GInd®

from ideas to reality

TAILOR-MADE PROJECT SOLUTIONS

GInd®

ABOUT US

SHORT NOTE

GInd is an Indian conglomerate holding company headquartered in **Chennai, India.**

GInd® is India leading independent engineering and consulting enterprise and mainly of experienced Infrastructure, engineers and specialists. Water is the lifeline of industrial activities and urban conglomerates. This requires setting up of dedicated water treatment plants, wherein, we offer vast expertise and services as a top-notch water treatment plant construction company in India.

GInd® offers end-to-end industrial and municipal water treatment solutions including civil works across the value chain; water supply system, sewage system, treatment plants including desalination and effluent treatment plants. We capitalize on our in-house design, technology partnership, and real-time project monitoring. We also focus on circular economy and provide unique solutions to various customers in converting wastewater into portable and industrial water.

OUR SERVICES

» Drinking water treatment
» Industrial and process water treatment
» Desalination of sea and brackish water
» Water reclamation systems
» Municipal wastewater treatment
» Industrial wastewater treatment
» Sludge treatment

» Consulting
» Planning
» Financing
» Design & Engineering
» Equipment supply
» Construction
» Commissioning
» Operations & Maintenance

TURNKEY PROJECTS

WATER TREATMENT PLANTS

- Water Treatment Plants
- Raw Water Treatment Plants
- Ground Water Treatment Plants
- Seawater Treatment Plants
- Rainwater Harvesting Systems
- Packaged Water Treatment Plants
- Industrial Water Treatment Plants
- Commercial Water Treatment Plants
- Containerized Water Treatment Plants

WASTEWATER TREATMENT PLANTS

- Sewage Treatment Plants
- Effluent Treatment Plants
- Grey Water Treatment Plants
- Zero Liquid Discharge

OUR WORKS

WATER TREATMENT

- Raw Water Intake
- Pipelines
- Pumping Stations
- Water Treatment Plants
- Distribution Networks
- Laboratories

WASTEWATER TREATMENT

- Collection Networks
- Pumping Stations
- Wastewater Treatment & Reclamation Plants
- Sludge Treatment Plants
- Desalination Plants
- Power Generation
- Sludge Drying And Incineration
- Sludge Disposal

SUPPORT & TRAINING

At present, the most important models for efficient operational management consist of:

» CONSULTING - GInd offer consulting for the management of water technology plants.

» O&M - GInd undertakes operational management within the framework of service contracts.

» DBO - Design, Build, Operate Plant Construction, Modernisation and Operational Management.

» BOOT - Build-Own-Operate-Transfer Including Financing

GInd®

WASTEWATER MANAGEMENT

EFFLUENT TREATMENT PLANTS

Effluent Treatment Plant or **ETP** is one type of waste water treatment method which is particularly designed to purify industrial waste water for its reuse and it's aim is to release safe water to environment from the harmful effect caused by the effluent.

Industrial effluents contain various materials, depending on the industry. Some effluents contain oils and grease, and some contain toxic materials (e.g., cyanide). Effluents from food and beverage factories contain degradable organic pollutants. Since industrial waste water contains a diversity of impurities and therefore specific treatment technology called ETP is required.

The ETP Plant works at various levels and involves various physical, chemical, biological and membrane processes to treat waste water from different industrial sectors like **chemicals, drugs, pharmaceutical, refineries, dairy, ready mix plants & textile etc.**

BENEFITS OF ETP:

1. To clean industry effluent and recycle it for further use
2. To reduce the usage of fresh water in industries
3. To preserve natural environment against pollution
4. To meet the standards for emission of pollutants set by the Government & avoid heavy penalty
5. To reduce expenditure on water acquisition

INDUSTRIAL EFFLUENT TREATMENT PROCESS

Preliminary Treatment: Its objective is physical separation of large sized contaminants. for example cloth, paper, plastics, wood logs etc.

Primary Treatment: Its aim is removal of floating and settleable materials such as suspended solids and organic matter. In this treatment both physical and chemical methods are used

Secondary or Biological Treatment: The objective of this treatment is the further treatment of the effluent from primary treatment to remove the suspended solids and residual organics. In this step biological and chemical processes are involved.

Tertiary/advanced/disinfection treatment: The purpose of tertiary treatment is to provide a final treatment stage to raise the effluent quality to the desired level before it is reused, recycled or discharged to the environment.

WASTEWATER MANAGEMENT

SEWAGE TREATMENT PLANTS

Sewage Treatment Plant or **STP Sewage** is water that is discharged after **residences, institutions, hospitals, industrial and commercial use.**

Sewage treatment refers to the process of removing contaminants, micro-organisms and other types of pollutants from wastewater influent. The main objective of sewage treatment is to produce an effluent (treated waste water) and a solid waste/sludge suitable for discharge into the natural environment.

SEWAGE TREATMENT PROCESS

1. Preliminary Treatment: This is the first stage of sewage treatment plant process and its main objective is the removal of coarse solids and other large materials often found in raw wastewater. Preliminary treatment operations typically include large filtering screens, grit removal and, in some cases, breaking of large objects. Excess grit cause severe pump blockages thereby affecting a range of subsequent treatment pumps. Flow measurement devices, often standing-wave flumes, are always included at the preliminary treatment stage.

2. Primary Treatment: The main purpose of this treatment is to reduce any heavy solids (organic & inorganic) that settle to the bottom by sedimentation while oil, grease & lighter solids float to the surface by skimming. The settled and floating materials are removed and the remaining liquid may be discharged or subjected to the next stage i.e. secondary treatment. Primary treatment removes about 60% of suspended solids from wastewater.

3. Secondary Treatment: The prime objective is the further treatment of the effluent from primary treatment to remove dissolved and suspended biological matter. The biological solids removed during secondary sedimentation, called secondary or biological sludge, are normally combined with primary sludge for sludge processing. Secondary treatment may require a separation process to remove the micro-organisms from the treated water prior to discharge or tertiary treatment. Secondary treatment removes more than 90% of suspended solids.

4. Tertiary/Advanced Treatment: Tertiary treatment generally follows secondary treatment and aids the removal of those wastewater constituents which cannot be removed in secondary treatment. Treated wastewater is sometimes disinfected chemically or physically (for example, by lagoons and microfiltration) prior its discharge into the receiving environment (sea, river, lake, wet lands, ground, etc.)

EXPERT IN STP TECHNOLOGY

- ACTIVATED SLUDGE PROCESS **(ASP/ EA)**
- MOVING BED BIO REACTOR **(MBBR)**
- FIXED AERATED BIO REACTOR **(FAB)**
- SEQUENTIAL BATCH REACTOR **(SBR)**
- MEMBRANE BIO REACTOR **(MBR)**
- UPFLOW ANAEROBIC SLUDGE BLANKET **(UASB)** REACTOR
- TRICKING FILTER **(TF)**

WATER MANAGEMENT

WATER TREATMENT PLANTS

GInd offers end-to-end industrial and municipal water treatment solutions including civil works across the value chain; water supply system, sewage system, treatment plants including desalination and effluent treatment plants.

GInd is the leading manufacturer of mineral processing equipments in the Asian Sub-Continent. GInd has a large range of equipments to suit the ever-growing package drinking water industry. The mineral water processing plants are specially designed to meet the highest standards of quality and shelf life in accordance with IBWA, ABWA, ECC and BIS Guidelines. State of the art Pre-filtration system combined with Reverse Osmosis System, Sub Micron Filter, Ultra Violet and Ozonator form an integral part of the mineral water processing equipments.

MINERAL WATER PROJECT

- Water Processing Equipment
- Automatic Rinser Filler Capper 200 Ml Upto 2000 Ml.
- Pet Stretch Blow Moulding Machine 60 Ml Upto 25 Liters
- Poly Carbonate Bottle Packing Machine
- Multiple Shrink Wrapping Machine
- Labeling Machine (Shrink, Paper Label, Bop)
- Air Conveyor
- Slat Conveyor
- Date And Batch Coding

SOFT DRINK PROJECT

- Blending Tanks
- Sugar Syrup Tanks With Heating System
- Sugar Syrup Filter
- Carbonator (Carbo Coolers)
- Chillers
- Rotary Rinser Filler Capper
- Linear Rinser Filler Capper
- CIP System
- Final Filters
- Ink Jet Printers

EXPERT IN MINERAL WATER TECHNOLOGY

GIND

You Dream it, We Built it.

OUR STRENGTH

Sustainable Design Approach
Flexibility in Design & Implementation
Assured Quality & Safety
No Compromise In Quality
Powerful Management in Place
Adherence to Global Standard & Laws
On Time Project Delivery

GInd®

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DESIGN- TO- BUILD