



FINORCHEM LIMITED





CORPORATE INTRODUCTION



OUR VISION

.....

To be a world class company in rubber and specialty chemicals, with a clear focus to exceed customer expectations.

ACMECHEM LIMITED



**We manufacture
Fine and
Performance Rubber
chemicals**



Head quartered
in Kolkata, India



Commenced
in 1994



Company type-
Public Limited



Founder – **Mr. Narain Holani**
(Chemical Engineer, BITS Pilani,
alumnus), having about 4
decades of industry experience,
rubber & specialty chemicals
industry specialist.



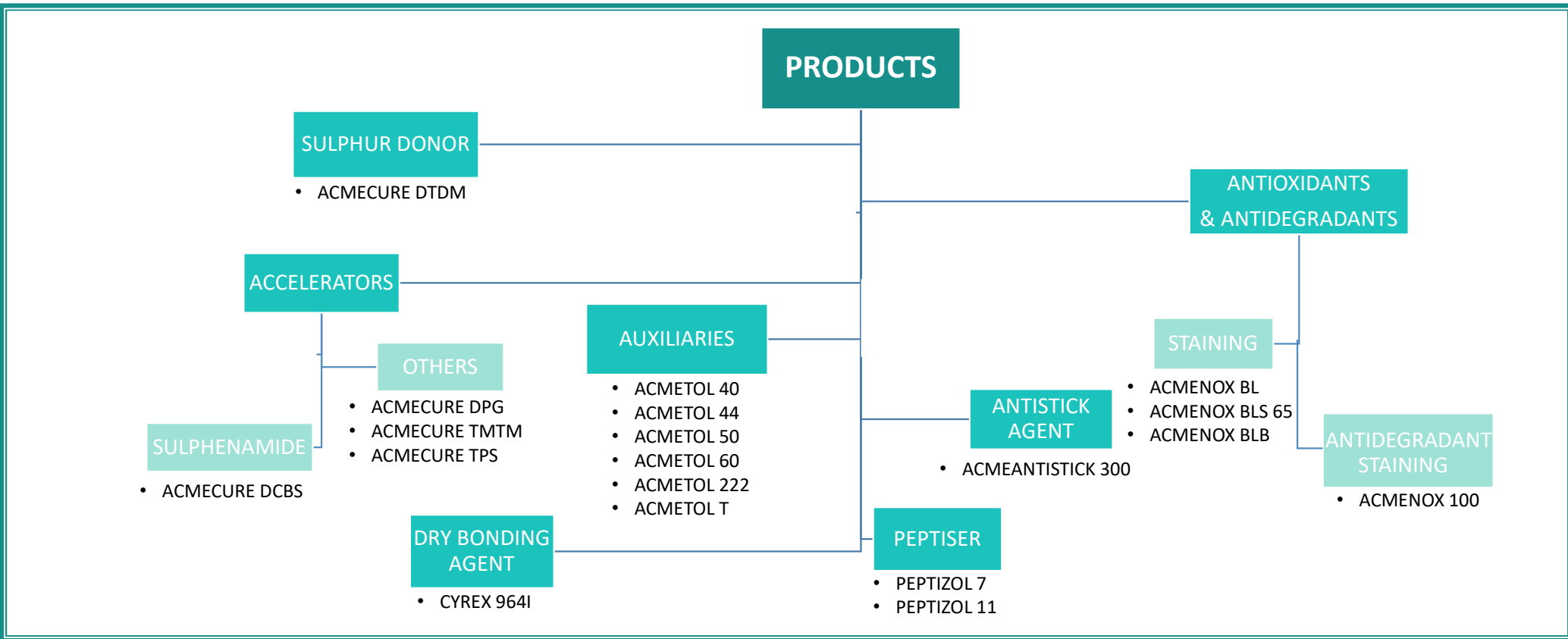
Number of manufacturing
facilities – 1 @ G.I.D.C Panoli,
District Bharuch, Gujarat India.

Total Capacity – **15000 MT**



Acmechem Ltd. is
IATF 16949 :2016,
ISO 9001:2015, ISO
14001:2015,
ISO 45001:2018.
certified company.

FINORCHEM (UNIT-1) PRODUCT DETAILS



FINORCHEM (UNIT 1) PRODUCT DETAILS



GROUP	CHEMICAL NAME	CAS NO.	COMPOSITION	MTPA (Current)
ANTIOXIDANTS	Acmenox 100	74-31-7	Mixture of Diaryl Para-Phenylene Diamine	1800
	Acmenox BL/BLN	68412-48-6	Condensation product of Diphenyl amine and acetone	3600
	Acmenox BLB	0013333-86-4 68412-48-6	Blend of Acmenox BL and Carbon	
	Acmenox BLS-50/65/75	009003-79-6 68412-48-6	Blend of Acmenox BL and Silica	

FINORCHEM (UNIT 1) PRODUCT DETAILS



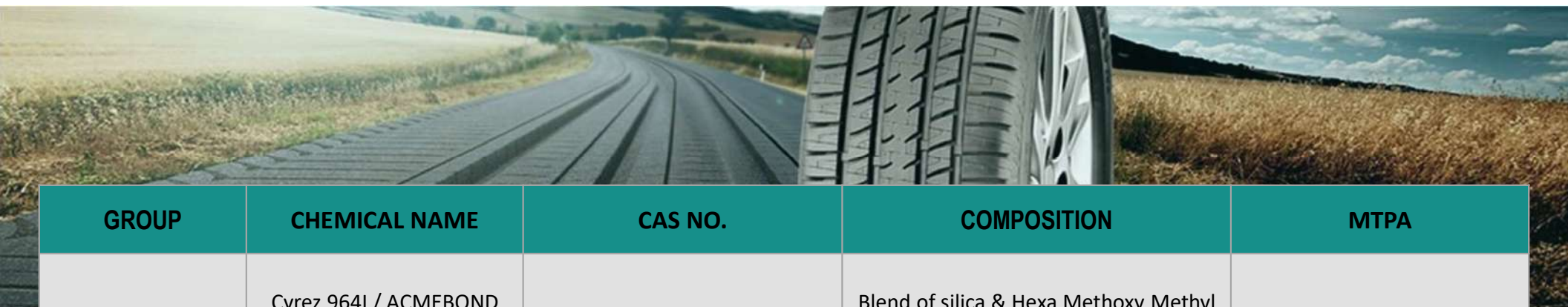
GROUP	CHEMICAL NAME	CAS NO.	COMPOSITION	MTPA (Current)
PEPTISERS	Peptizol 7 (Powder/pellets)	133-49-3	Mixture of Penta chloro thio phenol (PCTP) with activator, dedusting agents and Kaoline	3600
	Peptizol 11 (Powder/pellets)	135-57-9	Mixture of Di benzamido diphenyl disulphide (DBD) with activator , dedusting agents and Kaoline	
	Peptizol 11 (G)/Peptizol 11 (R)	135-57-9	Mixture of Di benzamido diphenyl disulphide (DBD) with activator, binder and Kaoline	

FINORCHEM (UNIT 1) PRODUCT DETAILS



GROUP	CHEMICAL NAME	CAS NO.	COMPOSITION	MTPA
PROCESSING AIDS	Acmetol 50/Acmetol T	NA	Zinc salt of unsaturated fatty acid	3600
	Acmetol 44	NA	Mixture of Zinc salt of fatty acid and alkali soap	
	Acmetol 60	NA	Mixture Zinc soaps of high molecular rubber compatible carbonic soap	
	Acmetol 222	NA	Di-stearyl phthalate PentaEryhritol Ester I & II	
	Acmetol EF 44	NA	Blend of fatty acid derivatives (predominantly zinc soaps)	
	Acmetol JV46F	NA	Blend of fatty acid derivatives	
	Acmetol ZB49	NA	Blend of fatty acid derivatives	
	Acmetol 276	NA	Blend of fatty acid zinc soaps of predominantly aliphatic nature	
	Acmetol 254	NA	Compound of fatty acid amides and amino acid derivatives	
	Acmetol 16	NA	Mixture of fatty acid soaps, predominantly calcium	
	Acmetol 42	NA	Blend of fatty acid derivatives	
	Acmetol 1105	NA	Combination of metal soaps and aromatic disulphide	

FINORCHEM (UNIT 1) PRODUCT DETAILS



GROUP	CHEMICAL NAME	CAS NO.	COMPOSITION	MTPA
RUBBER ADHESIVE	Cyrez 964I / ACMEBOND HMMM (65% & 75%)	0009011-05-6	Blend of silica & Hexa Methoxy Methyl melamine	1800
ANTI STICK AGENT	Acmeantistick-100/200/300/400	001392-7-77-0	Combination of inorganic fillers, active substance and tensides	1800
ACCELERATOR	Acmecure TP/S	6990-43-8	Zinc dialkyl dithiophosphate bound to silica	1000

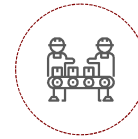
ADVANTAGE TO THE CUSTOMER



Tried and tested reliable partner across the globe for consistency in quality & 100% on time delivery



A robust & well diversified supply chain system to ensure availability of product for customer



State of the art manufacturing facilities , with modern equipment for automation and quality systems.



Energy conservation, reduction of wastages, conservation of natural resources.



Customer's aspirations relating to the products and feedback are constantly asked for, thereby new range of products are introduced



We are embarking upon ZLD for reduction of effluent, water conservation.



Location Advantage – Gujarat Highly Industrialized state ensures easy availability of skilled manpower, machinery & Raw Material



We are complying with necessary SVHC, RoHS, PAH and other international standards.

MERCHEM LIMITED



Acmechem acquired Merchem Limited – another well known Rubber chemical manufacturer in **2019**



Besides adding production capacities this acquisition will help Acmechem expand it's basket of product offerings to our customers



Total combined capacity after Merchem acquisition is **50,000 MT** and number of manufacturing locations is 2



Merchem plants restarted commercial operations in **2020**



















In **2022** the merger of Acmechem & Merchem was completed and the merged entity was rechristened as **Finorchem Limited**



Current turnover of Finorchem Limited is ~ **INR 700 Crs.**
~ **USD 85 million**

MERCHEM JOURNEY



 2020 Restarted Operations	 2013 Merchem wins AIRIA – Award for Export performance in Raw Material – rubber chemicals category	 2012 Multiple Effect Evaporator for effluent treatment installed in Ponoli, Gujarat plant	 2011 Merchem awarded the certificate of Merit for Export large scale industry category by Govt. of India (CHEMEXCIL)	 2008 R & D department recognized by the Department of Scientific and Industrial Research, Govt. of India	 2006 Exclusive centralized R & D commissioned	 2005 Zero discharge system for effluent treatment by installing multi-effect evaporator system	 2004 Best performer award from Hindustan Organic Chemicals.
 2010 1. BS OHSAS 18001:2007 Certified. 2. SAP go-live.	 2010 "A Business House Par Excellence" award by Times of India Group	 2009 1. QMS ISO 9001: 2000 standard updated to 2008 version 2. Merchem starts exporting to Latin America.	 2009 Merchem wins Govt. of India's award for Export Excellence	 2000 Environment Management System : 14001	 1997 Quality management system accredited with ISO 9001 standard	 1995 Started exports to South East Asia.	 1981 Merchem launched rubber processing chemicals in the Indian market.

FINORCHEM (UNIT 2) PRODUCT DETAILS



PRODUCTS

ANTIOXIDANT

STAINING TYPE

- MERNOX TQ

NON STAINING TYPE

- MERNOX SP
- MERNOX MB2
- MERNOX 2MBI
- MERNOX ZMB2
- MERNOX 445
- MERNOX CPL

ANTIOZONANT

- MERNOX 6C (6PPD)

ACCELERATOR

SUPHENAMIDES

- MERCURE CBS
- MERCURE TBBS
- MERCURE TBSI
- MERCURE DCBS
- MERCURE MBS/OBTS
- MERCURE OTOS

THIAZOLES & OTHER

- MERCURE MBT
- MERCURE MBTS
- MERCURE ZMBT
- MERCURE DPG

NON RUBBER APPLICATIONS INTERMEDIATES

- MERCIDE Na-MBT
- MERCIDE SM

THIURAMS AND DITHIOCARBAMATES

- MERCURE TBzTD
- MERCURE TMTD/TMTM
- MERCURE ZDEC/ZDBC
- MERCURE ZBEC

AUXILIARIES

PEPTIZER

- MERTISER

FINORCHEM (UNIT 2) PRODUCT DETAILS



GROUP	PRODUCT	CAS NO.	CHEMICAL NAME	MTPA (Current)
ACCELERATORS	Mercure CBS	95-33-0	N-Cyclohexyl-2-Benzothiazole Sulphenamide	2400
	Mercure TBSI	155-04-4	N-Tert-Butyl-2-Benzothiazole-sulfenimide	1000
	Mercure MBS	102-77-2	N,N'-Oxy-Di-Ethylene Benzothiazole Sulphenamide	1400
	Mercure MBT	149-30-4	2-Mercaptobenzothiazole	3600
	Mercure MBTS	120-78-5	Dibenzothiazyl disulphide	1800
	Mercure TBBS	95-31-8	N-Tert-Butyl-2-Benzothiazole Sulphenamide	2400
	Mercure OTOS	13752-51-7	Thiocarbamyl Sulfenamide	500
	Mercure DCBS	4979-32-2	N-N Dicyclohexyl benzothiazyl sulphenamide	1800
	Mercure TBzTD	10591-85-2	Tetra Benzyl Thiuram Disulphide	1000

FINORCHEM (UNIT 2) PRODUCT DETAILS



GROUP	PRODUCT	CAS NO.	CHEMICAL NAME	MTPA (Current)
ANTIOXIDANTS/ ANTIOZONANTS	Mercure SP	61788-44-1	Mixture of Styrenated Phenol	1000
	Mernox TQ/TQ (HPG)	26780-96-1	1,2-Dihydro-2,2,4-trimethyl quinoline, polymerized	8000
	Mernox MBI	583-39-1	2-Mercapto Benzimidazole	500
	Mernox MB2	53988-10-6	(4,5) – Methyl – 2 – Mercapto Benzimidazole	500
	Mernox ZMB2	61617-00-3	Zinc Salt of 4 and 5-Methyl-2-Mercapto Benzimidazole	500
	Mernox 6C (6PPD)	793-24-8	N-1,3-dimethyl butyl-N'phenyl-paraphenylenediamine	10000

THIAZOLE & SULPHENAMIDE PLANT

- High pressure Autoclave facility using Aniline, CS₂ and Sulphur to produce MBT.
- MBT is further taken for Oxidative condensation with respective Amines to produce Sulphenamides



6PPD PLANT

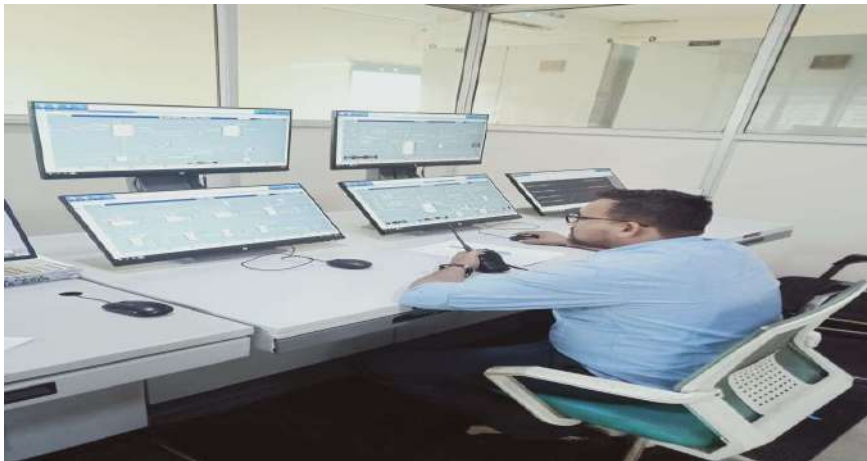
- Facility with three hydrogenators with total name plate capacity of 10,000 TPA. Product in pastilles form.
- High Purity product.
- Assay > 99 % by GC method.



TMQ ANTIOXIDANT PLANT



- ▶ TMQ New manufacturing facility with capacity of 8000 MT/Year
- ▶ High Dimer content
- ▶ Low monomer
- ▶ Low BIS Aniline (impurities)



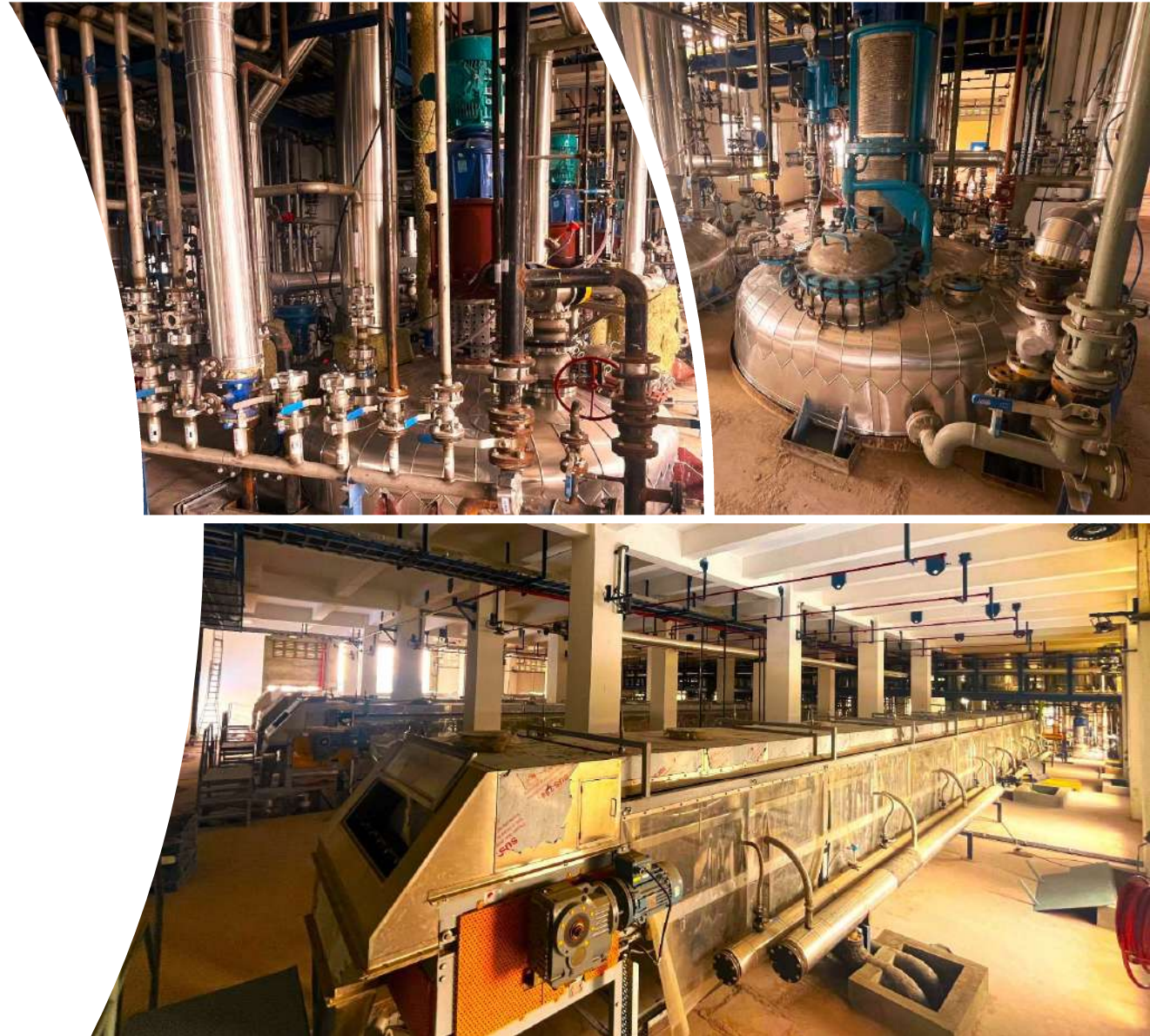
RESIN PLANT

Resin plant is equipped with 5 different streams as per nature of products.

- Stream 1 – Phenolic Resin
- Stream 2 – Tackifier Resin
- Stream 3 – Resorcinol Resin
- Stream 4 – PAMS Resin
- Stream 5 – Viscous Liquid Resin



RESIN PLANT: REACTORS



RESIN PLANT: REACTORS



PRODUCT BASKET (RESIN & SPECIALITY PRODUCTS)

New Product

TACKIFIER RESINS

- ⊙ FINOREX 1068
- ⊙ FINOREX 1068H

SUPER TACKIFIER RESINS

- ⊙ FINOREX KR 140
- ⊙ FINOREX TR 140

REINFORCING RESINS

- ⊙ FINOREX PN 160B
- ⊙ FINOREX RR 95
- ⊙ FINOREX RR 90
- ⊙ FINOREX RR 110

CURING RESINS

- ⊙ FINOREX PB 1045

TREAD ENHANCEMENT RESIN (TEA)

- ⊙ PAMS RESIN
 - ⊙ FINOREX AMS 85
- ⊙ TERPENE PHENOL RESIN
 - ⊙ FINOREX TP 115.
- ⊙ POLYTERPENE RESIN
 - ⊙ FINOREX PT

CUT & CHIP RESISTANT RESIN

- ⊙ FINOREX CCR 120

BONDING RESIN

- ⊙ RF RESIN
 - ⊙ FINOREX B18S
 - ⊙ FINOREX B19S.
- ⊙ RF STYRENE RESIN
 - ⊙ FINOREX B20S.
- ⊙ MODIFIED RF RESIN
 - ⊙ FINOREX B25S.
- ⊙ PRF RESIN
 - ⊙ FINOREX BPRF.

DRY BONDING AGENT

- ⊙ HMMM 65%
- ⊙ HMMM 72%
- ⊙ HMT

RESORCINOL DISPERSION

- ⊙ RESORCINOL - SILICA BLEND
 - ⊙ FINOREX RS
- ⊙ RESORCINOL - STEARIC BLEND
 - ⊙ FINOREX RSA

COUPLING AGENT

- ⊙ FINOSIL 69
- ⊙ FINOSIL 266

SILICA DISPERSANT FOR RUBBER

- ⊙ ACMETOL S-2000.
- ⊙ ACMETOL JV46F.

REVERSION RESISTANCE CHEMICALS

- ⊙ FINOLINK 900
- ⊙ FINOLINK BDZTH

TECHNOLOGY INNOVATION CENTRE



TIC was established at Panoli to meet the upcoming requirements in the Rubber Industries.
This consists of:



R&D Synthesis Lab

- ❑ To develop new sustainable chemicals supporting rubber & allied Industries for import substitution.



Analytical Development Lab

- ❑ To characterize the molecules developed in the R&D Lab.



Product Application Centre

- ❑ To evaluate the developed chemicals in the rubber compound for its rheological and physical properties.



Pilot Plant

- ❑ To scale up the process developed by the R&D and to manufacture the material in on a pilot scale production prior to commercial production.



R&D SYNTHESIS LAB



ANALYTICAL DEVELOPMENT LAB

Differential scanning calorimetry (DSC) TA MAKE- DSC-25



Fourier-Transform Infrared Spectroscopy (FTIR)
Perkin Elmer Spectrum Two



UV-Vis Spectrophotometer lambda-365+ Perkin Elmer



High performance liquid chromatography (LC-300) Perkin Elmer



Gas Chromatography (Clarus-590) Perkin Elmer



Size Exclusion Chromatography (SEC)
GPC For Molecular weight Determination of Resin



ANALYTICAL DEVELOPMENT LAB

Softening point C&B Mettler



Softening point R&B



Melting Point apparatus



Potentiometry titrator



Karl Fischer Titrator



RUBBER APPLICATION CENTRE



Mixing:

- Banbury Mixer
- Two Roll mill
- Curing Press

Process Testing:

- Premier RPA- ALPHA
- Premier Mooney Viscometer
- PICMA Tack Tester

Product Testing:

- Universal Testing Machine (Zwick)
- Weighing balance with Densikit
- DIN Abrader
- Impact Resilience Tester
- Durometer- Shore A
- Compression set & Tension Set

Flex-Fatigue Test:

- Demattia Flexometer
- Fatigue to failure test
- Goodrich Flexometer
- Temperature & Humidity Chamber

Adhesion Testing:

- Fabric adhesion
- Steel Cord Adhesion
- Bead Wire Adhesion

Ageing Facilities:

- Box air ageing Oven
- Multi cell air ageing Oven
- Temperature & Humidity Chamber
- Salt ageing jar

EQUIPMENT FOR MIXING & CURING

Banbury Mixer- 1.6L : BAINITE



Two Roll Mill



Curing Press : SANTEC



EQUIPMENT FOR TESTING

Premier RPA



Mooney Viscometer



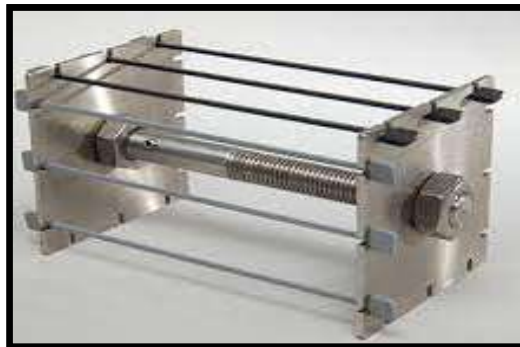
Picma Tack Tester



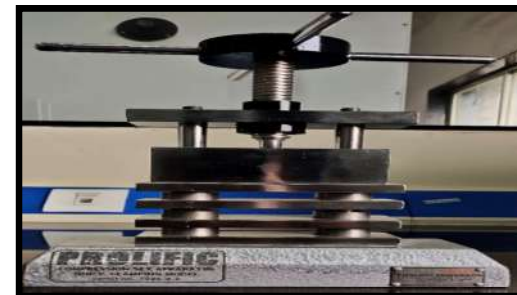
Hardness Tester



Tension SET



Compression SET



EQUIPMENT FOR TESTING

Universal Testing Machine
Zwick



DIN Abrader



Impact Resilience Tester



Specific Gravity Balance



EQUIPMENT FOR TESTING

FTFT



Demattia Flexometer

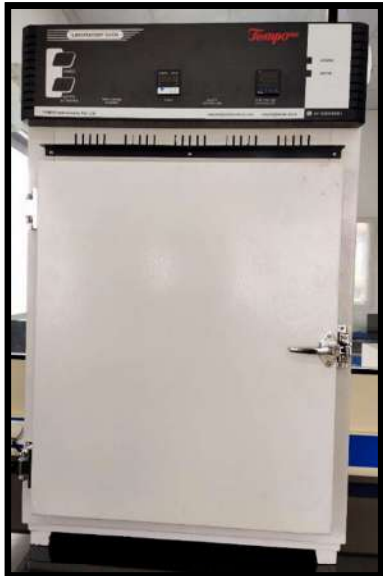


Goodrich Flexometer



EQUIPMENT FOR AGEING

Box Air Ageing
Oven



Salt ageing Jar



Multi-cell air
ageing Oven



Temperature & Humidity Chamber



Pilot Plant



EQUIPMENT FOR TESTING



FINORCHEM CORE TEAM



Director –Marketing &
Technical Services

Mr. Kishor Katkar

Ex- Bayer/Lanxess & ISRL



Executive Director –
Manufacturing & Projects

Mr. RB Vishwanath

Merchem (2003)



Director – QA/QC

Mr. B Jayamani

Ex - MRF



Director - R&D

Dr. Raj Durairaj

Ex - Indspec

QUALITY ASSURANCE



We are committed to Total Customer Satisfaction through manufacturing of quality products and consistency in quality & services.



Our QA Laboratory operates round the clock and has developed a Quality Assurance approach based on clear target of Zero defect.



Continual improvement of quality management system conforming to IATF 16949 :2016, ISO 9001:2015, ISO 14001:2015, ISO 45001:2018.



QA team is manned by qualified, well experienced & trained staff handling the responsibility of achieving Continuous Quality Improvement Goals.

SUSTAINABILITY INITIATIVES



Improvement in Production Process to reduce effluent quantity and quality in production of Accelerators. We are using Soyabean oil as anti dusting agent for TBBS. Currently we use about 8 to 10 % sustainable renewable material in the products.



Energy efficient agitation systems are incepted to improve the reaction efficiencies and cycle time. Implemented Steam Turbine – 350 KW



Plant roof tops are provided solar panel (346KWp) to tap renewable energy source. Cleaner source of energy - natural gas for steam production



Installation of new ETP (Effluent Treatment Plant) facility - Soil Biotechnology (SBT) is a Green Engineering approach based on a bio-conversion process and MEE (Multiple Effect Evaporation)

FINORCHEM
LIMITED,
PANOLI



EFFLUENT TREATMENT PLANT



OUR VALUED CUSTOMERS



CEAT



Continental



FINORCHEM
BREATHING CHEMISTRY

BKT
GROWING TOGETHER

JK TYRE
& INDUSTRIES LTD.

GOODYEAR

TITAN
MOVES THE WORLD

YOKOHAMA

METZELER
MOTORCYCLE TYRES

RALSON

TRELLEBORG

TVS TYRES

Ansell

Fenner
Fenner (India) Limited

INTERNATIONAL PRESENCE



EXPORTING COUNTRIES



- USA
- France
- Turkey
- Canada
- Italy
- Israel
- Brazil
- Japan
- Thailand
- Germany
- China
- Malaysia
- Netherlands
- Indonesia
- Sri Lanka

NEWS & MEDIA





THANK YOU