

Fontus Water is a leading turnkey solution provider of water and wastewater treatment solutions in India. With over a decade of experience and expertise in the Indian industrial, buildings and the government segments, Fontus Water extends its philosophy of simplifying solutions for water & wastewater treatment through its revolutionary ergo range of products.

ergo Electro Static Deionization

The ergo Electro static deionization (ESD) system offers deionization technology which applies electric field that treats all dissolved ion in water. Consuming one-third the energy of RO systems, ESD is an innovative and cost effective technology. The ESD system has higher tolerance to organics, silica, chlorine and is capable of treating impurities like arsenic, fluoride, hardness, metals and nitrate, while maintaining high water recoveries.



Advantages Of ESD Systems

- ▶ Low energy consumption: uses only one-third the energy consumed by RO systems
- ▶ Upto 97% recovery achievable
- ▶ High water recoveries coupled with high ion removal efficiencies
- ▶ No sustained concentrate leading to the formation of precipitates and fouling
- ▶ Mono-valent design targets monovalent ions like nitrate, fluoride, chloride, perchlorate & cyanide
- ▶ Long life cycles of the capacitor materials
- ▶ No continual addition of salts or chemicals for drinking water and brackish water applications
- ▶ Can be integrated with Solar / Wind turbines as power source

Applications

- ▶ Drinking water treatment
- ▶ Cooling tower blown down reuse
- ▶ Boiler waterfeed and heat exchanger
- ▶ Removal of arsenic, fluoride, iron and nitrate from ground water.



Ergonomic Design



Minimum Footprint



Maximum Convenience



Plug & Play



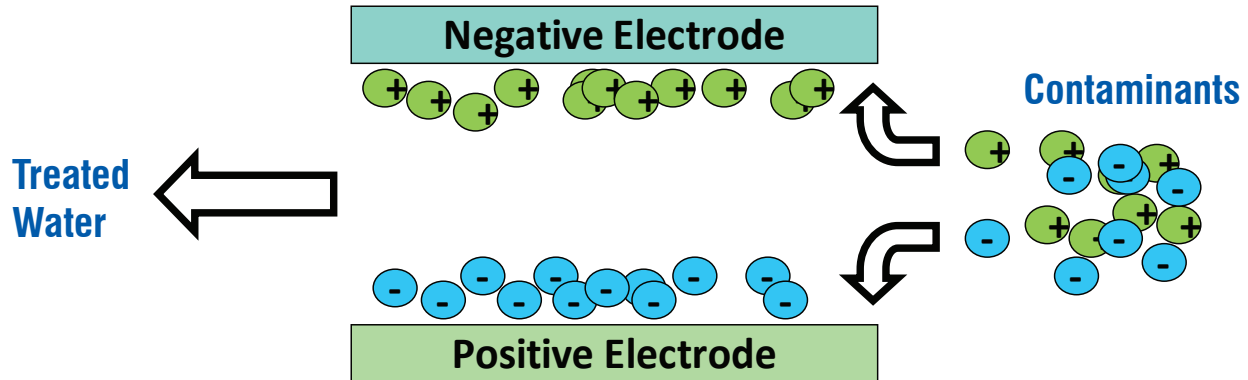
Easy Maintenance



Fontus Service Advantage

Technology

By applying a low voltage of 1.2 VDC, the positive and the negative ions are attracted towards the electrodes and thus deionization is accomplished. When the electrode is saturated, the electrode potential is reversed and the captured ions are discharged out as a highly concentrate stream.



Analytical laboratory data for ESD treated water (Drinking water Treatment – TDS reduction)

Parameters	Units	Contaminated Water Concentration	Treated Water Concentration	Removal Rate
Total Dissolved Solids (TDS)	mg/l	1650	125	92.4
pH	unit less	6.6	5.1	N.A
Total Hardness	Mg/l	320	18	94.3
Calcium	Mg/l	80	3.2	96.0
Magnesium	Mg/l	30	2.5	91.6
Sodium	Mg/l	440	2.8	99.4
Chloride	Mg/l	660	51	92.3
Sulphate	Mg/l	65	4.6	93.0
Soluble silica	Mg/l	12.1	0.6	95.0
E. Coli	Cfu/100ml	40000	305	99.2
Conductivity	uS	935	21	97.7
Arsenic (AS)	Mg/l	0.339	0.012	96.5
Floride	Mg/l	10	0.65	93.5
Nitrate Nitrogen (NO ₃)	Mg/l	311	11.8	96.20



FONTUS WATER PVT. LTD.

A-1/152, Neb Sarai, IGNOU Road, New Delhi-110 068, INDIA

T: +91-11-4310 0561/541 | F: +91-11-4310 0599 | M: +91-97176 90522

E: sales@fontuswater.com | W: www.fontuswater.com



 **AN EARTH WATER ENTERPRISE**

Our Partner



CIN: U74899DL2001PTC111383

Version: FW00/08/13