**Company Profile**

**FORTITUDE ENVIRO TEAM**

**CONSULTANTS AND TURNKEY CONTRACTORS**

**WATER & WASTE WATER**

**SEWAGE TREATMENT PLANTS,**

**TREATED EFFLUENT & SEWAGE RECYCLING VIA**

**ULTRA-FILTRATION, REVERSE OSMOSIS, MEE**

**RAIN WATER HARVESTING**

**SOLID WASTE MANAGEMENT**

**MSW PROCESSING EQUIPMENTS, COMPOSTING**

Year of Establishment: 2006.

Office & Works @

Plot No. M-94, Ambad MIDC,

Opp. Mungi Brothers,

Near Ambad Village.

Ambad, Nashik-422010.

From big corporations to small businesses, **FET** has the ability to serve the Customer’s needs. It offers a wide range of services and products to all industries and has been providing cost-effective solutions with a remarkable performance in the following areas viz.

* **Water Purification:-**

Purification encompasses all equipment and process technologies for removing impurities from fresh water supplies. We treat water from all natural sources such as rivers, lakes, springs, wells, sea, rainwater etc. with most appropriate techniques.

The treatment is designed to convert available quality of water into desired quality of water for the intended use. Custom made and standard solutions are available to get just the right quality of water for variety of uses such as drinking, domestic use, boiler feed, processes, cooling tower make up and numerous other applications.

Our extensive knowledge of entire spectrum of technologies enables us to combine multiple technologies together in a package to deliver water with the quality, quantity as required at affordable capital and operating costs.

Fortitude can provide solutions using following technologies and continuously add newer sustainable technologies to fulfil any requirement;

* Coagulation & Settling
* Filtration (Media / Micro )
* Ultra-Filtration
* Nano Filtration
* Reverse Osmosis
* Ion Exchange
* Ultra Violet Disinfection
* Ozonization
* Physico-Chemical precipitation
* Electro-Coagulation

We design, manufacture and supply equipment involved in all the above processes.

The equipment and machinery involved in the above processes are Chemical Dossers, Flocculators, Tube Settler, Lamella Clarifiers, HRSCC, PSF, ACF, DMF, IRF, UF, NF, RO, DM, Degassers, Mixed Beds, De-alkalizers, Softeners, EDI, UV, Ozonator, Electro-coagulators etc.

* **Waste Water Treatment and Recycling:**

The effluents or the liquid waste generated by industrial, commercial or domestic establishments are treated by variety of technologies to meet disposal norms as well as to recycle and reuse the treated effluents.

The nature of effluents and the contaminants therein varies from case to case basis and we undertake detailed study of process and effluents to accurately design a solution to treat any effluent.

The methods used for waste water treatment can be classified as physical, chemical and biological unit processes. Basically we provide two plants for waste water treatment mainly as

Effluent Treatment and Sewage Treatment plant depending on the raw water quality and its purpose.

Some of the technologies and processes involved in treating waste water are:

* Screening and Grit Removal
* Physico-Chemical reactions
* Coagulation and Settling
* Dissolved Air Floatation
* Electro-Coagulation
* Advance Oxidation
* Anaerobic Biological Process
* Aerobic Biological Process
* Membrane Reactors
* UF-RO for Recycling
* Sludge Dewatering
* Media Filtration and Absorption
* Multiple effect evaporation (with our Nashik based associate)

Using these technologies, the contaminants like TSS, Oil & Grease, BOD, COD, Heavy Metals, Solvents, bacteria and viruses can be removed.

The equipment and machinery involved in the above processes are Screen chambers, Grit removal chambers, Dosing systems, Flocculators, Tube Settlers, HRSCC, Reaction Tanks, Agitators, DAF clarifiers, Electro-coagulators, UV, Ozonators, Digesters, Septic tanks, UASB, SAFF, MBBR, MBR, Aeration Tanks, Lagoons, Filter Press, Filter bags, Belt Filter Press, Centrifuge driers, Media Filters, Resin Units etc.

* **We undertake Turn key Projects as below,**
1. Design and Execution of Water, Domestic & Industrial Wastewater Treatment Plants.
2. Manufacturing of Water and Wastewater Pollution Control Equipment.
3. Execution of Turnkey Projects for Water and Domestic/Industrial Wastewater Treatment Schemes.
4. Environmental Impact Assessment Studies and preparation of Environmental Audit Reports

(Environmental Statement) and Total Environmental Management Plans.

1. Obtaining NOCs, Air-water consents, Clearances for Environment related aspects from Various State

and Central Government Authorities.

1. Up gradation of existing systems for water and wastewater treatment projects.
2. Trouble-shooting, System Assessment and Augmentation of water & wastewater treatment plant.
3. Advanced water and wastewater Treatment for reuse, recycling of Treated waste water for Utilities,

domestic, green belt.

1. Solid Waste Management equipments for MSW Treatment/Composting.
2. Biogas from Organic Solid waste, MSW.

Supply of Specialty Chemicals and components related to Water and Effluent Treatment.

By catering to the needs of water purification pollution control for various industries, **FET** has gained considerable experience and recognition in the industrial sector.

* **Client List:**
1. **Mahindra & Mahindra:** Water Treatment Plant Automation for Scorpio Coolant Filling.

 STP & ETP: Modification of existing ETP and STP: Conventional STP of 40KLPD X 02

 Nos., Coolant Treatment ETP modification 2KL/Batch.

1. **Glenmark Pharma, Sinner:-** DM Plant Spares and Services.
2. **Mylan Laboratories Ltd, Sinner (Nashik), Indore, Aurangabad**:- Supply of ETP, STP.
* 100KL/Day Conventional STP with Circular RCC Aeration Tank and Fabricated Tube Settler at Sinner unit.
* Prefabricated (MS FRP) Primary Chemical Treatment ETP for formulation unit:

240KLPD X 02Nos. at Sinner Unit. This includes Flash Mixer, Paddle Flocculator, Tube Settler, and Chemical Dosing System with Semiautomatic Panel.

* Primary Prefabricated (MS FRP) ETP with SBR ETP 250KL/Day: for 600ppm BOD

and 1200ppm COD. This includes Prefabricated (MSFRP) Flash Mixer, Flocculator, Primary Tube Settler, Air Blower with Diffused Aeration, Decanter, MS Epoxy Sand Filter and Carbon Filter.

* UF RO for Process Water: 27KL/Hr. UF with Inge (BASF's Multibore Hallow Fiber modules);

followed by Softener (with 5000 Liters Resin and Automatic Regeneration Using Pneumatic Valves and PLC Programming) and 20KL/Hr. Permeate RO Plant with 75% Recovery. Feed TDS: 1500ppm.

1. **Mylan Laboratories Ltd**, **Pithampur SEZ, Indore:-**

Prefabricated (MS FRP) Primary Chemical Treatment ETP: 240KL/Day including Flash mixer, flocculator, Tube Settler.

1. **Mylan Laboratories Aurangabad unit:**
* 250KL/Day Primary Chemical treatment ETP complete in MS FRP including Flash Mixer, Flocculator, Tube Settler.
* SBR ETP: 250KL/Day: (without Civil Work) Twin Lobe Blowers with acoustics and Diffused Aeration followed by Tertiary Treatment.
1. **Jindal Saw Pipes, Sinner:** Supply Filter media for online Cooling Tower Filters with

4.5m Dia. And 3.5meter height.

1. **Maharashtra Seamless (D.P. Jindal Group)** Nagothane, Roha, Sewage Treatment Plant. 200KL/Day. Without Civil work. STP Includes: Anaerobic Reactor followed by Diffused Aeration with Twin Lobe Blowers.
2. **Sula Wineries, Gawardhan Village, Nashik**:

ETP: 100KL/Day with 5000ppm BOD and 10000ppm COD. Turn Key project with RCC/Civil Tanks. Primary Settling with Anaerobic Reactor followed by two stage Aeration followed by Tertiary Treatment. Supply of Softener: 15KL/Hr. MS Epoxy Vessel.

1. **Sula Vineyards Pvt. Ltd, Pimplegaon, Nashik:**
* ETP: 100KL/Day with 5000ppm BOD and 10000ppm COD. Turn Key project with RCC/Civil Tanks. Primary Settling Chemical Treatment with Anaerobic Reactor followed by two stage Aeration followed by Tertiary Treatment.
* Sludge Handling System including Feed pumps, Chemical Dosing and Filter Press: 750KG/Batch

X 02Nos.

* UF 8KL/Hr., RO Plant 5KL/Hr. for 1500ppm TDS and 500ppm Hardness Bore Water.
1. **Sula Vineyards Pvt. Ltd, Basavkalyan, Karnataka:-**

Prefabricated ETP: 5000ppm BOD and 10000ppm COD. This includes Primary Chemical Treatment followed by Primary Tube Settler, followed by UASB followed by Aeration, Settling and Filtration. Complete set-up in MS FRP.

1. **Cupid India Limited, Sinner:-** DM Plant Spares Servicing, Supply of ETP: 75KL/Day; All in Prefabricated MS FRP. Includes: Primary Chemical treatment followed by Two Stage Aeration and Filtration. Filter Press for Sludge Handling.
2. **Ajanta Pharma Ltd., Dahej SEZ, Bharuch**: 100KLPD ETP including Primary Chemical Treatment followed by MBBR Aeration, Tube Settler, Filtration, Sludge Handling (Filter Press). Only Aeration tank and foundations in Civil.
3. **John Distilleries Pvt. Ltd, Bangalore:-**Winery Effluent ETP, Includes only electromechanical supply; 20KLPD with 5000ppm BOD and 10000ppm COD: Primary Treatment followed by MBBR Aeration and Filtration.
4. **Anand Distilleries Pvt. Ltd, Amravati (Nagpur):-** R.O. Plant: 20KL/Hr. Permeate flow rate with 75% Recovery, Technical Consultancy for ETP and Process.
5. **SAB Millar Breweries, Aurangabad:-** Water Treatment Plant, Tertiary Treatment Plant for Effluent Recycling: Tertiary Treatment Plant was designed to use existing (Old ETP) tanks like Clarifier, Aeration Tank, Old Blower for Flocculation instead on Paddle Flocculator. Aeration Tank was used as Flocculation Tank, Secondary Clarifier was used as Settling Tank.
6. **HCC Winery, Dindori, Nashik**:-, ETP, Water Treatment and R.O. Plant,
7. **Holden Medical Laboratories, Sinner**:-, ETP
8. **Konkan Agro Marin India Pvt. Ltd**.:- R.O. Plant Trouble shooting, Technical Consultancy.
9. **Seagram Wineries, Dindori**:-
* Water Treatment Plant AMC, ETP/STP consultancy.
* UF RO followed by Mixed Bed for ETP Treated Effluent recycling to High Pressure Boiler; Feed TDS: 1000 to 1200ppm. Hardness: 500ppm. Capacity: 10KL/Hr.
* Softener for Borewell Water: Hardness: 400ppm, OBR: 300KL, Flow: 15KL/Hr. Semiautomatic. Resin: 2000Liters.
1. **HPCL, Aurangabad**:- ETP, Technical Consultancy.
2. **Coastal Marin Construction and Engineering Co. Pvt. Ltd**.:- Sea Water De-Salination

 Plant for Ship (Innovocean). Capacity: 1000 LPH.

1. **Skol Breweries Ltd., Aurangabad:-** 60KL/Day STP renovation.
2. **Prabhat Dairy, Shrirampur:-** Water Treatment Plant AMC.
3. **Suzlon Energy Ltd, Nandurbar:-** Sewage Treatment Plant:40KL/Day MBBR STP Turn Key project with complete Civil work.
4. **Charosa Winery, Dindori:** MPCB Liasioning, Legal Compliance.
5. **Eco-friend Environmental Solutions, Nashik:** Nandgoan Municipal Solid Waste

Treatment & Composting.

1. **Polygenta Technologies Ltd, Dindori, Distt. Nashik:** Supply and ETP Technical Consultancy, supply of ETP components.
2. **Hindustan National Glass, Sinner: DM Plant AMC, ETP Up gradation**: 100KL/Day.
3. **Brihan Karan Sugar Syndicate Pvt. Ltd,** **Gonde, Distt. Nashik**:- Supply of 5KL/Hr. R.O. Plant followed by Mixed Bed DM.
4. **Orchid Chemicals, Aurangabad:-** Supply of WTP components and Heat sanitizable RO membranes.
5. **United Breweries**, **Dharuhera, Chopanki, Aurangabad, Shahjanpur, Manglore:-** Supply of MBBR STP in Prefabricated MS FRP MOC. Capacity 20KLPD.
6. **Somanda Vineyards and Resorts Pvt. Ltd, Nashik**:- ETP, STP, Water Treatment.
7. **Celebrity Breweries Pvt. Ltd, Kolkata** **Brewery:-**

ETP: Capacity: 550KLPD; Design COD: 15000ppm, BOD: 8000ppm, TSS: 500ppm.

Without Civil Work; Includes: Primary Treatment like Parabolic Screen, Primary Settling, UASB Reactor, Two stage Diffused aeration with Tri-Lobe Blowers, Filtration. Decanter Humboltz (Italy make) for Sludge Dewatering.

1. **Wisdom High International School**:- 100KLPD MBBR STP without Civil RCC Tanks..
2. **Sahyadri Farm Producer Co. Ltd. Nashik:-** ETP. Design capacity: 350KL/Day, COD: 3500ppm, BOD: 1500ppm. TSS: 500ppm.This includes: Anaerobic Reactor UASB followed by Aeration, Tube Settler, Tertiary Treatment, and Filter Press for sludge dewatering.
3. **SUMUL (Surat District Co-Operative Milk Producer Union Ltd):-** ETP, UF & RO.

Capacity: 400KL/Day. Design COD: 2000ppm, BOD: 1200ppm. TSS: 300ppm.

Process includes: Anaerobic Reactor UASB followed by two stages MBBR Aeration followed by Sec. Tube Settler followed by UF and RO with 75% recovery. Filter press for Sludge dewatering.

1. **Carlsberg India Breweries:-** Auto-ignition system for Biogas, Water Recycling plant, Chemical Dosing System.
2. **HPCL Bottling Plant, Sinner :-** ETP (Through Prakruti Enviro Engineers)
3. **Porus Laboratories Pvt. Ltd. (Bulk Drug):-**ETP for Phenolic effluent.

Design COD: 6000ppm, BOD: 3000ppm. Civil Work was in Client scope. Turn Key ETP Supply for 100KLPD capacity; includes Anaerobic Reactor UASB, followed by Aeration followed by Tertiary treatment and Filter press for sludge dewatering.

1. **Tilak Nagar Industries:-** Bottle Wash water recycling Plant (Through Karan marketing). 10KL/Hr. Chlorination followed by filtration.
2. **Associate Blenders and Distillers, Aurangabad:**
* ETP, Bottle Wash water recycling.
* Supply of 2KL/Hr. RO Plant for Drinking Water, feed TDS: 1500ppm. Recovery 75%.
1. **Sapta Shrungi Steel Industry, Jalana:-** 1KL/Hr. R.O. Plant & DM Plant.
2. **Akshay Steel Industry:-** Jejuri, WTP, Softener.
3. **Vaishnavi Indotech, Belgaum:-** WTP, Softener.
4. **Mahalaxmi Seamless & Steel Industry, Baramati:-** Softener Plant.
5. **TI Cycles Ltd. Sinner:-** DM Plant Spares, Servicing, AMC.
6. **Bumper India Pvt. Ltd. Ambad:-** DM Plant Servicing.
7. **Hotel Sun and Sand, Shirdi:-** Water Treatment Plant AMC
8. **Epitome Components Ltd, Ahmednagar:-** Supply and Technical Consultancy for ETP.
9. **Aryan Castings Pvt. Ltd. Dindori, Distt. Nashik:**
* Supply of Reverse Osmosis Plant: 8KL/Hr.
* Cooling Water Circuit, Liasioning and Technical Consultancy.
1. **Beyond Resort, Nashik:-** Turn Key supply with Civil RCC Tanks 25KL/Day SBR STP.
2. **S.M. Enterprises, Kolkata:-** Erection and Commissioning of WTP for Bridgestone, Pune.
3. **Nikhil Aquatech, Pune:-** R.O. Plant, Water Treatment: Filtration and Softener.
4. **Ajit Trading Co., Mehsana, Gujarat:-** Tube Settler
5. **Marsavco Sarl, Congo S.A.:-** DM Plant.
6. **Marcuras Water, Pune:-** Erection Commissioning of Water Treatment Plants.
7. **Water Management Co., Ahmadabad:-** Tube Settler.
8. **Aritma Water Pvt. Ltd. Sangli:-** Tube Settler.
9. **MAA & CO. Surat**:-Tube Settler.
10. **Green Filed Services, Nashik:-** Softener.
11. **Agila Specialties Pvt. Ltd., Bangalore,:-**ETP
* Chemical Pretreatment ETP in MS FRP MOC: 250KL/Day. Includes: Flash

 Mixer.

* Flocculator, Tube Settler, Dosing System.
* SBR ETP for 250KL/Day capacity; Supply of Electromechanical equipments

(Civil in Client Scope). Blowers with Diffused Aeration, Tertiary Treatment with MS Epoxy Sand Filter and Carbon Filter.

1. **Siddhachal Co-Operative Society Ltd. Thane, Ghodbunder:-**

160KLPD STP for Water Re-cycling Prefabricated and partly existing civil tanks.

Includes Baffled Anaerobic Reactor followed by Two stage MBBR Aeration, tube Settler, Ozonation, filtration. Treated water used for Toilet flushing.

1. **3F Fji Foods Pvt. Ltd. Indo Japan food industry**:- Civil work by Client.

Capacity: 171KL/Day.

Design COD: 22000ppm, BOD: 13500ppm, Oil/Fat: 100ppm.

Process includes: Dissolved Air Flotation, Anaerobic Reactor followed by two stage aeration, Tertiary Treatment, Decanter (Humboltz) for Sludge dewatering.

1. **Rapid Services:**- Drinking Water Filtration.
2. **Vadivarhe Specialty Chemicals Limited:-** ETP Bio-reactor.: Prefabricated MS FRP tanks with Diffused Aeration System.