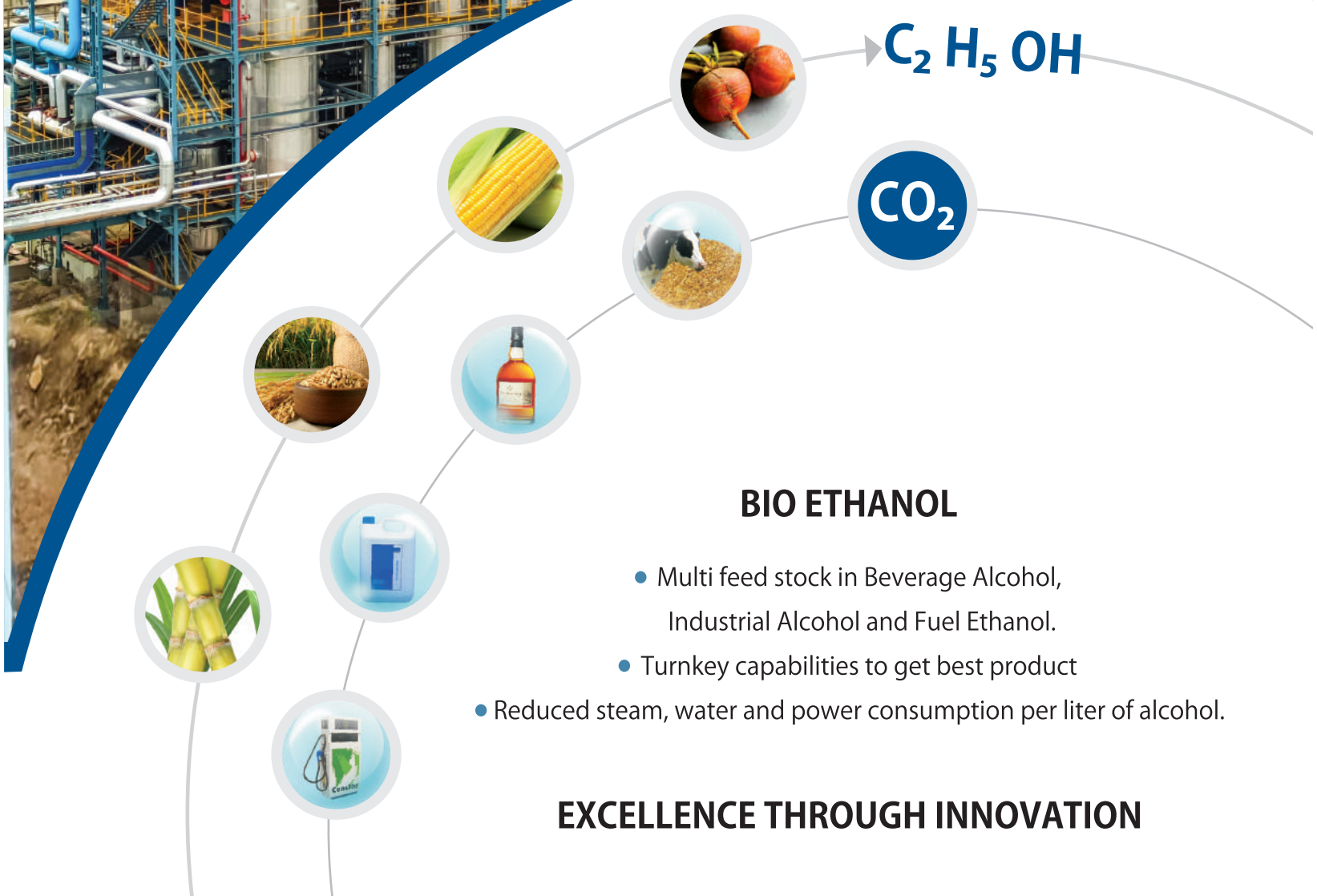




MÖJJ ENGINEERING SYSTEMS LTD.

Alcohol Division



BIO ETHANOL

- Multi feed stock in Beverage Alcohol, Industrial Alcohol and Fuel Ethanol.
- Turnkey capabilities to get best product
- Reduced steam, water and power consumption per liter of alcohol.

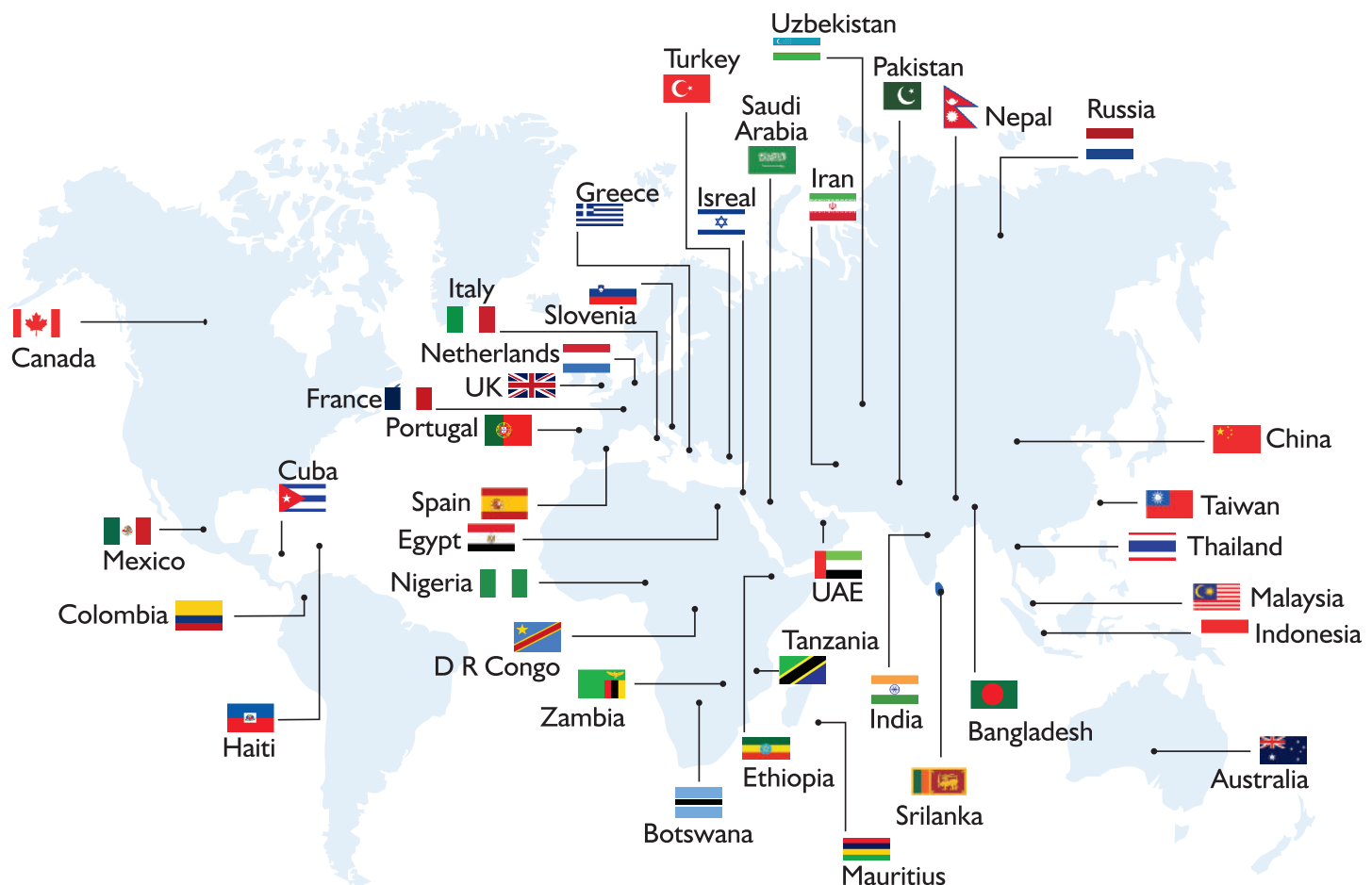
EXCELLENCE THROUGH INNOVATION

EXPERIENCE & GOALS

Over 37 years of Distilleries Experience

Over 1300+ Installation of Distilleries Plant Worldwid

Successful Installations Over 35 Countries.



We at Mojj Engineering System Ltd Have established ourselves as a permanent force in the industry, commanding a global presence through the successful execution of over 1300 installations across the world.

Our aim is to deliver customized turnkey solutions for Distilleries, Dryers & Evaporators with high operational feasibility. We have our own Five state of the art manufacturing plants situated at Pune and Gujrat with well-equipped Tools and Machineries with 400+ Engineers team to deliver the turnkey solutions.

We are glad to say the distilleries built with Mojj technology have redefined benchmark in terms of project completion time frame, product quality & Effluent handling system.

Our adaptability & responsiveness ensure that we meet the dynamic & diverse needs of our esteemed clients, solidifying Mojj Engineering System Ltd

DISTILLERIES | DRYERS | EVAPORATORS

1 FERMENTATION SYSTEM

Highlights

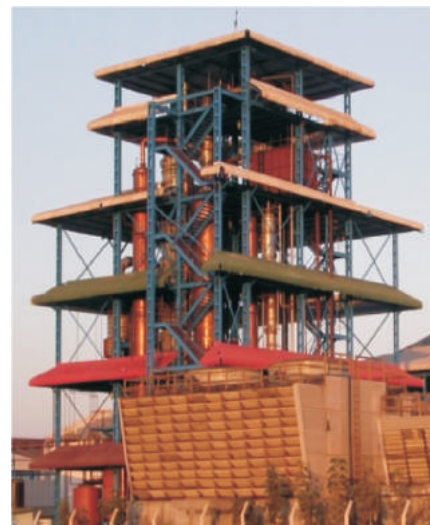
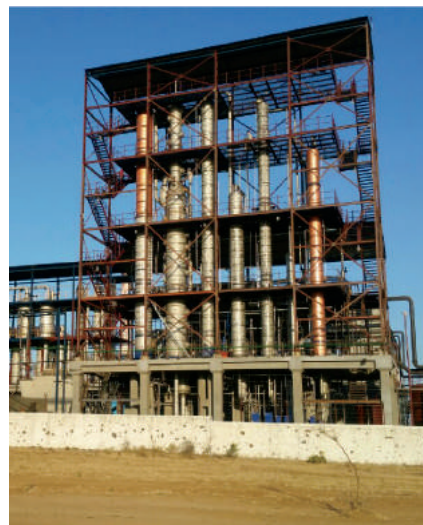
- Maximum yield.
- Multi feed fermentation module.
- Highest alcohol content in fermented wash hence least effluent generation.
- Specially designed educators for better contact between yeast and fermented sugars.
- Maximum conversion efficiency.
- Adequate residence time in fermenters.



2 DISTILLATION SYSTEM

Highlights

- Best quality of alcohol due to optimized scheme of distillation.
- Multi pressure distillation operates under vacuum and at low operating temperatures which avoids hard scale formation, and unwanted impurities like carbamates.
- Improved steam economy by cascading columns under vacuum and pressure.
- Optimum utility consumption.
- Axial flow pump at stripper column bottom to eliminate cleaning down time.
- Low Pressure distillation with air cooled condenser design
- We Provide force circulation reboiler to reduce effluent generation



3 DDGS 'COMBI DRYER'

Highlights

- Dryer vapours integrated with stillage evaporator, without any protein loss in DDGS.
- Concentrated stillage is fed to DDGS dryer to recover valuable products.
- Internals designed for uniform distribution of wet cake and maximum exposure to heat transfer area.
- Heat transfer area optimally designed to consume complete concentrated stillage.
- Higher thermal efficiencies.
- Low energy consumption.
- Low maintenance and operating cost.



4 EVAPORATOR FOR SPENT WASH & THIN STILLAGE CONCENTRATION

Highlights

- Special and proprietary design of integrated and standalone evaporators to achieve required end results.
- Superior plant design based on years of experience.
- Selection of configuration to avoid scaling hence low down time and low CIP chemicals requirement.
- Plant operates to achieve desired concentration of product which can be used for incineration directly or can be used for composting, fertilizer Powder etc.
- Special design for Bio methanated spent wash concentration with Degassing (Patent Pending).



5 FUEL ETHANOL PLANT

Mojj is driven by a passion to excel, a commitment to redefine industry benchmarks. Our fuel ethanol plants are based on molecular sieve technology.

Highlights

- Vapour phase integration with distillation to reduce the steam
- Choice of two or three bottle pressure swing adsorption enable smoother transition and longer sieve life.
- Lowest utility consumption per litre of fuel alcohol.
- Maximum alcohol yield (Typical loss less than 0.03%).
- Moisture content up to 0.1% v/v.
- Component design and selection to guarantee extensive service life.
- Fully automated with PLC / DCS based system.
- Customized design and plant layouts to suit all customers' requirements.



6 AIR COOLED CONDENSER TECHNOLOGY

An Air-Cooled Condenser (ACC) is a direct dry cooling system where Alcohol Water Mixture from Distillation Column & Water Vapours from Evaporator are condensed inside air-cooled finned tubes. The ambient air flows outside the finned tubes & removes heat, thus saving water as compared to Conventional Water-Cooled System. The fresh water requirement is reduced from 6 – 7 Lit/Lit of Total Spirit (by Convectional method) to 2-3 Lit/Lit of Total Spirit with this new concept.

Mojj Introduced this concept of ACC in Distillery Industry for Alcohol Water Mixture & with this concept Distillery Plant is now Practically Being Operated in Draught Hit Area in India.

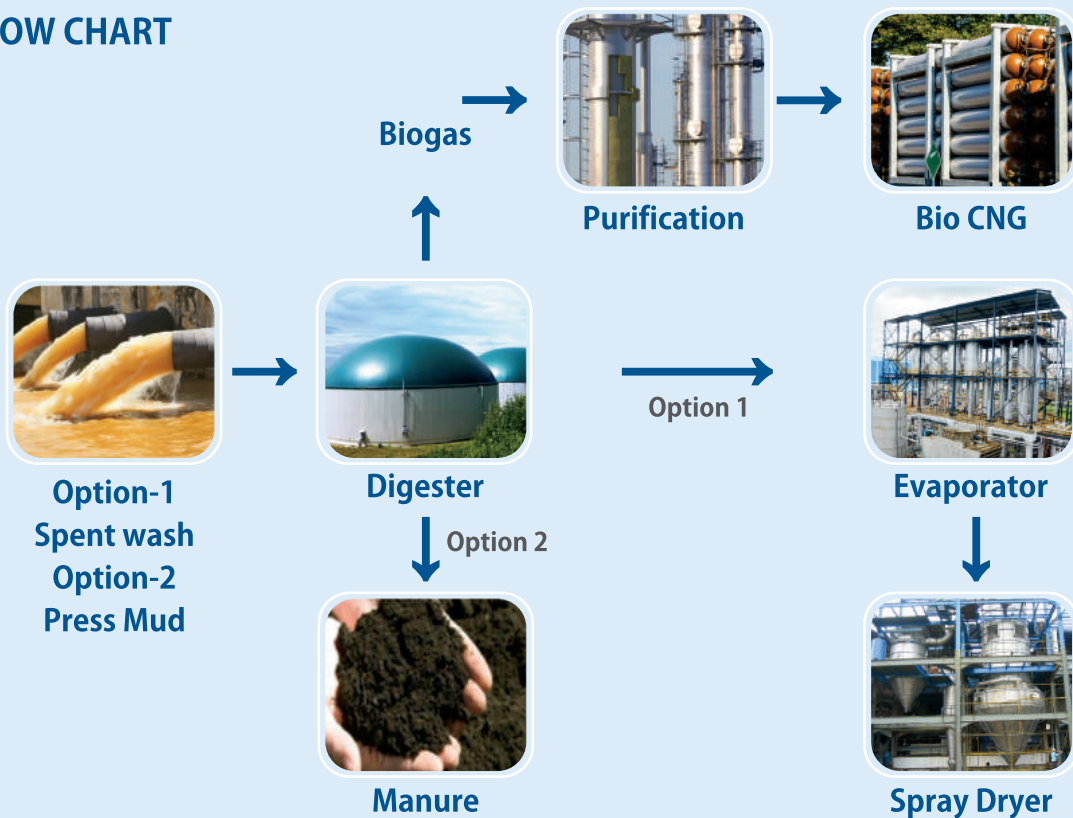


7 VENTURING BEYOND CONVENTIONAL BOUNDARIES

Our company provides complete solution from compressed bio-gas generation to waste treatment using our cutting edge technology of transforming biomass waste into liquid & solid manure.



FLOW CHART



8 GRAIN BASED ETHANOL PLANT



200 KLPD Grain Based Ethanol Plant



200 KLPD Grain Based Ethanol & ENA Plant



130 KLPD Grain Based Ethanol Plant.



60 KLPD Molasses Based Plant



150 KLPD Grain Based Ethanol Plant.



80 KLPD Multi Feed Composition Grain Based and Molasses Based Distillery Plant



175 KLPD Grain Based Ethanol Plant



80 KLPD Grain Based Ethanol Plant

9 MOLASSES BASED DISTILLERY PLANT



180 KLPD Molasses Based Ethanol Plant



130 KLPD Molasses Based Plant



150 KLPD Molasses Based Ethanol Plant



260 KLPD Molasses Based Ethanol Plant

10 LEGACY CUSTOMERS



90 KLPD Molasses Based Plant



60 KLPD Molasses Based Plant



45 KLPD & 70 KLPD Molasses Based Plant



45 KLPD & 65 KLPD Molasses Based Plant



45 KLPD Molasses Based Plant



45 KLPD Molasses Based Plant



40 KLPD & 60 KLPD Molasses Based Plant



30 KLPD & 45 KLPD Molasses Based Plant

OUR VALUABLE CUSTOMERS

 JAKSON Ethan Naturals Bio Fuels	 GOEL TMT Shri Bajrang Chemicals LLP	 modi naturals	 Ashtavinayak BIO FUELS AND EXPORTS Ashtavinayak Bio Fuels & Exports	 IPL Indian Potash Limited
 Lohiya Group	 RCP REAL CHEMIS PRODUCTS Real Chemsys Products	 PUNJAB CARBONIC PRIVATE LIMITED	 JRS Ventures Pvt. Ltd.	 ALCOBREW Dabra Alcobrew Pvt. Ltd.
 Dalmia BHARAT CEMENT (M /s SED)	 Maa Danteshwari MPMCS Ltd.	 Davangere Sugar	 WESTWELL BIOREFINERIES PVT LTD	 ALLIANZ DISTILLERY
 BHRAMAPUTRA Bhramaputra Biochem Pvt. Ltd.	 SSOPL Sonasati Organic Pvt. Ltd.	 SM SMPRIMAL Process Pvt. Ltd.	Shree Vinod Industries & Chemicals Pvt. Ltd.	New Look Bio fuel Pvt. Ltd.
 PureCircle Pure Circle SDN. BHD	 KIBOS DISTILLERS LTD.	 ZSFL Zanzibar Sugar Factory Ltd.	 TÜRKŞEKER Türkiye Şeker Fabrikaları A.Ş.	 Reliance Sugar & Chemical Ind. Pvt. Ltd. Reliance Sugars & Chemicals Ind Pvt. Ltd.
 PREMIER ORGANICS	 Kilimanjaro Biochem Ltd Kilimanjaro Bio chem Ltd	 Shree Dudhganga Vedganga SSK. Ltd.	 Harsha Sugars	 DCM SHRIRAM Daurala Sugar Works
 Bhimashankar SSK. Ltd.	 Onkar Sakhar Karkhana Pvt. Ltd.	 Vijayanagar Sugar Pvt. Ltd.	 The Malegaon SSKL	Yedeshwari Agro Product Ltd.
 Jamkhandi Sugar Ltd.	 Shree Halshidhnath SSK	 Sonhira SSK. Ltd.	SAHYADRI Sahakari Sakhar Karkhana Ltd.	 Shree Sant Tukaram SSKL
 DAYA Daya Claimax Sdn. Bhd.	 PRASOL CHEMICALS LIMITED	 SHPL Sunita Hydrocolloids Pvt. Ltd.	 KLJ KLJ Plasticizers Ltd.	 Laxmi Organic Industries
 Shree Pandurang SSKL	 SGSI SHRI GURUDATT SUGARS LTD. TAKALWADI	 UTOPIAN Utopian Sugars Ltd.	 KM Khatav-Man Taluka Agro Processing Ltd.	Vittalrao Shinde Sahakari Sakhar Kharkhana
 Ajinkyatara SSKL	 Dwarkadhish Sakhar Karkhana Ltd.	 Samarth SSKL	 Shree Narmada K.U.S.M. Ltd.	 Vilas Sahakari Sakhar Kharkhana

Our Philosophy

We believe and recognize the basic fact that each customer has his own specific and not so specific need to be catered to, requirements to be met and problems to be solved. We therefore strive in giving our services suited to these specific and peculiar needs of our customer. This calls for understanding these needs and transferring them into an engineering solution. No aspect of a plant is too minor to be ignored and no process requirement too complex to be met.

Range of Products	Dryer <ul style="list-style-type: none">• Spray• Fluid Bed• Flash• Rotary• Conduction• ATFD	Evaporators <ul style="list-style-type: none">• Falling Film• Forced Circulation• Scraped Surface• Wiped Film• Natural Circulation	Bio-Technology <ul style="list-style-type: none">• Bio Ethanol Plant• Industrial Alcohol Plants• Potable Alcohol Plant• Fuel Ethanol Plant• Bio Gas & Composting• Waste Recovery Plant• Spentwash Evaporator• DDGS Dryer• Zero Discharge Plants for Molasses, Grain and Juice Based Distilleries
	Turnkey Plant <ul style="list-style-type: none">• Liquid Milk• Powder Milk• Starch• Detergents• Instant Coffee• powder	Pollution Control <ul style="list-style-type: none">• Flue Gas Spray Scrubber• Wet Scrubber• Incinerators• Bag Filters• Thermal Oxidizers	



ISO 9001:2015

MOJJ Engineering Systems Ltd.

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Tel: + 91-20-27120360 / 27122837.

Email

distillery@mojjpune.com | dryer@mojjpune.com | evaporator@mojjpune.com

Website

www.mojjpune.com

Branch Offices (India)

New Delhi | Ahmedabad | Bangalore | Chennai

Works (India)

Unit I : Bhosari, Pune | Unit II : Ranjangaon, Pune
Unit III : Markal (Alandi), Pune | Unit IV : Vatva, Ahmedabad
Unit V : Alandi, Pune.

Concept to Commissioning