effects on all other variable. By this current Study we can show that how much Reynolds no are efficient on some specific Angle of attack. Dur to increases and decrease of Reynolds no, angle of attack shows some changes in Coefficient of lift and drag. The most important things re that due to analysis of airfoil we can clearly say that at some coefficient of lift and drag coefficient of moment also change. The graph and table of increase and decrease in different angle of attack at different angle of attack shows in this. And analysis on these we can say that we have some fix value at fix angle of attack at some specified Reynold no.

Keywords: Airfoil, turbomachinery, compressor and turbines, 5 Digit Airfoil, Angle of attack

1. INTRODUCTION

Airfoil is a surface like wing, tail of aircraft which create lift when moving throughout their. Airfoil generate lift in the same direction as free stream airflow and the drag similar to airflow. In high speed aircraft airfoil are thin, with minimal drag and minimal lift. Low speed aircraft have thick airfoil with high lift and drag.

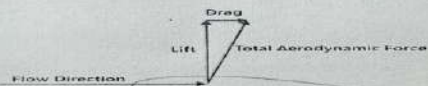


Fig. 1: Airfoil and forces

Types of Airfoils

There are 2 types of airfoils:

Symmetric Airfoils: It is the type of airfoil in which there are zero lift at zero AOA. It has same upper and lower surface which means it has one camber and one chord line. In this due to equal upper and lower surface the chord line and camber line are overlap each other.

Cambered Airfoil: It is the type of airfoil in which there are some lift at zero AOA also. It has different size of upper and lower surface which means it has more than one camber and chord line.

RESEARCH AT MECHANICAL ENGINEERING

Electrical Engineering
<https://doi.org/10.1007/s00202-024-02454-0>

ORIGINAL PAPER

Adaptive control strategy for isolated renewable energy-based generation system with intermittency

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Abstract
 This paper implements a three-phase four-wire renewable generation system using wind and solar energy sources that feed standalone consumer loads. A solar photovoltaic (SPV) array, a bidirectional converter (BDC), and a battery storage system (BSS) are being integrated into a self-excited induction generator-based wind energy conversion system. A Modified Proportionate Affine Projection Algorithm (MPAPA) is designed to compute the amplitude of the fundamental load current component with reduced oscillations and keep the power equilibrium between the energy sources and load. An MPAPA-based control of voltage source inverter (VSI) provides numerous functions like harmonics abatement, compensation of neutral current, active and reactive power, load leveling, and voltage stabilization at the common point of intersection (CPI). A BDC controls the charging/draining of BSS by buck-boost modes operation and MPPT of the SPV during intermittent conditions. Moreover, the BSS is connected at the DC link of the VSI to absorb extra power and provide power support during intermittency. Moreover, a comparison is performed between the proposed MPAPA control and existing LMS and leaky momentum control approaches. The MPAPA control settles in less than one cycle (18 ms), becoming within the 2% specified limit. The dynamic simulation and test results of the isolated generation system are assessed under intermittency in non-conventional energy sources and unbalanced load. The total harmonic distortion of the CPI current is less than 5%, which meets the boundary of IEEE-519 standard.

Keywords Adaptive control approach · Battery storage system · Isolated power generation · Power quality

Abbreviations

3P4W, SEIG	Three-phase four-wire, self-excited induction generator	SPV, IC	Solar photovoltaic, incremental conductance
		BSS, VSC	Battery storage system, voltage source converter
		WECS, CPI	Wind energy conversion system, common point of inter-section
		MPAPA, THD	Modified Proportionate Affine Projection Algorithm, total harmonic distortion
		BDC	Bidirectional converter
		PLL, FLL	Phase-locked loop, frequency-locked loop
		PQ, MLMS	Power quality, modified least mean square

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1 Introduction
 Electricity usage has been rapidly growing owing to continuous increases in the global population. Global electricity demand is expanding twice as fast as primary energy demand, increasing electricity's proportion of total energy utilization from 19% in 2018 to 24% by 2040. Presently global

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CONTROL AND ANALYSIS OF ADULTERANT FACTOR OF FOUR STROKE IGNITION CYCLE

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ABSTRACT
 The name of the engine reveals that it has a cycle with six strokes, of which two are the powerful ones. This reciprocating engine also has a two-stage charge progression and is capable of using both internal and external ignition. Because of its thermodynamic cycle, it completely differs from 2 and 4 stroke engines. This kind of engine has a "modified cylinder head" and "two supplementary chambers," one of which is a combustion chamber and the other is a chamber for heating air, both of which are completely independent of the cylinder. Due to the separation of the cylinder and combustion chamber, the design analysis of this type of engine is quite simple. Compared to a four-stroke engine, this sort of engine has two more valves, and both of those valves are driven by a piston arrangement. Because the volume change in the power stroke is greater than that in the compression stroke and intake stroke, this engine has a higher thermodynamic efficiency. This engine's main benefit is "the reduction in fuel consumption by 40%." There are two power strokes in each of the engine's six-stroke cycles, and it also produces less pollution than other types of engines. The vehicle industry's decision to use six-stroke engines would have a significant impact on the planet and the global economy.
Key words: Stroke, Engine, Efficiency, Fuel, Heat.

1. INTRODUCTION
 The burning that occurs in the chamber following each compression cycle in an internal ignition engine has one constant component and results in gas development that is limited to 180° of the crankshaft point and shows up directly on the cylinder (the work). The six-stroke engine [1] with internal and external ignition and two streams is similar to a real internal responsive ignition engine, as shown by its mechanical design. In any event, due to its thermodynamic cycle and an adjustable chamber head with two beneficial chambers, it completely distinguishes itself. Although it doesn't occur inside the chamber, combustion does not act fast on the cylinder in the favorable burning chamber, and it is free from the 180° crank shaft revolution that occurs during the growth of the burning gases (work). The air-warming room entirely encloses the burning chamber. Air pressure in the warming chamber rises due to heat exchange through the sliding ignition chamber partitions, which in turn creates control for a useful work stroke. This leads to a few advantageous circumstances, the increase of warm efficacy being one of the most significant. The crucial cooling of the ignition chamber dividers results in large calorific losses in the modern internal ignition engine. Burning occurs in the main chamber with each turn, just like in a two-stroke engine, and with oil, just like in a four-stroke engine. Fuel injection can occur in the cylinder chamber [2], in the gas move divert or in the ignition chamber. It is likewise conceivable to charge two working

2. LITERATURE REVIEW
Six Stroke Engine- This segment clarifies the valuable angles in a six stroke motor which doesn't exist in a 4 stroke engine. The significant contrasts between 4 and 6 stroke engine are the additional 2 strokes of which the fifth stroke is the power stroke. It is of 2 kinds recorded underneath:
Air Induction Systems The six-stroke engine, as previously discussed, is primarily used for high output and efficiency [3]. The air from the air channel is subsequently passed to the mass stream sensor by a noticeable all-around acceptance mechanism. Although there is also an admission temperature sensor that aids in determining temperature, the mass wind stream sensor in the system displays the wind stream. It goes without saying that the system will have a high compression ratio due to the high power and efficiency. This causes the system to activate the explosive impact or pre-heat. These days, a suppressor is used to eliminate the noises that this hit causes. Due to the turbochargers and superchargers in the engine, which heat the inlet air, the air acceptance system requires high temperature entrance air. The supercoolers, which assist in lowering the temperature of the hot packed air and so reducing its weight, can also aid to dissipate this heat. This broadens the show by removing heat from the environment. Flying machines use this method because it provides more power and is useful in high burden limit motors.

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PROGRAMMES OFFERED

M. TECH

B. TECH (LEET)

MCA

B. TECH

MBA

BCA

BBA



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