



**Dr. Vithalrao Vikhe Patil College of Engineering,
Vilad Ghat, Ahmednagar**



Department of Mechanical Engineering

Industrial Visit Report

At Unique Metal Treaters

22/11/2023

A batch of Second Year Third Semester DVVPCOE Ahmednagar. Department of Mechanical Engineering along with the one faculty.

We Visit the Unique Metal Treaters at Ahmednagar on 22 November 2023 At 3.00 PM.

In visit , we have seen the improve the hardness of the material, using the heat treatment process, & Teampearing Equipment, Material handling Equipment.

Aim of visit: -Observe the heat treatment equipment, Teampearing equipment & material handing equipment.

Details of visit :

Name of company: Unique Metal Treaters Pvt Ltd

Add : MIDC G51, MIDC, Ahmednagr, Nagapur, Maharashtra 414111

Name of faculty: Prof.D.K. Nannaware

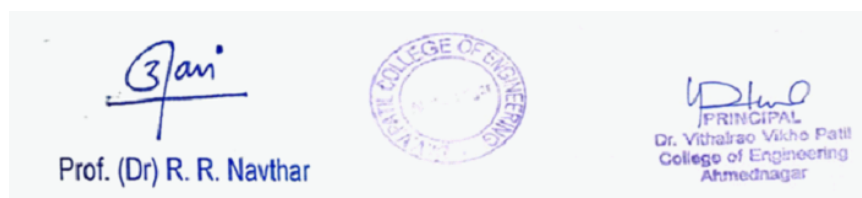
Discription of the visit :

Process:

However, I can provide you with a general overview of the typical working process of metal treating companies. Metal treating involves various processes aimed at improving the properties of metal components. These processes can include heat treatment, surface treatment, and other specialized treatments based on the specific requirements of the metal.

1] Receiving and Inspection:

The process begins with the receipt of metal components. These components are inspected for any defects or inconsistencies.



2] Pre-treatment Cleaning:

Metal components often undergo a cleaning process to remove contaminants such as oil, grease, or scale before the actual treatment.

3] Heat Treatment:

Heat treatment is a common process that involves heating the metal to a specific temperature and then cooling it to alter its properties. This can enhance hardness, toughness, and other mechanical properties.

4] Surface Treatment:

Surface treatments like plating, coating, or case hardening may be applied to improve corrosion resistance, wear resistance, or aesthetic appeal.

5] Quality Control:

Quality checks are performed at various stages of the treatment process to ensure that the metal components meet the required specifications.

6] Post-Treatment Processing:

After the treatment process, some components may undergo additional processes such as tempering, stress relieving, or other treatments to achieve the desired properties.

7] Final Inspection and Packaging:

Once the treatment processes are completed, a final inspection is conducted to ensure that the components meet the specified standards. After approval, the treated components are packaged for delivery.

It's important to note that the specific processes and technologies used can vary between different metal treating facilities. To get detailed and accurate information about Unique Metal Treating in Ahmednagar, I recommend reaching out to the company directly or checking their official website for the latest information on their working processes, services, and capabilities.

Part: In general, metal treating companies may work with various metal components, including:

I. Machine Parts: Components used in machinery that may require heat treatment, surface treatment, or other specialized processes.



II. Automotive Parts: Components used in the automotive industry, such as gears, shafts, and springs, which may undergo treatments for improved strength or durability.

III. Aerospace Components: Parts used in the aerospace industry, where specific treatments are applied for enhanced performance and resistance to harsh conditions.

IV. Tooling and Dies: Components used in tooling and die manufacturing that may undergo heat treatment or other processes for increased hardness and wear resistance.

V. Fasteners: Bolts, screws, and other fasteners may undergo treatments to improve their mechanical properties.

VI. Bearings: Components used in bearings and other rotating machinery that may require treatments for improved wear resistance.

VII. Metallic Structures: Various metal structures may undergo treatments for corrosion resistance or other specific properties.

Application: In general, metal treating companies offer services that are crucial for various industries and applications. Here are some common applications of metal treating services:

I. Automotive Industry:

Heat treatment for engine components, gears, and other parts to improve strength and durability.

II. Aerospace Industry:

Surface treatment and heat treatment for aircraft components to enhance resistance to extreme conditions.

III. Tool and Die Manufacturing:

Heat treatment and surface treatment for tooling and dies to increase hardness and wear resistance.

IV. Manufacturing and Machining:



Treatment of various metal components used in manufacturing processes to improve their properties.

V. ***Oil and Gas Industry:***

Heat treatment and corrosion resistance treatments for components used in the exploration and production of oil and gas.

VI. ***Medical Devices:***

Surface treatments for medical implants and devices to ensure biocompatibility and corrosion resistance.

VII. ***Electronic Components:***

Surface treatments for electronic components to enhance conductivity and corrosion resistance.

VIII. ***Renewable Energy:***

Treatment of components used in renewable energy systems, such as wind turbines and solar panels.

IX. ***General Engineering:***

Various metal components used in diverse engineering applications may undergo treatments for specific properties.

Hardness: "Unique Metal Treaters." The hardness of metal treated by a company can depend on various factors, including the specific heat treatment processes, surface treatments, and the type of metals involved.

For accurate and up-to-date information on the hardness capabilities of Unique Metal Treaters, I recommend reaching out to the company directly. You can check their official website, contact them through email or phone, or refer to any provided documentation for details on the specific hardness levels they can achieve and the treatments they offer.

Typically, metal treating companies offer a range of services that may include heat treatment, surface hardening, case hardening, and other processes to modify the mechanical properties of metals. The desired hardness will often be specified by the client based on the intended application of the metal components.

If you have specific requirements or inquiries regarding the hardness of metals treated by Unique Metal Treaters, contacting the company directly will provide you with the most accurate and relevant information.





R.R. Navthar

Prof. (Dr) R. R. Navthar



V. Patil
PRINCIPAL
Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar

Notice of visit :

Ref.No. CEA/Mech/2023/ 3086

Date: 20/11/2023

To,
M/s. Unique Metal Treaters Pvt. Ltd
M.I.D.C.
Ahmednagar.

Sub:-Industrial visit of S.E. Mechanical Students

Dear Sir,

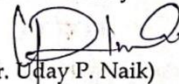
Dr. Vithalrao Vikhe Patil College of Engineering was established in 1983 and is approved by AICTE New Delhi, Govt. of Maharashtra and affiliated to University of Pune. The college provides Engineering under graduation course in Civil, Mechanical, Electrical, Electronics & Telecommunication, Information Technology, Computer science and design with post graduation courses in Civil & Mechanical Engineering. As per the curriculum of Savitribai Phule Pune University Pune. It is necessary to visit industry for up-gradation of practical knowledge of students. Subject of visit will be "Engineering Materials and Metallurgy.

It is now requested that permission to be granted for 40 students of **SE Mechanical Engineering** accompanied with 01 staff members. The visit may be scheduled preferably on **22nd Nov.2023 at 03.00 Pm** It is assured that there will be no disturbance in your work schedule due to visit of our students.

Your cooperation in this matter will be highly appreciated.

Thank you.

Your sincerely



(Dr. Uday P. Naik)
Principal

o/e Mech.
Engg
S.E.





Prof. (Dr) R. R. Navthar




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Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar

College later :

 
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Dr. Vithalrao Vikhe Patil Foundation's
Dr. Vithalrao Vikhe Patil
College of Engineering Ahmednagar
DTE, College Code: 619/544/2


Department of Mechanical Engineering

Date-20/11/2023


Notice- SE Mechanical Visit

All the students of SE Mechanical are hereby informed that, the compulsory visit for Engineering Materials and Metallurgy title "Visit to Material Hardening plant" has been organized on 22th November, 2023 @ 3 pm
It is instructed that all the students should come in uniform, shoes, identity card & notebook.

Address: Unique Metal Treaters,
G-51, MIDC,
Ahmednagar


HoD
Dr. R.R. Navthar


Prof. (Dr) R. R. Navthar




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College of Engineering
Ahmednagar

Attendance :

| Ind. visit Attendance | | Page No. |
|-----------------------|-----------------------------------|----------------------|
| Unique metal treaters | | Date 22 11 2023 |
| Roll No. | Name | |
| 1 | Achav Vaibhav Rajendra | V.R. |
| 35 | Phapale Apurv Vikas | Phapale |
| 16 | RUPAM JADHAV | Rupam |
| 15 | Abhishek Ganesh | Abhishek |
| 31 | Yash Mawya | Yash |
| 11 | Chavare Nikhil | NA |
| 37 | Shauikh Main | Shauikh |
| 22 | Kolekar Ajit | Ajit |
| 41 | Wagh Saurabh | Wagh |
| 51 | Wolkale Shubham | Shubham |
| 23 | Yuvraj Katkar | Yuvraj |
| 08 | Belhakar Rohit | Belhakar |
| 56 | AKASH Chhapare | AKASH |
| 33 | Shinde Gaurav | Shinde |
| 64 | Shinde Marshal | shinde H.B. |
| 68 | Lokhande Abhijit | lokhande A.S. |
| 59 | Kote Bhushan | Kote |
| 12 | Kale Dhiraj D | Kale D.D. |
| 58 | Ghorpade Tejas | Ghorpade |
| 63 | Sayyad Adil | Sayyad |
| 03 | Andhale Nikhil Arjun | Andhale |
| 32 | Nannaware Vishal Gachhinueth | Nannaware |
| 29 | Mhetre Vishal Sadashiv | Mhetre |
| 27 | Memane Sandesh | Memane |
| 07 | Barbade Rohit kailas | Barbade |
| 65 | Sonawane Prathamesh Sangram | Sonawane |
| 66 | Patiljari Niranjan Yashwant Zirpe | Patiljari |
| 12 | Pokale Shrikrushna Anant | Pokale |
| 14 | Kshirsagar Rushikesh Devidas | Rushikesh |
| 12 | Ashwini Shivnath Dhakane | Ashwini |
| 18 | Gayatri Suresh kale | Gayatri |
| 61 | Satshi Balasateb Padway | Satshi |

3/ani

Prof. (Dr) R. R. Navthar



Dr. Vithal
PRINCIPAL
Dr. Vithalrao Vitho Patil
College of Engineering
Ahmednagar