

Industrial Visit Report



GOVERNMENT POLYTECHNIC COLLEGE, VALSAD
ELECTRICAL ENGINEERING DEPARTMENT
INDUSTRIAL VISIT REPORT



- Organizer** : ELECTRICAL ENGINEERING DEPARTMENT, GOVERNMENT POLYTECHNIC COLLEGE, VALSAD
- Industry Visited** : Balaji Wafers Pvt Ltd
National Highway No 8, Dungri Valsad,
Valsad - 396375 (Near Shanker Talav,
Dugri Village)
- Officials involved from Industry** : Shri. Bhavin Patel Training Superintendent
- Date** : August 02, 2024
- Transportation** : Bus
- Total Students** : 113 students
- Students belongs to course** : 1st sem, diploma (Induction program) in electrical engineering.
- Faculty Accompanied** : (04 M)
Shri. H N Lad, Mr. B P Golakia, Ms. N A Patel & Ms. V K Patel
- Coordinator** : Mr. Harshad N Lad

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Name of Industry: Balaji Wafers, Valsad

The electrical department of G P Valsad polytechnic engineering College has organized a one day industrial visit at Balaji Wafer, Valsad for 1st year Electrical(Induction Program) Engineering students.

Balaji Wafers began as a micro-retail enterprise in 1974, managed by the Virani brothers . By 1982, spurred by the initiative of Virani brothers, this grew to a home-based manufacturing venture. A decade later, the brothers set up an international standard automatic plant in Gujarat, with steps to increase capacity and quality. In 2000, Balaji Wafers installed its first fully automatic plant. By 2014, Balaji Wafers captured a 70% market share in snacks market.. Balaji has the capacity to manufacture 100,000 kg of potato wafers, along with 500,000 kg of savories per day.

Objective of Industrial Visit

- 1) To interact the students with actual industry personals.
- 2) To make them aware of the industrial procedures required to enter in any company.
- 3) To experience them about the importance of all Departments in the Industry.
- 4) To prepare the students for the selection of carrier path in various industry.

Visit at Balaji Wafers Company:-

Balaji Wafer plant is an entirely automatic plant and at their Valsad plant they manufacture potato wafers and other Namkeens. We started our journey at 11:00 AM from our college and reached the plant around 11:30 AM. Being around 113 students, we were divided into two groups to be taken turn by turn inside the factory

Before entering the plant, all the students were given hair caps as per the Food Safety Act and the Food Hygiene Regulations. After making sure, we complied with all the requirements of the Plant, we were taken in the Factory and explained the whole process as follows: Potatoes that are freshly dug from the ground are placed in trucks and transported to a building before going to the storage for grading.

The cold storage at the plant has the capacity of storing potatoes worth Rs.10 Crore. During the grading process, potatoes are inspected for rot, green heads, double growth, or all other types of defects or disease. In the initial processing phase, the potatoes flow from storage tanks into a large hopper that slowly feeds them into a destoner. This piece of equipment is full of water and has a spiral lift auger that takes the potatoes into the peeler. The destoner will remove all stones, wood, or any other foreign matter that may have been dug when harvesting the potatoes. Here all the potatoes are checked again using an Image Processing Technique for any defects that were missed by human eyes during the grading process. The rejected pieces of potato are then discarded. The peeler consists of abrasive rollers that revolve at a given speed to insure that the potato is peeled properly. Upon completion of removing the skins, the potatoes are processed on an inspection line where employees inspect them again. Potatoes that do not pass inspection are removed prior to processing. Upon completion of inspection, the potatoes proceed on the conveyor belt to a lift where they are dropped into a holding hopper that feeds the slicers. The potatoes are then sliced very thinly after they fall into a revolving slicer that has sharp cutting blades that are set by a gauge. The potato slices then proceed into a rotating mesh drum that is constantly running in water.

As the potato slices tumble in the drum, they are washed and most of the starch removed from them. From the drum, the potato slices proceed up a mesh conveyor where they are washed and dried upon entering the frying

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kettle.

The slices fry for approximately 4 minutes. There are paddle wheels that move the slices forward to the front of the machine. As the potato slices leave the paddle wheel area, they are submerged into the cooking oil by a mesh conveyor. This conveyor finishes cooking the slices. The operator of the cooker inspects the chips to insure they are completely cooked and also to insure the temperature of the machine is proper at all times. This plant operates two manufacturing lines, both of which have production capacity of approximately 2,200 kg/hour. As the chips proceed past the fryer's inspection point, they fall onto a small mesh stainless steel conveyor and then pass under the salter. As the salt is dispensed, it falls onto a spinner type bracket that spreads the salt evenly on the chips. Here, different flavors are added along with salt for preparing different products. Here, each time, approximately, 35 -40 kg of salt is used. After the chips are salted, they fall onto a vibrating conveyor where they are inspected using Image Processing Technique. Chips that do not meet the required standards are removed from the line and disposed of into plastic containers. From the inspection conveyor, the chips are dropped into a bucket lift which elevates the chips on to the overhead vibrating conveyors that process the finished product into the automatic packaging machines. The chips are then weighed and deposited into a former which releases the chips into Plastic bags. The bags are then packed into boxes by employees or automatic packers. Packers inspect baggage for proper weight and sealing of the bag. They are then placed on conveyors to be sent to the warehouse. The warehouse personnel stacks the cartons and issue them to the driver salesman for redistribution to selling outlets.

Name Of the subject	Induction program
CO covered	Develop creative problem solving skill,Design thinking,apply technology.

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Government polytechnic, Valsad Electrical engineering department

List of Student for Industrial visit at Balaji Wafers Pvt. Ltd. Valsad

Sr.No.	Name of Students	Students Mo. Number	Sign
1	Yash anilbhai maher	8866588677	Y.A. Mahera
✓2	GANVIT KHUSHBUKUMARI ASHOKBHAI	8200687235	K. A. Ganvita
✓3	Yushar Suresh sarode	9106437329	✓ Shushan
✓4	Patel krish Subhashchandra	7043813130	K.S. Patel
5	Tandel krishan Nishan Tandel	9558291559	Mitandel
6	Zalak maneshbhai patel	7046324144	Z.M. Patel
7	Dhruv bhandari	8155885714	Patel
8	Rushil Ajaybhai Patel	9099497477	Rushil
✓9	Tandel dev rajubhai	9824734765	D.R. Tandel
10	Vatsal .K. Tandel	7990776871	^{Tandel} D.A.P
11	PATEL SIDDH DIVYAKANT Day	7046446640	D.A.P
✓12	PAVAR NIDHIKUMARI JAGDISHBHAI	6352334783	N.J.P.
13	Jay bhai ritesh bhai tandel	8156029011	—
✓14	DESHMUKH AMISHAKUMARI NAVINBHAI	6354539594	A.M. Deshmukh
✓15	tandel Neel gangarambhai	8140527654	N.U. Tandel
16	Patel Ananya maneshbhai	7990859660	—
17	Bhoya Anilbhai Gopalbhai	9316400730	—
18	Shubham Rampratap chaurasiya	8347116684	—
✓19	Solanki riya dharmendra	9104056069	Riya
20	Parmar Harshkumar Takhatsinh	7383917214	—
21	Rawal payal pukhrajbhai	7862958136	—
22	Karan anil patil	8200271397	P.P. Rawal
23	Sanketmistry Tandel Narayan	8160730503	—
24	Patel Mahek Mukeshbhai	6351264886	MA
✓25	Varlekar bhavya kamleshbhai	8780607246	M.M. patel
26	VALVI APURV SHARADBHAI	9265663759	V.B.K A.S.V

Rushil

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27	Patel KRISH Sujitbhai Shiv C	9016574251	K.S. Patel	57
✓ 28	Daksh Dharmeshkumar Tandel	8128102201	D.D. Tandel	✓ 58
✓ 29	Kenil tandel	9054220232	—	59
30	Patel Divy Mukeshkumar	8849448797	—	60
✓ 31	Patel heli santoshbhai	7862004776	H. S. Patel	61
✓ 32	Vartha Nimitkumar Ratilal	9687425179	N.R. Vansher	62
✓ 33	Tandel pritikumar harishbhai	9328738104	P.H. Tandel	✓ 63
✓ 34	Halpati Dharmeshkumar Ashokbhai	7046631970	—	64
35	Shreyansh JayeshBhai patel	8469889814	S. J. Patel	65
✓ 36	Bhawesh sanjay prasad	9909877047	Bhavesh	✓ 66
37	JainishPatel	7862087783	J.V. Patel	67
38	Patel Prachi Ashokbhai	9313534358	—	68
✓ 39	Kapadia Soham Babubhai	6355082920	—	✓ 69
✓ 40	MEGH ROHITBHAI PATEL	9664896659	M. R. P	70
41	Pratham tandel	9662362235	—	✓ 71
✓ 42	Patel dhruv pravin bhai	7984577165	D. P. Patel	✓ 72
43	TANDEL KRISH BHARATBHAI	7284001202	K. S. Patel	✓ 73
44	AHIR YASHKUMAR PRAVINBHAI	9328038992	—	74
45	JHA AVINASH KAMLESH	7481060972	—	✓ 75
✓ 46	Krish Sujitbhai Patel	9016574251	K.S. Patel	✓ 76
47	Parmar Meet Jayeshbhai	8980087917	—	77
48	Patel khushikumari parbhubhai	6356581908	—	78
49	Harshalkumar manilal patel	8980945415	—	✓ 79
✓ 50	smitkumar amratbhai patel	9099807980	S.A. Patel	✓ 80
51	Tansel krit amrat bhai	8734834349	—	81
52	Neel tandel	6354025194	N. B. T	82
53	Patel Panth Miteshbhai	9558608211	P. M. Patel	83
✓ 54	PATEL VANSJ JATINKUMAR	7046659287	Patel V. J.	✓ 84
✓ 55	Ansh kamleshbhai patel	8320661687	A. K. Patel	✓ 85
56	Sujal Paresh Tandel	9558548863	—	✓ 86

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57	Vansh manoj bhai patel	9638172770	K. D. PATEL
✓ 58	PATEL kardam dharmesh bhai	8320844668	K. D. PATEL
59	Dhruvit Pramodkumar tandel	8735903883	—
60	Patel Samir Kumar Manishbhai	9737399724	—
61	Parth Prakash Kumar Rana	9586108914	Ruth. P. Patel
62	Yashkumar Sukhdevbhai Mangela	8780614665	—
63	Patel ayush Ashvinbhai	7046287428	—
64	TANDEL RAHIL JITENDRABHAI Dhasmin	9624757492	D. J. T
65	TANDEL ^{Yash} MONIK DAHYUBHAI	7359764512	Yash
✓ 66	Tandel Manthan Thakor bhai	9879002346	M. J. Tandel
67	Garasiya vaibhavkumar dilipbhai	9537677629	V. D. Garasiya
68	Mandole krish Rameshbhai	8849060401	—
✓ 69	Bhandari krishi Nileshbhai	9687948472	K. N. Bhandari
70	Halpati sneh sanjaybhai	6353123796	sneh. s. halpati
✓ 71	Patel Krishbhai YogeshKumar	9913064192	K. Y. Patel
✓ 72	PATEL MEET ISHWARBHAI	7069660989	M. I. Patel
✓ 73	ASALIYA TEJAS SURESH	7984423225	Asaliya T. S.
✓ 74	Ayush patel	9173189005	Ayush K. Patel
✓ 75	RahulKumar Bharat Bhai Patel	7435934887	Rahul
✓ 76	Nepal Dhanshyambhai tandel	7383732941	N. D. Tandel
77	Vansh y-mistry Tandel Dax	9714550188	D. J. Tandel
78	Dirgh prakashbhai Tandel	9104978307	—
✓ 79	Patel Rudra Nileshbhai	7990691117	Rudra
✓ 80	Tandel meet Sanjaybhai	7048242411	—
81	Lucky jiteshbhai tandel	9316923562	M. S. Tandel
82	Tandel raj	9662635504	—
83	^{magan} Vatsal tandel	7990776871	R. C. Tandel
✓ 84	PRIYALBEN JIVRAJBHAI TANDEL	9173748221	M. D. T
✓ 85	Prince bhikubhai tandel	8200750610	Tandel. P. J
✓ 86	Tandel krish	9157379902	D. J. T K. P. Tandel

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87	Patel Hetvi Dharmeshbhai	6359841434	<i>[Signature]</i>
88	Jinay Nayak	7048214469	Y. K. J.
89	Yug Ketankumar tandel	9974017214	—
90	BRUJALBEN MUKESHBHAI PATEL	9316099926	H. G. Tandel
91	TANDEL HENIL GANPATBHAI	7861045041	—
92	Yug Ketankumar tandel	9974017214	<i>[Signature]</i>
93	Pratham n patel	9081350136	<i>[Signature]</i>
94	Yasmi kailash Bhai tandel	9574820702	Patel A. N.
95	Patel AnkitBhai NavinBhai	6353221423	—
96	Mandole krish	8849060401	—
97	Halpati doonam natubhai	9327515198	P. N. Halpati
98	Parth Prakash Kumar Rana	9586108914	Parth P. Rana
99	KRISH BHARATBHAI TANDEL	7284001202	—

[Signature]
 આચાર્ય
 સરકારી પોલીટેકનીક, વલસાડ

100. Rathod Pratham Prakashbhai - P.P. Rathod
 101. Tandel Prins Jagdishbhai - P.J. Tandel
 102. Tandel Vicky Harshibhai - V.H. Tandel
 103. Patel Dhruvin Pankajbhai - D.P. Patel
 104. Tandel Jeet kishorbhai - —
 105. Tandel Dhruvan Nareshbhai - O.N. Tandel
 106. Tandel Pal kirankumar - P. K. Tandel
 107. Tandel manthan Ashakbhai - Mandel
 108. Tandel Dax Dilipbhai - D.D. Tandel
 109. Tandel Harsh kundalkumbharbhai - [Signature]
 110. Tandel shivang Umeshbhai - S.U. Tandel
 111. Tandel Nil Duburbhai - N.D. Tandel
 112. Patel mahesh - M.M. Patel
 113. Raval Patel P. - P.P. Raval
 Total students = 81

Sign of subject coordinator

Sign of HOD(E.E.D)