

## SHIMI RESEARCH CENTER PVT. LTD.

Several years of extensive experience in design and manufacture of environment friendly technologies, has made Shimi Research Center Pvt. Ltd. the prime choice of leading companies across various sectors both in India and overseas. An ISO 9001:2008 company, Shimi Research Center Pvt. Ltd is well known for delivering the highest levels of performance, excellence and quality in all its products and services. Our product portfolio stands out because of the extensive range of tailor made pollution control equipment and remedial solutions for pollution, waste management, recycling technology and process control offerings.

#### **SEWAGE TREATMENT**

Sewage treatment is the process of removing contaminants from wastewater generated from industrial or domestic sewage using physical, chemical, and biological processes. Its objective is to produce an environmentally-safe fluid waste stream and a solid waste (or treated sludge) suitable for disposal or reuse usually as manure. The treated water after tertiary treatment can be used for cooling towers, horticulture, flushing and washing.

SRC offers various advance technologies with low foot print as per customer requirement. The prefabricated STPs from 10 KLD to 150 KLD are ideal for applications where time and area are the essence of the project. Higher capacity STPs require civil construction.

#### Technologies Offered:

FAB - (Flocculating Aerobic Bio Reactor): The process uses floating PVC media and a two stage design for higher efficiency. Requires minimum height of 5m and is preferred for above ground installations. The Process requires high degree of pre-treatment for sewage from kitchen waste.

SAFF - (Submerged Aerobic Fixed Film): This is the simplest and most cost effective method of commercial and residential sewage sanitation / waste water treatment, suited for small to medium sized treatment plants where available land is limited and full time operational manning would be uneconomical. A well built SAFF plant has no moving parts within its main process zones and any serviceable items are positioned to access easily without disrupting the ongoing sewage treatment.







MBBR - (Moving Bed Biofilm Reactor): This process is based on the aerobic biofilm principle and utilizes the advantages of activated sludge and other biofilm systems without being restrained by their disadvantages. The basis of the process is the biofilm carrier elements that are made from polyethylene which provide a large protected surface area for the biofilm and optimal conditions for the bacteria culture to grow and thrive.

MBR - (Membrane Bio Reactor): When the treated water is to be reused and is used as feed water for Reverse Osmosis, a high degree of purity with low BOD & COD is essential. This process makes use of reactor tank and a set of membrane filters which are either submerged or are in crossflow type design.

SBR - (Sequence Batch Reactor): A type of the activated sludge process which combines all the process (fill, react, settle, decant, idle) in a single tank, giving it the proclaimed name.

# **APPLICATIONS**

- Industrial Sanitation
- Housing complexes
- Townships
- Hospitals
- Shopping Malls
- Colleges





#### **EFFLUENT TREATMENT**

Effluent Treatment covers the mechanisms and processes used to treat water that have been contaminated in some way by anthropogenic industrial or commercial activities prior to its release into the environment or its reuse. Effluent treatment plants may also be utilized effectively for a cluster of small scale industrial units. ETPs can be based on physio-chemical or biological treatment, in presence of air ( aerobic) or in the absence of air ( anaerobic).

Shimi Research Center provides solutions on a turnkey basis right from conceptualization to commissioning. Our solutions related to ETP include:

- Primary Treatment (Coagulation, flocculation and clarification)
- Secondary Treatment for aeration, clarification and disinfections
- Tertiary Treatment for colour removal and reduction of TDS
- Recycling of water

We also manufacture ETP based on anaerobic biological treatment which utilize the concept of Upflow Anaerobic Sludge Reactor (UASBR). The sludge blanket is comprised of microbial granules (0.5-2.0 mm diameter), that, because of its weight, resist being washed out in upflow stream. The microorganisms in the sludge layer degrade organic compounds, as a result, gases such as methane and carbon di oxide are released which after purification can be used as energy (biogas).

### **APPLICATIONS**

- Food Processing Units
- Pharmaceutical Units
- Refineries
- Textile Houses
- Laundries

- Mining
- Electroplating Units
- Distilleries
- Fisheries
- Slaughter Houses

Shimi Research Center has the intensive experience of handling more than 200 turnkey projects. We strive to provide our customers with high quality environment solutions. Our team of highly experienced and talented professionals works closely with you to deliver a solution that is best suited to your organization's needs.

An association with Shimi Research Center Pvt. Ltd guarantees:

- » State of the art equipment
- » Exclusive one of a kind-Tailor Made Solutions to match all your needs
- » Flexible designs to suit variation in available space
- » User friendly and easy to handle constructions
- » Provision of extensive safety features for smooth and trouble free operation
- » A team of knowledgeable professionals dedicated solely to your project
- » Dependable Customer Support
- » Regular system upgrades offerings by our R&D Division





- » BAJAJ MOTORS PVT. LTD., Gurgaon, Haryana, India
- » HAVELL'S INDIA LTD., Delhi, India
- » KUMAR PRINTERS, Manesar, Haryana, India
- » MICROTEK FORGINGS, Gurgaon, Haryana, India
- » GENPACT INDIA, Gurgaon, Haryana, India
- » AUGUSTA POINT, Gurgaon, Haryana, India
- » BAJAJ ELECTROPLATORS, Delhi, India
- » G. D. FOODS MANUFACTURING PVT. LTD., Delhi, India
- » HARYANA ACRYLIC MANUFACTURING CO. PVT. LTD. , Sonepat, Haryana, India
- » MADHU EXPORTS, Lucknow, U.P., India
- » MET TRADE INDIA LTD., Dadri, U.P., India

# WE ALSO DEAL IN

- » Ventrui Scrubbers, Bag House (Pulse Jet Bag Filters).
- » Wet scrubbers viz multi-stage spray tower, packed bed towers and other custom made combinations.
- » Blanket Wash (Solvent) Recycling
- » Blowers up to 2,50,000 CMH and pressure of 1,200 mmWG
- » Pumps: High pressure pumps in SS-304, SS-316, PP and GFPP.
- » Fumes exhaust systems.

# CONTACT SHIMI RESEARCH CENTER PVT. LTD.

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