

Award for Excellence in Consistent in TPM commitment
apcotex industries limited
Valia Plant, Gujarat, India



CORPORATE PROFILE



**Works: Village: Dungri, Taluka: Valia, Ankleshwar,
Distt. : Bharuch – 393135 ,Gujarat, (INDIA).**

Apcotex Industries Ltd. is one of the leading producers of Performance Emulsion Polymers in India and is engaged in manufacturing and supplying synthetic latex (XSB latex, XNB latex, VP latex, styrene acrylics, and nitrile latex) and synthetic rubber (nitrile rubber, high styrene rubber, nitrile polyblends, and nitrile powder). Synthetic rubber finds application in Automotive Components, Hoses, Gaskets, Rice roll industries, Printing and Industrial Rollers, Friction Materials, Belting, and Footwear, while synthetic latex finds application in paper and paperboard, textiles, carpet, construction, tire cord, Gloves surgical and industrial use, etc.

The company was first established as a division of Asian paints (India) Limited in 1980, primarily, as an import substitution endeavor, for then fully imported product i.e., vinyl pyridine latex, key to tyre manufacturing. This was the first unit to manufacture this latex in India.

Apcotex Industries Limited has two manufacturing facilities at Talaja in Maharashtra and Valia in Gujarat.

The Talaja manufacturing facility has a manufacturing capacity of 1,05,000 MTPA of synthetic latex and 7,000 MTPA of high styrene rubber.

The Valia manufacturing facility has a manufacturing capacity of 25000 MTPA of nitrile rubber and its allied products. Both the manufacturing facilities at Talaja & Valia are having ISO 9001-2015, ISO 14001-2015, ISO 45001-2018 & Responsible Care (RC) certifications.

apcotex Industries Limited Valia has state-of-the-art manufacturing plants strategically located on the western coast of India. It has one of the broadest ranges of emulsion polymer products i.e. Nitrile Butadiene Rubber & lattices (NBR), NBR powder, and NBR: PVC polyblends manufactured at Apcotex Industries Ltd. Valia.

The main bulk raw materials used are Butadiene & Acrylonitrile. NBR is produced through the emulsion polymerization of Butadiene & Acrylonitrile. The technology was supplied by M/s Goodyear Tire & Rubber Co. USA.

The manufacturing facilities incorporate state-of-the-art emulsion polymerization technology controlled by sophisticated DCS control systems to ensure fine control over operating parameters.

A strong Research & Development base enables development, manufacture, and export of products and compete effectively against global players. We also provide value-added services to enable customers to constantly improve the quality of their final product. The Total Productive Maintenance (TPM) awards recognize plants that full-fill the demanding requirements of the JIPM's continuous improvement program.

“We’re proud to receive this important recognition from the Japan Institute of Plant Maintenance,” said Mr. Ravishankar Sharma, COO, Apcotex. “Total quality and continuous improvement are the cornerstones of our commitment to customers every day.

➤ **Milestones on the Journey of Manufacturing Excellence**

Apcotex Industries Ltd. received ISO 9001 certification in the year 1999 by the General Society of Surveillance (SGS), UK for Quality Management System. Again, received ISO 14001 certification on “Environment Management System” in the year 2012 and up-gradation

to ISO 45001 from OHSAS 18001 by the General Society of Surveillance (SGS), UK in the year 2020 & Responsible care logo by Indian Chemical Council in the year 2019 and re responsible care logo in the year 2022 for next 3 years (April 2022 to March 2025). Being a “Responsible Care company”,

Apcotex Industries Ltd. is committed to the promotion and maintenance of the Highest degree of the physical, Mental, and social well beings of its employees. By Implementing the Health and Safety Program, Apcotex Industries Ltd. is ensuring the protection of the health and safety of employees through the prevention of adverse effects caused by working conditions.

Regular training for all the employees with respect to Health and Safety is being conducted at a defined frequency.

Keeping in view, today’s competitive, cost-competitive, and quality-committed business environment, Apcotex Industries Ltd. decided to embrace the TPM culture.

➤ **The TPM Journey -Valia Plant**

The TPM awareness training was started in February 2016.–The Apcotex Valia Plant TPM Journey is as below,

- TPM Intent - April 2016
- Selection of Model Plant - June 2016
- Training of Executive - July 2016
- Training of Non-Executive - August 2016
- A.M. Launch - September 2016
- Complete Awareness Training - March 2017
- TPM Kick-Off - April 2017
- Health Check Up by CII - Jan.2020
- 1st Assessment by JIPM - June 2021
- Final Assessment by JIPM – Dec. 2021
- TPM Excellence Award Category “A” By JIPM – Year 2021
- Excellence in Consistent TPM Commitment Kick–Off – June 2022
- Application for Excellence in Consistent TPM Commitment Award – Dec. 2022
- Excellence in Consistent TPM Commitment 1st Assessment by JIPM – July 2023
- Excellence in Consistent TPM Commitment Final Assessment by JIPM – Dec. 2023

TPM Consistency drives very close together with our vision of becoming “A Globally Admired Company”. I am certain that the apcotex Valia plant proves its mettle once again. As a result of this TPM Level-2 Excellence in Consistent Final Assessment by JIPM – Dec. 2023.

➤ Benefits Achieved & Key of our Manufacturing Excellence

With the implementation of TPM at apcotex across the plant not only helped in improving business results but also brought total change in the work culture and attitude of the employees and drastic change in organization culture.

Below are a few tangible benefits on key business results in terms of PQCDsME.

SL	KPI	UOM	Benchmark (2015-16)	April 2023-Sept.23	IMPROVEMENT, %
P	OPE for NBR	%	62.00	97.20	35.20
	Availability- NBR Line	%	68.00	100.00	32.00
	FPP for NBR Line	%	95.00	97.90	2.90
	NBR Production	MT	6843.00	7923	15.78
	Number of breakdowns	No.	38.00	0	100.00
Q	External Customer complaint	Nos/Yr.	26	0	100
C	Steam consumption	kg/MT	1995.00	1575	21.50
	NH3 Consumption	Kg/MT	1.66	0.65	60.84
	Water Used	m3/MT	23.01	16.93	26.42
	Power Consumption	kWH/MT	1003.00	549	45.26
D	On time Delivery	%	95.00	100.00	5.00
S	Major Accidents	Nos/Yr.	0	0	100.00
	Minor Accidents	Nos/Yr.	12	0	100.00
M	KAIZEN / Suggestions	Cum Nos/Yr.	8	2267	283 Times
E	Reduction of SOx emission in Ambient Air	µg/M3	80	12.14	84.83

2023 TPM Award -Achievement Sheet

Company	apcotex industries limited
Plant name	Valia Plant
TPM Slogan	“ Bond’s Beyond Chemistry” proved true by adopting TPM in Apcotex.
Objectives	To make TPM a way of life in Apcotex from Top to Bottom in years to come.
Year when TPM activity started	Apr-16
Year of benchmarking	2015-16

Category	Index (Calculation Formula)	Unit	TPM Started 2015-26	Actual Status April -Sept.2023
S	Number of work-related accidents requiring days off work	Cases/ year	0.00	0.00
S	Number of work-related accidents not requiring days off work	Cases/ year	10.00	0.00
P	Productivity for main products	Parts/Operator hours	1.47	1.98
P	OEE (or Overall Plant Efficiency)	%	62.00	97.20
P	Availability	%	68.00	100.00
P	Performance Rate	%	97.00	99.60
P	Quality Products Rate	%	95.00	97.90
P	Number of breakdowns	Breakdowns/ year	38.00	0.00
P	MTBF	Hour	2600	31460
P	MTTR	Hour	16.00	1.19
Q	Number of customer complaints	Number/year	26.00	0.00
Q	In-line defect rate, scrap	%	0.00	0.00
Q	In-line defect rate, scrap and rework	%	0.00	0.00
C	Cost index	Cost/Kilogram	47.5	41
D	Production Lead time	Days	0	0
D	Delivery performance	%	95.00	100
S	Safety index	Accidents per 1,000,000 operator hours	0.00	0.00
M	Number of Employee Suggestions	Number/year	8	2267