

INDION® Electrodeionisation (EDI) System



Ultrapure Water Without Chemicals

The growing demand for ultrapure water by industries has led to a demand for systems that deliver superior quality water products. Ion Exchange India's rugged, reliable Electrodeionisation (EDI) system offers consistent, high-purity water without the costs and hassles of chemical regeneration.

The EDI system is an effective design combining two well-established and proven water purification technologies - electrodialysis and ion exchange resin deionisation. In other words, EDI is a continuous process for producing high-purity water using ionexchange membranes, resins and electricity.



Key Advantages

- Continuous system producing consistent ultra pure water quality
- No acid and alkali regenerants thus eliminating waste disposal problems
- Minimal maintenance – minimises on-going O&M cost
- Compact and modular system requiring reduced floor space and lower installation cost
- Faster installation than conventional ion exchange systems
- Factory-trained service technicians

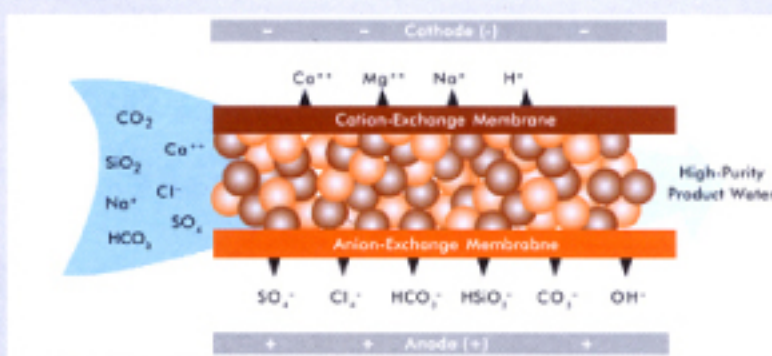
Key Performance Parameters

- Upto 18+ megohm-cm product quality after RO pretreatment
- 99.5% salt removal
- 95 – 99% + silica rejection
- 99% + CO₂ rejection
- 96% boron rejection
- High water recovery, typically 95%
- Safe and reliable – no chemical handling

Process of Electrodeionisation

This compact and modular system uses revolutionary techniques to remove dissolved salts with low energy cost and without the need for chemical regeneration.

The EDI system removes ions from water by forcing them out of the feed stream into an adjacent stream via an electric potential. EDI differs from ED by using resins in the diluting chambers - the resins allow for more efficient migration of ions in very low conductivity water. The resins operate in steady state; they act not as an ion reservoir but as an ion conduit.



Industries and Applications

- Semiconductor
- Power generation
- Industrial boiler feed makeup
- Electronics
- Pharmaceuticals
- Biotechnology
- Chemical manufacturing
- Food and beverages
- Laboratories
- Cosmetics

Model	Flow rate l/h	Operating Voltage VDC	Dimensions (cm)		
			Width	Height	Depth
XL-100	50 to 150	30-80	21	56	15
XL-200	100 to 300	60-120	21	56	18
XL-300	300 to 900	100-160	21	56	23
XL-400	700 to 1500	150-250	21	56	28
XL-500	1300 to 2350	200-350	21	56	36

To the best of our knowledge the information contained in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice. Please contact our regional offices for current product specifications.

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