

A Project Report
On
DESIGN AND TOPOLOGY OPTIMIZATION OF POGO PIN BASED
TEST SOCKET FOR MICROELECTRONIC COMPONENTS

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ENGINEERING
In
MECHANICAL ENGINEERING

With specialization in

ADVANCED DESIGN AND MANUFACTURING

Submitted By

DONDAPATI NAVEEN

(1602-21-745-004)

Under the guidance of

Dr. P.V.S. SUBHASHINI
Assistant Professor



DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD

2021 - 2023



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CERTIFICATE

This is to certify that the work in this dissertation entitled **“DESIGN AND ANALYSIS OF TRIPOD FOR LAUNCHING AN ARTICLE”** is submitted by **P.V. RAHUL SAI** bearing Roll number **1602-21-745-005** has been read and approved for meeting the requirements and regulations governing the award of the degree in Master of Engineering in **Advanced Design and Manufacturing** as specialization, to Vasavi College of Engineering during the academic year 2021-2023.

The work done in this dissertation has not been submitted to any other University/Institute for the award of any degree.


Signature of Internal Guide

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Asaistant Professor
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CERTIFICATE

This is to certify that the work in this dissertation entitled "*Design and Topology Optimization of Pogo pin based Test Socket for Microelectronic Components*" is submitted by **Dondapati Naveen** bearing Roll number **1602-21-745-004** has been read and approved for meeting the requirements and regulations governing the award of the degree of **Master of Engineering in Mechanical Engineering** with specialization in **Advanced Design and Manufacturing** during academic year 2021-2023 in Department of Mechanical Engineering, Vasavi College of Engineering.

The work done in this dissertation has not been submitted to any other University/Institute for the award of any degree.


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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE

This is to certify that the work in this dissertation entitled "**Estimation of Non-linear Mechanical Properties of Rubber using SPLIT-HOPKINSON PRESSURE BAR**" is submitted by **MEDIPALLY SAIPRASAD** bearing Roll number **1602-21-745-002** has been read and approved for meeting the requirements and regulations governing the award of the degree in Master of Engineering in **Advanced Design and Manufacturing** as specialization, to Vasavi College of Engineering during the academic year 2021-2023.

The work done in this dissertation has not been submitted to any other University/Institute for the award of any degree.

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A Project Report
On
DESIGN AND ANALYSIS OF TRIPOD FOR LAUNCHING AN ARTICLE
AT

Defence Research & Development Laboratory (DRDL), Hyderabad
Submitted for partial fulfillment of the requirements for the degree
of

MASTER OF ENGINEERING

In

ADVANCED DESIGN AND MANUFACTURING

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HYDERABAD
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A Project Report
On
Estimation of Non-linear Mechanical Properties of Rubber Using
SPLIT-HOPKINSON PRESSURE BAR

Submitted for partial fulfillment of the requirements for the degree.

of

MASTER OF ENGINEERING

In

ADVANCED DESIGN AND MANUFACTURING

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DEPARTMENT OF MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that the work in this dissertation entitled "*Design, Analysis and Fabrication of Gear Cutting Attachment On Conventional Lathe*" is submitted by **V S S Sumanth Batchala** bearing Roll number **1602-21-745-003** has been read and approved for meeting the requirements and regulations governing the award of the degree of **Master of Engineering in Mechanical Engineering** with specialization in **Advanced Design and Manufacturing** during academic year 2021-2023 in Department of Mechanical Engineering, Vasavi College of Engineering.

The work done in this dissertation has not been submitted to any other University/Institute for the award of any degree.

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Signature of External Examiner

A Project Report
On
Experimental Studies On Compressive Behaviors Of Granite Using Quasi-Static
And Split Hopkinson Pressure Bar Test.

Submitted for partial fulfillment of the requirements for the degree of

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In

MECHANICAL ENGINEERING

With specialization in

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2021 - 2023

A Project report
on
DESIGN ANALYSIS AND FABRICATION OF GEAR CUTTING ATTACHMENT
ON CONVENTIONAL LATHE

A Dissertation Submitted in partial fulfillment of the requirements for the degree
of

MASTER OF ENGINEERING

In

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CERTIFICATE

This is to certify that the project work in this dissertation entitled **CUSTOM DESIGN, ANALYSIS AND DEVELOPMENT OF 3D PRINTABLE MULTI-ROTOR QUAD COPTER** submitted by **CH PRANEETH REDDY** bearing Roll No. **1602-21- 745-008**, has been read and approved for meeting the requirements and regulations governing the award the degree of "**MASTER OF ENGINEERING**" in Mechanical Engineering with specialization in Advanced Design and Manufacturing during the academic year 2021-2023 in the Department of Mechanical Engineering, Vasavi College of Engineering.

The work done in this dissertation has not been submitted to any other University/Institute for the award of the degree.

Signature of Internal Guide

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This is to certify that the work in this dissertation entitled "*Comparison of Mechanical Properties Between SLA 3D Printed Specimens Using Split Hopkinson Pressure Bar*" is submitted by **Sheelam Akhil** bearing Roll number **1602-21-745-006** has been read and approved for meeting the requirements and regulations governing the award of the degree of **Master of Engineering in Mechanical Engineering** with specialization in **Advanced Design and Manufacturing** during academic year 2021-2023 in Department of Mechanical Engineering, Vasavi College of Engineering.

The work done in this dissertation has not been submitted to any other University/Institute for the award of any degree.

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This is to certify that the dissertation work entitled “ **EXTENSIVE STUDY ON 3D SCANNING TECHNOLOGY IN PRODUCT DEVELOPMENT AND SUSPENSION SYSTEM ADVANCEMENTS**” is a bonafide record of the work done by **MADHAVA SAI SHIKHARAMMETLA (1602-21-745-009)** submitted in partial fulfilment of requirement for the award of Degree in Masters of Engineering in Mechanical Engineering with **Advanced Design and Manufacturing** as specialization, to Vasavi College of Engineering,(Autonomous),during the academic year 2021-2023.

The result embodied in this report have not been submitted to any other university or institute for the award of degree or diploma.


Dr. PV GOPAL KRISHNA

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Associate Professor
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Dr. T RAMMOHAN RAO

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Dissertation Report

On

**EXTENSIVE STUDY ON 3D SCANNING TECHNOLOGY IN
PRODUCT DEVELOPMENT AND SUSPENSION SYSTEM
ADVANCEMENTS**

Submitted in partial fulfillment for the award of the degree

of

MASTER OF ENGINEERING

In

ADVANCED DESIGN AND MANUFACTURING

Submitted by

MADHAVA SAI SHIKHARAMMETLA

(1602-21-745-009)

Under the Guidance of

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Associate Professor



DEPARTMENT OF MECHANICAL ENGINEERING

**VASAVI COLLEGE OF ENGINEERING
(AUTONOMOUS)**

(Approved by AICTE & affiliated to OSMANIA UNIVERSITY)

Ibrahimbagh, Hyderabad, 500031

A project Report
On

**CUSTOM DESIGN, ANALYSIS AND DEVELOPMENT OF 3D
PRINTABLE MULTI-ROTOR QUAD COPTER**

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In

MECHANICAL ENGINEERING

With specialization in

ADVANCED DESIGN AND MANUFACTURING

Submitted By

CH PRANEETH REDDY

(1602-21-745-008)

Under the guidance of

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PRINCIPAL

&

DR. K. RAGHAVENDRA

Scientist/Engineer 'SG', ISRO



**DEPARTMENT OF MECHANICAL ENGINEERING
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2021 – 2023

DEFENCE RESEARCH AND DEVELOPMENT LABORATORY
Kanchanbagh, Hyderabad-500058

CERTIFICATE

This is to certify that the following students have completed an internship in the Department of Solid Propulsion (DOSP) at the Defence Research and Development Laboratory (DRDL) from 1st February 2023 to 30th April 2023 on "**Design and Analysis of Thrust Frame, Solid Rocket Motor Casing and Nozzle Casing**"

M. Arjun - - - 1602-19-736-007

D. Preetham Sai - - - 1602-19-736-027

G. Satish - - - 1602-19-736-042

They have successfully demonstrated their theoretical and practical knowledge and have worked diligently on the project assigned to them.


Rajesh Maji

SC-F, DOSP, DRDL.

External Guide

RAJESH MAJI
SCIENTIST 'F'
DOSP, DRDL, HYDERABAD-58.

Date: 10/05/2023

TO WHOMSOEVER IT MAY CONCERN

Sub: Completion of Internship

This is to certify that Mr. Gontla Agastya Sravan has completed an internship in Department of Electro Optical Instruments Research Academy at Research Centre Imarat from 4th February 2023 to 6th May 2023 on "Design and Analysis of Mechanical Dither In a Ring Laser Gyroscope" under my guidance.

Mr. Agastya has successfully demonstrated his theoretical knowledge related to the project. He has shown great discipline, self-motivation, and hard work throughout the internship. He has worked diligently on his assignment and performed well.

I wish Mr. Gontla Agastya Sravan all the best for his future endeavours.


Authorised Signatory,





भारत इलेक्ट्रॉनिक्स लिमिटेड
(भारत सरकार का एक उद्यम, रक्षा मंत्रालय)
आई.ई.नाचारम, हैदराबाद - 500076, भारत

Bharat Electronics Limited

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Date: 16th May 2023

CERTIFICATE

This is to certify that **Mr. S. SRUJAN** bearing Roll. No. **1602-19-736-049** and **Mr. K. BHANU PRASAD REDDY** bearing Roll No. **1602-19-736-008**, students of **VASAVI COLLEGE OF ENGINEERING, Ibrahimbagh, Hyderabad** pursuing the degree of **B.E in Mechanical Engineering** have undergone Project Work/Internship titled "**Design & analysis of a water cooled aluminium cold plate for effective heat dissipation in electronic components**" under our guidance during the period from **15-02-2023** to **30-04-2023** in partial fulfilment of the requirement for the award of the above mentioned degree.



B. Lalitha Padmini [MGR-NS]

B. LALITHA PADMINI
MANAGER
NAVAL SYSTEMS
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Anantapur District - 515 164

3rd May 2023

To whom so ever It may concern

This is to certify that Mr. Goutham Boguju interned with us at Quality Control Dept. from 13-02-2023 to 03-05-2023. During his internship he has done project on

"Fallure Analysis & Quality Enhancement of Cowl top side cover of a compact SUV".

During his tenure, we found him hardworking & responsible. The feedback has always been positive.

We wish him all the very best for his future endeavors.

For KIA INDIA PVT. LTD

Mr. KIM, HAN GU
Head of Department - Human Resource

Movement that inspires



KIA INDIA PRIVATE LIMITED
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Anantapur District - 515 164

3rd May 2023

To whom so ever it may concern

This is to certify that Mr. Boddam Tharun Yadav interned with us at Quality Control Dept. from 13-02-2023 to 03-05-2023. During his Internship he has done project on

"Fallure Analysis & Quality Enhancement of Cowl top side cover of a compact SUV".

During his tenure, we found him hardworking & responsible. The feedback has always been positive.

We wish him all the very best for his future endeavors.

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Mr. KIM, HAN GU
Head of Department - Human Resource

Movement that inspires



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3rd May 2023

To whom so ever It may concern

This is to certify that Mr. Kocherlakota Shlva Subrahmanyam interned with us at Quality Control Dept. from 13-02-2023 to 03-05-2023. During his Internship he has done project on

"Investigating Water Leakage in a Car Tailgate and developing counter measures".

During his tenure, we found him hardworking & responsible. The feedback has always been positive.

We wish him all the very best for his future endeavors.

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Mr. KIM, HAN GU
Head of Department - Human Resource

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3rd May 2023

To whom so ever It may concern

This is to certify that Mr. Aditya Abishal Pedapatl interned with us at Quality Control Dept. from 13-02-2023 to 03-05-2023. During his internship he has done project on

"Investigating Water Leakage in a Car Tailgate and developing counter measures".

During his tenure, we found him hardworking & responsible. The feedback has always been positive.

We wish him all the very best for his future endeavors.

For KIA INDIA PVT. LTD

Mr. KIM, HAN GU
Head of Department - Human Resource

Movement that inspires



Ref: TSAL/Internship/23-24/08

Date: 02-05-2023

TO WHOMSOEVER IT MAY CONCERN

Sub: Completion of Internship

This is to certify that Mr. Bairagoni Harith has successfully completed his Internship in Manufacturing Engineering Department at TATA Sikorsky Aerospace Limited, Hyderabad from 01-02-2023 to 30-04-2023.

We appreciate his valuable contribution and wish him all the very best in his future endeavors.

For TATA Sikorsky Aerospace Limited,


Authorized Signatory

TATA SIKORSKY AEROSPACE LIMITED

(formerly known as TARA Aerospace Systems Limited)

Sy No: 255 Adibatla (V) Ibrahimpatnam (M) Rangareddy (D) Telangana - 501 510

Registered Office : Hardware Park, Plot No.21, Sy No. 1/1, Imarat Kancha, Raviryala (V), Maheshwaram (M), Hyderabad - 501218.

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Ref: TSAL/Internship/23-24/10

Date: 02-05-2023

TO WHOMSOEVER IT MAY CONCERN

Sub: Completion of Internship

This is to certify that Mr. Boppana Pranav Chowdary has successfully completed his Internship in Manufacturing Engineering Department at TATA Sikorsky Aerospace Limited, Hyderabad from 01-02-2023 to 30-04-2023.

We appreciate his valuable contribution and wish him all the very best in his future endeavors.

For TATA Sikorsky Aerospace Limited,


Authorized Signatory

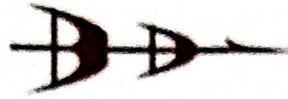
TATA SIKORSKY AEROSPACE LIMITED

(formerly known as TARA Aerospace Systems Limited)

Sy No: 255 Adibatla (V) Ibrahimpatnam (M) Rangareddy (D) Telangana - 501 510

Registered Office : Hardware Park, Plot No.21, Sy No. 1/1, Imarat Kancha, Raviryala (V), Maheshwaram (M), Hyderabad - 501218.

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(भारत सरकार का उद्यम A Govt. of India Enterprise)

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पंजीकरण संख्या Regd. No. 221

वर्ष Year 2023

Skill India
असतो मा सद्गमय

क्र.सं. S.No. P-2022-186

परियोजना प्रमाण-पत्र PROJECT CERTIFICATE

सुखी / श्री

Ms. / Mr. K. NITHYA SRI

पुत्री / पुत्र श्रीमती एवं श्री

Daughter / Son of Smt. A. SRAVANTHI Shri RATHNAM

कॉलेज / संस्थान

College / Institute VASAVI COLLEGE OF ENGINEERING

विषय / क्षेत्र

Subject / Discipline B.E. (MECHANICAL)

वर्ष/सेमिस्टर

Year / Semester 4/8

परियोजना कार्य / प्रशिक्षण कार्य

has completed Project Work / Training on ANALYSIS AND MANUFACTURING OF CRITICAL COMPONENT OVER CNC TURNMILL CENTER

Duration THREE MONTHS Period from 21/02/2023 to 12/05/2023

के बीच पूर्ण किया है.

इस कार्य के दौरान इन्होंने अध्ययन में पर्याप्त रुचि दिखाई है.

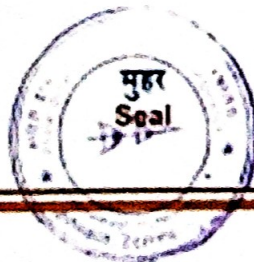
He / She has shown keen interest in learning during the period of Project.

प्रमुख (मा.सं.)
Head (HR)

तालिमा नरदिम्हम

TALIMA NARADIMHAM

Dr. General Manager (Head HR) KBU & ISU



प्रभारी, परियोजना कार्य
Incharge, Project Works

घृष्णावर्धन कोमलेटी

KRISHNA VARDHAN KOMLETI
Sr. Manager (HR-L&D&CLM) KBU



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वर्ष / सेमेस्टर

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has completed Project Work / Training on ANALYSIS AND MANUFACTURING OF CRITICAL COMPONENT OVER CNC TURNMILL CENTER

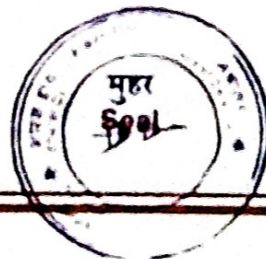
Duration THREE MONTHS Period from 21/02/2023 to 12/05/2023

के बीच पूर्ण किया है.

इस कार्य के दौरान इन्होंने अध्ययन में पर्याप्त रुचि दिखाई है.

He / She has shown keen interest in learning during the period of Project.

प्रमुख (पी.एम.)
Head (HR)



प्रभारी, परियोजना कार्य
Incharge, Project Works

प्रणाली प्रौद्योगिकी एवं प्रबंधन संस्थान

यतिना नारायणसिंह
Dy. General Manager (Head HR) KBU & IBU

प्रणाली प्रौद्योगिकी एवं प्रबंधन संस्थान
Dy. Manager (HR-L&D&CLM) KBU



भारत डायनामिक्स लिमिटेड

BHARAT DYNAMICS LIMITED

(भारत सरकार का उद्यम A Govt of India Enterprise)

रक्षा मंत्रालय Ministry of Defence

कचनबाग Kanchanbagh हैदराबाद Hyderabad - 500058

प्रणाली प्रौद्योगिकी तथा प्रबंधन संस्थान

INSTITUTE OF SYSTEMS, TECHNOLOGY AND MANAGEMENT



पंजीकरण मख्या Regd No 209

वर्ष Year 2023

Skill India

क्र.स. S.No P-2022-185

परियोजना प्रमाण-पत्र PROJECT CERTIFICATE

मुझे/की

Ms./Mr. V. THANMAYI

पुत्री/पुत्र श्रीमती एवं श्री

Daughter/Son of Smt. R. LALITHA SRI Shri V. VIJAYA KUMAR

कॉलेज/संस्थान

College/Institute VASANI COLLEGE OF ENGINEERING

विषय/क्षेत्र

Subject/Discipline B.E (MECHANICAL) वर्ष/सेमिस्टर 4/8

परियोजना कार्य/प्रशिक्षण कार्य

has completed Project Work / Training on ANALYSIS AND MANUFACTURING OF CRITICAL COMPONENT OVER CNC TURNMILL CENTER

Duration THREE MONTHS Period from 21/02/2023 to 12/05/2023

के बीच पूर्ण किया है.

इस कार्य के दौरान इन्होंने अध्ययन में पर्याप्त रुचि दिखाई है.

He/She has shown keen interest in learning during the period of Project.

प्रमुख (मा.स.) 15/05/2023
Head (HR)



प्रभारी, परियोजना कार्य
Incharge, Project Works
कृष्णचर्चज कोजलेटी

प्रमुख (मा.स.) के डी यू एच का डी यू
Dy. General Manager (Head HR) KBU & ISU

डी.जी.एम. (मा.स.) के डी यू एच का डी यू
Sr. Manager (HR-LE&ECLM) KBU

12th May, 2023.

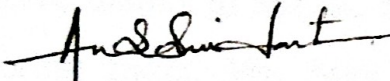
TO WHOMSOEVER IT MAY CONCERN

Sub: Completion of Internship

This is to certify that Mr. Gonapa Aditya Yashaswi has successfully completed his internship in **MAGMA ENGINEERING INDIA PVT. LTD.**, Hyderabad from 06-02-2023 to 05-05-2023.

We appreciate his valuable contribution and wish him all the very best in his future endeavors.

With regards,
For **MAGMA ENGINEERING INDIA PVT. LTD.**



Srikanth N S Addala
General Manager



एन एम डी सी



NMDC

एन एम डी सी लिमिटेड NMDC Limited

(भारत सरकार का उद्यम) (A GOVT. OF INDIA ENTERPRISE)

पंजीकृत कार्यालय : 'खनिज भवन', 10-3-311/ए, कैसल हिल्स, मासाब टैंक, हैदराबाद - 500 028.

Regd. Office : 'Khanij Bhavan' 10-3-311/A, Castle Hills, Masab Tank, Hyderabad - 500 028.

नैगम पहचान संख्या / Corporate Identity Number : L13100TG1958 GOI 001674

HRD-3(3)/2022-23

Date: 11.05.2023

CERTIFICATE

This is to certify that Ms. Amulya Addanki, student of B.E in (Mechanical Engineering) Vasavi College of Engineering (Autonomous), Hyderabad has successfully completed Project Work at Engineering Department, NMDC Limited, Hyderabad from 01.01.2023 to 30.04.2023.

AGM (Per) 11/5/23



**INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY
AND NEW MATERIALS (ARCI)
BALAPUR, HYDERABAD-500 005**

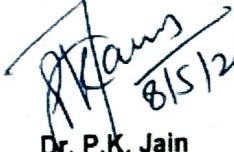
Lr. Rc. No. 001/PW/AD/2023

Dt. 8-5-2023

The following students from Vasavi College of Engineering, Ibrahimbagh, Hyderabad, have completed their project work at ARCI, Hyderabad. from Feb. 2023 to April, 2023 under the guidance of Dr. Balaji Padya, Sc-E, Centre for Carbon Materials.

Title of the Project: Carbon Nano materials as additive in oils for nano lubrication.

- | | | |
|----------------------|---|-----------------|
| 1. E. Chethana | - | 1602-19-736-064 |
| 2. V. Ashritha Reddy | - | 1602-19-736-060 |
| 3. A. Pranay Sagar | - | 1602-19-736-077 |


8/5/2023
Dr. P.K. Jain
Associate Director



TOSHIBA

Date: 15-May-2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that, the following students of "Vasavi College of Engineering, Ibrahimbagh, Hyderabad" studying **B.Tech (Mechanical)** has successfully completed their project work / internship in our organization from **15/02/2023 to 15/05/2023**.

S.No	Name	Roll No
01	Mr.G.Rahul Chandra	1602-19-736-079
02	Mr.D.Bhavani Prasad	1602-19-736-062

For Toshiba Transmission & Distribution Systems (India) Private Limited,


G.A.RAMAKRISHNA
SR GENERAL MANAGER - HR



Toshiba Transmission & Distribution Systems (India) Pvt. Ltd.
Rudraram, Patancheru Mandal, Sangareddy District, Telangana, Pin 502329, India
Phone: +91-8455-692222, Fax: +91-8455-692246
Website: www.toshiba-tidi.com
CIN: U40108TG2013PTC088501

डॉ. जी. राजा सिंह थंगदुरई
वैज्ञानिक 'जी'
प्रोग्राम निदेशक पी जे - 10
Dr. G. Raja Singh Thangadurai
Scientist 'G'
Programme Director, PJ-10



सत्यमेव जयते

भारत सरकार
Government of India
रक्षा मंत्रालय
Ministry of Defence
रक्षा अनुसंधान तथा विकास प्रयोगशाला, हैदराबाद
Defence Research & Development Laboratory
Hyderabad

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the following students of "Vasavi College of Engineering, Ibrahimbagh, Hyderabad" studying B.Tech. (Mechanical) have successfully completed the project work / internship in "**Design and Analysis of Canister made up of Composite Material**" in our organisation from **15.02.2023 to 15.05.2023**:

1. Mr. A. Charan Reddy (Regn No.1602-19-736-063)
2. Mr. Ravipati Deep Kalyan (Regn No.1602-19-736-065)
3. Ms. T. Shravya Sree Reddy (Regn No.1602-19-736-097)

During the entire training period, their performance was excellent and their passion to learn new technologies is highly appreciable.

Dr.G.RAJA SINGH
SCIENTIST 'G'
Programme Director, PJ-10
D.R.D.L.,HYDERABAD-500058.

Place : Hyderabad

Date : 16.05.2023





Technology Human Care

7S Technologies

5-3-419, first floor JEERA, Secunderabad-500 003 -INDIA

Ph:-9848023755, Telefax 040 27534407

Email : 7stechhyd@gmail.com

INTERNSHIP CERTIFICATE

This is to certify that **Ms. Tanmayi Inaparthi(1602-19-736-105) , Doma Suhas Reddy (1602-19-736-103) and Grishma Jonnada (1602-19-736-067)** of the course Mechanical Engineer of Vasavi College of Engineering at Ibrahimbagh, Hyderabad, has undergone an Internship at our Company from 6th February to 6th May 2023. During this time he has been working on a project Designing and Analysis of Package loading and unloading mechanism for Drone. During this period, there performance was found to be good.

Dr. P.Chandra Shekar
Technical Advisor
7S Technologies
6th May 2023





Technology Human Care

7S Technologies

5-3-419, first floor JEERA, Secunderabad-500 003 -INDIA

Ph:-9848023755, Telefax 040 27534407

Email : 7stechhyd@gmail.com

INTERNSHIP CERTIFICATE

This is to certify that **Mr B. Rakesh (1602-19-736-081) , K. Rohil (1602-19-736-084) and E. Rahul Yadav (1602-18-736-088)** of the course Mechanical Engineer of Vasavi College of Engineering at Ibrahimbagh, Hyderabad, has undergone an Internship at our Company from 6th February to 6th May 2023. During this time he has been working on a project Designing and Analysis of positioning Platform of a Drone. During this period, there performance was found to be good.

Dr. P.Chandra Shekar
Technical Advisor
7S Technologies
6th May 2023





BULL ROCK DRILLS PRIVATE LIMITED

An ISO 9001-2015 Company

Plot No 34, IDA, Phase I, HCL Post, Cherlapally, Hyderabad - 500 051
Phone : +91-40-27260393, 27260293 Cell 09392773434, 9963143434
E-mail: vjaybrd@rocketmail.com, vjaybrd1960@gmail.com
Web: www.bulrockdrillsprivtltd.com



Date : 17.05.2023
Place: Hyderabad

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the following students of **Vasavi College of Engineering**, Ibrahimbagh, Hyderabad. Studying B.E Mechanical have successfully completed the Internship from Feb. 2023 to April. 2023, at **BULL ROCK DRILLS PRIVATE LIMITED**, Cherlapally, Hyderabad. During the entire training period, their performance was excellent.

Title: Analysis of characteristics of different steel drill bits under heat treatment.

- | | |
|---------------------|-----------------|
| 1. N. SAI RAM SAGAR | 1602-19-736-089 |
| 2. P. SAI TEJA | 1602-19-736-091 |
| 3. D. VEMAN KUMAR | 1602-19-736-308 |

Regards
for Bull Rock Drills Private Limited


Director
A. Karthik



Manufacturers of : DTH Hammers, Drill Bits, Drill Rods & Accessories.
GSTIN : 36AABCB8022F1Z1
Subject to Hyderabad Jurisdiction only



KAKATI KARSHAK INDUSTRIES PRIVATE LIMITED

Manufacturers of Liquid Ring Vacuum Pumps and Systems

CIN NO. U29210TG1965PTC001069

50+
Years of
Expertise
Est. 1963

Dated: 16.05.2023

INTERNSHIP CERTIFICATE

This is to certify that Ms. Ayyagari Radhika, bearing Roll NO.1602-19-736-078, Ms. Shaik Zohra Jabeen, Bearing Roll No. 1602-19-736-095 and Mr. K. Veera Bhadraiah, Bearing Roll No. 1602-19-736-112 of B.Tech (Mechanical), final year students of VASAVI COLLEGE OF ENGINEERING, Ibrahimbagh, Hyderabad successfully completed a project on "MODELLING AND ANALYSIS OF CENTRIFUGAL PUMPS" from 06.02.2023 to 06.05.2023 at our factory.

During this period of project, there performance was found to be good.

For KAKATI KARSHAK INDUSTRIES PVT LTD


(K. LAKSHMI NARAYANA)
Manager - PRA

Plot No. P-4/1, Road No. 1, Nacharem Industrial Area
Hyderabad - 500 076, Telangana, INDIA.
Ph: +91 - 40 - 27153104, 27153105, 27172704
marketing@kakatipumps.com | kakatikarshak@gmail.com
www.kakatipumps.com



Kakati
Vacuum Pumps & Systems

DLRL

ISO 9001:2015 Certified Lab



NO. DLRL/HRD/1/150742/10/23 - 20
Government of India, Ministry of Defence
Defence Electronics Research Laboratory
Chandrayangutta, Hyderabad- 500005

HUMAN RESOURCE DEVELOPMENT

Dated 17/05/2023

CERTIFICATE

This is to certify that **SK M Munthasir, Shubhang B & Tavishi Garg** of **Vasavi College of Engineering** has undergone project training from **February 2023** to **May 2023** in the Defence Electronics Research Laboratory, Hyderabad-05. The project **"DESIGN AND ANALYSIS OF AN ACTIVE MISSILE DECOY SYSTEM"** is a record of the bonafide work undertaken by her towards partial fulfillment of the requirements for the award of the Degree of **B.E. in Mechanical Engineering**. He / She has completed the assigned task satisfactorily.

(Dr M Gopal)
Sc 'F'
Guide

(Dr Lachiram)
Sc 'F'
Wing Head
Design Engineering
wing

(JRC Sarma)
Sc 'F'
Wing Head HRD

DLRL, Hyderabad






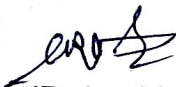
HUMAN RESOURCE DEVELOPMENT


Dated:17/05/2023

CERTIFICATE

This is to certify that **Alur Tharun Reddy & Pitla Vamshi of Vasavi College of Engineering** has undergone project training from **February 2023 to May 2023** in the Defence Electronics Research Laboratory, Hyderabad-05. The project “**DESIGN AND ANALYSIS OF A ROTOR BLADE SYSTEM FOR HOVERING AN ACTIVE MISSILE DECOY SYSTEM**” is a record of the bonafide work undertaken by her towards partial fulfillment of the requirements for the award of the Degree of **B.E. in Mechanical Engineering**. He / She has completed the assigned task satisfactorily.


(Dr M Gopal)
Sc 'F'
Guide


(Dr Lachiram)
Sc 'F'
Wing Head
Design Engineering
wing


(JRC Sarma)
Sc 'F'
Wing Head HRD
DLRL, Hyderabad



DLRL is an ISO 9001:2015 Certified Laboratory



DESIGN AND FABRICATION OF MOTORIZED SCREW JACK

**KAMMARI MOUNIKA
1602-19-736-019**

**KETHIREDDY PARTHAV REDDY
1602-19-736-023**

**DUVVADA VAMSI KRISHNA
1602-19-736-052**

Under the guidance of

**Dr. VBS RAJENDRA PRASAD
Associate Professor**



**DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD**

May 2023

**PROJECT REPORT ON
DESIGN AND FABRICATION OF
MOTORIZED SCREW JACK**

Submitted by:

KAMMARI MOUNIKA	1602-19-736-019
KETHIREDDY PARTHAV REDDY	1602-19-736-023
DUVVADA VAMSI KRISHNA	1602-19-736-052

IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
OF
BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING

Under the guidance of

Dr. VBS RAJENDRA PRASAD
Associate Professor



**DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD**

May 2023

PROJECT REPORT ON
**Design and Development of Turntable for a 3D
Scanner**

Submitted by:

Ch. Sai Lalitha Srija	1602-19-736-032
P. Saketh Reddy	1602-19-736-037
B. Sai Prabhath	1602-19-736-034

IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
OF
BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING

Under the guidance of

Dr. T. Ramamohan Rao
Professor & Head of the Department



DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD

May 2023

**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the project report entitled "Design and Development of Turntable for a 3D Scanner" is a bonafide record of a project carried out by

Ch. Sai Lalitha Srija - - - 1602-19-736-032
P. Saketh Reddy - - - 1602-19-736-037
B. Sai Prabhath - - - 1602-19-736-034

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (affiliated to Osmania University), Hyderabad during the academic year 2022-23 in partial fulfillment for the award of Degree in Bachelor of Mechanical Engineering.



Dr. T. Ramamohan Rao
Project Guide

Dr T RAMAMOHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-31



Dr. T. Ramamohan Rao
Professor & HOD
Dept. of Mechanical Engg.

Dr T RAMAMOHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-31

PROJECT REPORT ON

**Parametric Studies on a Cylindrical Nuclear Fuel Rod Involved in
Multi-Mode Heat Transfer**

Submitted by:

Sai Ram	1602-19-736-035
Shahadil Hussain	1602-19-736-044
Sai Kumar	1602-19-736-301

**IN PARTIAL FULFILLMENT FOR THE AWARD OF THE
DEGREE**

OF

BACHELOR OF ENGINEERING

IN

MECHANICAL ENGINEERING

Under the guidance of

Dr. C. Gururaja Rao

Professor



**DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD**

May 2023

**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the project report entitled “Parametric Studies on a Cylindrical Nuclear Fuel Rod Involved in Multi-Mode Heat Transfer” is a bonafide record of a Major project work carried out by

Sai Ram	1602-19-736-035
Shahadil Hussain	1602-19-736-044
Sai Kumar	1602-19-736-301

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.

C. Gururaj M
15 May 2023.

Dr. C. Gururaja Rao

Project Guide

Department of

Mechanical Engineering

PROFESSOR



Dr. T. Ramamohan Rao

Professor & HOD

Department of

Mechanical Engineering

Professor & HOD


**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the project report entitled "Design, Analysis and Fabrication of a Speed Breaker Mechanism for Power Generation" is a bonafide record of a project carried out by

Brahmadandi Manideep - - - 1602-19-736-016
V.Sathwik Krishna. - - - 1602-19-736-039
SK.Sohel - - - 1602-19-736-045

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (affiliated to Osmania University), Hyderabad during the academic year 2022-23 in partial fulfillment for the award of Degree in Bachelor of Mechanical Engineering.


Mr. M. Venu Gopal Reddy
Project Guide

Assistant Professor
MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING
IBRAHIMBAGH, HYDERABAD-31.


Dr. T. Ramamohan Rao
Professor & HOD
Dept. of Mechanical Engg.

Dr T RAMAMOHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg.
Ibrahimbagh, Hyderabad-31


**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**


CERTIFICATE

This is to certify that the project report entitled
" Optimizing Surface Finish Roundness and
Eccentricity of HSS - Drilled Holes on EN8 Steel " is a
bonafide record of a project carried out by

M.Rakesh	--- 1602-19-736-028
U.Abhishek	--- 1602-19-736-302
R.Mahesh	--- 1602-19-736-304

in the Department of Mechanical Engineering,
Vasavi College of Engineering (Autonomous)
(affiliated to Osmania University), Hyderabad during
the academic year 2022-2023 in partial fulfillment for
the award of Degree in Bachelor of Mechanical
Engineering.


Dr. P. V. Gopal Krishna
Project Guide


Dr. T. Ramamohan Rao
Professor & HOD
Dept. of Mechanical Engg.

CERTIFICATE

This is to certify that the project report entitled "OPTIMIZATION OF THRUST AND TORQUE FORCES OF EN8 MATERIAL IN DRILLING WITH HSS DRILL BITS" is a bonafide record of project work carried out by

ASHADAPU SAI TEJA - - - 1602-19-736-036

CHEPURI ARUN KUMAR - - - 1602-19-736-305

ALLEPU NAVEEN KUMAR - - - 1602-19-736-313

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-2023



Dr. P.V. Gopal Krishna

Associate Professor

Project Guide

Mechanical Engineering Dept.
Vasavi College of Engineering
Hyderabad-500 031.



Dr. T. Ramamohan Rao

Professor & HOD

Dept. of Mechanical Engg.

Dr T RAMAMOHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-31

PROJECT REPORT ON
Design and Fabrication of Mini Belt Grinder

Submitted by:

K Chandra kiran	1602-19-736-009
M Divya	1602-19-736-011
M Poojith Reddy	1602-19-736-025

IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
OF
BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING

Under the guidance of

Dr. VBS Rajendra Prasad
Associate Professor



DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD

May 2023

**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the project report entitled
"Design and Fabrication of Mini Belt Grinder" is a
bonafide record of a project carried out by

K Chandra kiran 1602-19-736-009

M Divya 1602-19-736-011

M Poojith Reddy 1602-19-736-025

in the Department of Mechanical Engineering,
Vasavi College of Engineering (Autonomous)
(affiliated to Osmania University), Hyderabad during
the academic year 2022-23 in partial fulfillment for
the award of Degree in Bachelor of Mechanical
Engineering.



Dr. VBS Rajendra Prasad
Project Guide

Associate Professor
Mechanical Engineering Dept.,
Vasavi College of Engineering
Hyderabad-500 031.



Dr. T. Ramamohan Rao
Professor & HOD

Dr T RAMAMOHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-500 031

PROJECT REPORT ON

Design, Analysis and Fabrication of Electromagnetic Clutch

Submitted by:

Anuraagh T	1602-19-736-006
Aerramsetty Shivank	1602-19-736-047
Gardas Tejdeep	1602-19-736-050

IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
OF
BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING

Under the guidance of
Dr. JALLEDA ANJANEYULU

B. Tech, M.Tech, Ph.D, Assistant Professor (Sr.)



DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD

May 2023


**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the project report entitled
**“Design, Analysis and Fabrication of
Electromagnetic Clutch”** is a bonafide record of a
project carried out by

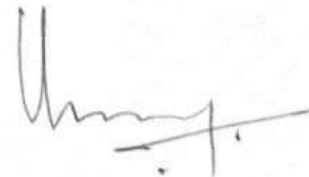
Anuraagh T	--- 1602-19-736-006
Aerramsetty Shivank	--- 1602-19-736-047
Gardas Tejdeep	--- 1602-19-736-050

in the Department of Mechanical Engineering,
Vasavi College of Engineering (Autonomous)
(affiliated to Osmania University), Hyderabad during
the academic year 2022-2023 in partial fulfillment for
the award of Degree in Bachelor of Mechanical
Engineering.



Dr. Jalleda Anjaneyulu
Project Guide

Assistant Professor
MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING
IBRAHIMBAGH, HYDERABAD-31



Dr. T. Ramamohan Rao
Professor & HOD

Dr. T. RAMAMOHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-31

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD

CERTIFICATE

This is to certify that the project report entitled "Simulation Studies on a Discretely Heated Slab-Shaped Electronic Device Without and With Consideration of Radiation" is a bonafide record of a project carried out by

1602-19-736-003 --- M. Akash Varma

1602-19-736-004 --- R. Akhil Sai

1602-19-736-054 --- L. Vidhya Sagar

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (affiliated to Osmania University), Hyderabad during the academic year 2022-23 in partial fulfillment for the award of Degree in Bachelor of Mechanical Engineering.

Gururaj Rao
15 May 2023.

Dr. C. Gururaja Rao

Project Guide

Dept. of Mechanical Engg.

Dr. T. Ramamohan Rao

Dr. T. Ramamohan Rao

Professor & HOD

Dept. of Mechanical Engg.

PROJECT REPORT ON
DESIGN, ANALYSIS AND FABRICATION OF
SUSPENSION UNIT FOR POWER GENERATION

Submitted by:

D. LAVA KUSHA REDDY 1602-19-736-010
N. HARSHITA KRUTHI 1602-19-736-013
K. KARTHIK KUMAR 1602-19-736-014

IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
OF
BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING

Under the guidance of
Mr. Venugopal Reddy
Assistant Professor



DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD

MAY 2023


**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**


CERTIFICATE

This is to certify that the project report entitled "*DESIGN, ANALYSIS AND FABRICATION OF SUSPENSION SYSTEM FOR POWER GENERATION*" is a bonafide record of a project carried out by

D LAVA KUSHA REDDY --- 1602-19-736-010
N.HARSHITA KRUTHI --- 1602-19-736-013
K.KARTHIK KUMAR --- 1602-19-736-014

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (affiliated to Osmania University), Hyderabad during the academic year 2022-23 in partial fulfillment for the award of Degree in Bachelor of Mechanical Engineering.


Mr. Venugopal Reddy
Assistant Professor.
Project Guide.


Dr. T. Ramamohan Rao
Professor & HOD
Dept. of Mechanical Engg.

Assistant Professor
MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING
IBRAHIMBAGH, HYDERABAD

III

Dr T RAMAMOCHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-31

Major project report on
**PERFORMANCE EVALUATION OF COATED
SINGLE POINT CUTTING TOOL IN TURNING
OPERATION**

E. NIHARIKA

1602-19-736-020

A. SATHWIKA

1602-19-736-041

Under the guidance of
Mr. SYAMALA SREEKRISHNA
ASSISTANT PROFESSOR



DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD
MAY 2023

**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the project report entitled "PERFORMANCE EVALUATION OF COATED SINGLE POINT CUTTING TOOL IN TURNING OPERATION" is a bonafide record of the project carried out by

E. Niharika

1602-19-736-020

A. Sathwika

1602-19-736-041

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (affiliated to Osmania University), Hyderabad during the academic year 2022-2023 in partial fulfillment for the award of Degree in Bachelor of Mechanical Engineering.


Mr. S. Sreekrishna

Project Guide

Assistant professor

Dept. of Mechanical Engineering


Dr. T. Ramamohan Rao

Professor & HOD

Dept. of Mechanical Engineering

Dr T RAMAMOHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-31

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)

AFFILIATED TO OSMANIA UNIVERSITY

IBRAHIMBAGH, HYDERABAD

CERTIFICATE

This is to certify that the project report entitled "**Performance Evaluation of Two Stage Cascade Refrigeration System Using CO₂ in LT cycle and Hydrocarbons in HT cycle.**" is a bonafide record of a project carried out by

POOJA JADHAV --- 1602-19-736-024

ESLAVATH RAMDAS --- 1602-19-736-029

BANOTH AKHILA --- 1602-19-736-306

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (affiliated to Osmania University), Hyderabad during the academic year 2022-23 in partial fulfillment for the award of Degree in Bachelor of Mechanical Engineering.



Dr. S. Venkataiah

Associate Professor
Project Guide
Mechanical Engineering Dept.,
Vasavi College of Engineering
Hyderabad-500 031.



Dr. T. Ramamohan Rao

Dr. T. RAMAMOCHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg.
Ibrahimbagh, Hyderabad-31

PROJECT REPORT ON
DESIGN AND FABRICATION OF AN EDDY
CURRENT BASED SHUTDOWN SYSTEM FOR
PELTON WHEEL TURBINE

Submitted by:

D. VIKYATH	1602-19-736-055
N. SAI PAVAN	1602-19-736-033
K. ROHIT	1602-19-736-030

IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE
OF
BACHELOR OF ENGINEERING
IN
MECHANICAL ENGINEERING

Under the guidance of

Mr.K. VELADRI
B.E, M.E



DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD

May 2023



भारतसर्कार Government of India
भारतीयरेलमंत्रालय Ministry of Indian Railways
दक्षिणमध्यरेलवे SOUTH CENTRAL RAILWAY
Office of the Sr.Divl. Mech.Engineer
Diesel Loco Shed, Moula Ali – 500040.



फोन/ Tel + 91 40 27789680 ई-मेल/ E-Mail srdmedslmly@gmail.com



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SI.No.DSL/MLY/2023 /49

प्रमाणपत्र / CERTIFICATE

This is to certify that **Mr. ADIL AHMED (1602-21-736-003)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of Sri.N.Balraj-SSE/LABC, Sri Amjath Hussan-SSE/LHRM and Smt.K.Swetha-JE/CRS.

Date: 23-08-2023.



Assistant Divisional Mechanical Engineer
Diesel Loco Shed, Moula-ali.

सहायक वलन यंत्रिक इंजीनियर
Assistant Divisional Mechanical Engineer
डीजल लोको शेंड
DIESEL LOCO SHED
मौला अली, हैदराबाद
South Central Railway, Moula-Ali



भारतसर्वकार Government of India
 भारतीयरेलमंत्रालय Ministry of Indian Railways
 दक्षिणमध्यरेलवे SOUTH CENTRAL RAILWAY
 Office of the Sr.Divl. Mech.Engineer
 Diesel Loco Shed, Moula Ali - 500040.



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Sl.No.DSL/MLY/2023/50

प्रमाणपत्र / CERTIFICATE

This is to certify that **Mr. Bharadwaj Aditya Singh (1602-21-736-004)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of **Sri.N.Balraj-SSE/LABC, Sri Amjath Hussan-SSE/LHRM and Smt.K.Swetha-JE/CRS.**

Date: 23-08-2023.



[Signature]
 23/8/2023
 Assistant Divisional Mechanical Engineer
 Diesel Loco Shed, Moula-ali.

सहायक मंडल यंत्रिक इंजीनियर
 Assistant Divisional Mechanical Engineer
 डीजल लोको शोड
 DIESEL LOCO SHED
 द. म. रेल्वे, मोला अली.
 S C Railway Moula-Ali



भारत सरकार Government of India
भारतीय रेलमंत्रालय Ministry of Indian Railways
दक्षिण मध्य रेलवे SOUTH CENTRAL RAILWAY
Office of the Sr.Divl. Mech.Engineer
Diesel Loco Shed, Moula Ali – 500040.



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Sl.No.DSL/MLY/2023/57

प्रमाणपत्र / CERTIFICATE

This is to certify that **Ms.Vuppula Archana (1602-21-736-006)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of Sri.N.Balraj-SSE/LABC, Sri Amjath Hussan-SSE/LHRM and Smt.K.Swetha-JE/CRS.

Date: 23-08-2023.




23/8/2023
Assistant Divisional Mechanical Engineer
Diesel Loco Shed, Moula-ali.

सहायक मंडल यंत्रिक इंजीनियर
Assistant Divisional Mechanical Engineer
डीजल लोको शीड
DIESEL LOCO SHED
व. म. सेवे, मौला अली.
S.C Railway Moula-Ali



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भारतीयरेलमंत्रालय Ministry of Indian Railways
दक्षिणमध्यरेलवे SOUTH CENTRAL RAILWAY

Office of the Sr.Divl. Mech.Engineer
Diesel Loco Shed, Moula Ali – 500040

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SI.No.DSL/MLY/2023/52

प्रमाणपत्र / CERTIFICATE

This is to certify that Mr.P Avinash Reddy (1602-21-736-007) student of vasavi College of engineering has undergone Internship Training at Diesel Loco Shed, Moula-ali, Hyderabad,South Central Railway from 9/08/2023 to 23/08/2023 under the guidance of Sri .N.Balraj SSE/LABC,Sri.Amjath Hussan-SSE/LHRM and smt.K.Swetha-SSE/CRS

Date: 23-08-2023



[Signature]
23/08/2023
Assistant Divisional Mechanical Engineer
Diesel Loco Shed, Moula-ali.

सहायक मंडल यंत्रण इन्जीनियर
Assistant Divisional Mechanical Engineer
डीजल लोको शाड
DIESEL LOCO SHED
व. म. रेलवे, मौला अली.
S.C. Railway Moula-Ali



भारतसर्वकार Government of India
 भारतीयरेलमंत्रालय Ministry of Indian Railways
 दक्षिणमध्यरेलवे SOUTH CENTRAL RAILWAY
 Office of the Sr.Divl. Mech.Engineer
 Diesel Loco Shed, Moula Ali – 500040.



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Sl.No.DSL/MLY/2023/53

प्रमाणपत्र / CERTIFICATE

This is to certify that **Mr. D.Bhargav Raj Reddy (1602-21- 36-008)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway, from **09-08-2023** to **23-08-2023** under the guidance of **Sri.N.Balraj-SSE/LABC, Sri Amjath Hussan-SSE/LHRM and Smt.K.Swetha-JE/CRS.**

Date: 23-08-2023.



[Signature]
 23/8/2023
 Assistant Divisional Mechanical Engineer
 Diesel Loco Shed, Moula-ali.

सहायक बंडल यंत्रिक इंजीनियर
 Assistant Divisional Mechanical Engineer
 डीजल लोको शोड
 DIESEL LOCO SHED
 द. म. रेलवे, मौला अली.
 S C Railway Moula-Ali



भारतसरकार Government of India
भारतीयरेलमंत्रालय Ministry of Indian Railways
दक्षिणमध्यरेलवे SOUTH CENTRAL RAILWAY

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Diesel Loco Shed, Moula Ali – 500040



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Sl. No. DSL/MLY/2023/59

प्रमाणपत्र / CERTIFICATE

This is certify that Mr. Goli Daniel Mark (1602-21-736-011) student of Vasavi College of Engineering has undergone Internship Training at Diesel Loco Shed, Moula-ali, Hyderabad, South Central Railway from 09-08-2023 to 23-08-2023 under the guidance of Sri. N. Balraj - SSE/ LABC, Sri Amjath Hussain-SSE/LHRM and Smt. K. Swetha - JE/CRS.

Date: 23-08-2023



[Signature]
23/08/2023

Assistant Divisional Mechanical Engineer
Diesel Loco Shed, Moula-ali.

सहायक मंडल प्रमुख इलेक्ट्रिकल इंजीनियर
Assistant Divisional Mechanical Engineer
डीएलएलओएस
म. रेड्डी, मौला अली
S.C. Railway, Moula-Ali



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भारतीयरेलमंत्रालय Ministry of Indian Railways
दक्षिणमध्यरेलवे SOUTH CENTRAL RAILWAY
Office of the Sr.Divl. Mech.Engineer
Diesel Loco Shed, Moula Ali - 500040.



फोन/ Tel + 91 40 27789680 ई-मेल/ E-Mail srdmedslmly@gmail.com



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Sl.No.DSL/MLY/2023/55

प्रमाणपत्र / CERTIFICATE

This is to certify that **Ms.Doragolla Hari Priya Sri Harshitha (1602-21-736-015)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of **Sri.N.Balraj-SSE/LABC**, **Sri Amjath Hussan-SSE/LHRM** and **Smt.K.Swetha-JE/CRS**.

Date: 23-08-2023.



Assistant Divisional Mechanical Engineer

Diesel Loco Shed, Moula-ali.

सहायक मंडल यंत्रिक इंजीनियर
Assistant Divisional Mechanical Engineer

डीजल लोको शोड
DIESEL LOCO SHED
ब. ग. रेल्वे, मौला अली.
S.C. Railway Moula-Ali



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भारतीयरेलमंत्रालय **Ministry of Indian Railways**
दक्षिणमध्यरेलवे **SOUTH CENTRAL RAILWAY**

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Diesel Loco Shed, Moula Ali – 500040



फोन/ Tel + 91 40 27789680 ई-मेल/ E-Mail srdmedslmly@gmail.com



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Sl. No. DSL/MLY/2023/56

प्रमाणपत्र / CERTIFICATE

This is certify that **Ms. Ramavath Harika (1602-21-736-016)** student of **Vasavi College of Engineering** has undergone Internship Training at Diesel Loco Shed, Moula-ali, Hyderabad, South Central Railway from **09-08-2023 to 23-08-23** under the guidance of **Sri. N. Balraj - SSE/ LABC, Sri Amjath Hussain-SSE/LHRM and Smt. K. Swetha - JE/CRS.**

Date: 23-08-2023



[Signature]
23/08/2023
Assistant Divisional Mechanical Engineer
Diesel Loco Shed, Moula-ali.

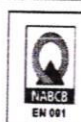
सहायक मंडल यंत्रिक इंजीनियर
Assistant Divisional Mechanical Engineer
डीजल लोको शोड
DIESEL LOCO SHED
द. म. रेल्वे, मौला अली.
S C Railway Moula-Ali



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 Office of the Sr.Divl. Mech.Engineer
 Diesel Loco Shed, Moula Ali – 500040.



फोन/ Tel + 91 40 27789680 ई-मेल/ E-Mail srdmedslmly@gmail.com



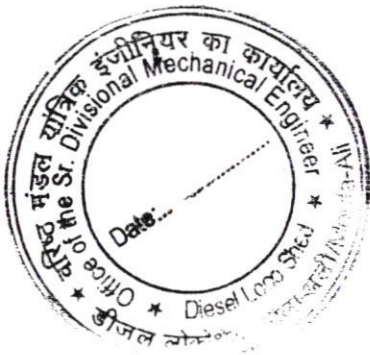
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SI.No.DSL/MLY/2023/63

प्रमाणपत्र / CERTIFICATE

This is to certify that Ms.**G. HARINI(1602-21-736-017)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of Sri.N.Balraj-SSE/LABC, Sri Amjath Hussan-SSE/LHRM and Smt.K.Swetha-JE/CRS.

Date: 23-08-2023.



[Handwritten signature]
23/08/2023

Assistant Divisional Mechanical Engineer
 Diesel Loco Shed, Moula-ali.

सहायक डीजल यंत्रिक इंजीनियर
 Assistant Divisional Mechanical Engineer
 डीजल लोको शोड
 DIESEL LOCO SHED
 डी. ए. मेल्ले मोला अली.
 Diesel Loco Shed, Moula-Ali.



भारतसरकार **Government of India**
भारतीयरे लमंत्रालय **Ministry of Indian Railways**
दक्षिणमध्यरे लवे **SOUTH CENTRAL RAILWAY** Office
of the Sr.Divl. Mech.Engineer
Diesel Loco Shed, Moula Ali – 500040



फोन/ गेल + 91 40 27789680ई-मेल/ E-Mail srdmedslmly@gmail.com



File No.SCR-HQ0Mech(Pers)/66/2019-Oo Ch.OS Pers PCME-SCR

Sl.No.DSL/MLY/2023 /57

प्रमाणपत्र / CERTIFICATE

This is to certify that **Mr. Khaja Mubashir Uddin (1602-21-736-022)** student of **Vasavi College of Engineering** has undergone Internship Training at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of Sri.N.Balraj-SSE/LABC,Sri Amjath Hussan-SSE/LHRM and Smt.K.Swetha-JE/CRS.

Date: 23-08-2023



[Handwritten Signature]
23/08/2023

Assistant Divisional Mechanical Engineer
Diesel Loco Shed, Moula-ali.

सहायक मंडल यांत्रिक इंजीनियर
Assistant Divisional Mechanical Engineer
डीजल लोको शेड
DIESEL LOCO SHED
न. म. रेल्वे, मौला अली.
S C Railway Moula-Ali



भारतसरकार Government of India
 भारतीयरेलमंत्रालय Ministry of Indian Railways
 दक्षिणमध्यरेलवे SOUTH CENTRAL RAILWAY
 Office of the Sr.Divl. Mech.Engineer
 Diesel Loco Shed, Moula Ali - 500040.



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Sl.No.DSL/MLY/2023/59

प्रमाणपत्र / CERTIFICATE

This is to certify that **Mr.ALIGE SHARANDEEP (1602-21-736-049)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of **Sri.N.Balraj-SSE/LABC, Sri Amjath Hussan-SSE/LHRM and Smt.K.Swetha-JE/CRS.**

Date: 23-08-2023.



[Signature]
23/08/2023

Assistant Divisional Mechanical Engineer
 Diesel Loco Shed, Moula-ali.

सहायक मंडल यंत्रिक इंजीनियर
 Assistant Divisional Mechanical Engineer
 डीजल लोको शीड
 DIESEL LOCO SHED
 द. म. रेल्वे, मौला अली.
 S C Railway Moula-Ali



भारतसरकार **Government of India**
भारतीयरेलमंत्रालय **Ministry of Indian Railways**
दक्षिणमध्यरेलवे **SOUTH CENTRAL RAILWAY**

Office of the Sr.Divl. Mech.Engineer
Diesel Loco Shed, Moula Ali – 500040

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SI.No.DSL/MLY/2023/60

प्रमाणपत्र / CERTIFICATE

This is to certify that **Mr. Syed Habeeb Ur Rehman (1602-21-736-055)**
student of **Vasavi College of Engineering** has undergone **Internship**
Training at **Diesel Loco Shed, Moula-ali, Hyderabad, South Central Railway**
from **09/08/2023** to **23/08/2023** under the guidance of **Sri.N.Balraj-**
SSE/LABC, Amjath Hussain-SSE/LHRM, and Smt.K.Swetha-JE/CRS.

Date: 23-08-2023



[Signature]
23/08/2023
Assistant Divisional Mechanical Engineer
Diesel Loco Shed, Moula-ali.

सहायक मंडल यंत्रिक इंजीनियर
Assistant Divisional Mechanical Engineer
डीजल लोको शोड
DIESEL LOCO SHED
द. म. रेलवे, मौला अली.
S C Railway Moula-Ali



भारत सरकार Government of India
 भारतीय रेलवे मंत्रालय Ministry of Indian Railways
 दक्षिण मध्य रेलवे SOUTH CENTRAL RAILWAY
 Office of the Sr.Divl. Mech Engineer
 Diesel Loco Shed, Moula Ali - 500040.



फोन Tel + 91 40 277896804-वेब/ E-Mail srdmedslmly@gmail.com



File No.SCR-HQ0Mech(Pers)/66/2019-0o Ch.OS Pers PCME-SCR

Sl.No.DSL/MLY/2023/62

प्रमाणपत्र / CERTIFICATE

This is to certify that **Mr. KADAVATH VIJAY KUMAR (1602-21-736-061)** student of **Vasavi College of Engineering** has undergone **Internship Training** at Diesel Loco Shed, Moula-Ali, Hyderabad, South Central Railway from **09-08-2023** to **23-08-2023** under the guidance of **Sri.N.Balraj-SSE/LABC, Sri Amjath Hussar-SSE/LHRM and Smt.K.Swetha-JE/CRS.**

Date: 23-08-2023.



[Handwritten Signature]
23/08/2023

Assistant Divisional Mechanical Engineer
 Diesel Loco Shed, Moula-ali.

सहायक मंडल घंत्रिक इंजीनियर
 Assistant Divisional Mechanical Engineer
 डीजल लोको शोड
 DIESEL LOCO SHED
 द. म. रेलवे, मौला अली.
 S.C. Railway Moula-Ali



GOVERNMENT OF INDIA
RESEARCH CENTRE IMARAT
DRDO, Ministry of Defence
Vignyanakancha P.O
HYDERABAD - 500 069

Tel: 040 - 24306124/24307000
Fax: 040 - 24306626

RCI/DNS/PROJ/23/01

6 September 2023

CERTIFICATE

This is to certify that **Mr. ABHIRAM YERRAM (Roll No. 1602-21-736-002) B.E. 4th Semester Student in Mechanical Engineering** from **Vasavi College of Engineering, Hyderabad** has successfully completed his Internship Project on "**Studies on Solid Modelling of Mechanical Hardware for Navigation**" during the Period 09th August 2023 to 06th September 2023 at **Directorate of Navigation System, Research Centre Imarat, DRDO, Ministry of Defence**, under the guidance of **Mr. Amit Kumar Chaurasiya, Sc 'B'**. His performance was good and we wish him success for future endeavors.

(PASALAPUDI NVN RAO)
Sc 'F'
Head-PED, DNS/RCI



एन वि एन राव पासलपुडी / NVN RAO, PASALAPUDI
वैज्ञानिक 'एफ', डी एन ई सी / Scientist 'F', DNEC
प्रधान पी ई डी / Head PED
अनुसंधान केन्द्र इमारत / Research Centre Imarat
डी आर डी ओ, रक्षा मंत्रालय, भारत सरकार
DRDO, Min. of Defence, Govt. of India
हैदराबाद-59 / Hyderabad-500 069



GOVERNMENT OF INDIA
RESEARCH CENTRE IMARAT
DRDO, Ministry of Defence
Vignyanakancha P.O
HYDERABAD - 500 069

Tel: 040 - 24306124/24307000
Fax: 040 - 24306626


RCI/DNS/PROJ/23/05

6 September 2023

CERTIFICATE

This is to certify that **Mr. HARIKRISHNA SAI VALLEPALLY (Roll No. 1602-21-736-014) B.E. 4th Semester Student in Mechanical Engineering** from **Vasavi College of Engineering, Hyderabad** has successfully completed his Internship Project on "**Studies on Solid Modelling of Mechanical Hardware for Navigation**" during the Period 09th August 2023 to 06th September 2023 at **Directorate of Navigation System, Research Centre Imarat, DRDO, Ministry of Defence**, under the guidance of **Mr. Amit Kumar Chaurasiya, Sc 'B'**. His performance was good and we wish him success for future endeavors.




(PASALAPUDI NVN RAO)
Sc 'F'
Head-PED, DNS/RCI

एन वि एन राव पसलपुडी / NVN RAO-PASALAPUDI
शैक्षणिक 'एफ', डी एन ई सी / Scientist 'F', DNEC
प्रधान पी ई डी / Head PED
अनुसंधान केन्द्र इमारत / Research Centre Imarat
डी आर डी ओ, रक्षा मंत्रालय, भारत सरकार
DRDO, Min. of Defence, Govt. of India
हैदराबाद-69 / Hyderabad-500 069



GOVERNMENT OF INDIA
RESEARCH CENTRE IMARAT
DRDO, Ministry of Defence
Vignyanakancha P.O
HYDERABAD - 500 069

Tel: 040 - 24306124/24307000
Fax: 040 - 24306626


RCI/DNS/PROJ/23/04

6 September 2023

CERTIFICATE

This is to certify that **Mr. OM KADEM (Roll No. 1602-21-736-020)** B.E. 4th Semester Student in Mechanical Engineering from **Vasavi College of Engineering, Hyderabad** has successfully completed his Internship Project on "**Studies on Solid Modelling of Mechanical Hardware for Navigation**" during the Period 09th August 2023 to 06th September 2023 at **Directorate of Navigation System, Research Centre Imarat, DRDO, Ministry of Defence**, under the guidance of **Mr. Amit Kumar Chaurasiya, Sc 'B'**. His performance was good and we wish him success for future endeavors.




(PASALAPUDI NVN RAO)
Sc 'F'
Head-PED, DNS/RCI

एम वि एन राव पसलपुडी / NVN RAO-PASALAPUDI
वैज्ञानिक 'एफ', डी एन ई सी / Scientist 'F', DNEC
प्रधान पी ई डी / Head PED
अनुसंधान केन्द्र इमारत / Research Centre Imarat
डी आर डी ओ, रक्षा मंत्रालय, भारत सरकार
DRDO, Min. of Defence, Govt. of India
हैदराबाद-69 / Hyderabad-500 069



GOVERNMENT OF INDIA
RESEARCH CENTRE IMARAT
DRDO, Ministry of Defence
Vignyanakancha P.O
HYDERABAD - 500 069

Tel: 040 - 24306124/24307000
Fax: 040 - 24306626

RCI/DNS/PROJ/23/02

6 September 2023

CERTIFICATE

This is to certify that **Mr. MOHNISH KUMAR BALMURI (Roll No. 1602-21-736-025) B.E. 4th Semester Student in Mechanical Engineering** from **Vasavi College of Engineering, Hyderabad** has successfully completed his Internship Project on "**Studies on Solid Modelling of Mechanical Hardware for Navigation**" during the Period 09th August 2023 to 06th September 2023 at **Directorate of Navigation System, Research Centre Imarat, DRDO, Ministry of Defence**, under the guidance of **Mr. Amit Kumar Chaurasiya, Sc 'B'**. His performance was good and we wish him success for future endeavors.




(PASALAPUDI NVN RAO)
Sc 'F'
Head-PED, DNS/RCI

एन वि एन राव पसलपुडी / NVN RAO PASALAPUDI
वैज्ञानिक 'एफ', डी एन ई सी / Scientist 'F', DNEC
प्रधान पी ई डी / Head PED
अनुसंधान केन्द्र इमारत / Research Centre Imarat
डी आर डी ओ, रक्षा मंत्रालय, भारत सरकार
DRDO, Min. of Defence, Govt. of India
हैदराबाद-69 / Hyderabad-500 069



GOVERNMENT OF INDIA
RESEARCH CENTRE IMARAT
DRDO, Ministry of Defence
Vignyanakancha P.O
HYDERABAD - 500 069

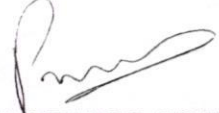
Tel: 040 - 24306124/24307000
Fax: 040 - 24806626

RCI/DNS/PROJ/23/07

6 September 2023

CERTIFICATE

This is to certify that **Mr. DESU SAI SANTOSH RITHWIK (Roll No. 1602-21-736-040) B.E. 4th Semester Student in Mechanical Engineering** from **Vasavi College of Engineering, Hyderabad** has successfully completed his Internship Project on "**Studies on Solid Modelling of Mechanical Hardware for Navigation**" during the Period 09th August 2023 to 06th September 2023 at **Directorate of Navigation System, Research Centre Imarat, DRDO, Ministry of Defence**, under the guidance of **Mr. Amit Kumar Chaurasiya, Sc 'B'**. His performance was good and I wish him success for future endeavors.


(PASALAPUDI NVN RAO)
Sc 'F'
Head-PED, DNS/RCI



एन वि एन राव पसलपुडी / NVN RAO-PASALAPUDI
वैज्ञानिक 'एफ', डी एन ई सी / Scientist 'F', DNEC
प्रधान पी ई डी / Head PED
अनुसंधान केन्द्र इमारत / Research Centre Imarat
डी आर डी ओ, रक्षा मंत्रालय, भारत सरकार
DRDO, Min. of Defence, Govt. of India
हैदराबाद-69 / Hyderabad-500 069



GOVERNMENT OF INDIA
RESEARCH CENTRE IMARAT
DRDO, Ministry of Defence
Vignyanakancha P.O
HYDERABAD - 500 069

Tel: 040 - 24306124/24307000
Fax: 040 - 24306626


RCI/DNS/PROJ/23/08

6 September 2023

CERTIFICATE

This is to certify that **Mr. V. SAI VYBHAV (Roll No. 1602-21-736-042) B.E. 4th Semester Student in Mechanical Engineering** from **Vasavi College of Engineering, Hyderabad** has successfully completed his Internship Project on "**Studies on Solid Modelling of Mechanical Hardware for Navigation**" during the Period 09th August 2023 to 06th September 2023 at **Directorate of Navigation System, Research Centre Imarat, DRDO, Ministry of Defence**, under the guidance of **Mr. Amit Kumar Chaurasiya, Sc 'B'**. His performance was good and I wish him success for future endeavors.




(PASALAPUDI NVN RAO)
Sc 'F'
Head-PED, DNS/RCI

एन वी एन राव पसलपुडी / NVN RAO-PASALAPUDI
वैज्ञानिक 'एफ', डी एन ई सी / Scientist 'F', DNEC
प्रधान पी ई डी / Head PED
अनुसंधान केन्द्र इमारत / Research Centre Imarat
डी आर डी ओ, रक्षा मंत्रालय, भारत सरकार
DRDO, Min. of Defence, Govt. of India
हैदराबाद-69 / Hyderabad-500 069



भारत डायनामिक्स लिमिटेड

BHARAT DYNAMICS LIMITED

(भारत सरकार का उद्यम A Govt. of India Enterprise)

रक्षा मंत्रालय Ministry of Defence

कंचनबाग Kanchanbagh :: हैदराबाद Hyderabad – 500058.

प्रणाली प्रौद्योगिकी तथा प्रबंधन संस्थान

INSTITUTE OF SYSTEMS, TECHNOLOGY AND MANAGEMENT



पंजीकरण संख्या Regd. No. 168

वर्ष Year 2023

Skill India
कौशल भारत - कुशल भवत

क्र.सं. S.No. P-2023-033

परियोजना प्रमाण-पत्र PROJECT CERTIFICATE

सुश्री/श्री

Ms./Mr. AMBATI BHARGAVA

पुत्री/पुत्र श्रीमती एवं श्री

Daughter / Son of Smt. AMBATI SHAILAJA Shri AMBATI NAGARAJU

कॉलेज/संस्थान

College / Institute VASAVI COLLEGE OF ENGINEERING

विषय / क्षेत्र

Subject / Discipline B.E (MECHANICAL)

वर्ष/सेमिस्टर

Year / Semester 3rd Yr (5th Sem)

परियोजना कार्य/प्रशिक्षण कार्य

has completed Project Work / Training on ENHANCING NOSE CONE

AERODYNAMICS & MANUFACTURING ON CNC TURN-MILL.

Duration ONE MONTH

Period from 17/08/2023 से 16/09/2023

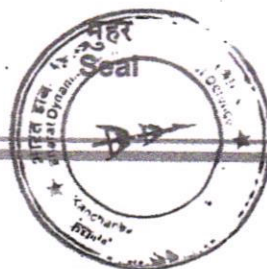
के बीच पूर्ण किया है.

इस कार्य के दौरान इन्होंने अध्ययन में पर्याप्त रुचि दिखाई है.

He / She has shown keen interest in learning during the period of Project.

प्रमुख (मा.सं.)
Head (HR)

19/09/2023



N. Mallikarjuna Swamy 19/9/23

प्रभारी, परियोजना कार्य
Incharge, Project Works

तातिना नरसिम्हम

TATINA NARASIMHAM

अपर महाप्रबंधक (प्रधान - मा.सं.) के बी यू तथा आई बी यू
Addl. General Manager (Head-HR) KBU & IBU

एन मल्लिकार्जुन स्वामी

N. MALLIKARJUNA SWAMY
प्रबंधक (मा.सं.) शिक्षा प्रशिक्षण एवं विधि
Manager (HR) APP TRG & LEGAL



भारत डायनामिक्स लिमिटेड
BHARAT DYNAMICS LIMITED
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रक्षा मंत्रालय Ministry of Defence
कंचनबाग Kanchanbagh :: हैदराबाद Hyderabad – 500058.

प्रणाली प्रौद्योगिकी तथा प्रबंधन संस्थान
INSTITUTE OF SYSTEMS, TECHNOLOGY AND MANAGEMENT



पंजीकरण संख्या Regd. No. 167

वर्ष Year 2023

क्र.सं. S.No. P-2023-032

Skill India
वीरम भारत - कुशल भारत

परियोजना प्रमाण-पत्र PROJECT CERTIFICATE

सुश्री / श्री

Ms./Mr. MALLELA KARTHIK (1602-21-736-021)

पुत्री / पुत्र श्रीमती एवं श्री

Daughter / Son of Smt. MALLELA BHAGYA Shri MALLELA BALRAJ

कॉलेज / संस्थान

College / Institute VASAVI COLLEGE OF ENGINEERING

विषय / क्षेत्र

Subject / Discipline BE (MECHANICAL)

वर्ष/सेमिस्टर

Year / Semester 3rd Yr (5th SEM)

परियोजना कार्य / प्रशिक्षण कार्य

has completed Project Work / Training on ENHANCING NOSE CONE
AERODYNAMICS & MANUFACTURING ON CNC-TURNMILL

Duration ONE MONTH उद्योग Period from 17/08/2023 to 16/09/2023

के बीच पूर्ण किया है.

इस कार्य के दौरान इन्होंने अध्ययन में पर्याप्त रुचि दिखाई है.

He / She has shown keen interest in learning during the period of Project.

T. Narasimham
प्रमुख (मा.सं.)
Head (HR)

तातिना नरसिंहम

TATINA NARASIMHAM

अपर महाप्रबंधक (प्रधान - मा.सं.) के वी यू तथा आई बी यू
Addl. General Manager (Head-HR) KBU & IBU



N. Swamy 19/9/23
प्रभारी, परियोजना कार्य
Incharge, Project Works

N. Swamy
प्रबंधक (मा.सं.) शिष्टक प्रशिक्षण एवं विधि
Manager (HR) APP TRG & LEGAL



Technology Human Care

7S Technologies

5-3-419, first floor JEERA, Secunderabad-500 003 -INDIA

Ph:-9848023755, Telefax 040 27534407

Email : 7stechhyd@gmail.com

INTERNSHIP CERTIFICATE

This is to certify that **Mr C. Sam Joel (1602-21-736-044)** of the course Mechanical Engineering of Vasavi College of Engineering at Ibrahimbagh, Hyderabad, has undergone an Internship at our Company from 6th August to 6th September 2023. During this time he has been working on a project Design and analysis of Multi Axis Chair for DRDO Simulators. During this period, his performance was found to be good.



Dr. P.Chandra Sheker
Technical Advisor
7S Technologies
6th September 2023





Technology Human Care

7S Technologies

5-3-419, first floor JEERA, Secunderabad-500 003 -INDIA

Ph:-9848023755, Telefax 040 27534407

Email : 7stechhyd@gmail.com

INTERNSHIP CERTIFICATE

This is to certify that **Mr R. Sandeep Naik (1602-21-736-046)** of the course Mechanical Engineering of Vasavi College of Engineering at Ibrahimbagh, Hyderabad, has undergone an Internship at our Company from 6th August to 6th September 2023. During this time he has been working on a project Design and analysis of Multi Axis Chair for DRDO Simulators. During this period, his performance was found to be good.

Dr. P.Chandra Sheker
Technical Advisor
7S Technologies
6th September 2023



TELANGANA STATE POWER GENERATION CORPORATION LIMITED**KTPS-VII STAGE (1 X 800MW)**

Date: August 25th, 2023.

CERTIFICATE

This is to certify that **Mr. MOHAMMAD AIMAN HUSSAIN**, a student of, **VASAVI COLLEGE OF ENGINEERING, HYDERABAD**, pursuing B.tech (2nd Year) in Mechanical Engineering has undergone the industrial training of **15 days duration** at **KTPS-VII Stage(1X800MW)** on "**POWER PLANT FAMILIARIZATION**" from **10/08/2023** to **25/08/2023** under the guidance of **Er. MD. HAFEEZ HUSSAIN (Assistant Divisional Engineer), Turbine Maintenance / KTPS-VII Stage (1X800MW)**.

During this industrial Training he had followed the rules provided and took a keen interest in the training, we found him to be sincere and hard working.

✓ We wish him all success in his future endeavors.

B. Ram Chandra Rao
25/08/2023
Er. B. Ram Chandra Rao
(Divisional Engineer)
Turbine Maintenance
KTPS-VII Stage (1X800MW)

Hafeez Hussain
25/08/2023
Er. MD. HAFEEZ HUSSAIN
(Assistant Divisional Engineer)
Turbine Maintenance
KTPS-VII Stage (1X800MW)

TELANGANA STATE POWER GENERATION CORPORATION LIMITED**KTPS-VII STAGE (1 X 800MW)**

Date: August 25th, 2023.

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B. Ram Chandra Rao
25/08/2023
Er. B. Ram Chandra Rao
(Divisional Engineer)
Turbine Maintenance
KTPS-VII Stage (1X800MW)

Hafeez Hussain
Er.MD.HAFEEZ HUSSAIN
(Assistant Divisional Engineer)
Turbine Maintenance
KTPS-VII Stage (1X800MW)

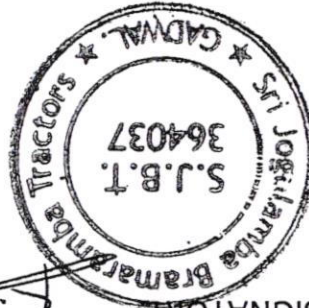
email: swarajgadwal123@gmail.com

Cell : 9849827634

GADWAL - 509 125 Jogulamba Gadwal Dist., (T.S.)

Plot No.-3, Opp. PJP Camp Office,

M/S. Sri Jogulamba
Bramaramba Tractors
Plot No: 3, Opp: PJP Camp Office
GADWA - 509125,
Jogulamba Gadwal Dist. T.S.



Handwritten signature and date 12/09/2023.

AUTHORISED SIGNATORY

For M/S SRI JOGULAMBA BRAMARAMBA TRACTORS

Hence This Certificate.

This Internship has been completed under good conduct and required accuracy.

Gadwal(DT).

BRAMARAMBA TRACTORS (SWARAJ TRACTORS DEALERSHIP) Gadwal, Jogulamba

service Manager, from date 10/08/2023 to 10/09/2023 at our SRI JOGULAMBA

completed Internship period in service Department under the supervision of

Engineering-Ibrahim bagh, Hyderabad (B.E, Mechanical) has successfully

It is to certify that , Mr. Muddani Ravi Teja student of Vasavi college of

Certificate

Date :

Ref :

Dealers : Swaraj Tractors, Sales, Spares & Services

SRI JOGULAMBA BRAMARAMBA TRACTORS

GST IN : 36ACUFS9898Q1ZA

Mahindra



SWARAJ

Deming Prize
2012

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)

AFFILIATED TO OSMANIA UNIVERSITY

IBRAHIMBAGH, HYDERABAD

CERTIFICATE

This is to certify that the Theme based project report entitled “Remote control power steering mechanism” is a bonafide record of a Theme based project work carried out by

L Balram 1602-20-736-007

S Durga prasad 1602-20-736-008

A Gokul Rao 1602-20-736-009

B Laya 1602-20-736-018

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.



Dr. S Venkataiah

Project Guide

Associate Professor

**Mechanical Engineering Dept.,
Vasavi College of Engineering
Hyderabad-500 031.**



Dr. T. Ramamohan Rao

Professor & HOD

Dept. of Mechanical Engg.

Dr T RAMAMOHAN RAO

Professor & HOD

Dept. Of Mechanical Engg

Vasavi College of Engg

Ibrahimbagh, Hyderabad-31



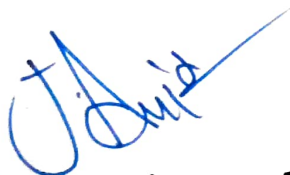
**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the Theme based project report entitled "....." is a bonafide record of a Theme based project work carried out by

Shanpal	--- 1602-20-736-024
Sai Arjun Kumar	--- 1602-20-736-025
Sai Ram	--- 1602-20-736-027
Varun	--- 1602-20-736-041

in the Department of Mechanical Engineering,
Vasavi College of Engineering (Autonomous)
(Affiliated to Osmania University), Hyderabad during
the academic year 2022-23.



Mr. K Anjaneyulu
Project Guide



Dr. T. Ramamohan
Professor & HOD
Dept. of Mechanical Engg.




VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD

CERTIFICATE

This is to certify that the Theme based project report entitled
"**...FABRICATION OF MINI BELT GRINDER...**" is a bonafide record of a
Theme based project work carried out by

MANUPADI SURESH	1602-20-736-303
BHEEMANANDHAM LIKITH REDDY	1602-20-736-049
VEERLAPALLY PRUTHVI RAJ GOUD	1602-20-736-316
PALARAPU PAVAN KALYAN	1602-20-736-301

in the Department of Mechanical Engineering, Vasavi College of
Engineering (Autonomous) (Affiliated to Osmania University),
Hyderabad during the academic year 2022-23.


Dr. kishore
Professor
Project Guide

PROFESSOR
MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING
IBRAHIMBAGH, HYDERABAD - 31


Dr. T. Ramamohan Rao
Professor & HOD
Dept. of Mechanical Engineering.

Dr T RAMAMOCHAN RAO
Professor & HOD
Dept. Of Mechanical Engg
Vasavi College of Engg
Ibrahimbagh, Hyderabad-31

JHANSI
SANDEEP
AFROZ
ANSH

1602-20-736-010
1602-20-736-015
1602-20-736-021
1602-20-736-020

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022 - 2023



Dr. T. Krishna Chaitanya
Assistant Professor

Project Guide



Dr. T. Rammohan Rao
Professor & HOD

Dept. of Mechanical Engg.





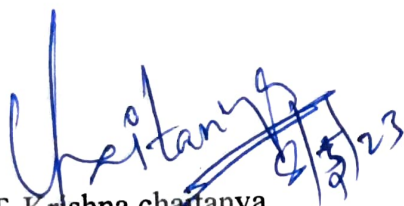
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AFFILIATED TO OSMANIA UNIVERSITY IBRAHIMBAGH,
HYDERABAD


CERTIFICATE

This is to certify that the Theme-based project report entitled
“ DRIP IRRIGATION USING SOLAR PANEL ” is a bonafide record
of a theme-based project work carried out by

JHANSI	1602-20-736-010
SANDEEP	1602-20-736-015
AFROZ	1602-20-736-021
ANSH	1602-20-736-020

in the Department of Mechanical Engineering, Vasavi College of
Engineering (Autonomous) (Affiliated to Osmania University),
Hyderabad during the academic year 2022 – 2023


Dr. T. Krishna Chaitanya
Assistant Professor
Project Guide


Dr. T. Rammohan Rao
Professor & HOD
Dept. of Mechanical Engg.



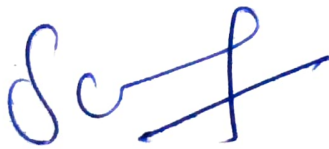
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CERTIFICATE

This is to certify that the Theme based project report entitled "**IOT BASED SMART IRRIGATION SYSTEM**" is a bonafide record of a Theme based project work carried out by

R.YASHWANTH KUMAR	1602-20-736-047
P.DINESH GOUD	1602-20-736-310
K.NANDA VARDHAN	1602-20-736-312
M.SUDHARSHAN REDDY	1602-20-736-314

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Project Guide
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Assistant Professor



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IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

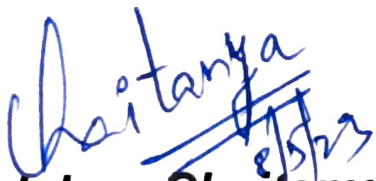
This is to certify that the Theme based project report entitled "Power Generation using Electromagnetic suspension system" is a bonafide record of a Theme based project work carried out by

Ananya Prakruthi Ganti - - - 1602-20-736-004

V Kashyap Reddy - - - 1602-20-736-011

Anil Polam - - - 1602-20-736-005

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CERTIFICATE

This is to certify that the Theme based project report entitled "Mini Hacksaw powered by beam engine "is a bonafide record of a Theme based project work carried out by

SAKETH KAMMARI
SHAIK MOHAMMED ANEES
SHAIK SUFIYAN FARAZ
SHREYA AKUTHOTA

1602-20-736-030
1602-20-736-031
1602-20-736-032
1602-20-736-034

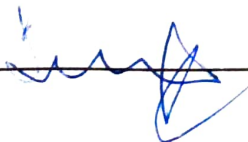
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Mr. B.SANDEEP,
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This is to certify that the Theme based project report entitled "Fabrication of Dynamic Assist Lighting" is a bonafide record of a Theme based project work carried out by

M Niranjan 1602-20-736-022

K Sai Chaitanya 1602-20-736-026

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Mr. K Veladri
Project Guide



Dr. T. Ramamohan Rao
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Dept. of Mechanical Eng.



CERTIFICATE

This is to certify that the Theme based project report entitled "FABRICATION OF WAVE ENERGY CONVERTOR" is a bonafide record of a Theme based project work carried out by

Cheemakurti Kaushik - - - 1602-20-736-012
Komirisetty Manikanta - - 1602-20-736-013
Vepuri Lakshmi Prasad - - - 1602-20-736-017

in the Department of Mechanical Engineering,
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S. Venkataiah

Associate Professor
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T. Ramamohan Rao

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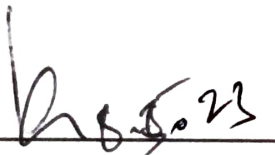
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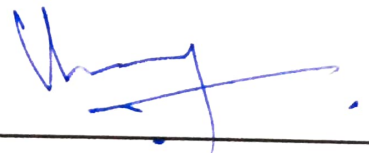
This is to certify that the Theme based project report entitled
"**MINI CONVEYOR USING GENEVA MECHANISM**" is a bonafide
record of a Theme based project work carried out by

M.SAKET SURYA.	-1602-20-736-029
CH. SAI TEJA	- 1602-20-736-028
PAVAN CHEGU	- 1602-20-736-023

in the Department of Mechanical Engineering, Vasavi College of
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This is to certify that the Theme based project report entitled "*Sun Tracking Solar Panel*" is a bonafide record of a Theme based project work carried out by

AMRUTH VARSH --- 1602-20-736-001

AKSHAT ANAND --- 1602-20-736-002

ANVESH ERUKULLA --- 1602-20-736-006

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8/5/23

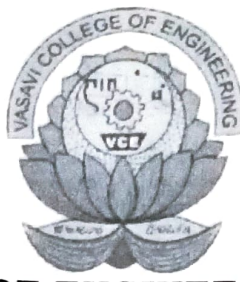
Dr. CHVKNSN MOORTHY

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**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
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This is to certify that the Theme based project report entitled "DESIGN AND FABRICATION OF A DELTA ROBOT MECHANISM" is a bonafide record of a Theme based project work carried out by

**K. Sai Akshit Kumar
Apsana Begum
Mohana Ganesh
Preethi Singh**

**1602-20-736-307
1602-20-736-306
1602-20-736-313
1602-20-736-305**

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.

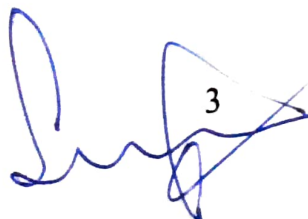


Dr. J. Anjaneyulu

Assistant Professor (Sr.)
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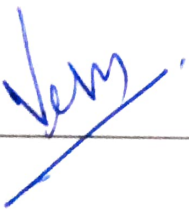
This is to certify that the Theme based project report entitled "**Line Follower Robot**" is a bonafide record of a Theme based project work carried out by

Sohith - - - - - 1602-20-736-035

K V Sudheshna - - - 1602-20-736-038

Vasista Sai - - - - - 1602-20-736-042

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.



Mr. M. Venu
Gopal Reddy
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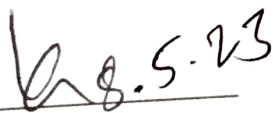
This is to certify that the Theme based project report entitled "Mini Hacksaw powered by beam engine" is a bonafide record of a Theme based project work carried out by

V. SUMMANTH 1602-20-736-302

D. VENU 1602-20-736-304

R. SHIVASURYA 1602-20-736-308

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.

 8.5.23

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Assistant Professor



Professor & HOD
Dr. T. Ramamohan Rao,
Dept. of Mechanical Engineering.



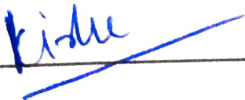
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IBRAHIMBAGH, HYDERABAD

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This is to certify that the Theme based project report
entitled "**AUTOMATED PNEUMATIC PRESS MACHINE**" is
a bonafide record of a Theme based project work
carried out by

MALLIDI YASHWANTH REDDY	1602 20 736 048 ✓
HARSHDEE SINGH SAINI	--- 1602-20-736-315 ✓
B. SRINIVAS KUMAR	--- 1602-20-736-311 ✓
K.C. HEMANTH	--- 1602-20-736-309 ✓

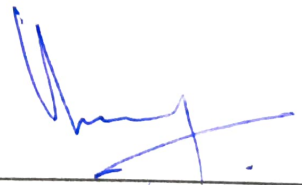
in the Department of Mechanical Engineering, Vasavi
College of Engineering (Autonomous) (Affiliated to
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Dr. Kanakapalli Kishore
Project Guide

PROFESSOR

MECHANICAL ENGINEERING
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Dr. T. Ramamohan Rao
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Dr. T. RAMAMOCHAN RAO
Professor & HOD
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Vasavi College of Engg
Ibrahimbagh, Hyderabad-31

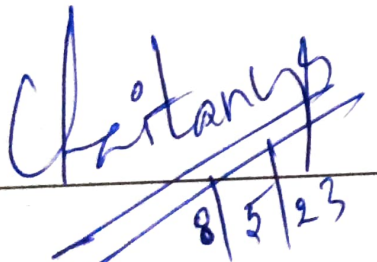
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IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the Theme based project report entitled "**Rain Protector for Premature Crops**" is a bonafide record of a Theme based project work carried out by

Sri Charan Moganti	--- 1602-20-736-037
Maddirala Sujith Reddy	--- 1602-20-736-040
S Venkata Dinesh	--- 1602-20-736-043

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.



Mr. T. Krishna Chaitanya
Project Guide



Dr. T. Ramamohan Rao
Professor & HOD
Dept. of Mechanical Engg.

**THEME BASED PROJECT REPORT ON
Design And Fabrication Of Spray Painting
Robot**

Submitted by:

K.Prajwal Krishna Singh	1602-20-736-091
Sharanya Jawalkar	1602-20-736-103
B.Rajitha	1602-20-736-093

Under the guidance of

Dr.P.V.S.Subhashini
Assistant Professor



**DEPARTMENT OF MECHANICAL ENGINEERING
VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
HYDERABAD**

May 2023

CERTIFICATE

This is to certify that the Theme based project report entitled "Design and Fabrication of Spray Painting Robot" is a bonafide record of a Theme based project work carried out by

K.Prajwal Krishna Singh

- - - 1602-20-736-091

Sharanya Jawalkar

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B.Rajitha

- - - 1602-20-736-093

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.



Dr.P.V.S.Subhashini

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Dr T RAMAMOHAN RAO
Professor & HOD
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Vasavi College of Engg.
Ibrahimbagh, Hyderabad-31

Theme Based Project report
On
Design And Fabrication Of Electromagnetic
Braking System By Using Ultrasonic Sensor

G. Sai Anugna
1602-20-736-096

P. Sai Siddardha
1602-20-736-098

S. Shiva Kumar
1602-20-736-104

Under the guidance of
Mr. Suda Venkateswarulu
Assistant Professor



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HYDERABAD

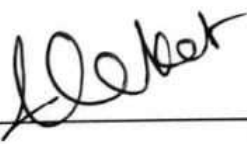
May 2023

CERTIFICATE

This is to certify that the Theme based project report entitled "Design and Fabrication of electromagnetic braking system by using ultrasonic sensor" is a bonafide record of a Theme based project work carried out by

G. Sai Anugna	--- 1602-20-736-096
P. Sai Siddardha	--- 1602-20-736-098
S. Shiva kumar	--- 1602-20-736-104

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.



Mr. Suda Venkateswarulu

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Dept. of Mechanical Engg.**

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**THEME BASED PROJECT REPORT ON
Design, Analysis and Fabrication of Fractal Vise
using Additive Manufacturing**

Submitted by:

Anusha. G	1602-20-736-064
D.G. Sai Koushik	1602-20-736-073
Prasanna Laxmi. K	1602-20-736-079

Under the guidance of

Mr. K. Srinivas Rao
M.E, Associate Professor



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VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
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HYDERABAD**

May 2023

**VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
AFFILIATED TO OSMANIA UNIVERSITY
IBRAHIMBAGH, HYDERABAD**

CERTIFICATE



This is to certify that the Theme based project report entitled "**Design, Analysis and Fabrication of Fractal Vise using Additive Manufacturing**" is a bonafide record of a Theme based project work carried out by

Anusha. G	1602-20-736-064
D.G. Sai Koushik	1602-20-736-073
Prasanna Laxmi. K	1602-20-736-079

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.

Mr. K. Srinivas Rao

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Dr T RAMAMOCHAN RAO
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**THEME-BASED PROJECT REPORT
ON
Fabrication of a Model for Railway Accident
Prevention System**

Submitted by:

**V. Akshay Kumar
S.Gangadhar Reddy
N.Mahesh Goud**

**1602-20-736-062
1602-20-736-072
1602-20-736-080**

Under the guidance of

**Mr.B.Sandeep
Assistant Professor**



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HYDERABAD**

May 2023

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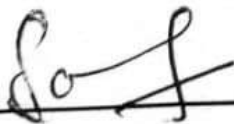
CERTIFICATE

This is to certify that the Theme based project report entitled
“**Development of Railway Accident Prevention System**”
is a bonafide record of a Theme based project work carried out by

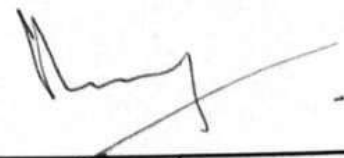
**V. Akshay Kumar
S.Gangadhar Reddy
N.Mahesh Goud**

**1602-20-736-062
1602-20-736-072
1602-20-736-080**

in the Department of Mechanical Engineering, Vasavi College of
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MR.B.Sandeep
Assistant Professor
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Assistant Professor
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Dr.T.Ramamohan Rao
Professor & HOD
Dept. of Mechanical Engineering
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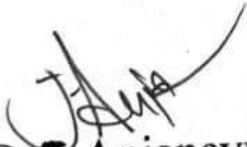
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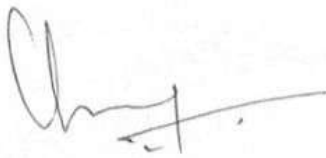
This is to certify that the theme based project report entitled
“Fabrication of piezo electric generator” is a bonafide record
of a theme based project work carried out by

A. Sudhamsh ---1602-20-736-107
K. Surya kiran reddy ---1602-20-736-109

In the Department of Mechanical Engineering, Vasavi College
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Ibrahimbagh, Hyderabad-31



Vasavi College of Engineering

(Private Un-aided Non-minority Autonomous Institution)

ACCREDITED BY NAAC WITH 'A++' GRADE

Affiliated to Osmania University and Approved by AICTE

DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE

This is to certify that the Theme based project report entitled "FABRICATION AND EXPERIMENTAL ANALYSIS OF SOALR REFREGERATOR" is a bonafide record of a Theme based project work carried out by

E. VIKRAM

1602-20-736-325

K. PRASANTH KUMAR

1602-20-736-326

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.

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Assistant Professor
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MECHANICAL ENGINEERING

**VASAVI COLLEGE OF ENGINEERING
IBRAHIMBAGH, HYDERABAD-31.**

Head of the Department

Dr. T. RAMAMOCHAN RAO

Professor & Head
Department of Mechanical Engineering
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IBRAHIMBAGH, HYDERABAD**

CERTIFICATE

This is to certify that the Theme based project report entitled "**FABRICATION OF VOICE AUTOMATED HYDRAULIC JACK**" is a bonafide record of a Theme based project work carried out by

B.INDUSRI	---	1602-20-736-322
M.DEENU	---	1602-20-736-324
T.RAVITEJA	---	1602-20-736-328

in the Department of Mechanical Engineering, Vasavi College of Engineering (Autonomous) (Affiliated to Osmania University), Hyderabad during the academic year 2022-23.


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Mr. D. Varman Ravi Prasad

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Dr. T. Ramamohan Rao

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IBRAHIMBAGH, HYDERABAD**

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This is to certify that the Theme based project report entitled "DESIGN AND FABRICATION OF 360° ROTATING TROLLEY " is a bonafide record of a Theme based project work carried out by

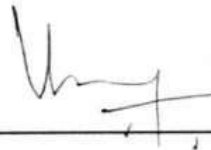
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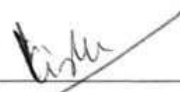
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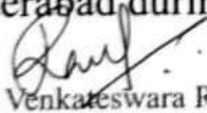
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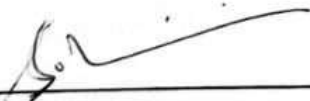
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This is to certify that the Theme based project report entitled
“**Fabrication of Line follower robot to follow critical paths**”
is a bonafide record of a Theme based project work carried out
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This is to certify that the Theme based project report entitled "...*FABRICATION OF 4 WHEEL DRIVE ACCELERATION CONTROLLED BY GESTURES...*" is a bonafide record of a Theme based project work carried out by

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This is to certify that the Theme based project report entitled "**DESIGN AND FABRICATION OF ARTICULATED ROBOTIC ARM MODEL FOR PICK AND PLACE APPLICATION**" is a bonafide record of a Theme based project work carried out by

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