



**MECHANICAL ENGINEERING DEPARTMENT**  
**A Report on one day Industrial Visit**  
**to**  
**“Vrindavan Industries, Sachin, Surat”**

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### **EXECUTIVE SUMMARY**

Mechanical Engineering Department of S.N.P.I.T. & R.C., Umrakh arranged an industrial visit to Vrindavan Industries, Sachin, Surat on 2<sup>nd</sup> March 2024 with 25 students of 6<sup>th</sup> sem Mechanical Engineering. The purpose of the visit was to enhance industrial exposure of the students, get practical knowledge of manufacturing procedures. Our faculty coordinator Mr. Milan R. Patel took part in prestigious industrial visit.

### **AIM OF INDUSTRIAL VISIT**

Industrial visit is considered as one of the tactical methods of teaching. The main reason behind this- it lets student to know things practically through interaction, working methods and employment practices. Moreover, it gives exposure from academic point of view. Main aim of industrial visit is to provide an exposure to students about practical working environment. They also provide students a good opportunity to gain full awareness about industrial practices. Through industrial visit students get awareness about new technologies. Technology development is a main factor, about which a students should have a good knowledge. Visiting different companies actually help students to build a good relationship with those companies. We know building relationship with companies always will always help to gain a good job in future. After visiting an industry students can gain a combined knowledge about both theory and practical. Students will be more concerned about earning a job after having an industrial visit.

### **ABOUT INDUSTRY**

Vrindavan Industries is a sub division of Alidhra Wavetech, Udhyog Nagar, Udhna, Surat. Weavetech's Textile Machinery Division is a part of the larger Weavetech Group of Industries covering a wide area including Textiles, Engineering, Pharmaceuticals,

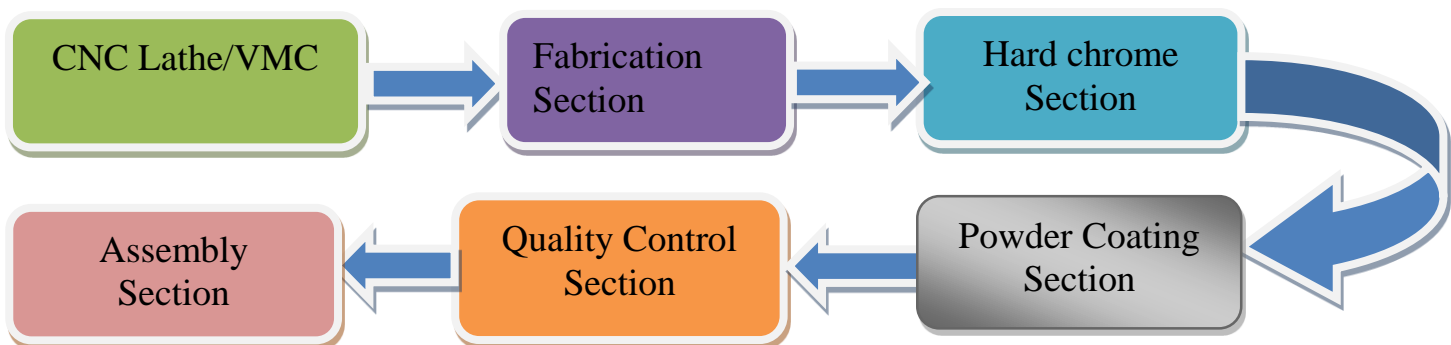


Cement, Real-Estate as well as Agriculture. The core competencies of the group lie in developing & supporting self-sustaining management teams to take control of the growth of these different segments.

Since 1980s, Weavetech has been at the forefront of indigenous technology development in the field of Twisting & Weaving machineries leading R&D efforts specific to answer to the growing needs of a developing market like India. Leveraging on core competencies in research and development, Weavetech offers a portfolio of products & solutions that have proved to be highly cost-effective & offers the best value to the Textile Industry. Under the guidance of mentor, Mr. Denish Mehta, Vrindivan Industries is able to offer their valuable clients, a range that is appreciated for its quality, durability and longer service life.

## ACTIVITIES AND OUTCOMES OF THE VISIT

### Flow of the Visit



As scheduled, the visit team reached Vrindivan Industries at 9:30 am. Warm welcome was received from company representatives and they gave us the brief idea about their work culture. Then Technology description by Engineering team was imparted to us.

**Students has visited following departments and understand the processes which undertaken for the manufacturing of various Textile Machinery Parts:**

- **CNC Lathe/VMC Section**
- **Fabrication Section**



- **Hard Chrome Section**
- **Powder Coating Section**
- **Quality Control Section**
- **Assembly Section**

**Below is the Technology learning from the industrial visit at Vrindivan Industries which will impart roots of knowledge in our students of Bachelor of Engineering.**

When the visit team reached at the location they found that there are various divisions of the manufacturing. All division makes the products based on textile products. At the first, our visit starts by introducing some of the basic process of sheet metal manufacturing, CNC machines and introduction on the staff of the CNC section. They told us that they are making the products for Alidhra Wavetech like textile components.

Around 10:00 A.M. we started our visit in quality control section. In this section, there was a various measurement instruments which used to measure the dimensions of various textile products. They described us that they were measuring the outer diameter as well as roundness of work piece by using the various instruments such a like dial gauge, vernier caliper, hardness tester etc.

After the introduction of quality section we gathered at the sheet metal manufacturing Section where different types of sheet metal machines were available such a like laser cutting machine, Punching machine, Shear Cutting Machine, Bending machine etc. All the machine are used to perform operations on sheet metal which used in textile machinery.

After the sheet metal section we gathered at the CNC/VMC Section where different types of CNC/VMC machines were available. First they described us the Vertical milling machine. They used machines like CNC turning center, Shaper, Shear cutting m/c, Slotting m/c, Band grinding for better accuracy and productivity. They described us all the machine operations and how they are used for manufacturing.

After the CNC/VMC Section we moved towards the fabrication Section where different types of metal joining machines were available. First they describe us the basic arc welding



machine. They used machines like TIG, MIG, Spot welding machine, Arc cutting machine to join and cut the various components of textile machinery.

After the fabrication Section we gathered at the assembly Section where different types of assembly machines were available. First they describe us the different types of components gather here to be assembled then they have perform one assembly operation which used for the yarn winding purpose in textile industry.

After the assembly Section we moved to the powder coating Section where different types of metal coating machines were available. They perform the coating operation of the various sheet metal which used on machine frame of the textile machinery.

After the powder coating section we moved to the foundry Section where different processes of the casting were conducted to produce various components of textile machinery. First they described us about the sand conditioning plant which produce the sand used for casting mold. There are various molding machines available such a like jolting and squeezing machine, sand slinger machine, shot blasting machine. They used induction furnace to melt the raw material of casting. Around 1:00 P.M. we almost completed our visit with satisfactory knowledge.

## **APPRECIATION**

The students got the opportunity to learn about different products and process which undergoes the subject Computer Aided Manufacturing. In addition, Machine learning was given by their officials at every corner of their plant. We S.N.P.I.T. & R.C. Mechanical Engineering department team are really thankful to the Vrindivan Industries, Surat and their team.

**Report prepared by,**

Prof. Milan R. Patel

(Mechanical Eng. Dept.)

**PARTICIPANT DETAILS: ANNEXURE – I**

**VISIT SCHEDULE: ANNEXURE II**

**VISIT PHOTOGRAPHS: ANNEXURE III**





## PARTICIPANT DETAILS: ANNEXURE – I

SNPIT&RC, UMRAKH			
MECHANICAL ENGINEERING DEPARTMENT			
STUDENT LIST SEM 6 FOR ATTENDANCE DURING INDUSTRIAL VISIT AT			
VRINDAVAN INDUSTRIES LIMITED, SACHIN, SURAT Date: 02-03-2024			
Sr. NO.	PEN	Name	Signature
1	140490119094	PATEL ROHITKUMAR	
2	150493119008	KOSARE JAY JAYDEV	
3	150490119035	KHANIYA ANAND	
4	170493119007	CHAUDHARI HARDIKKUMAR UMEDBHAI	
5	170494119001	VALVI SUSHILBHAI UDESINGBHAI	
6	190493119053	PATEL SHIVANGKUMAR BIPINBHAI	
7	190490119005	CHAUDHARI AMITKUMAR BABUBHAI	
8	200490119526	KHAIRNAR HRITIK SAHEBRAY	
9	200490119042	YADAV SUJIT UMESHPRASAD	
10	210490119526	GARASIYA HIRENKUMAR KAMLESHBHAI	
11	210490119531	PARMAR DHHRUVKUMAR JASHVANTBHAI	
12	210490119532	CHAUDHARI VISHALBHAI NILESHBHAI	
13	210490119539	RATHOD ASHISHBHAI RAMESHBHAI	
14	210490119547	CHAUDHARI TUSHARKUMAR AJITBHAI	
15	200490119037	KUSHWAHA SANJAY BETALSINH	G.B. Kushwaha
16	210490119003	VASAVA RAJKUMAR AMARSINGBHAI	R.A. Vasava
17	210490119004	CHAUDHARI JENILKUMAR DIPAKBHAI	J.D. Chaudhary
18	210490119005	DESHMUKH RASIKBHAI KARSANBHAI	
19	210490119006	PATEL JAYDIPBHAI PRAVINBHAI	
20	210490119007	GAMIT AKSHAYBHAI ARVINDBHAI	
21	210490119008	GAMIT GAURAVKUMAR BABUBHAI	G. Gamit
22	210490119011	RAJPUT ABHISHEK RAJKUMARSINH	Abhishek
23	210490119014	CHAUDHARI KAUSHAL RAJUBHAI	K. Chaudhary
24	210490119015	GANVIT VINESHBHAI SHRAVANBHAI	
25	210490119016	CHAUDHARI VIPULKUMAR RAVJIBHAI	V. Chaudhary
26	210490119017	GAMIT SHREYASKUMAR BABUBHAI	G. Gamit
27	210490119020	SURVE VAIKUNTH PRAKASH	
28	210490119023	TALAVIYA JAY LAXMANBHAI	J.L. Talaviya
29	210490119024	CHAUDHARI DARSHANAKUMARI ASHVINBHAI	D. Chaudhary
30	210490119026	GAMIT ASHISHBHAI VARISHBHAI	
31	210490119027	PATEL KARAN KANTUBHAI	K.K. Patel
32	210490119030	PATEL ANSHKUMAR BHAVESHBHAI	
33	210490119034	VASAVA ROSHANBHAI BHALUSING	V. Vasava
34	210490119035	CHAUDHARI JAYDIPKUMAR SURESHBHAI	J. Chaudhary
35	210490119038	PATEL VAIBHAVKUMAR SURESHBHAI	P. Patel



# SITARAMBHAI NARANJI PATEL

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36	210490119039	HADAL ASHOKBHAI DHARMABHAI	Akshay patel R. A
37	210490119043	PATEL ROHANBHAI ALPESHBHAI	
38	220493119001	AHIRRAO GAURAV KANTILAL	
39	220493119003	BATHWAR NEHA BECHARBHAI	Neha.
40	220493119004	CHAUDHARI BRISEKUMAR MADHUBHAI	
41	220493119005	CHAUDHARI KARANKUMAR BHIKHUBHAI	
42	220493119006	Chaudhari kenil Nileshbhai	Chaudhary
43	220493119007	CHAUDHARI NIRAVKUMAR FATESINHBHAI	
44	220493119008	CHAUDHARI RUTVIKKUMAR SUNILBHAI	
45	220493119009	CHAUDHARI SAGARKUMAR AMRATBHAI	
46	220493119010	CHAUDHARI SAPNILKUMAR VIJAYBHAI	
47	220493119011	CHAUDHARI SEVANGKUMAR ARVINDBHAI	
48	220493119012	CHAUDHARI YASH GAMBHIRBHAI	
49	220493119013	CHAUDHARY NISHANTKUMAR SUBODH	Yash
50	220493119014	CHAUHAN MAHIR SHAILESHBHAI	
51	220493119015	DARSHAN YOGESHBHAI BANGORIA	
52	220493119016	DATA MAHMMADZAIM JAKIRHUSEN	
53	220493119019	DOUBLE ABDULQADIR SOYEB	
54	220493119022	GAMIT DEVRAJBHAI ASHVINBHAI	
55	220493119023	GAMIT RAHULKUMAR RAJENDRABHAI	
56	220493119025	GAMIT SMITALKUMAR AJITBHAI	
57	220493119028	KASHYAP RITESH SHRISUBHASHBHAI	
58	220493119029	KRISHKUMAR BHUPENDRABHAI PATEL	
59	220493119031	PANDEY OM CHANDRAMOHAN	Om
60	220493119034	PATEL HARSHKUMAR PRAVINBHAI	
61	220493119036	PATEL KENILKUMAR RAJESHBHAI	
62	220493119040	PATEL RUSHIL KALPESHBHAI	
63	220493119042	PATEL VIVEKKUMAR DHANESHBHAI	
64	220493119044	PATIL NITIN SUBHASH	
65	220493119045	PATIL PRAVIN DATTATRAY	
66	220493119046	PAWAR SANDEEP KULWINDERSINGH	Sandeep
67	220493119048	RATHOD YASH CHETANKUMAR	
68	220493119051	SAIFI AAQIB SALIM	
69	220493119054	SOLANKI YUVRAJSINH VIKRAMSINH	Solanki
70	220493119056	VASAVA PRATIKBHAI RAKESHBHAI	
71	220493119057	VASAVA SAHILKUMAR PINUBHAI	
72	220493119058	VASAVA SOHELKUMAR VINODBHAI	Sohel
73	220493119059	YADAV ABHISHEKKUMAR RAGHAVPRASAD	Abhishek





## ANNEXURE II VISIT SCHEDULE

SCHEDULE OF VISIT	
<b>Date &amp; Time</b>	2 <sup>nd</sup> March 2024 & 9:30 AM
<b>Venue</b>	<b>From:</b> SNPIT & RC, Umrakh, Bardoli <b>To:</b> Vrindavan Industries, Sachin, Surat, Gujarat - 394 210, India
<b>Staff Accompanied</b>	<b>Prof. Milan R. Patel</b> Assistant Professor, Mechanical Engineering Department
<b>Visit Module</b>	Working Factory's Machinery
<b>No. of Benefited Students</b>	25



## ANNEXURE III PHOTOGRAPHS

### A. VISIT PHOTOS







# SITARAMBHAI NARANJI PATEL

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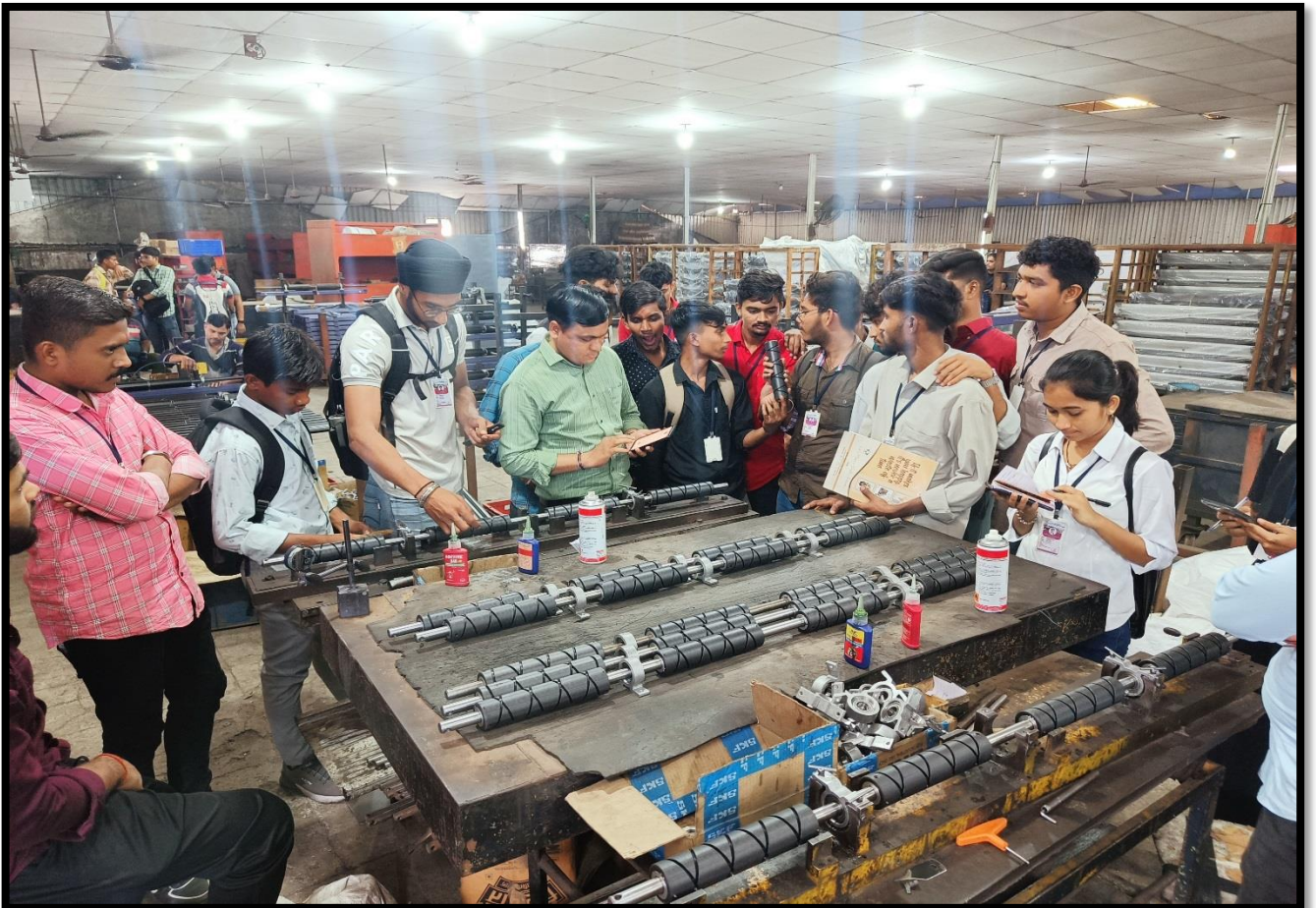




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