



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

EXECUTIVE SUMMARY

Mechanical Engineering Department of S.N.P.I.T. & R.C., Umrakh arranged an industrial visit to Vrindavan Industries, Sachin, Surat on 23rd March 2023 with 35 students of 6th 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,

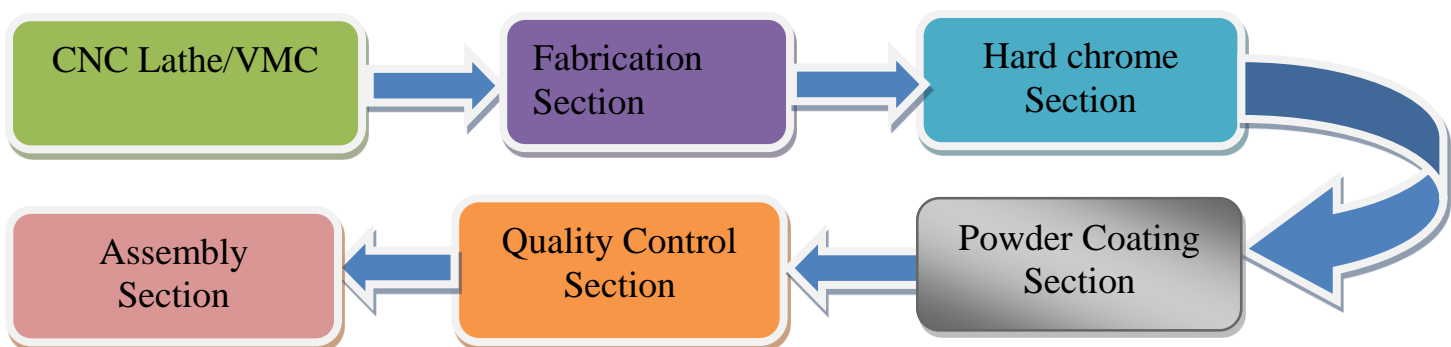


Cement, Real-Estate as well as Agriculture. The core competencies of the group lie in developing & supporting self-sustaining management teams to take control of the growth of these different segments.

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.)

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PARTICIPANT DETAILS: ANNEXURE – I

S.N.Patel Institute of Technology & Research Centre, Umrakh			
Mechanical Engineering Department			
Semester - 6 (Summer-2023)			
Industry Visit: Vrindavan Industries Ltd., GIDC-Sachin, Surat (Date: 23/03/2023)			
Sr. NO.	PEN	Name of Student	Sign of Student
1	190490119005	CHAUDHARI AMITKUMAR BABUBHAI	
2	200490119001	CHAUDHARI SHREYAS M	<i>Shreyas</i>
3	200490119002	BHAGARIYA RAHUL MADHUBHAI	
4	200490119004	MATHUKIYA PRATIK KAILASHBHAI	<i>Pratik</i>
5	200490119005	CHAUDHARI PRIYANSHUBHAI DHANSUKHBHAI	
6	200490119006	TANDEL AKASH KANUBHAI	<i>Akash</i>
7	200490119007	GUPTA VUNAYKUMAR MATABADAL	
8	200490119008	GAMIT AYUBBHAI DILIPBHAI	
9	200490119009	CHAUDHARI ANGELKUMAR VINAYBHAI	<i>A.v.chaudhari</i>
10	200490119010	CHAUDHARI YUSUFKUMAR ARJUNBHAI	
11	200490119011	PARMAR DHAVAL KANTIBHAI	<i>Parmar Dhaival</i>
12	200490119012	TAILOR PARTHKUMAR DHARMESHBHAI	<i>Patil</i>
13	200490119013	CHAUDHARI ASHISH ARJUN	<i>Ashish</i>
14	200490119014	GEDIYA OM AJITBHAI	<i>Om</i>
15	200490119015	MAHLA ANKITBHAI DHIRUBHAI	<i>Mahla A.D.</i>
16	200490119016	PADVI ANIRUDDH NARESHBHAI	
17	200490119017	NAYKA BHAVINKUMAR GIRISHBHAI	
18	200490119018	ROHIT KARAN SHASHIKANT	
19	200490119019	PANCHAL HARSH CHETANBHAI	<i>Harsh</i>
20	200490119020	CHAUDHARI NILKUMAR JITENDRABHAI	
21	200490119021	PATEL NEELKUMAR NATVARBHAI	<i>N.R. Patel</i>
22	200490119022	GANVIT MAYANKBHAI RAJESHBHAI	<i>M.R.G</i>
23	200490119023	VASAVA JAIMINKUMAR NARENDRABHAI	
24	200490119024	RATHAVA DHAVAL RAMANBHAI	
25	200490119025	GAMIT NIRMALBHAI PRAVINBHAI	
26	200490119026	VASAVA MEHULKUMAR SURESHBHAI	
27	200490119027	PATIL CHETAN LAKHICHAND	
28	200490119028	KHALASI UTSAVBHAI SANJAYBHAI	
29	200490119029	PAWAR NILAYBHAI GANESHBHAI	<i>Pawar</i>



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30	200490119030	PATEL DISHANG DILIPBHAI	
31	200490119031	PATEL JAINIL GORDHANBHAI	
32	200490119032	GAYAKWAD ROHITBHAI RAJUBHAI	
33	200490119034	RAJPUROHIT KRISHNA DEEPSINGH	
34	200490119036	PATEL ROHITBHAI ALPESHBHAI	Patel R.A.
35	200490119038	BARAT KALPESHBHAI KAKADBHAI	
36	200490119039	PRAJAPATI UDIT JIGNESHBHAI	
37	200490119040	PATEL SHIVKUMAR PRAKASHCHANDRA	
38	200490119041	GOHIL PIYUSHKUMAR MAHENDRASINH	
39	200490119042	YADAV SUJIT UMESHPRASAD	
40	210490119501	GANDHI SAHIL SIRAJUDDIN	
41	210490119502	GAMIT SHRADDHABEN RAVINDRABHAI	
42	210490119503	DESAI KHUSH NAIMESHKUMAR	K.V. Desai
43	210490119504	GOSWAMI SHIVAM SURESHBHAI	S.S. Goswami
44	210490119505	VISHASH SHUKLA	
45	210490119506	MEHTA VISHAL VINAYKUMAR	V.V. Mehta
46	210490119507	Rathod Vivekkumar Prabhulal	
47	210490119508	PATEL HENIL MUKESHBHAI	
48	210490119509	SHARMA YASH GANGARAMBHAI	Yash
49	210490119510	LAD NIRALKUMAR HARESHBHAI	Lad N.H.
50	210490119511	PATEL MAYANKKUMAR NAGARBHAI	Patel M.A.
51	210490119512	PANCHOLI AYUSHKUMAR SHAILESHBHAI	A.S. Pancholi
52	210490119513	PATEL KRUNALKUMAR NILESHBHAI	
53	210490119515	Gamit Jaineshkumar Rakeshbhai	
54	210490119516	VALVI ANKUBHAI AMRATBHAI	Valvi A.A.
55	210490119517	RAM VINAY BACHCHARAM	
56	210490119518	NIKAM KRISHNA DAMODAR	
57	210490119519	Dumasia Jay Deepakkumar	Dumasia
58	210490119520	MUKULBHAI BHUSARE	Mukul Bhusare
59	210490119521	PRANIL ANIL SONAWANE	
60	210490119522	THAKOR PRUTHVIRAJ BHUPENDRABHAI	Pruthviraj
61	210490119523	BIND AADITYA SURESHKUMAR	Aditya
62	210490119524	CHAUDHARI PIYUSHKUMAR DINESHBHAI	



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63	210490119525	CHAUDHARI SHYAMKUMAR RASIYABHAI	
64	210490119526	GARASIYA HIRENKUMAR KAMLESHBHAI	
65	210490119527	PATIL NILESH AMRUTLAL	<i>Nilesh</i>
66	210490119529	GAMIT JATINBHAI ARVINDBHAI	<i>Gamit</i>
67	210490119530	PATIL VIPUL BHARAT	<i>Vipul</i>
68	210490119531	PARMAR DHHRUVKUMAR JASHVANTBHAI	
69	210490119532	CHAUDHARI VISHALBHAI NILESHBHAI	
70	210490119533	PATIL DEVIDAS GULABRAO	<i>Devidas</i>
71	210490119534	SALVE SNEHA RANDHIRBHAI	
72	210490119537	PATEL KUMPALKUMAR SURESHBHAI	
73	210490119538	PATEL MAYANKBHAI JITENDRABHAI	
74	210490119539	RATHOD ASHISHBHAI RAMESHBHAI	
75	210490119541	PATEL NILAYKUMAR PRAFULBHAI	<i>N.P. Patel</i>
76	210490119542	ANSARI AZHARALI SHAUKATALI	
77	210490119543	SURTI PRUTHVIKKUMAR NATVARBHAI	<i>P.N. Surti</i>
78	210490119544	Yelave kalpesh vasant	<i>Kalpi</i>
79	210490119545	CHAUDHARI VIVEKKUMAR NAVINBHAI	
80	210490119546	Bhavsar Mitanshu Narendrabhai	<i>Mitanshu</i>
81	210490119547	CHAUDHARI TUSHARKUMAR AJITBHAI	
82	210490119548	PATIL SAURAV NIMBA	
83	210490119549	MISTRY VATSALKUMAR ARUNBHAI	
84	210490119551	KOLA MUHAMED UMER RIYAZ	
85	210490119552	CHAUDHARI PRASHANTKUMAR VALMIKBHAI	<i>Prashant</i>



ANNEXURE II VISIT SCHEDULE

SCHEDULE OF VISIT		
Date & Time	23 rd March 2023 & 9:30 AM	
Venue	From: SNPIT & RC, Umrakh, Bardoli	To: Vrindavan Industries, Sachin, Surat, Gujarat - 394 210, India
Staff Accompanied	Prof. Milan R. Patel Assistant Professor, Mechanical Engineering Department	
Visit Module	Working Factory's Machinery	
No. of Benefited Students	35	



ANNEXURE III PHOTOGRAPHS

A. VISIT PHOTOS





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