

*Innovation In Sustainable Solution*



 **Chemtronics®**

# Chemtronics is committed towards Innovative Sustainable Solutions in the field of AIR | Water | Waste Water

## Indoor Air Quality [IAQ] – Commercial | Institutional | Residential

Poor Indoor Air Quality [IAQ], lack of freshness & energy is the root cause of modern day illnesses. This significantly determines the wellbeing, health, mood & performance of your loved ones, staff & clients.

**Chemtronics not only treats Indoor Air but also  
enhances energy & freshness.**



Schools | Office | Hotels | Resorts | Hospitals | Malls | Theaters | Restaurants



## Indoor Air Quality [IAQ] – Manufacturing Industries

For disinfection & sterilization manufacturing industries have been struggling for quality, reliability & consistency. Often neglected, one of the key factor is “Indoor Air Quality [IAQ]”

**Chemtronics innovative comprehensive IAQ  
Plan reduces - Spoilage | Rejection | Recall**

Pharma & API | Bakery | Dairy | Food & Beverage | Meat | Aquaculture | Poultry |  
Slaughter House | Cosmetic | Space Research | Semiconductor | Cold Storage | Wine

## Clean Exhaust Air – Commercial | Industrial | Residential

Foul odour, microbes, toxic gases, micro pollutants going out through exhaust are the nightmare for plant head and chief engineer to control.

**Chemtronics gives you complete peace of mind from  
Oil & Grease, foul odour, microbes & pollutant Gases.**



STP | OWC | Commercial Kitchen | Garbage Rooms | Washroom | Waste Segregation Room |  
Sewage Lift Stations | Slaughter House | Fish Market | Butchery | Fish Feed Industries | Morgue |  
Dumping Yards | Chemical Exhaust | Fire Burning | Rubber



Core of our innovations are to make our clients  
a preferred choice by their customers.

## Water

Practically every industry suffers from limited spectrum coverage of disinfectant on pollutants. And high dose of disinfectant adds to dangerous DBPs.

**Chemtronics ECO technology treats water pollutants safely & comprehensively with negligible DBPs.**

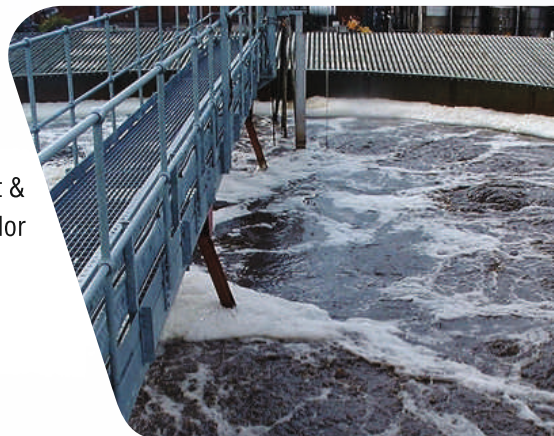
Raw Water | Purified Water System | WFI | Cooling Tower | Package Drinking Water | Pharma Potable Water | Laundry | Aquaculture | RAS | Swimming Pool

## Reclaim Waste Water

Day by day stringent waste water disposable norms demands high treatment cost & space or reduction in production capacity. Presence of high COD, BOD, color & odor in industrial waste water are difficult to treat with conventional technologies.

**Chemtronics ECO with AOP technology can oxidize harsh & complex chemical bonds & makes them simplified & can be subsequently treated by Physio-chemical or Biological process, which reduces chemical & energy.**

Pharmaceutical | Textile | Chemical | Dyes | Food & Beverage | Distillery | Tannery

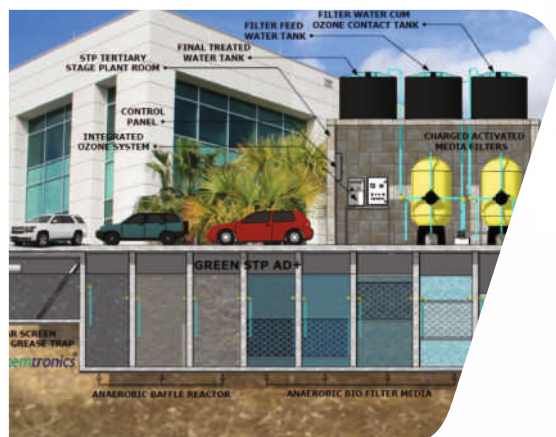


## GREEN STP AD+

Sewage treatment plants, takes lot of real estate space & team to operate. The sludge handling is a major issue to handle.

**Chemtronics GREEN STP AD+ goes 80% below ground, sludge handling once in 2 years, 50% saving in electricity & 30 minutes of operation per day.**

Residential | Factories | Corporates | Hotels & Resorts | Universities | Religious Places



### CIP | COP

- Reliability
- Online Monitoring
- Savings in
  - ▶ Time
  - ▶ Energy
  - ▶ Water
  - ▶ Money
  - ▶ Waste Water



### Commercial Kitchen

- Fire Safety
- Control
  - ▶ Oil & Grease
  - ▶ Odor
  - ▶ Pollutants
  - ▶ Toxic Gases



### Cooling Tower

- Savings
  - ▶ Energy
  - ▶ Make up Water
  - ▶ Heat Transfer Efficiency
- Money
- Reduces
  - ▶ Microbial Growth
  - ▶ Scaling
  - ▶ Corrosion
  - ▶ Blow down
  - ▶ Chemical Consumption



### Commercial Laundry

- Savings
  - ▶ Water
  - ▶ Chemicals
  - ▶ Waste Water
- Maintains
  - ▶ Fabric Quality
  - ▶ Fabric Color
  - ▶ Fabric Life



### Swimming Pool

- Safe
- No effect on human skin
- Maintains hygiene
- No Odor
- Crystal Clear Water
- Chemical Storage not Required



### Package Drinking

- Online Monitoring
- Chemical Storage not Required
- Higher Efficiency
- No harmful DBPs





## Pharma | API



Portable Water | High Purity Water | WFI | CIP | COP |  
Laundry | ETP | Green STP

IAQ – Change Room, Wash room, Production,  
Packing, Storage

## Food | Beverage



Raw Water | Product Water | Surface Cleaning | CIP |  
COP | ETP | Green STP

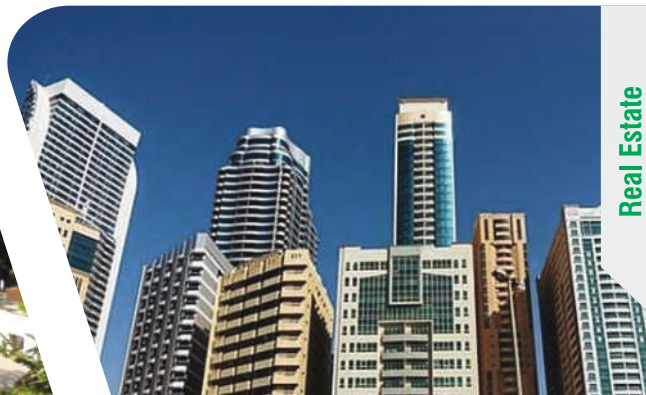
IAQ – Change Room, Wash room, Production, Packing,  
Storage, transport & Retail

## Hospitality



IAQ – Guest Room | Conference | Banquet | Restaurant | Pub & Bar |  
Smoking Lounge | Gym | Butchery  
Exhaust - Kitchen | STP | OWC  
Swimming Pool | Cooling Tower | Laundry | Green STP | ETP

## Real Estate



Green STP | Raw Water | Portable Drinking Water |  
Grey Waste Water | STP & OWC Exhaust |  
Swimming Pool | STP-TT

## Aqua-Culture



Hatchery - Row Water / COP / IAQ / Packing  
RAS - Raw Water / Recirculating Water

## Textile & Chemical



ETP – Colour, Odour, COD, BOD, ZLD,  
Denim Vintage Look | Fabric De-sizing



### German Metal Surface Treatment Chemicals, KSA – DM water Disinfection

A German company having manufacturing facility in KSA wanted to get rid of microorganisms & residual disinfectant without chemicals, from their DM water. They installed Chemtronics automatic ECO system to completely disinfect DM water in storage tank & distribution network. With installation they got 100% result in eliminating salmonella & pseudomonas from their treated water.

### LUX Resort, Maldives – STP Tertiary Water Treatment

LUX is one of the premium five star resort in Maldives. Bluish green mesmerizing water due to corals beneath the ocean is the main attraction. Excess growth of sea grass due to disposal of treated sewage water in sea made water dark green. Chemtronics ECO technology made 100 % reuse of water for landscape, made zero liquid discharge to sea & saving on precious sea water desalination.



### Spinners & Spinners, Kenya – Zero Discharge Textile Waste Water

Textile industry in Kenya was spending \$1,900 per month on chemicals in treating their colour waste water and reusing. Installing ECO & Advanced Oxidation Process their chemical consumption was brought down by \$1,000 per month. As a bonus their treated waste water is much lower in TDS, Colour & COD.

### Cream bell, Uganda – CIP | COP

Harsh chemical residue was a major concern of plant head.

Installing ECO from Chemtronics not only solved the chemical residues but also increased disinfection with online monitoring, reduced 20 % energy, 25 % savings in water & 20 % reduction in CIP time.



### CIPLA, Goa – Potable Water Purification System

Renowned pharmaceutical company in India was facing serious issues of pathogens in their potable water system which is a feed water to Purified Water (PW) system. Initially Chemtronics ECO based water disinfection gave them complete elimination of pathogens with no harmful disinfectants. Also in the process their TOC got reduced.

### HONDA Cars, India – Change Room Odour Elimination

State of the art factory of Honda cars had 7,000 lockers for staff to change their civilian dress & wear uniform. To eliminate the strong foul odour of sweat from clothes & shoes they installed Chemtronics advanced ECO system in their change room. This not only eliminated foul odour but offered clean disinfected man power for production area.





## Mission

Lower CAPEX & OPEX  
with Quick ROI

To implement our solutions with experienced business associate.  
And to train human resource to implement solutions for  
the betterment of our Client's Customers.



### ITC, India – OWC Odour Control

One of the premium commercial property owners in India was facing difficulty in renting out their spaces, due to strong foul exhaust air smell coming from their OWC & STP in basement. Installing Chemtronics ECO based solution completely eliminated foul odour from exhaust air duct. This technique was already used by the same client's five star hotel.

### Voltas, India – Cooling Tower Water Treatment



On demand of a client, Voltas one of the top HVAC company introduced Chemtronics ECO based cooling tower water treatment. This reduced the consumption of couple of cooling tower chemicals like biocides & algacide. Due to reduction in chemicals they could achieve higher COC & also reduced corrosion. This also reduced blow down & make water quantity with reduced load in ETP.



### Oberoi Mall, India – Commercial Kitchen Exhaust

It is mandatory by PCB's to treat commercial kitchen exhaust air before releasing into atmosphere. Chemtronics has introduced innovative ECO & BOI to Oberoi food court kitchen to treat exhaust air within duct, eliminating the use of dry scrubbers. This is extremely effective on oxidising oil & grease, making ducts safe from fire hazards.

### Club Mahindra, India – Swimming Pool



Chain of 5 star resorts & hotels, had pressure from international customers to have chlorine free pool. Chemtronics ECO based pool disinfection gave freedom from harsh chlorine derivatives. Now guest enjoys more time in chlorine free water without teeth bittering, eye reddening, itchy skin, hair fall & above all children gulping dangerous disinfectant by-products.



### Blue Star, India – IAQ, Indoor Stadium

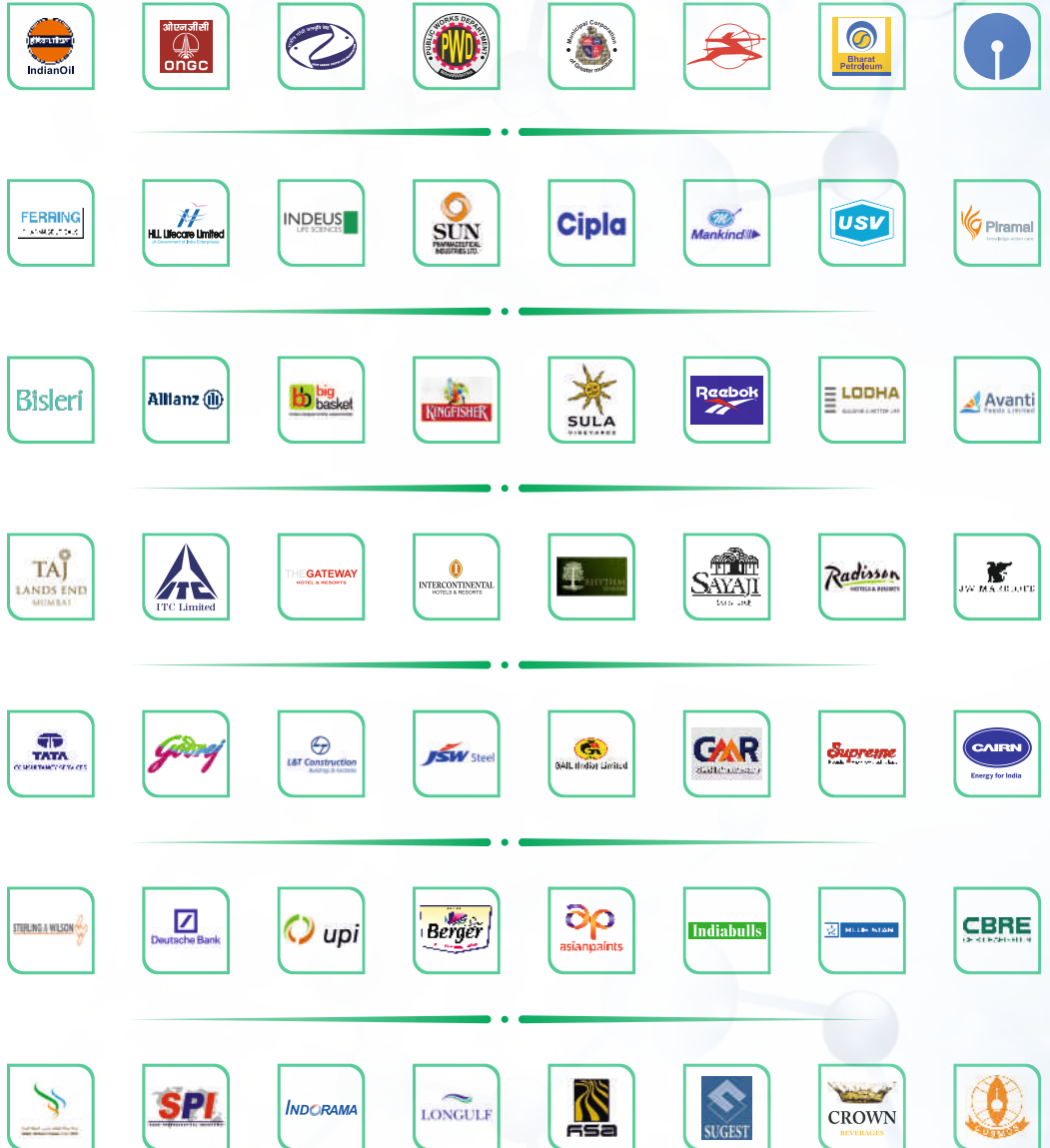
Indoor Sports stadium undergoes two scenarios one very high density of visitors & days having no audience. Under both condition Indoor Air Quality gets severely disturbed. One of the leading HVAC company, Blue Star introduced Chemtronics ECO & BOI based air treatment to enhance IAQ. With this foul & dull odour got eliminated & indoor air became fresh. This also reduced the load on HVAC.

### Anmol Bakery, India – IAQ, Manufacturing Industry



Principal brand of bakery wanted to increase the shelf life & quality of their product. They installed Chemtronics ECO & BOI based indoor air treatment system to control the mould & fungal growth in factory. Post installation within couple of week their IAQ got enhanced & as a result their spoilage, rejection & recall got reduced.

Enhance – Product | Process | Service  
Reduce – Spoilage | Rejection | Recall



 **Chemtronics®**