

# INSTITUTE OF CHEMICAL TECHNOLOGY

Deemed to be University under Section-3 of UGC Act 1956

Elite Status & Centre of Excellence - Government of Maharashtra Category I Deemed to be University (MHRD/UGC) National Rank 1 in Atal Innovation Ranking (ARIIA), by MHRD, Category: Govt Aided Universities (2020)



ICT/MARJ/DIR/7

14th March, 2022

To.

Mr.Rohit Tembhurkar

Assistant Professor

Matsyodari Insititute of Engineering and Technology,

Nagewadi, Jalna 431203

Email:- rohittembhurkar007@gmail.com

Mo. No.9764249849/8668536545

Sir / Madam,

I am pleased to invite you to as a visiting faculty for Trimester IV of the academic year 2021-22. You are requested to spare your valuable time for the benefit of the students by sharing your expertise in the

subject and make it convenient to conduct lectures as under: -

Sr.No.	Program & Semester	Course Code & Title	Total Marks	Total Turns	Your Share	Coordinating Teacher
1	Integrated M.Tech, Trimester IV	Engineering Laboratory	50	24p	12p	Dr. Saurav Raj Mo. No8470975763

Evaluation: As per the rules of ICT, Continuous Evaluation tests of the Students are mandatory.

- d) It is expected that the teacher would conduct at least two assessments under the continuous mode in a semester.
- The teacher will announce at the beginning of the respective course the method of conducting the tests under the continuous mode and the assignment of marks.
- The Pattern of marks distribution is: Continuous Evaluation: 35 marks, End Semester Examination: 15 marks, totalling 50 marks, as the case may be.

#### Attendance:

- e) Kindly keep attendance records and submit it to the Director, ICT Mumbai Marathwada Campus,
- Please not that 75% attendance is compulsory for the students and your co-operation is sought in following these requirements strictly, In case of any shortfall at the end of a month, you are requested to communicate the same to the student with simultaneous copy to :- Director, Jalna campus (email id: director@marj.ictmumbai.edu.in),Dean (email id: dean.ap@ictmumbai.edu.in) and AR (email id: ar.acade@staff.ictmumbai.edu.in)
- g) Requested to use recording facility for the benefit of students.
- h) Please note that only enrolled students will access to this (for watching only).

Honorarium of Rs. 2000/- per practical is admissible to you. You may please communicate the timings of your lectures to respective coordinator.

We hope that your will accept the invitation. A line of confirmation will be highly appreciated.

Director

Copy to :- 1. Accounts section, ICT MARJ 2. Director Office, ICT MARJ

**ICT MUMBAI** 

Nathalal Parekh Marg, Matunga, Mumbai - 400 019, India Tel.: +91-22-3361-1111/2222(B) Fax: +91-22-3361-1020(B)

Website: www.ictmumbai.edu.in email: vc@ictmumbai.edu.in GSTIN: 27AAATI4951J1ZG

ICT IOC, BHUBANESWAR

ICT-IOC Odisha Centre, Indian Institute of Technology, Kharagpur Extension Centre, Near Hotel Swosti Premium, Mouza-Samantpuri, Bhubaneswar- 13 email: director@iocb.ictmumbai.edu.in

GSTIN: 21AAATI4951J1ZS

ICT MARATHWADA, JALNA

M/s Beej Sheetal Innovations Centre Private Limited, BT-6/7, Biotechnology Park, Additional MIDC Area, Auranaabad Road, Jalna- 431 203 email: director@marj.ictmumbai.edu.in GSTIN: 27AAATI4951J1ZG



#### रसायन तंत्रज्ञान संस्था



Deemed to be University under Section-3 of UGC Act 1956

#### Elite Status & Centre of Excellence Government of Maharashtra

Catagory I Deemed to be University (MHRD/UGC)

National Rank 1 in Atal Innovation Ranking (ARIIA), by MHRD, Category: Govt Aided Universitites (2020)

# ICT/MARJ/DIR/56

September 16, 2023

To,

Mr. Pravin T. Avhad

Matsyodari Shikshan Sanstha

Jalna

Email:-pravinavhad85@gmail.com

Mo.: - 8668355088

#### Sir / Madam,

I am pleased to invite you to as a visiting faculty for **Semester- I** of the academic year **2023-24**. You are requested to spare your valuable time for the benefit of the students by sharing your expertise in the subject and make it convenient to conduct lectures as under: -

Sr. Program No. Semester	&	Course Code & Title	Total Marks	Total Turns	Your Share	Incharge Faculty/Staff Coordinating
1 Integrated M.Tech, Semester-		Structural Mechanics Lab	100	15 P	5 P	Dr. Saurav Raj Mr. Ganesh M. Gudewar

- 1) Evaluation: As per the rules of ICT, Continuous Evaluation tests of the Students are mandatory.
  - a) It is expected that the teacher would conduct at least two assessments under the continuous mode in a semester.
  - b) The teacher will announce at the beginning of the respective course the method of conducting the tests under the continuous mode and the assignment of marks.
  - c) The Pattern of marks distribution is: 50 Marks Continuous (including Mid Sem), and 50Marks End Sem Total = 100 Marks

#### 2) Attendance:

- a) Kindly keep attendance records and submit it to the Director, ICT Mumbai Marathwada Campus, Jalna.
- b) Please note that 75% attendance is compulsory for the students and your co-operation is sought in following these requirements strictly, In case of any shortfall at the end of a month, you are requested to communicate the same to the student with simultaneous copy to :- Director, Jalna campus (email id: director@marj.ictmumbai.edu.in) Dean (email id: dean.ap@ictmumbai.edu.in) and AR (email id: ar.acad@staff.ictmumbai.edu.in)
- c) Requested to use recording facility for the benefit of students. Please note that only enrolled students will access to this (for watching only).

Honorarium of **Rs. 2000** per Practical is admissible to you. You may please communicate the timings of your lectures to respective coordinator.

We hope that you will accept the invitation. A line of confirmation will be highly appreciated.

Director

Copy to :-

- 1) Accounts, ICT MARJ.
- 2) Academics, ICT MARJ

#### ICT MUMBAI

Nathalal Parekh Marg, Matunga, Mumbai - 400 019, India Tel: +91-22-3361-1111/2222(B) Fax :+91-22-3361-1020(B)

> Website: www.ictmumbai.edu.in email: vc@ictmumbai.edu.in GSTIN: 27AAATI4951J1ZG

#### ICT IOC, BHUBANESWAR

ICT-IOC Odisha Centre, Indian Institute of Technology, Kharagpur Extension Centre, Near Hotel Swosti Premium, Mouza-Samantpuri, Bhubaneswar-13 email : director@iocb.ictmumbai.edu.in GSTIN : 21AAATI4951J1ZS

#### ICT MARATHWADA, JALNA

M/s Beej Sheetal Innovations Centre Private Limited, BT-6/7, Biotechnology Park, Additional MIDC Area, Aurangabad Road, Jalna-431 203 email: director@marj.ictmumbai.edu.in GSTIN: 27AAATI4951J1ZG

# MATSYODARI SHIKSHAN SANSTHA'S COLLEGE OF ENGINEERING & TECHNOLOGY, JALNA Department of Mechanical Engineering

# NOTICE

Date: 24/05/2022

All Final Year students are here by informed that Industrial Visit is scheduled on 25/05/2022, Wednesday, at Rajureshwar Cold Storage. So all Students Should be present in college campus at 11.00 am Sharp in college uniform along with college Identity Cards

Also, it is Mandatory to follow the Instructions given by the Faculty Members during Visit & Maintain the Discipline.

Prof.Mohammad Javed

Faculty In-Charge

(Prof. R. L. Karwande)

HOD



# Proposal for INDUSTRIAL VISIT at your Esteemed Organization on 25/05/2022

1 message

javed mohammed < javed.mohammed996@gmail.com> To: er.chetanjoshi@gmail.com

Mon, May 23, 2022 at 12:50 PM

Respected Sir,

Warm Greetings from MSS's CET, Jalna....!

Matsyodari Shikshan Sanstha is a reputed organization and has

established

itself as one of the foremost educational group of institutions in Marathwada region. Matsyodari Shikshan Sanstha having an Engineering College at Jalna. As a part of academic curriculum of Final Year Mechanical Engineering students, Our college wants to arrange an INDUSTRIAL VISIT at your Esteemed organisation to enhance Practical Exposure & Skills of students. We have planned 46 Students along with 02 Faculty members to visit your institute on 25/05/2022

Thanking you....
With Regards...
Er.Mohamad Javed
BE (Mech) ME (Production)
Assistant Professor
Department of Mechanical Engineering
Matsycdari Shikahan Sanistha's College of
Engineering & Technology, Jaine 451263.
Cell No. +91-8421028999/9209201737

#### MSS's

# COLLEGE OF ENGINEERING AND TECHNOLOGY, JALNA <u>DEPARTMENT OF MECHANICAL ENGINEERING</u> <u>INDUSTRIAL VISIT REPORT</u>

Name of industries visited: Rajureshwar Cold Storage (RCS), Jalna. MS.

Date: 25/05/2022

Total no. of students: 46

No. of faculty: 1

Faculty coordinator: Prof. Md. Javed.

#### Introduction

The college has arranged Industrial visit for final year engineering students to study Cold Storage process. The visit was organized with the prior permission and guidance of HON. Principal Dr. S. K. Biradar and Head of Mechanical Engineering Department, Prof. R. L. Karwande.

Industrial visit is a vital part of curriculum. It bridges classroom learning and real working worlds. The visit provides knowledge about the organizational structures and modes of operation in different industries.

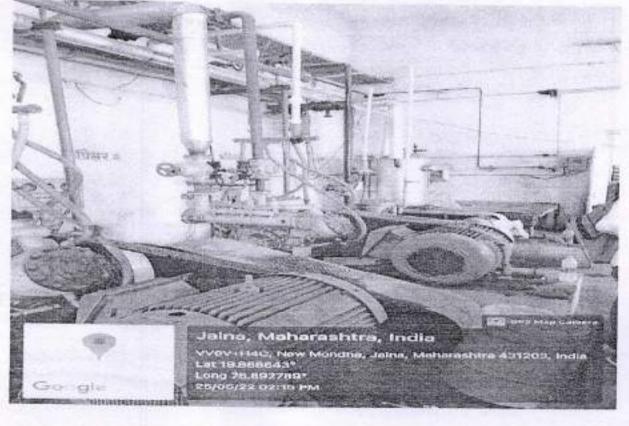
# OBJECTIVES OF INDUSTRIAL VISIT

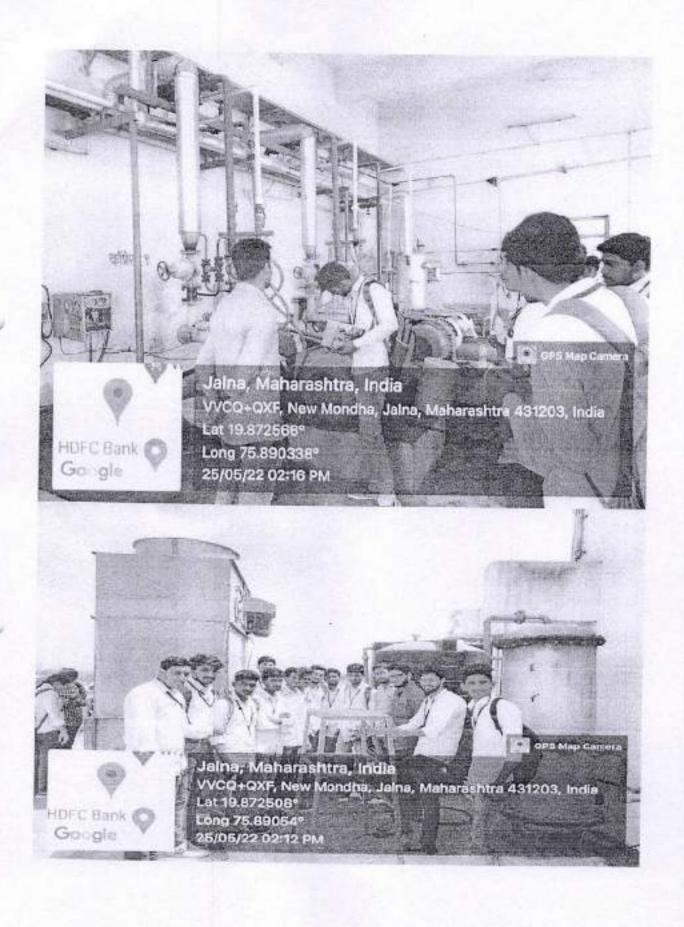
- 1) To Know the information about physical set up of industry.
- To understand the working of Cold Storage
- Knowing about Compressors, Condensers, Intercooler & other components of refrigeration system.

#### About RCS

Rajureshwar Cold Storage has capacity of 28000 metric tons. It has 11 cold storage rooms. All types of food grains, spices, eatables are stored here. It works on Ammonia Vapour Absorption System. It has two compressors with inter cooling.









# Conclusion of a very fruitful visit to Rajureshwar Cold Storage

The visit was fruitful, and would help us in connecting the theoretical study in class with the practical applications of various tooling and machining processes used in industry. The visit also motivated us in many ways. We are excited to have more such industrial visits, field visits, internships, taking industrial projects, and take more of practical works including workshops on various concepts. Overall, we got a new viewpoint of approaching the same problem, and an experience we won't forget for their lifetime. We also have got some very exciting new ideas for the projects we are going to prepare in future based on various concepts, loopholes existing in the concepts, new and a fine-tuned approach for the same thing and the likes.

Prof.Mohamad Javed

Visit in Charge

Prof.R. C. Karwande

HMED

# Matsyodari Shikshan Sanstha's College of Engineering & Technology, Jalna. Department of Mechanical Engineering

Date:-25/05/2022

### Undertaking

We the students of B.E Mechanical Engineering of Matsyodari Shikshan Sanstha's College of Engineering & Technology, Jalna hereby declared that, we will follow the instructions and guidelines given by concerned faculties time to time during the visit. We are solely responsible for causalities, accidents, physical injuries or disability during the visit. We will maintain the discipline.

Roll Nos.	Name	Signature
2401	AGARWAL RAHUL PRAKASHCHANDJI	
2402	AHERWAR SAGAR SUSHILKUMAR	
2403	BANCHOD ADITI VINAYAK	BELLEY-
2404	BHAGWAT AKASH PRAKASH	*
2405	BHORE VISHAL SANJAY	
2406	BHOSLE SHUBHAM BABASAHEB	
2407	BODKHE UMESH VISHNU	· Buriett
2408	CHAVAN SACHIN SUKHDEO	Store
2410	DASRE VYANKATESH RAMESH	
2411	DESHMUKH GAURAV GOVINRAO	
2413	DHANDE KRISHNA KESHAV	(P. MARCO
2414	GAIKWAD VAIBHAV KISHOR	Peuled.
2415	INGLE AVINASH PARASRAM	Angle
2416	JADHAV RAGHUNATH BADRINATH	
2418	JANGID RAM ANURODH	
2419	KATHORE SHRIKANT GANGADHAR	
2420	KHANDEBHARAD SACHIN PRALHAD	
2422	KHANDEKAR KANHAIYYA CHANDRABHAN	
2423	KUMAWAT SANDIP BHAUSAHEB	
2424	MISAL HARIDAS SHIVAJI	ofully.
2425	PAKHARE SANDESH PRABHAKAR	Colum
2426	PATHAN JAVED GULABKHA	died.
2427	PIPARIYE VAIBHAV MOHANLAL	
2428	POPALGHAT KUNAL KADUBA	Cull .
2429	RAMDASI SAURABH DEEPAK	there,
2430	SAKHARE DEEPAK ARJUN	***
2431	SALVE NARESH KUNDLIKRAO	

2432	SAYYED KAMRAN SY KARBHARI	
2433	SHAIKH JISHAN ANSAR	
2434	SHARMA KALYANI ANAND	Volganie
2435	SHELAKE SACHIN RAMDAS	-450
2436	SHINDE RAHUL SANJAY	- Access
2437	TAKALKAR ABHISHEK LAXMIKANT	Cakalkaz .
2438	THOMBRE NILESH KALYAN	(office)
2439	THUBE NAVNATH GORAKH	
2440	UDHAN BAJIRAO LAXMAN	
2441	GIRI AMAN BHARAT	
2442	FAROOQUI SOOFI	
2443	KHARAT TRIMBAK LAXMAN	Listadis
2444	MOHSIN MIRZA ZAFAR BAIG	(8
2445	Sayyed Arshad Sayyad Ahmad	
2446	Wade Sagar shankar	
2448	KHEDEKAR ASHWINI GAJANAN	
2449	PANKAJ KUMAR KARVE PRAKASHRAO	
2450	KUNAL AMRUT CHAUVAN	
2451	JAGTAP KAILASH	

Co-ordinator

HMED



# MATSYAODARI SHIKSHAN SANSTHA'S COLLEGE OF ENGINEERING AND TECHNOLOGY, JALNA

# DEPARTMENT OF MECHANICAL ENGINEERING INDUSTRIAL VISIT REPORT

#### Name of industries visited

- Marathwada Auto Cluster, Center of Excellence MIDC, Plot No. P-174 Waluj, Aurangabad, Maharashtra 431136
- Indo German Tool Room, P-31, M.I.D.C. Industrial Area, Chikalthana, Aurangabad 431
   006, Maharashtra, India.

Date: 22 May 2023, Monday

Total no. of students: 54

Faculty coordinator: Prof. Md. Javed, Prof. Ganesh Matre, Prof. Vilas Jadhav

#### Introduction

The college has arranged an Industrial visit for third year engineering students to study jig and fixtures, press tools, forging die, and injection moulds. The visit was organized with the prior permission and guidance of Hon. Principal Dr. S. K. Biradar and Head of Mechanical Engineering Department, Prof. R. L. Karwande.

Industrial visit is a vital part of curriculum. It bridges classroom learning and real working worlds. The visit provides knowledge about the organizational structures and modes of operation in different industries.

Our visit was divided into two Sessions. In the first Session of our visit, we went to Marathwada Auto Cluster, Chh. Sambhajinagar, while in the latter we visited IGTR Chh. Sambhajinagar.

#### OBJECTIVES OF INDUSTRIAL VISIT

- 1) To Know the Information about physical set up of Industry.
- 2) to understand the Press tool work/ tool room
- Knowing about CNC/CAM and CAE centers.
- 4) To understand various moulding process.
- 5) CNC operated machining and programming.
- 6) Information about hydraulics, pneumatics and maintenance lab.
- Practical application of tool's for making various parts.

#### Prologue

As the students got themselves comfortable in the buses after signing the undertakings, the bus, at 10:00 AM left the college premises and followed its path towards Chh. Sambhajinagar to our first destination, Marathwada Auto Cluster, Chh. Sambhajinagar.

## About Marathwada Auto Cluster

- Marathwada Auto Cluster is an IIUS Project supported by Ministry of Commerce & Industry, Govt. Of India & Govt. Of Maharashtra
- Initiated by Chamber Of Marathwada Industries and Agriculture ( CMIA ), Aurangabad.
- This is Section 8, earlier sec 25 Company with Public Private Partnership approach.
- No dividend to directors/members
- It is registered under 80 G (5) (VI) of IT Act, 1961

#### Our Vision

To develop a Common Facility Centre that supports the growth of MSMEs in the region and helps them to achieve manufacturing excellence & ensuring sustainable growth through collective wisdom

#### Our Mission

To empower all the MSMEs in the region by providing them manufacturing services and skill development.

#### **Our Objective**

The objective of the project is to establish a state of the art Common Infrastructure Facility at Waluj Industrial area in Aurangabad, in order to improve the global competitiveness of the industrial units in Marathwada, through manufacturing excellence and ensuring sustainable growth through collective wisdom and result oriented efforts.

#### **Project Funding**

#### Marathwada Auto Cluster

	₹ (in Cr )	US \$ (in Millions)	
Total Project Cost	81.35	12.0	
Govt. of India	58.20	8.6	
Govt. Of Maharashtra	08.09	1.2	
Industry Contribution	12.24	1.8	
Bank Loan	02.82	0.4	
Scheme	t.t.u.s.		
Starting of the Project	31* May 2010		
Completion of the Project	30 <sup>th</sup> Sep 2016		

#### Industries They Serve

- SPM Manufacturing
- Dia Mould Manufacturing
- Automotive Sector
- Machine Parts Manufacturing
- Sheet Metal

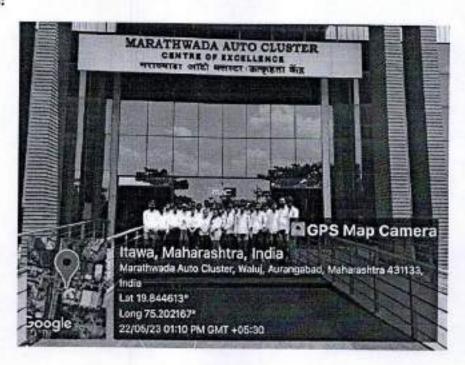
- Process Equipment
- · Electrical Vehicle
- Electronics & Telecommunication
- Tool Manufacturing

#### Facilities at MAC

#### A. Tool Room

- HMC MAZAK (Horizontal Machining Centre)
- VMC Vertical Milling Center
- DCVMC Double Column Vertical Milling Center
- TMC Turning Milling Center
- Wire Cut
- Surface Grinding
- B. Standard Room Inspection Facility
- C. LASER Cut PRISMA
- D. CTL-EKI CONTROL (Cutting Slitting Line)
- E. AIDA (Automatic Blanking Die Press)
- F. RPT Plastic- Rapid Prototyping

#### Glimpses:



# About Indo German Tool Room (IGTR)

Government of India, Ministry of micro, small & medium Enterprises

Area of Industrial visit: MIDC, Industrial Area, Chikhalthana, Chh. Sambhajinagar 431006 (MS) INDIA.

Date: 07-03-2019

Time: 2:00pm to 5pm.

## Departments and Classification of process

We Visited Following IGTR departments at IGTR.

- 1) Production Department
- 2) Tool room

#### Press Working

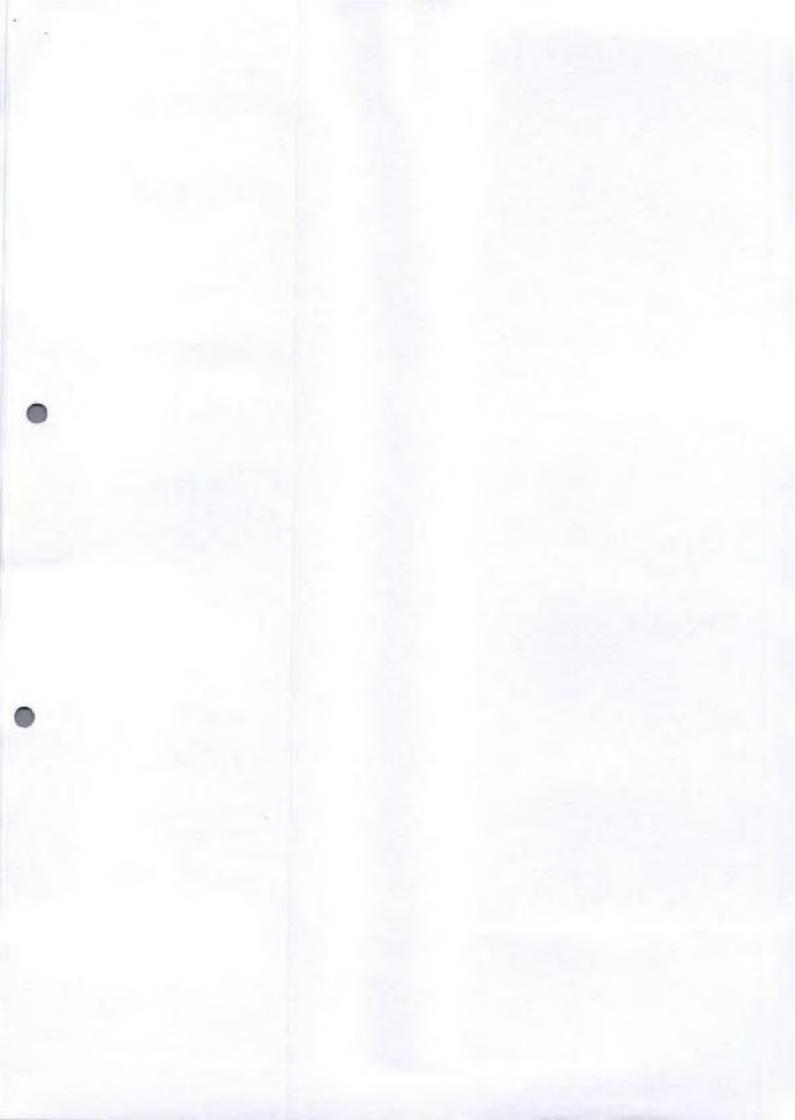
Press working may be defined as chip less manufacturing process by which various components are made from sheet metal. This process is also termed as cold stamping. The sheet metal operation done on a press may be into two categories, cutting operation and forming operations. In cutting operations, the work piece is stressed beyond ultimate strength.

#### These operations

- 1) Blanking
- 2) Punching
- 3) Notching
- 4) Deforming
- 5) Trimming
- 6) Shaving
- 7) Slitting
- 8) Lancing
- 9) Nibbling

#### Forming operations

- 1) Bending
- 2) Drawing
- Squeezing



Applications:

1) To make Automobile parts, Gears, Brakes, Clutch plates etc.

2) Parts make by sheet metal working, car body parts.

Moulding

Mould is defined as a cavity in which molten metal is poured and allowed it to cool so as

to product. Such cavity may be formed with the help of pattern. The process of making

mould is known as moulding.

A pattern of making mould is known as moulding.

· A pattern is having its shape and size approximately similar to that of the desired

component. Moulding is the process of making a mould.

Moulds are normally made from heat resisting materials like sand and clay.

Sand is widely used mould material for casting ferrous and non-ferrous materials.

Non-Conventional Machines

CNC Machine is the Machine tool which is operated and controlled by

using dedicated computers is known as computerized numerical control machine. In CNC

system, most of the hardware function modules of NC are replaced by a stored program in

computer. Software stored in computer performs the functions of data decoding, control,

buffering, feed rare control etc.CNC machine tools are widely used due to many new control

features available on these machines.

Specification of CNC

M/C Type: LT-2 LM500

M/C Number: 280

Year: 2016

Supply voltage: 380V/415V ,3PEN, 50Hz

Control volt: 24V.Dc

Back up fuse: 63Amps.

Rated current: 33/3/Amps

CVA Rating: 22Kva

Size of wire: 10sqmm.

6

#### Features of CNC Machines

- The part program can be input to the controller unit through key board or the paper tape can be read by reader in the control unit.
- 2) The part program once entered into the computer memory can be used again and again.
- The input information can be reproduced with use of spatial sub programs developed for repetitive machining sequences.
- 4) The control system can provide the information such as number of components produced, cycle time of components, job setting time, time for repair and diagnosis etc.

#### Advantages of CNC Machines

- 1) Reduced lead time
- 2) Elimination of operator error
- 3) Lower labour cost
- 4) High accuracy
- 5) Elimination of jig and fixture
- 6) Flexibility
- 7) Reduced inspection
- 8) Less scrap

#### Disadvantages of CNC Machine

- 1) Higher investment cost
- 2) Higher maintenance cost
- 3) Costlier CNC personnel
- Planned support facility

#### Application area of CNC Machine

- 1) When operations are very complex.
- 2) The numbers of operation per component are large.
- Batch size is medium.
- 4) Batches are often repeated.
- When design changes or Individual variation are required on parts.
- A large variety of components is produced.

- 7) The components required high skilled operator.
- 8) Components required sub satirical tooling.
- 9) Components are critical and require 100% Inspection.

#### Wire-cut EDM

#### Introduction of wire-cut EDM

In wire-cut EDM the electrode consists of thin wire. As the material removal is obtained through the continuously feed of wire in the work piece, the process is called as wire-cut EDM. This process is used for machining sheet metal dies, Extrusion dies and prototype part. It is relatively slow process (linear travel of the order of 100mm /hour) utilizing computer controlled machines.

#### Principle of Wire-cut EDM

- 1. It works on the principle of spark Erosion occurred due to electrical and thermal energy.
- As the cutting tool is in the form of thin wire of diameter 0.05 to 0.25mm the wire of Allowed to pass through a predrilled hole in the work piece.
- The Electrode wire made of copper or brass.
- The wire is inserted in the drilled slot initially and moves part of work piece at the speed of 3m/min.

#### Control Parameters of Wire-cut EDM

- Discharge current
- Duration of pulse
- Frequency of pulse
- Wire diameter
- Wire tension
- Dielectric flow

#### Advantages of EDM

- Forming electrode of product shape is not required.
- Negligible wear of Electrode

- Machined surface are smooth
- High accuracy of geometrical and dimensions
- No tapering overcut
- No need of storage of tool
- · High utilization of machine
- · Low operating skills

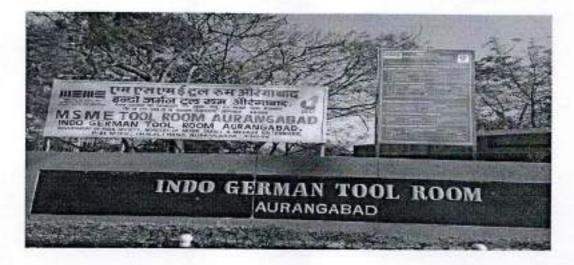
#### Disadvantages of Wire-cut EDM

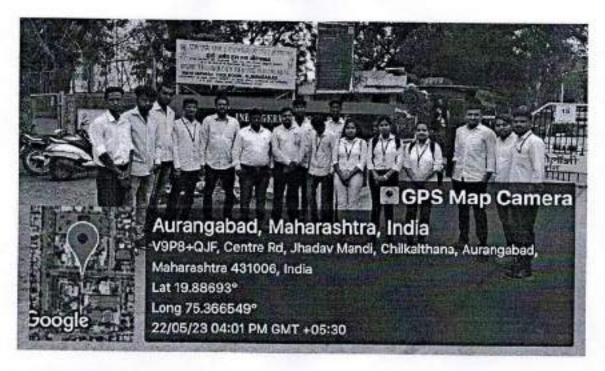
- The wire cut EDM machine is more expensive than other machines.
- · High skill are required to handle the machine when programming facility is not available
- Only conductors work piece can be machined
- It has slow material removal rate
- Less flexible compared to other machines.

#### Applications of WIRE-CUT EDM

- Production of prototypes
- Small series of spare parts, turbine blades, aerospace parts etc.
- Stamping dies, drawing and Extrusion tools, molding dies.
- Sintering dies, blanking dies, spark erosion, electrodes.

#### Glimpses





#### Conclusion

The visit was fruitful, and would help us in connecting the theoretical study in class with the practical applications of various tooling and machining processes used in industry. The visit also motivated us in many ways. We are excited to have more such industrial visits, field visits, internships, taking industrial projects, and take more of practical works including workshops on various concepts. Overall, we got a new viewpoint of approaching the same problem, and an experience we won't forget for their lifetime. We also have got some very exciting new ideas for the projects we are going to prepare in future based on various concepts, loopholes existing in the concepts, new and a fine-tuned approach for the same thing and the likes.

Prof. Md. Javed Coordinator IV Prof. R.L. Karwande HMED

#### MSS's

# COLLEGE OF ENGINEERING AND TECHNOLOGY, JALNA <u>DEPARTMENT OF MECHANICAL ENGINEERING</u> INDUSTRIAL VISIT REPORT

Name of industries visited: CIPET Aurangabad

Date: 08/06/2022, Wednesday

Total no. of students: 65

No. of faculty: 2

Faculty coordinator: Prof. Md. Javed, Prof. Md. Irfan,

#### Introduction

The college has arranged an Industrial visit for third year engineering students to study jig and fixtures, press tools, forging die, and injection moulds. The visit was organized with the prior permission and guidance of HON. Principal Dr. S. K. Biradar and Head of Mechanical Engineering Department, Prof. R. L. Karwande.

Industrial visit is a vital part of curriculum. It bridges classroom learning and real working worlds. The visit provides knowledge about the organizational structures and modes of operation in different industries.

## OBJECTIVES OF INDUSTRIAL VISIT

- 1) To Know the Information about physical set up of Industry.
- 2) to understand the Press tool work/tool room
- 3) Knowing about CNC/CAM and CAE centers.
- 4) To understand various moulding process.
- 5) CNC operated machining and programming.
- 6) Information about hydraulics, pneumatics and maintenance lab.
- Practical application of tool's for making various parts.

# Prologue

As the students got themselves comfortable in the buses after signing the undertakings, the bus, at 10:00 AM left the college premises and followed its path towards Aurangabad to our destination, IGTR Aurangabad.

### About CIPET:

- 1.) Phone no.: 0240-2478302 to 340,
- 2.) Fax: 0240-2478333
- Address: Plot no. J- 3/2, MIDC Industrial Area, Chikalthana, Aurangabad-431006 (M.S.)
   INDIA
- 4.) Academic help no: 9373687915, 0240-2478322,31,317,325
- 5.) Email: Aurangabad@cipet.gov.in
- 6.) Web site: www.cipet.gov.in

#### Profile

Central Institute of plastic engineering and technology (CIPET) was established in 1968 by Government of INDIA with the assistance of United Nations Development Programme (UNDP) at Chennai. Today CIPET is a premier national institution under the aegis of Ministry of Chemicals and Fertilizers, Government of India fully devoted to skill development, Technology Support Services, Academic and Research (STAR). CIPET operates on hub and spokes model with 28 locations – 5 High Learning Centre, 12 Other learning Centre, 3 Specialized Centre, 2 R&D Wings, 5 Vocational training Centre, 1 of Polymer and Allied Industries. 11 more centre are in process of establishment. CIPET has been accredited with ISO 9001:2008 QMS, ISO/IEC – 17025, ISO/IEC – 17020 certification on Design, Development and Conduct of specialized training courses in Plastics Engineering and Technology and rendering technical/consultancy services in design, tooling, plastics processing and testing for the benefit of plastics and allied industry. Besides, STAR activities, CIPET also plays pivotal role in generating employment opportunities especially for unemployed and underemployed youth, promoting entrepreneurs through various skill development and training programs.

# About CIPET - Aurangabad

CIPET Centre at Aurangabad (Maharashtra) was established in the year 2006 and started functioning from its permanent campus spread over an area of 8.5 acres with effect from January 2011. CIPET Aurangabad is committed to provide state of the art technical services to plastics and allied industries of the State and to provide quality education to the students undergoing training in the institute creating technically qualified manpower to meet the requirement of industries at various levels.

#### Facilities at CIPET

The institute has various Functional and Support areas such as:

- · Administrative block
- · Tool Room
- Plastics Processing Workshop
- · Plastics Testing Laboratories
- Plastics Mould Design Laboratories
- CAD/CAM/CAE Centre
- Hydraulics, Pneumatics and Maintenance Lab
- Fully furnished library
- Digital Library with E-Journals and Technical Videos
- · Fully furnished class Rooms With Multimedia facility
- Conference Hall
- · Video Conference Hall
- Fully furnished Hostel for 300 Boys and 100 Girls

## Our visit to CIPET

We entered CIPET at 03:45 PM. Mobiles were not allowed and had to be switched off. We were not allowed to capture any images.

After entering CIPET we were taken to classroom, where we got seated and the faculty at CIPET introduced themselves and gave us some information about CIPET, plastics moulding, injection moulding, etc. and briefed us with what are we going to see during our visit. We were given to fill a training form, which we submitted to the CIPET faculty. Our class was divided into two groups, with 32 students in each group, and each group was going to visit the following lab departments at CIPET.



Group Photograph of Students along with Faculty Members at CIPET





# **Processing Department**

In Processing Department, various Plastic Moulding and production facilities were present and manufacturing for their vendors. On the other side of the Processing department, a group of students were receiving training on plastic processing technology. All the college chores and teaching took place in day time. Most of the manufacturing work was done during night shifts.

Our instructor, the CIPET faculty, briefed us with some basic information on injection moulding and blow moulding before we set off to see an injection moulding machine.

Injection molding is the most commonly used manufacturing process for the fabrication of plastic parts. A wide variety of products are manufactured using injection molding, which vary greatly in their size, complexity, and application. The injection molding process requires the use of an injection molding machine, raw plastic material, and a mold. The plastic is melted in the injection molding machine and then injected into the mold, where it cools and solidifies into the final part.

The blow moulding process, in comparison with injection moulding, is a low pressure process with typical blow air pressures around 25 to 150 psi.

The first machine that we saw was a microprocessor controlled injection moulding. Its specifications were:

CF - 200T

Model - Sigma 200

CS - 500 mm

Max. Daylight - 1210 mm

Mould Height (min/max) - 300/710

Pattern size - 805x842

Distance Between Tie Bars - 95 mm/max

Ejector stroke - 130 mm/max

Min. mould area - 1180 cm2

Shot Capacity - 468 g

Injection Pressure - 1900 bar

Injection Rate - 246 cc/s

Injection screw rate - 250 mm

Screw Diameter - 50 mm

Various components of the injection moulding machine were: Injection unit, screw, compressor, cutting zone, clamping system, toggle, LVDT, Limit Switches, etc.

We then set off to see another injection moulding machine which was continuously manufacturing plastic components. These plastic components were dipped in water for cooling. To these components, runners were attached which were scrapped by hand to be recycled.

Then we saw a film extrusion machine.

The equipment used in blown film extrusion is shown below. The method of making blown film distinguishes the process from other extrusion methods. The unique features about a blown film

extrusion line are the die, the method of cooling the film, the collapsing tower, and the film winder.

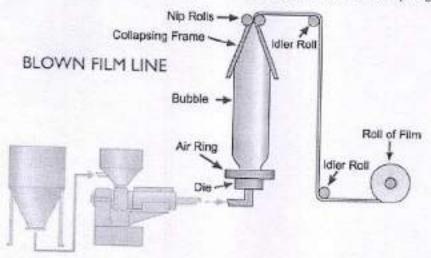


Image Courtesy: www.eastman.com

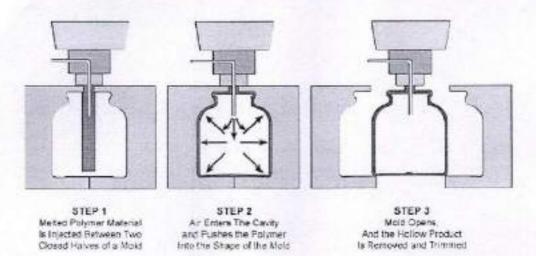
Air is introduced thru a hole in the center of the die to blow up the tube like a balloon. A high speed air ring mounted on top of the die blows into the hot film to cool it. The collapsing frame takes the bubble and collapses the tubular film before it is pulled through the nip rolls. The tube is flattened to create what is known as a "lay-flat" tube. The lay flat tube is taken back down the extrusion town via idler rolls. The film is either kept as such or the edges are slit off to produce two flat film sheets and wound into reels.

The next process that we saw was Extrusion blow molding.

Blow Molding (BM) process makes it possible to yield molded products economically, in unlimited quantities, with virtually no finishing required. There are basically four types of blow molding used in the production of plastic jugs, bottles and jars. These four types are Extrusion blow molding. Injection blow molding, Stretch blow molding, Reheat and blow molding.

Extrusion blow molding is simplest type of blow molding, where a hot tube of plastic material is dropped from an extruder and captured in water cooled mold. Once the molds are closed, air is passed through the top or the neck of the container; just as if one were blowing up a balloon.

#### **BLOW MOLDING PROCESS**



After seeing the proper functioning of the plastic manufacturing machines, we went to the classroom, before another instructor joined us to take us to the tool room.

In the tool room the first machine that we saw was a radial drilling machine. We also saw cylindrical grinders, universal tool and cutter grinders, surface grinders, BFW Vertical milling machine, a pantograph, and various lathe machines.

After seeing all the above machines, we ventured into the CNC section of the tool room, where we saw some unconventional type manufacturing machines.

We saw a CNC EDM machine (Electronica). Its specifications were:

Max. table movement (x\*y\*z) - 300\*200\*250

Table dimensions - 550 \* 350

Max. job weight - 300 kg

Min job weight - 70 kg

## Courses offered by CIPET Aurangabad

Following AICTE approved Long term academic programmes are offered at the institute:

## 1.) PG Diploma Program

- PG Diploma in Plastics Processing and Testing
- PG diploma in Plastics Testing and Quality Control

# 2.) Post Diploma Program

- Post diploma in Plastics Mould Design With CAD/CAM
- 3.) Diploma Programs

- · Diploma in Plastics Technology
- Diploma in Plastics Mould Technology
   CIPET also offers various short term courses for vocational training

# Conclusion of a very fruitful visit to CIPET

The visit was fruitful, and would help us in connecting the theoretical study in class with the practical applications of various tooling and machining processes used in industry. The visit also motivated us in many ways. We are excited to have more such industrial visits, field visits, internships, taking industrial projects, and take more of practical works including workshops on various concepts. Overall, we got a new viewpoint of approaching the same problem, and an experience we won't forget for their lifetime. We also have got some very exciting new ideas for the projects we are going to prepare in future based on various concepts, loopholes existing in the concepts, new and a fine-tuned approach for the same thing and the likes.

Prof.M.Javed

CO ORDINATOR

Prof.R.L. Karwande

HOD

Prof.Dr.S.K.Biradar

PRINCIPAL

#### MSS's

# COLLEGE OF ENGINEERING AND TECHNOLOGY, JALNA <u>DEPARTMENT OF MANAGEMENT</u> <u>INDUSTRIAL VISIT REPORT</u>

Name of industries visited: IGTR Aurangabad

Date: 08/06/2022, Wednesday

Total no. of students: 40

No. of faculty: 2

Faculty coordinator: Prof. S.N.Dhole, Prof. Md.Irfan.

#### Introduction

The college has arranged an Industrial visit for Management students to study production and operations, Management ,Inventory systems, study jig and fixtures, press tools, forging die, and injection moulds. The visit was organized with the prior permission and guidance of Hon. Principal Dr. S. K. Biradar and Head of Management Department Prof. Md.Irfan.

Industrial visit is a vital part of curriculum. It bridges classroom learning and real working worlds. The visit provides knowledge about the organizational structures and modes of operation in different industries.

& Techno

# OBJECTIVES OF INDUSTRIAL VISIT

- 1) To Know the Information about physical set up of Industry.
- 2) to understand the Press tool work/tool room
- Knowing about CNC/CAM and CAE centers.
- To understand various moulding process.
- CNC operated machining and programming.
- Information about hydraulics, pneumatics and maintenance lab.
- 7) Practical application of tool's for making various parts.

# Prologue

As the students got themselves comfortable in the buses after signing the undertakings, the bus, at 10:00 AM left the college premises and followed its path towards Aurangabad to our destination, IGTR Aurangabad.

# Indo German Tool Room (IGTR), Aurangabad

Government of India, Ministry of micro, small & medium Enterprises

Area of Industrial visit: MIDC, Industrial Area, Chikhalthana, Aurangabad 431006 (MS) INDIA.

Date: 08-06-2022

Time: 10:00AM TO 1.00 PM







# **Group Photograph of Students at IGTR**



# Departments and Classification of process

We Visited Following IGTR departments at IGTR.

- 1) Production Department
- 2) Tool room



# **Press Working**

Press working may be defined as chip less manufacturing process by which various components are made from sheet metal. This process is also termed as cold stamping. The sheet metal operation done on a press may be into two categories, cutting operation and forming operations. In cutting operations, the work piece is stressed beyond ultimate strength.

These operations are

- 1) Blanking
- 2) Punching
- 3) Notching
- 4) Deforming
- 5) Trimming
- 6) Shaving
- Slitting
- 8) Lancing
- Nibbling

Forming operations are

- 1) Bending
- 2) Drawing
- 3) Squeezing



# Applications:

- 1) To make Automobile parts, Gears, Brakes, Clutch plates etc.
- 2) Parts make by sheet metal working, car body parts.

# Moulding

- Mould is defined as a cavity in which molten metal is poured and allowed it to cool so as to product. Such cavity may be formed with the help of pattern. The process of making mould is known as moulding.
- A pattern of making mould is known as moulding.
- A pattern is having its shape and size approximately similar to that of the desired component. Moulding is the process of making a mould.
- Moulds are normally made from heat resisting materials like sand and clay.
- · Sand is widely used mould material for casting ferrous and non-ferrous materials.

#### Non-Conventional Machines

CNC Machine is the Machine tool which is operated and controlled by using dedicated computers is known as computerized numerical control machine. In CNC system, most of the hardware function modules of NC are replaced by a stored program in computer. Software stored in computer performs the functions of data decoding, control, buffering, feed rare control etc.CNC machine tools are widely used due to many new control features available on these machines.

# Specification of CNC

M/C Type: LT-2 LM500

M/C Number: 280

Year: 2016

Supply voltage: 380V/415V, 3PEN, 50Hz

Control volt: 24V.Dc Back up fuse: 63Amps. Rated current: 33/3/Amps

CVA Rating: 22Kva Size of wire: 10sqmm.



#### Features of CNC Machines

- 1) The part program can be Input to the controller unit through key board or the paper tape can be read by reader in the control unit.
- The part program once entered into the computer memory can be used again and again.
- 3) The input information can be reproduced with use of spatial sub programs developed for repetitive machining sequences.
- 4) The control system can provide the information such as number of components produced, cycle time of components, job setting time, time for repair and diagnosis etc.

# Advantages of CNC Machines

- Reduced lead time
- Elimination of operator error
- Lower labour cost
- High accuracy
- Elimination of jig and fixture
- Flexibility
- 7) Reduced inspection
- Less scrap

# Disadvantages of CNC Machine

- 1) Higher investment cost
- 2) Higher maintenance cost
- Costlier CNC personnel
- Planned support facility

# Application area of CNC Machine

- 1) When operations are very complex.
- The numbers of operation per component are large.
- Batch size is medium.
- Batches are often repeated.
- When design changes or Individual variation are required on parts.
- A large variety of components is produced.
- The components required high skilled operator.
- Components required sub satirical tooling.
- 9) Components are critical and require 100% Inspection, working &

## Wire-cut EDM

## Introduction of wire-cut EDM

In wire-cut EDM the electrode consists of thin wire. As the material removal is obtained through the continuously feed of wire in the work piece, the process is called as wire-cut EDM. This process is used for machining sheet metal dies, Extrusion dies and prototype part. It is relatively slow process (linear travel of the order of 100mm /hour) utilizing computer controlled machines.

## Principle of Wire-cut EDM

- It works on the principle of spark Erosion occurred due to electrical and thermal energy.
- As the cutting tool is in the form of thin wire of diameter 0.05 to 0.25mm the wire of Allowed to pass through a predrilled hole in the work piece.
- 3. The Electrode wire made of copper or brass.
- The wire is inserted in the drilled slot initially and moves part of work piece at the speed of 3m/min.

## Control Parameters of Wire-cut EDM

- Discharge current
- Duration of pulse
- · Frequency of pulse
- · Wire diameter
- · Wire tension
- Dielectric flow

## Advantages of EDM

- · Forming electrode of product shape is not required.
- Negligible wear of Electrode
- · Machined surface are smooth
- High accuracy of geometrical and dimensions
- · No tapering overcut
- No need of storage of tool
- · High utilization of machine
- Low operating skills



## Disadvantages of Wire-cut EDM

- The wire cut EDM machine is more expensive than other machines.
- High skill are required to handle the machine when programming facility is not available
- · Only conductors work piece can be machined
- · It has slow material removal rate
- Less flexible compared to other machines.

## Applications of WIRE-CUT EDM

- · Production of prototypes
- · Small series of spare parts, turbine blades, aerospace parts etc.
- Stamping dies, drawing and Extrusion tools, molding dies.
- · Sintering dies, blanking dies, spark erosion, electrodes.

## Conclusion of a very fruitful visit to IGTR

The visit was fruitful, and would help us in connecting the theoretical study in class with the practical applications of various tooling and machining processes used in industry. The visit also motivated us in many ways. We are excited to have more such industrial visits, field visits, internships, taking industrial projects, and take more of practical works including workshops on various concepts. Overall, we got a new viewpoint of approaching the same problem, and an experience we won't forget for their lifetime. We also have got some very exciting new ideas for the projects we are going to prepare in future based on various concepts, loopholes existing in the concepts, new and a fine-tuned approach for the same thing and the likes.

Prof. 9 N.Dhole

Visit In Charge

Prof. Md. Irfan

HoD

2 Visits Combine Report.

## MSS's

## COLLEGE OF ENGINEERING AND TECHNOLOGY, JALNA <u>DEPARTMENT OF MBA</u>

## INDUSTRIAL VISIT REPORT

Name of industries visited: Kalash Seeds Pvt. Ltd. & Kalika Steel Alloys

Pvt.Ltd. Jalna.MS.

Date: 17/12/2022

Total no. of students: 25

No. of faculty: 02

Faculty coordinator: Prof. S.N.Dhole, Prof. Md.Irfan.

## Introduction

The college has arranged Industrial visit for Management students to study in Kalash seeds Pvt.Ltd. Vegetable seed sowing, growing, and doing research & Kalika Steel Alloy Pvt. Ltd TMT Bar Manufacturing with advance Rolling mills & Leading Machinery. The visit was organized with the prior permission and guidance of HON. Principal Dr. S. K. Biradar and Head of Management Department, Prof. Md.Irfan.

Industrial visit is a vital part of curriculum. It bridges classroom learning and real working worlds. The visit provides knowledge about the organizational structures and modes of operation in different industries.

## OBJECTIVES OF INDUSTRIAL VISIT

- 1) To Know the Information about Vegetable seed sowing, growing
- 2) To understand the research & Marketing
- Knowing about TMT Bar Manufacturing with advance Rolling mills & Leading Machinery



## About Kalash Seeds Pvt. Ltd.Jalna M.S.

- Kalash Seeds Pvt Ltd is a leading seed company in India doing Research
   & Marketing in tropical vegetable
- Presently among top 5 Companies in India in vegetable seeds industry
- · Recently started focusing on SAARC countries
- Our sister concern Beej Sheetal is active in Research since the last 30 years
- There is steady growth of turnover as the research products are giving very good results in the market.
- In Indian Vegetable Seed market, Kalash has already achieved market leadership in chili, pumpkin, beetroot, onion, broccoli, muskmelon

## About Kalika Steel Alloy Pvt. Ltd.Jalna M.S.

Established in 2003, Kalika has grown to be known as one of the best brands with world-class infrastructure and a fully automated plant equipped with superior Primetal Technology (SIEMENS-VAI). Founded on the strong principles of integrity, transparency, and excellence, Kalika has consistently delivered the finest quality to its customers and created a positive, productive environment for employees with environment-friendly practices. With sheer dedication and a constant need for self-improvement, Kalika has always challenged the standards and invested in practices that lead to exemplary work.

The mechanical properties of bars are tested through — Section Weight: 'Weight per Meter' of the bars as per IS: 1786:2008 is checked by taking out sample after every thirty minutes. Standards weight is always maintained within BIS tolerance.

Load Test: Yield Load, Ultimate Tensile Load and Elongation are tested using UTM of 100 Ton capacity.

Bend Test: as per sizes specified in IS code, the bend test is carried out by bending the bars on mandrel.

Re-bend Test: Bars are bent at an angel of 1350C, kept in boiling water at I 000C for 30 minutes and then bent back at an of 1 57.50 C

After all these tests, lot-wise tagging, packing, storage, and dispatch of the material start.















## Conclusion of a very fruitful visit to Kalash Seeds Pvt. Ltd. & Kalika Steel Alloys Pvt. Ltd. Jalna.MS.

The visit was fruitful, and would help us in connecting the theoretical study in class with the practical applications of various tooling and machining processes used in industry. The visit also motivated us in many ways. We are excited to have more such industrial visits, field visits, internships, taking industrial projects, and take more of practical works including workshops on various concepts. Overall, we got a new viewpoint of approaching the same problem, and an experience we won't forget for their lifetime. We also have got some very exciting new ideas for the projects we are going to prepare in future based on various concepts, loopholes existing in the concepts, new and a fine-tuned approach for the same thing and the likes.

Prof. S.N.Dhole

Visit In Charge

Prof. Md.Irfan

HoD



## MSS's

## COLLEGE OF ENGINEERING AND TECHNOLOGY, JALNA <u>DEPARTMENT OF MECHANICAL ENGINEERING</u>

## INDUSTRIAL VISIT REPORT

Name of industries visited: Kalash Seeds Pvt. Ltd. & Kalika Steel Alloys

Pvt.Ltd. Jalna.MS.

Date: 17/12/2022

Total no. of students: 30

No. of faculty: 03

Faculty coordinator: Prof. G.A.Matre

## Introduction

The college has arranged Industrial visit for second year engineering students to study in Kalash seeds Pvt.Ltd. Vegetable seed sowing, growing, and doing research & Kalika Steel Alloy Pvt. Ltd TMT Bar Manufacturing with advance Rolling mills & Leading Machinery. The visit was organized with the prior permission and guidance of HON. Principal Dr. S. K. Biradar and Head of Mechanical Engineering Department, Prof. R. L. Karwande.

Industrial visit is a vital part of curriculum. It bridges classroom learning and real working worlds. The visit provides knowledge about the organizational structures and modes of operation in different industries.

## OBJECTIVES OF INDUSTRIAL VISIT

- 1) To Know the Information about Vegetable seed sowing, growing
- 2) To understand the research & Marketing
- Knowing about TMT Bar Manufacturing with advance Rolling mills & Leading Machinery

## About Kalash Seeds Pvt. Ltd.Jalna M.S.

- Kalash Seeds Pvt Ltd is a leading seed company in India doing Research & Marketing in tropical vegetable
- Presently among top 5 Companies in India in vegetable seeds industry
- · Recently started focusing on SAARC countries
- Our sister concern Beej Sheetal is active in Research since the last 30 years
- There is steady growth of turnover as the research products are giving very good results in the market.
- In Indian Vegetable Seed market, Kalash has already achieved market leadership in chili, pumpkin, beetroot, onion, broccoli, muskmelon

## About Kalika Steel Alloy Pvt. Ltd.Jalna M.S.

Established in 2003, Kalika has grown to be known as one of the best brands with world-class infrastructure and a fully automated plant equipped with superior Primetal Technology (SIEMENS-VAI). Founded on the strong principles of integrity, transparency, and excellence, Kalika has consistently delivered the finest quality to its customers and created a positive, productive environment for employees with environment-friendly practices. With sheer dedication and a constant need for self-improvement, Kalika has always challenged the standards and invested in practices that lead to exemplary work.

The mechanical properties of bars are tested through — Section Weight: 'Weight per Meter' of the bars as per IS: 1786:2008 is checked by taking out sample after every thirty minutes. Standards weight is always maintained within BIS tolerance.

Load Test: Yield Load, Ultimate Tensile Load and Elongation are tested using UTM of 100 Ton capacity.

Bend Test: as per sizes specified in IS code, the bend test is carried out by bending the bars on mandrel.

Re-bend Test: Bars are bent at an angel of 1350C, kept in boiling water at I OOOC for 30 minutes and then bent back at an of 1 57.50 C

After all these tests, lot-wise tagging, packing, storage, and dispatch of the material start.









## Conclusion of a very fruitful visit to Kalash Seeds Pvt. Ltd. & Kalika Steel Alloys Pvt. Ltd. Jalna. MS.

The visit was fruitful, and would help us in connecting the theoretical study in class with the practical applications of various tooling and machining processes used in industry. The visit also motivated us in many ways. We are excited to have more such industrial visits, field visits, internships, taking industrial projects, and take more of practical works including workshops on various concepts. Overall, we got a new viewpoint of approaching the same problem, and an experience we won't forget for their lifetime. We also have got some very exciting new ideas for the projects we are going to prepare in future based on various concepts, loopholes existing in the concepts, new and a fine-tuned approach for the same thing and the likes.

Prof. O.A.Matre

Visit In Charge

Prof.R.L.Karwande

HMED

PRHNCIPAL MSS's Cage of Engg. & Tecn. Jaina.



## Certificate of Training

This is to certify that Mrs. GANESH RAGHUNATH KHARAT. Student of Third year (6th SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's college of Engineering & Technology Nagewadi, Jalna, Aurangabad Has undergone internship from 17/02/2023 To 17/03/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life.

You're faithfully

GANESH KHARAT

Utility department head

Mr. Aniket Jadhav

# CERTIFICATE

## OF ACHIEVEMENT

This certificate is presented to

Vaibhay Vishnu Veer

for successfully completing a Course about

Certified No.

1363697064





www.mindluster.com



Signature







Sushil Kumar Gupta This certificate is presented to

for the completion of

Effective communication in the workplace | The Open University

(URL-C10D3E095F80)

As indicated by this learner

Completion date: 21 Mar 2023 (GMT)



Scanned with OKEN Scanner

Date: 31/01/2023

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.Narendra Uttam Dabhade had successfully completed in-plant training from 01/01/2023 to 31/01/2023. During this period he has

During the training he was sincere and enthusiast

worked in Bhagyalaxmi Rolling Mill Pvt Ltd.

With good wishes For further Development

Bhagyakaxmi Rolling Mill Pvt.Ltd (Authorized Signatory)

Bhagyalaxmi Plot No. G-7, G-8, G-9, G-10/1, G-10/2, Addi. MIDC Phase-II & Gut No. 30, 35, Village Daregaon, Rolling Mill Pvt. Ltd.

Works Address:

Regd. Off.

Flat No. 602, Building No. 5A/B, Versova Heights Co-operativs Housing Society Limited, New Mhada Colony, Near Lokhandwala Circle, Veera Desai Road, Behind Indralok, Andheri (W),





2024, 19:59



## TRANING APPOINTMENT LETTER

Name: -Ganesh Patilba Kale

Date: - 17.02.2023

Subject: - Appointment as Trainee in our Company

Dear Ganesh,

required to undertaken all duties and activities as assigned to you. Bed for a Period of four Weeks. During this training probation period you are Operation trainee in our company with the Mechanical Maintenance Cooling We are glad to inform you that you have been selected for the position of a Mill

We assure you of our support for your Training development and growth.

HR Department,

Kalika Steel Alloys Pvt. Ltd. Jalna



## MALIKA STEEL ALLOYS PVT. LTD.

19:50

Reg. Office: Office No.412, Shreekart Chambers Premises, Sion Trombay Road, Chembur, Mumbai - 400071 Workst C-7-11, Additional MIDC, Phase 1, Jaina - 431 213, Maharashtra, Telt: +51- 2482-258151/52/53 Emailt: sales@katikasteels.com, kalikajalna@gmail.com | Websites www.ksiikas CIN No.: U27000MH2002PTC137689

Scanned with OKEN Scanner

Heter India Private Limited | Plot no 138 MIDC thoses | 411 026 Puse

Contact:

Mahesh Tyagi

Phone: +91 96899 38701 Fax:+91 96899 38701

E-mail : mahesh.tyagl@heller.biz

Date: 01 September 2023

## CERTIFICATE OF TRAINING

Aurangabad, has undergone Industrial Training from 02/08/2023 To 31/08/2023 in our company & had Engineering) at Matsyodari Shikshan Sanstha's college of Engineering & Technology Nagewadi, Jalna, This is to certify that Mr. Yogesh Bhimrao Gaikwad, student of Third year (6th Sem), B-Tech (Mechanical completed it successfully.

During this training period we found him sincere, obedient learner and hardworking.

We wish him success in his future prospects

Your's faithfully

For Heller India Private Limited

**Authorised Signatory** 



Heller India Private Limited | Location: Plot no 138, Sector T MIDC Bhosan PCNIDA Bhosan Pune 411 006 | Place of negatration Pune Heller India Private Limited | Location: Plot no 138, Sector T MIDC Bhosan PCNIDA (boost: Holgerida; Internet wave.heller.bit

## INNOVATIVE TOOLING SOLUTION

Gut No.34/36, Plot No. 21/4, Shri-Sai Industrial Estate, Behind Savera Auto K88,
MIDC Waluj, Aurangabad. Maharashtra-431136

Design Of- Jigs & Fixture, Relation Gauge, Press Tools, S.P.M & Drafting Works.
Email: aniltooldesign@rediffmail.com, Mob. No:-9764977901

DATE: 03/04/2023

## Certificate of Training

This is to certify that Mrs. MUSTAK MUSAKHAN PATHAN. Student of Third year (6<sup>th</sup> SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's college of Engineering & Technology Nagewadi, Jalna, Aurangabad Has undergone internship from 01/03/2023 To 03/04/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life.



रसायन एवं पट्टोरसायन विभाग टेक्निकल सपोर्ट (सी एस टी सिपेट : सेन्टर फॉर स्किलिंग एण्ड 图

रसायन एवं उर्वरक मंत्रालय, भारत सरकार प्लॉट नं. जे-3/2, एम.आई.डी.सी. और्च धिकलधाना, औरगाबाद - 431006 明日: 0240-2478302-334 औद्योगिक क्षेत्र,

बेबसाईट : www.cipet.gov.in मुख्यालय : सिपेट, गिण्डी, चेन्नै-600 032 इमेल : aurangabad@cipet.gov.in / cipetabad@gmail.com फंक्स : 0240-2478333



## CIPET: CENTRE FOR SKILLING AND TECHNICAL SUPPORT (CSTS)

Scanned with OKEN Scanner

Ministry of Chemicals & Fertilizers, Govt. of India Department of Chemicals & Petrochemicals Plot No. J-3/2, MIDC Industrial Area

Chikalthana, Aurangabad - 431006

Tel.: 0240-2478302-334 Fax: 0240 - 2478333

E-mail: aurangabad@clpet.gov.in / cipetabad@gmail.com website: www.cipet.gov.in

Head Office : CIPET, Guindy, Chennal-600 032

Certificate No. AUR/2021/785

## CERTIFICATE

Centre: - Aurangabad

This is to certify that

Shril Smt. Ma ... Pradip Vishnu Indalkar

Vishnu Baburao Indalkar

Slo / Dlo /2010 ...

Has successfully completed the Implant Training Programme of 45hrs duration titled

"Basic Solid Modeling Using PRO-E (CREO)"

Organised at CIPET: CSTS, AURANGABAD from ...09/08/2021... to 12/09/2021

Date: 23/11/2021

Course Coordinator

Director & Head



23, 2024, 19:59



## INTERNSHIP APPOINTMENT LETTER

## VITTHAL JIJABHAU SHINDE

Durga Nagar,

Chandanzira Jalna

Maharashtra -431203

Date: - 15.02.2023

Subject: - Appointment as Trainee in our Company

Dear Vitthal,

We are glad to inform you that you have been selected for the position of a Mechanical Engineer in our company with the Furnace Maintenance for a Period of from 17.02.2023 to 17.03.2023. During this training probation period you are required to undertaken all duties and activities as assigned to you.

We assure you of our support for your Internship Training development and

growth.

HR Department

Kalika Steel Alloys Pvt. Ltd. Jalna

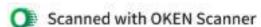
KALIKA STEEL ALLOYS PVT. LTD.
MFG: MS BILLETS, TMT BARS & ROUND BARS

Works: C-7-11, Additional MIDC, Phase 1, Jalna - 431 213, Maharashtra. Tel: +91- 2482-258151/52/53

Works: C-7-11, Additional MIDC, Phase 1, Jalna - 431 213, Maharashtra. Tel: +91- 2482-258151/52/53

Works: C-7-11, Additional MIDC, Phase 1, Jalna - 431 213, Maharashtra. Tel: +91- 2482-258151/52/53

Works: C-7-11, Additional MIDC, Phase 1, Jalna - 431 213, Maharashtra. Tel: +91- 2482-258151/52/53





Date: 2023-06-16

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Shrimant Hanumant Nikam (Intern ID- 111535) has successfully completed the Internship in Sales & Marketing presented by PHN Technology Pvt Ltd, Pune.

This program was designed to provide valuable hands-on experience and practical knowledge in Sales & Marketing. Through active participation and dedication, he/she has demonstrated exceptional skills, commitment, and a strong work ethic.

During the internship, he/she actively contributed to Sales & Marketing and exhibited professionalism, adaptability, and a willingness to learn. Their enthusiasm and positive attitude have made a significant impact on the overall success of the program.

We extend our sincere appreciation to Shrimant Hanumant Nikam for their valuable contributions and dedication throughout the duration of the virtual internship program.

Internship tenure was from 06/04/2023 to 06/06/2023.

PNarayankar

Pradip Narayankar Director PHN Technology Pvt. Ltd.



Document ID- PHN\_20230616450







At-In Front of Sahyadri Hotel Badnapur Dist. Jalna E-mail-rameshwarmadan@gmail.com Mob.No-9665923669

DATE:-

## IN-PLANT TRAINING CERIFICATE

This is to certify that Mr. CHAVAN SUNILKUMAR MURLIDHAR Studentof Third year (6th SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's college of Engineering & Technology Nagewadi, Jalna,

Has undergone internship from 17/02/2023 to 17/03/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life

You're faithfully

SHIV AUTO PARTS GARAGE



At-In Front of Sahyadri Hotel Badnapur Dist. Jalna E-mail-rameshwarmadan@gmail.com Mob.No-9665923669

DATE:-

## IN-PLANT TRAINING CERIFICATE

This is to certify that Mr. KALLUPURAKAL JOEL FRANCIS Student of Third year (6th SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's college of Engineering & Technology Nagewadi, Jalna,

Has undergone internship from 17/02/2023 to 17/03/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life

You're faithfully

SHIV AUTO PARTS GARAGE

भाव अटा गीज " अटा ।

At-In Front of Sahyadri Hotel Badnapur Dist. Jalna E-mail-rameshwarmadan@gmail.com Mob.No-9665923669

DATE:-

## IN-PLANT TRAINING CERIFICATE

This is to certify that Mr. KALE LAKSHMAN RUSHINDRA Studentof Third year (6th SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's college of Engineering & Technology Nagewadi, Jalna,

Has undergone internship from 17/02/2023 to 17/03/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life

You're faithfully

SHIV AUTO PARTS GARAGE

PANALL SINGE STATE OF THE STATE

At-In Front of Sahyadri Hotel Badnapur Dist. Jalna E-mail-rameshwarmadan@gmail.com Mob.No-9665923669

DATE:-

## IN-PLANT TRAINING CERIFICATE

This is to certify that Mr. RAVIRAJ MADAN NIVRUTI Studentof
Third year (6th SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's
college of Engineering & Technology Nagewadi, Jalna,

Has undergone internship from 17/02/2023 to 17/03/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life

You're faithfully

SHIV AUTO PARTS GARAGE

0

गंपायटर

At-In Front of Sahyadri Hotel Badnapur Dist. Jalna E-mail-rameshwarmadan@gmail.com Mob.No-9665923669

DATE:-

## IN-PLANT TRAINING CERIFICATE

This is to certify that Mr. JAKIR RAMJAN NAVRANGBADE Student of Third year (6th SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's college of Engineering & Technology Nagewadi, Jalna,

Has undergone internship from 17/02/2023 to 17/03/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life

You're faithfully

SHIV AUTO PARTS GARAGE

Smedy andres

At-In Front of Sahyadri Hotel Badnapur Dist. Jalna E-mail-rameshwarmadan@gmail.com Mob.No-9665923669

DATE:-

## IN-PLANT TRAINING CERIFICATE

This is to certify that Mr. SAYYED REHAN Student of Third year (6th SEM), Mechanical Engineering at Matsyodari Shikshan sanstha's college of Engineering & Technology Nagewadi, Jalna,

Has undergone internship from 17/02/2023 to 17/03/2023 is Successfully Completed. He has been very sincere, keep to learn and hardworking during this period.

We wish his every success in life

You're faithfully

SHIV AUTO PARTS GARAGE

**।शब** अटा गरंज : अटा पो.

**ज्यान**स्य



HR/2023/97789545

25.04.2023

## CERTIFICATE

This is to certify that Mr. Devendra Anurodh Jangid, student of Matsyodari RANGOLI Technology 17.03.2023 ENTERPRISES Jalna, has successfully completed Shikshan Sastha's ICHALKARANJI, College from of. his Internship Engineering 17.02.2023 and at ö

Shop" During the above period, he was placed in our "Turning And Milling

during his short stint in RANGOLI ENTERPRISES, ICHALKARANJI. his performance has been assessed as Very Good. The candidate was found to be enthusiastic and observant

PRANAV SUHAS PANDHARPATTE

MANAGER HR

Manufacturing Of Automobile Companant And CNC/VMC Unit

Manufacturing Of Automobile Companant And CNC/VMC Unit

Address: 18/607, Shahunagar, ICHALKARANI-416115, Ta Hatkanangale, Dist. Kolhapur, Maharashtra



HR/2023/97789545

25.04.2023

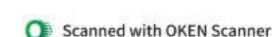
## CERTIFICATE

This is to certify that Mr. Akash Deepak Dhawle, student of Matsyodari Shikshan Sastha's College of Engineering and Technology Jalna, has successfully completed his Internship at RANGOLI ENTERPRISES ICHALKARANJI, from 17.02.2023 17.03.2023.

During the above period, he was placed in our "Turning And Milling Shop" .

The candidate was found to be enthusiastic and observant during his short stint in RANGOLI ENTERPRISES, ICHALKARANJI. his performance has been assessed as Very Good.

MANAGER HR



## White Mango Agro F. P.LTD

## AT VAIJAPUR DIST AURANGABAD

## INTERNSHIP APPOINTMENT LETTER

Manoj Ambarsing Kawal Aurangabad Maharashtra -431001

Date: 17.02.2023

Subject: Appointment as Trainee in cur Company

Dear Manoj kawal

We are glad to inform you that you have been selected for the position of a Mechanical Engineer in our company with the Maintenance for a Period of from 17.02.2023 to 17.03.2023. During this training probation period you are required to undertaken all duties and activities as assigned to you.

We assure you of our support for your Internship Training development and growth.





## SUSHIL ENGINEERING WORKS

Address: Plot No. B-11 Addi. MIDC Area, JALNA 4312023 Cell.7822080785/983559368 Email: office.sushileng@gmail.com

Date:

## CERTIFICATE

## TO WHOM IT MAY CONCERN

This is to certify that, Mr. KAKDE ISHWAR NARAYAN student of MSS'S COLLEGE OF ENGG.&TECHNOLOGY, JALNA has successfully completed industrial training from 17<sup>th</sup> feb 2023to 17<sup>th</sup> march 2023 in our workshop.

During the training he was sincere and enthusiast.

With good wishes For further development







## N D ENTERPRISES

(GST IN :- 27AQEPC2545E1ZA.).
Email Id:- ndenterprises640@gmail.com
Office:-Gut No. 68 Plot No. 23 Wadgaon (KO) MIDC Waluj

Tq.Dist.Aurangabad. Mobile No.8421292112

## INTERNSHIP APPOINTMENT LETTER

## AJAY TANAJI BHOSALE

Bajaj Nagar,

Waluj Midc Aurangabad

Maharashtra - 431136

Date: - 12.02.2023

Subject : - Appontment as Trainee in our company

Dear Ajay,

We are glad to inform you that you have been selected for the position of a Mechanical Engineer in our company with the CNC Maintenance for a Period of from 17.02.2023 to 17.03.2023. During this training probation period you are required to undertaken all duties and activities as assigned to you.

We assure you of our support for your Internship Training development and growth.

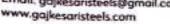
Authorized Singature

N D ENTERPRISES

## GAJKESARI STEELS & ALLOYS PVT. LTD.

Factory Add.: Plot No. F-18/19, Phase 2, Addl. MIDC Jaina - 431 203. Cell No.: 73910 44410

Ernail: gajkesaristeels@gmail.com













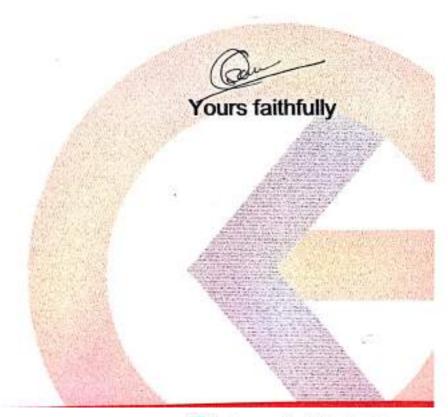
MS Billets, MS TMT Bars & Round Bars Size Available: 6MM, 10MM, 12MM, 16MM, 20MM, 25MM, 37MM

## CERTIFICATE

This is to certify that Mr. Sushil Kumar Gupta, student of Third year (Sixth semester) with Roll Number:2254 Matsyodari Shikshan Sanstha's College of Engineering and Technology Nagewadi, Jalna successfully completed his internship at Gajkesari Steel from 17/02/2023 to 17/03/2023.

We wish his every success in life.





Cin No.: UZ7100MH2004PTC144222

## GAJKESARI STEELS & ALLOYS PVT. LTD.

Factory Add: Plot No. F-18/19, Phase 2, Addl. MIDC 431 203, Cell No.: 73910 44410 





MS Billets, MS TMT Bars & Round Bars

## CERTIFICATE

Sanstha's College of Engineering and Technology Nagewadi, Jalna Third year (Sixth semester) with Roll Number:2357 Matsyodari Shikshan 7/02/2023 to 17/03/2023. successfully completed his internship This is to certify that Mr. Dhananjay Ravindra Wayal, at Gajkesari Steel student of from

We wish his every success in life.



