



**FULL SPECTRUM  
WATER AND ENVIRONMENT SOLUTIONS**



**SPANNING EVERY SECTOR**



Ion Exchange pioneered water treatment in India and is today Asia's largest water and environment solutions provider, with a strong global presence. Among few companies worldwide with the entire range of technologies, processes, products and services, we are able to provide total water and environment management for every sector - industrial, institutional, municipal and household, urban and rural.

- Over four decades of domain expertise
- Widest range of value-adding, innovative technologies
- Thorough understanding of our customers' processes
- Largest service network in water treatment industry in Asia
- Own R&D centres and manufacturing/fabrication facilities

### **Full Spectrum Solutions, Single Point Responsibility**

Our 360 ° solutions add value across the entire water circuit – on supply, quantity, quality, cost, conservation, discharge and environmental fronts.

Assuring our customers of

- Lowest water consumption
- Substantial savings on fresh water costs
- Water security in an increasingly water scarce scenario
- Compliance with regulatory consumption and discharge norms
- Creative ownership options such as BOO/T & lease



## **Serving Every Sector with Single Window Solutions**

Our specialist expertise coupled with thorough understanding of our customers' processes enables us to provide integrated solutions that address their individual requirements, totally.

### **Industrial**

- Automotive
- Brewery
- Cement
- Chemical
- Fertiliser
- Food & Beverage
- Oil & Gas
- Pharmaceutical
- Pulp & Paper
- Refinery & Petrochemical
- Semi-conductor & Micro-electronics
- Steel
- Sugar
- Textile
- Power - Thermal, Nuclear, Non-Conventional  
...and many more

### **Institutional**

- Construction
- Hospitals
- Hotels, Eco-Resorts, Spas
- IT Parks
- Laboratories
- Malls
- Railway & Defence Sectors
- Schools, Colleges

### **Communities, Urban & Rural**

- Homes
  - Residential Complexes & Townships
  - Municipalities
  - Public Health Engineering Departments
  - Water Supply & Sewage Boards
  - Infrastructural Development Projects
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### Air Treatment

- VOC & odour control, flue gas & bio-gas cleaning system, wet & dry scrubbers

### Management of Process Water

- Cooling & boiler water treatment & management
- Complete range of products for scaling, corrosion, fouling & bio-control management
- Cleaners & disinfectants for process equipment
- Programmes for maximising water reuse and reducing fresh water intake
- Water quality monitoring systems

### Process Water Treatment – Ion Exchange & Membrane Based

- Complete range of ion exchange process equipment – softeners, dealkalisers, demineralisers
- Membrane systems – micro filtration, ultra filtration, nano filtration, reverse osmosis
- Condensate polishers, deaerators
- Electrodialysis, electro deionisation

### Pretreatment

- Full range of advanced clarification and filtration equipment
- Feed water pretreatment chemicals including flocculants, coagulants
- Complete range of feed water disinfection equipment including on-site hypo generation, chlorine dioxide generators, ozone generators, ultra violet equipment

### Process Applications with Resins/Membranes

- Speciality resins & adsorbents for F&B, pharma & biotech industries, etc.
- Membrane systems for process fluids – dairy, textile, brewery, etc.
- Speciality process chemicals for paper, sugar, mining, oil refining, etc.

### Industrial Waste Water Treatment/Recycle & Solid Waste Management

- Complete range of effluent treatment systems
- State-of-art biological systems
- Recycling systems incorporating ultra filtration, reverse osmosis, membrane bio-reactor (MBR) and advanced photochemical oxidation
- Range of polyelectrolytes & chemicals for waste water treatment
- Rotary kiln incinerators, fluidised bed reactor, multi-fuel thermal oxidisers for hazardous waste management

### Drinking Water Treatment

- Drinking water purification systems for industry & communities, urban & rural, **ZERO B** point-of-use drinking water purifiers
- Full range of processes – membrane/non-membrane/non-electric
- Disinfection systems – ultra violet, chlorine dioxide generators, onsite hypo generators, ozone systems
- Salinity, fluoride, nitrate, arsenic, iron & manganese removal systems
- Disaster Management Units (DMUs)

### Services

- O&M, service contracts
- Water audits, consultancy
- Pilot studies, R&D, feasibility studies
- Plant upgradation, automation, rehabilitation
- Water systems on BOO/T
- Integrated facility management

### Sewage and Effluent Treatment/Recycle & Solid Waste Management

- Packaged sewage treatment systems
- State-of-art biological systems such as sequential batch reactor (SBR), fluidised media reactor (FMR), membrane bio reactor (MBR), advanced anaerobic treatment processes
- Recycling systems incorporating ultra filtration, reverse osmosis, MBR municipal solid
- Conversion of waste to energy

