



MGP

MGP TECHNOLOGIES

Environmental Engineers and Consultants

Our Services

- Design Consultancy Services
- Sewage Treatment Plant
- Water Treatment Plant
- Effluent Treatment Plant
- Rain Water Harvesting
- Statutory Approvals
- Water Softeners
- Reverse Osmosis Plant
- Plumbing
- Chemicals for STP / WTP / ETP



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About Us

MGP Technologies is a leading manufacturer of Sewage Treatment Plants for the industrial and building sector. We involved in the design, supply and erection, of sewage treatment plants The object of the treatment, is to use of combination of physical, chemical and biological processes, to remove contaminants from wastewater or industrial effluents so as, make the water fit for discharge or reuse. The water can be treated to adhere to the norms of the statutory, organizations. The treated water can be used for gardening, cleaning, and in toilet flushing line. The user ends up with a substantial cost benefit, on the working duration of the wastewater treatment plants. We design the plant baed on the test report of the customer's sample, space constraints and requirements.

Our sewage treatment plants have been running, successfully in diverse sectors such as Industries, Hospitals, Educational, Institutions, Apartments and Hotels spread across the country. We offer a cost effective and a timely solution to your wastewater disposal needs. After We also provide prompt after sales services for trouble shooting and maintenance of the installed system.

Offering a wide range of environment friendly technological solutions, we specialize in sewage recycling and reuse. Our strong national track record and in-depth domain expertise as a water and wastewater engineering specialist are unrivalled in the region. We have the profound ability to identify, design and implement customized solutions within a tight project footprint and time frame.



OUR PRODUCTS

We specialize in Sewage Treatment Plants with Technologies

- ◆ MS /FRP Compact Portable Type
- ◆ Conventional Type Activated Sludge Process (ASP Technology)
- ◆ Sequential Batch Reactor (SBR Technology)
- ◆ Moving bed bio Reactor (MBBR Technology)
- ◆ Membrane Bio Reactor (MBR Technology)
- ◆ Up flow anaerobic sludge blanket (UASB Technology)
- ◆ Eco Advance Sequence Batch Reactor (Eco SBR Technology)

1. MS /FRP Compact Portable Type STP



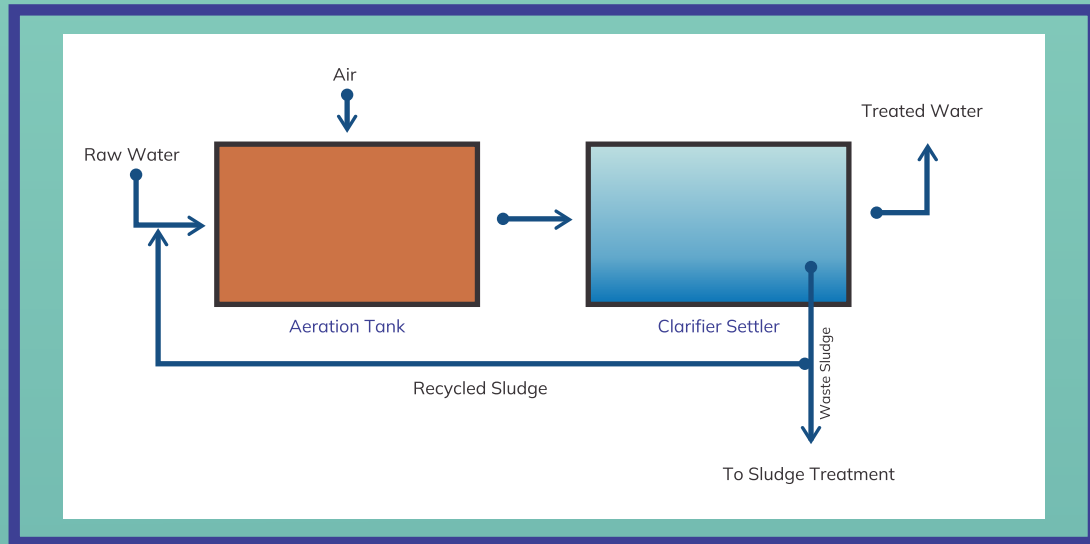
MGP– MBR/SBR/ASP is an indigenous technology developed to meet stringent treated water quality for sewage water and industrial effluent. MGP - MBR is a membrane reactor based design for biological treatment of waste water. MGP - MBR operates on the principle of biological/bacterial process followed with membrane filtration. Raw untreated wastewater is sent to MGP - MBR reactor requires a bar screen to prevent any larger debris, plastics etc. clogging the reactor. MGP - MBR module is a bio reactor fitted with necessary components like air diffuser and filtration membrane with a pore size ranging from 0.1 micron to 0.01 micron. Residence time of waste water within the reactor is controlled by drawing rate from the membrane module. Treated water is drawn from the reactor using suitable pump. As the pore size of the membrane is too small to allow any bacteria or other contaminants to pass through, the treated water at the outlet of the membrane is clean with reduced organic content and free from suspended solids. This water is thereafter dosed with necessary chlorine and sent for eventual reuse or discharge as per the requirement (Capacity)

2. Conventional ASP technology (ASP Technology)

Technology and Process Description

a. Primary Treatment

b. Secondary Treatment



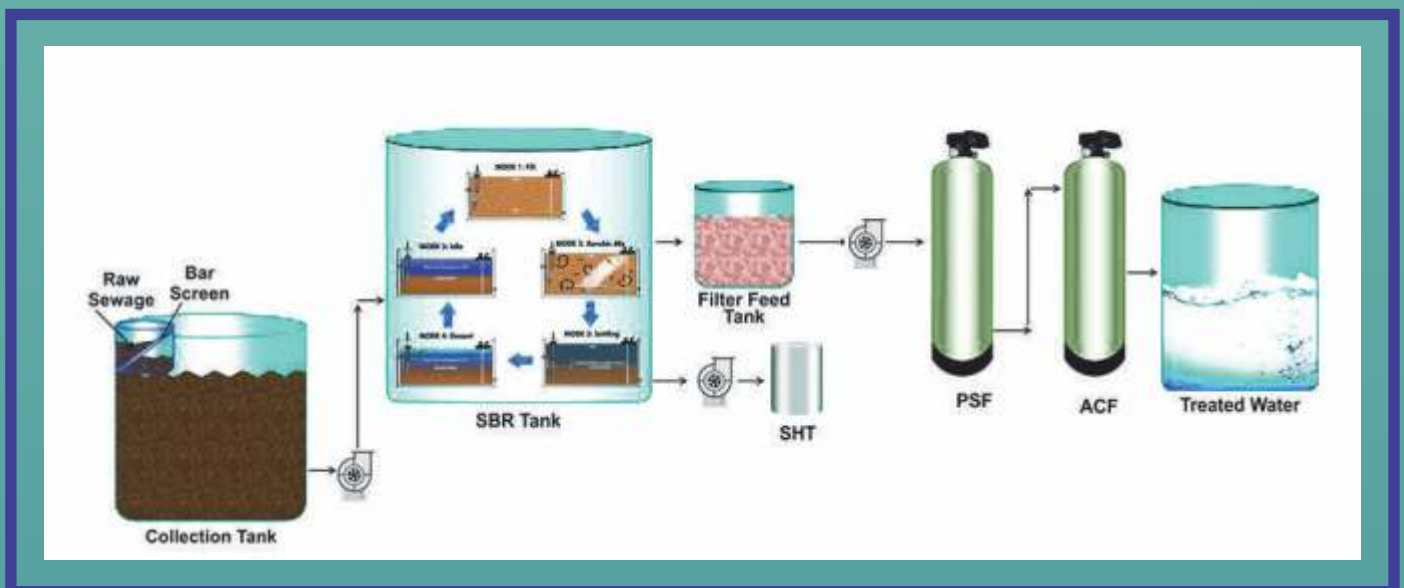
3. Sequential Batch Reactor (SBR Technology)

Technology and Process Description

The Sequencing Batch Reactor (SBR) is an activated sludge process working in a batch mode with aeration and sludge settlement both occurring in the same tank. This leads to a reduction in civil costs and less space is required as several steps are occurring in the same tank.

There are five stages in the treatment process:

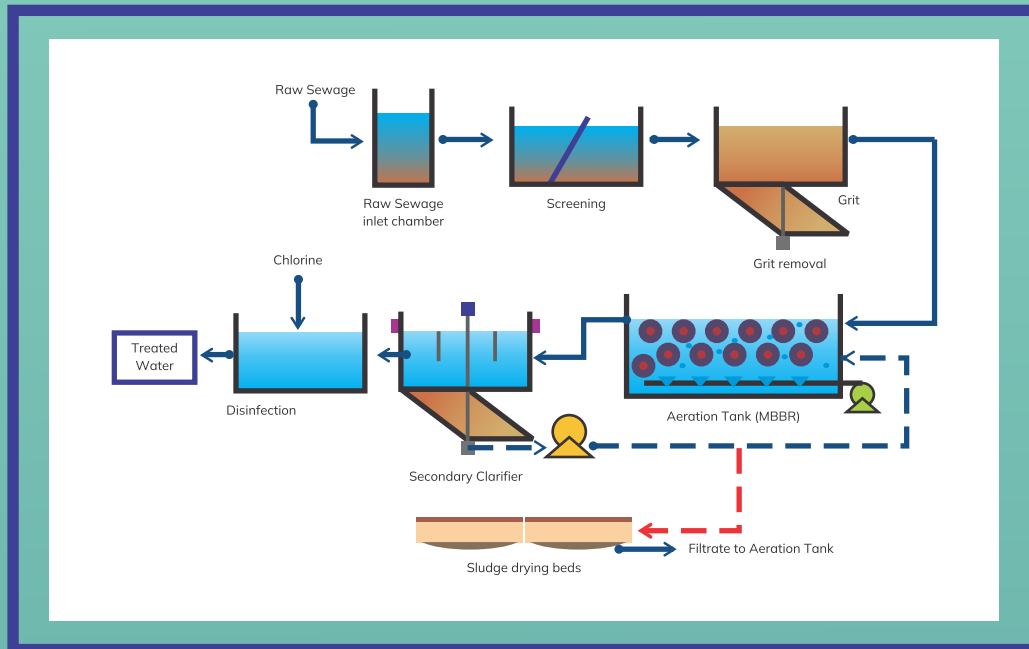
1. Fill
2. React
3. Settle
4. Decant/ Draw



4. Moving bed bio Reactor (MBBR Technology)

Technology and Process Description

It contains the Bio pack and tube pack media to enhance the surface volume for Microbial growth.

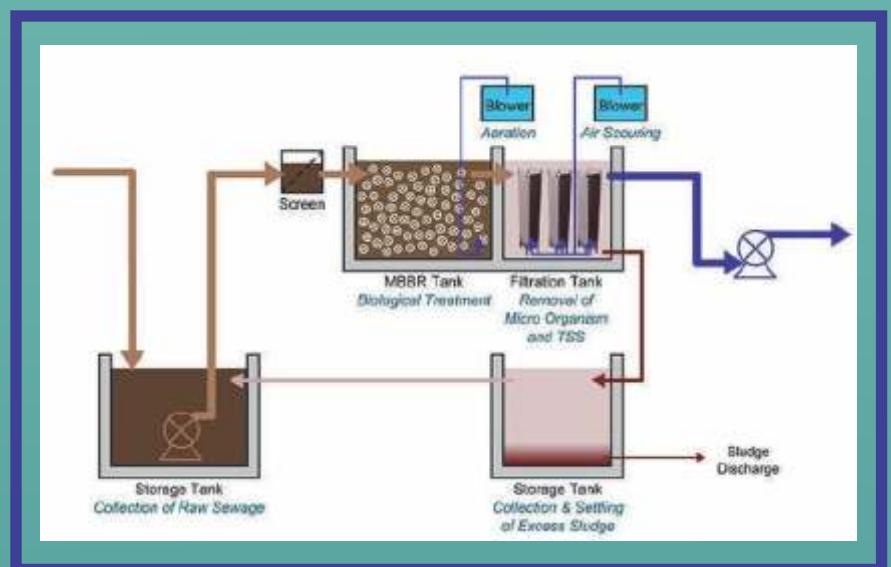


5. Membrane Bio Reactor (MBR Technology)

Technology and Process Description

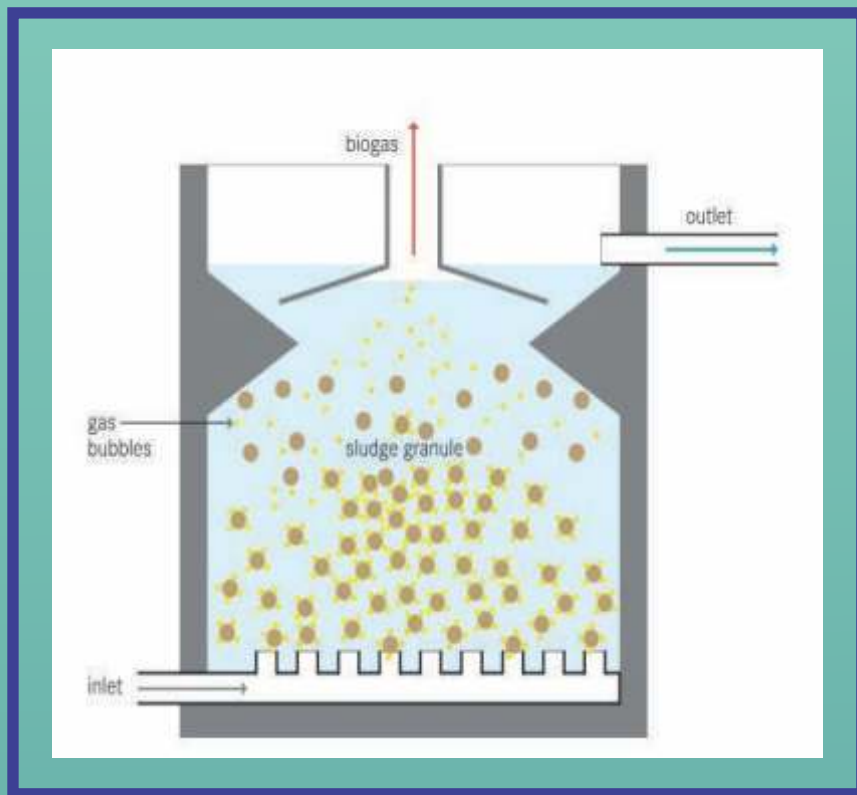
MBR PROCESS

- ◆ Pre-Treatment
- ◆ Pre Screen
- ◆ Oil & grease removal
- ◆ Sand removal & fine screen
- ◆ Bio Reactor
- ◆ Submerged membrane/ Airlift membrane
- ◆ Air blowers diffuse air to the wastewater
- ◆ Balance sludge discharge through pump
- ◆ Clear water will be permeated out by self-priming pump at vacuum pressure through MBR Modules



6. Up flow anaerobic sludge blanket (UASB Technology)

Technology and Process Description



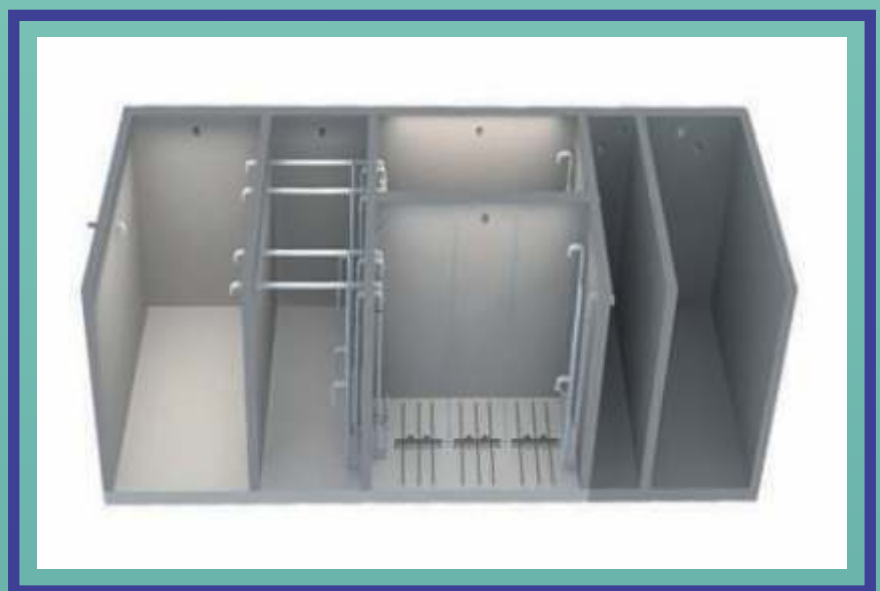
UASB uses an anaerobic process whilst forming a blanket of granular sludge which suspends in the tank. Wastewater flows upwards through the blanket and is processed (degraded) by the anaerobic microorganisms. The upward flow combined with the settling action of gravity suspends the blanket with the aid of flocculants. The blanket begins to reach maturity at around three months. Small sludge granules begin to form whose surface area is covered in aggregations of bacteria. In the absence of any support matrix, the flow conditions create a selective environment in which only those microorganisms capable of attaching to each other survive and proliferate. Biogas with a high concentration of methane is produced as a by-product, and this may be captured and used as an energy source, to generate electricity for export and to cover its own running power. The technology needs constant monitoring when put into use to ensure that the sludge blanket is maintained, and not washed out (thereby losing the effect). The heat produced as a by-product of electricity generation can be reused to heat the digestion tanks.

7. Eco Advance Sequence Batch Reactor (Eco SBR)

Household activities in water usage involve kitchen usage, washing, laundry, bathing and flushing the toilets. This combined water is characterized as sewage water. EcoSBR plants are designed to treat this waste water. Depending on the need for reuse and recycle additional tertiary treatment can be added to our standard EcoSBR sewage treatment plants. EcoSBR Plants are designed to achieve high levels of treatment before tertiary treatment. The treatment values achieved are as below.

EcoSBR Efficiency

Each treatment plant is designed to achieve high levels of treatment with optimal energy usage. EcoSBR series consumes the least energy for the treatment, while according to site conditions there might be slight variation in power consumption. The below illustration is the power consumption/ person in a year with EcoSBR compact plant.



EcoSBR Advantage

- ◆ Fully automatic operation
- ◆ No operator required
- ◆ Very high efficiency in operation
- ◆ Low load and weekend
- ◆ Very low power consumption in a day
- ◆ No valves in water for decantation
- ◆ Can be fitted into fully underground tanks on site
- ◆ Airlift pump replaces electrical pump and mechanical area. Sludge recycle and also decanting
- ◆ Can be retrofitted into underground septic tank
- ◆ No replaceable pumps or moving parts in waste water tank
- ◆ Easy to operate and maintain controller and air pump
- ◆ Just one compressor. Machine cabinet does the job of 4 pumps and blower
- ◆ Very low operation and maintenance cost
- ◆ Operation is not hampered by frequent power cuts

MGP SEWAGE TREATMENT PLANT HIGHLIGHTS

Technology and Process Description

- ◆ Consistent supply of treated water
- ◆ Low operating & maintenance cost
- ◆ Minimum foot print area
- ◆ Low power consumption
- ◆ Minimum use of chemicals
- ◆ Focus on ease of maintenance while designing
- ◆ Trained team for installation & after sales service
- ◆ Environment friendly systems
- ◆ Plants with parameters meeting PCB norms
- ◆ Overcomes factors of space and height constraints

MGP ADVANTAGE FOR STP

- ◆ Ready to use Systems
- ◆ Easy to Install
- ◆ Fast Delivery
- ◆ Operational Support and Commissioning

EFFLUENT TREATMENT PLANTS

MGP Provides Effluent treatment solutions for various types of industrial waste water. Customised systems to suit the wide variety of effluents and to maintain efficiency are provided to industries – systems based on physic-chemical and biological treatments and membrane separation are offered to suit efficiency.

Applications of these plants are in various industries like

- ◆ Paint shop, Heavy metal waste-phosphate and decreasing operations.
- ◆ Oil refineries
- ◆ Leather industry
- ◆ Paper industry waste treatment, recovery of fibres and recycling.
- ◆ Textile based treatment and de-colorization
- ◆ Dairy industry
- ◆ Food, fruit
- ◆ pulp and sugar
- ◆ industry etc.



WATER TREATMENT PLANTS

1. WATER SOFTENERS

FEATURES:

- ◆ Available Manual and Automatic
- ◆ Avail FRP/MS Constructions
- ◆ Increases the Life and efficiency of Home appliances
- ◆ Maintains floor tiles, marbles
- ◆ Makes the cooking faster
- ◆ Reduces consumption of cooking gas
- ◆ Prevents your pipe lines, faucets and appliances from scaling
- ◆ User friendly
- ◆ Value for money
- ◆ Prevent Hair Fall

APPLICATIONS:

- ◆ Hospitals, hotels, laundries and air-conditioning Plants
- ◆ Textile processing
- ◆ Beverage production
- ◆ Cooling water make-up
- ◆ For Residential purpose
- ◆ RO Pre-treatment
- ◆ Boiler Feed





2. RO SYSTEMS

MGP is a reputed reverse osmosis plant provider in the country. Our industry professional's best utilize the company resources for incorporating efficient water treatment mechanism for commercial buildings & industries.

ORGANIC WASTE CONVERTERS

We provide organic waste converters. It converts the organic waste added to the machine into nitrogen rich compost by reducing its volume to almost 90% of the original. It is available in different models & also can be custom made to suit your requirement. The best way of choosing the right capacity model is to weigh organic waste for a week and arrive at a per day generation. For societies and housing complexes, per day generation of organic waste is



approximately 400 to 500 grams per day per household. We can help you in capacity planning and making the right choice for the machine. Our OWC's comes in various sizes and can be customized based on our customers' requirements. It has been a popular choice for many of the new age builders and leading companies in India. It is also gaining popularity as a key component in establishing an independent and profitable waste management business.

RAIN WATER HARVESTING (RWH)

- ◆ **Roof based Rain Water Harvesting:**Roof based rainwater shall be harvested through
- ◆ A storage tank or recharged through an open well or a bore well in the building
- ◆ Irrespective of the nature of sub-soil conditions.
- ◆ **Land based Rain Water Harvesting:**Land based rain water from the open spaces
- ◆ Around the buildings/ gardens parks shall be harvested using appropriate ground
- ◆ Water recharge structures depending on the nature of the sub-soil conditions.
- ◆ Recharging ground water through open well
- ◆ Recharging ground water through Bore well

DESIGN CRITERIA

While designing the capacity of the storage structure for the Roof top Rain Water Harvesting or for design of artificial recharge structures to ground water a provision of 20 ltrs or more per sq.mtr (2 Ltrs per sq.ft) of the roof area shall be adopted.

PLUMBING

We are an Indian company operating as a plumbing contractor, specialization in Industries, IT parks Hospitals, hotels, residential and Commercial as well as education institutions installations. We have the experienced, technical supervisory staff, plumbers and inventory necessary to handle any project, large or small. We are committed to providing excellent workmanship and high quality services to every project we undertake. We also offer value engineering to our customers in an effort to provide viable alternatives in materials to lower project costs.

STATUTORY APPROVALS

- ◆ Consultancy and Liaison services
- ◆ CFE from KSPCB/ MOEF

OPERATION AND MAINTENANCE

MGP offers you peace of mind with maintenance and operating programs designed to keep your system operating efficiently, while also managing your budget and manpower. Maintenance and Operating Services help customers get the most value from their water treatment equipment investment. Our experienced field service technicians are ready to serve you. Our localized service allows us to schedule service and repairs when and where you need them.

Customers who rely on MGP to maintain and operate their water treatment systems realize these benefits:

- ◆ Extended equipment life
- ◆ Expert evaluation and troubleshooting before a problem occurs
- ◆ Minimized downtime
- ◆ Improved direct manpower usage
- ◆ Efficient operation

OUR SERVICES

MGP offers the following services

- ◆ Design Consultancy Services
- ◆ Drafting services
- ◆ Operation and Maintenance Services (O&M)
- ◆ Annual Maintenance Contract (Comprehensive and Non-comprehensive)
- ◆ Consultancy Services
- ◆ Up gradation and Services of Existing Plants
- ◆ Water Testing Services
- ◆ Automation of Existing Manual Plants
- ◆ Piping works for treatments plants
- ◆ Water Auditing
- ◆ Turnkey Project Work related to Water Treatment Plant (Supply of Manpower, Pipeline Work, Electrical Cable Laying etc.,)
- ◆ Upgradation services
- ◆ Project execution support.

ANNUAL MAINTENANCE CONTRACTS

Annual maintenance contracts outlining regular check-ups and routine work to regulate the performance and quality of Water Treatment Plant.

The AMC will comprise of the following services.

It contains the Bio pack and tube pack media to enhance the surface volume for Microbial growth.

- ◆ Routine / proactive check up visits.
- ◆ Regular Safety checks.
- ◆ Annual training for operators.
- ◆ Regular monitoring and Periodic Efficiency trials.
- ◆ Periodic analysis of input parameters (Water, Fuel, Thermic Fluid etc.).
- ◆ History Mapping, Reports, Root Cause Analysis.
- ◆ Complete Overhauling of the equipment annually.
- ◆ Attending breakdown call on priority.
- ◆ Reduce utility and chemical consumption costs



CLIENTS

- ◆ M/s Karan Construction,Bangalore
- ◆ M/s Pushpam Group, Jayanagar, Bangalore
- ◆ M/s Arun Shelters Pvt Ltd, Yelahanka, Bangalore.
- ◆ M/s.Prerana Motors (P) L
- ◆ M/s. Concorde motor (India) limited, Dairy circle, Bangalore
- ◆ M/s .Concorde motor (India) limited, Mysore Road, Bangalore.
- ◆ M/s.Saiven Developers
- ◆ M/s Mahaveer Jewel
- ◆ M/s Mahaveer Spring Annex
- ◆ M/s Arjun Aura Apartment M/s Bio plus, ITPL, Bangalore
- ◆ M/s BDA Project , Gunjare, Bangalore
- ◆ M/s. Ultra Laboratories Pvt Ltd
- ◆ M/s Moog India Technology CenterPvt.Ltd
- ◆ M/s Property Solutions (India) Pvt Ltd
- ◆ M/s GSI Building CPWD Uttarahalli main Road,Bangalore
- ◆ M/s GPOA Building CPWD Domlur,Bangalore
- ◆ M/s KMF Anekal
- ◆ M/s KMF Kankapura
- ◆ M/s CPWD ITAT Income Tax Building,Bangalore
- ◆ M/s S VInfrastructure,Bangalore
- ◆ M/s HSBC B-1 Project at Baneergatta Road, Bangalore
- ◆ M/s NIFT Building,CPWD ,Bangalore
- ◆ M/s MLA Hosing Co-Operative Society Ltd,Bangalore

We request you to kindly give us an opportunity to serve you the best.



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