



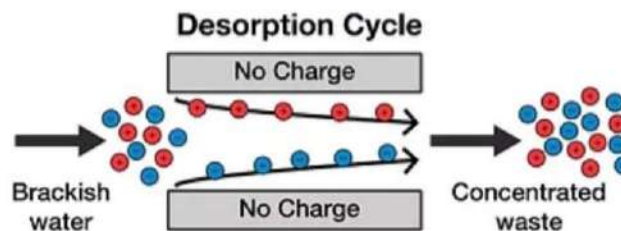
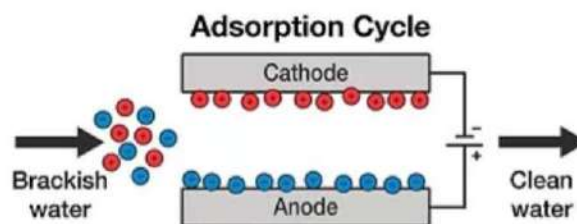
Capacitive Deionization (CDI) Water Treatment Plant

**STATE OF THE ART SMART CAPACITIVE
DEIONIZATION (SDI) SYSTEM FOR
CLEAN DRINKING WATER**

CDI Water Purification technology is available in multiples of 200 LPH & 500 LPH. CDI Technology is tuneable, Scalable, helps consumers to reduce water wastage, Chemical usage and operative expenses. Replace RO with CDI and get TDS and Good Water recovery upto 80%

CDI

Our Patented Technology of CDI works when electricity is applied to the electrode, ions of opposite charge pass through the ion exchange electrode and move to the surface of the electrode and are electrically adsorbed.



ADVANTAGES

When the water source is groundwater, river water, or municipal water, SDI is the most cost-effective and energy-efficient method of purifying water. SDI removes the dissolved charged species such as Total Dissolved Solids (TDS), Inorganic Contaminants, and Radionuclides.

Capacitive Deionization (SDI) vs. Reverse Osmosis (RO)

- ✓ SDI has an 80% water recovery when purifying to drinking water quality.
- ✓ RO has a 30% water recovery.
- ✓ SDI costs approximately ₹8 per 1000 liters. RO costs ₹15 to ₹25 per 1000 liters.

SDI is a low maintenance system. RO is a high-pressure system across membranes requiring routine maintenance. SDI is capable of leaving some minerals in the water. RO removes everything, including good minerals.

SPECIFICATIONS

SDI SPECIFICATION C1	
FLOW RATE	500 LPH
TDS REDUCTION	70 TO 80 PERCENT
WATER RECOVERY	70 TO 80 PERCENT
	MEMBRANE LESS
ELECTRICITY CONSUMPTION	0.5 KW
FEED WATER PRESSURE	0.5 BAR
SDI CELL	BILPOLAR
POWER SUPPLY	
INPUT	220 VOLT 50HZ AC
OUT PUT	300 VOLT DC 5 AMP
LCD DISPLAY	YES
CLEANING	AUTOMATIC
FRAME	MS POWDER COATED
PIPING	PVC QUICK FITTING TYPE
SOLOINID VALVE	SS 220 VOLT AC
LPS	YES
OVER FLOW CONTROL	YES
MAX FEED WATER LIMIT	1500 PPM HARDNESS 500PPM
DESIGN	MODULAR

APPLICATIONS

SDI Point-of-Entry System (Whole house water purification):



Our patented SDI water purification technology provides a method to treat inlet water coming into your house from various sources like borewell or municipal pipelines.

The SDI system works as both a softener and purifier.

Regular softeners require frequent regeneration, and when doing so release chemicals into the water table. This damages the environment, causes corrosion in pipelines, and damages appliances. SDI technology provides a water softening solution that is both environment-friendly and chemical-free.

You will not need water softeners or RO systems that require regular recharging and have a negative environmental impact like high wastage of water during purification.

Also, RO removes all minerals from the water which are beneficial for the human body. With SDI, the owner can decide to choose the mineral level (TDS) with the click of a button.

Benefits:

Minimal water wastage

Very less energy consumption

Tuneable

No harmful waste discharge

Latest water purification technology Long life

Modular

Plug and Play Transportable

Commercial Water Purification



SDI technology is used in many types of commercial applications, such as drinking water vending machines, water ATMs, rural water purification, centralized clean and safe drinking water for schools, colleges, hospitals, railway stations, big offices, laundry, agriculture, boiler industry, wastewater treatment,

The trusted water treatment systems offered by us consist of fully automatic self-cleaning ensuring the output water produced is clean and of high quality, adjusting to varying TDS of inlet

Industrial Water Purification

SDI technology is used in many types of industrial applications, such as beverage manufacturers, the automotive industry, sewage treatment plants, breweries, and cooling towers.

SDI is capable of removing the following:

Total Dissolved Solids (TDS), principally calcium, magnesium, potassium, sodium, bicarbonates, chlorides, and sulphates.

Inorganic contaminants such as antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, fluoride, lead, mercury, nitrate, nitrite, perchlorate, selenium, and thallium.

Radionuclides such as alpha and beta particles, radium, and uranium. Disinfection by-products such as bromate and chlorite.

Ammonia, nitrites, and nitrates.

Organic contaminants dissolved in an aqueous solution



SDI CELL

Up to Two cells can be configured in series, applicable to a wide range of TDS Operation under stable DC voltage by using bipolar electrode (300VDC or less) High recovery rate, up to 80%
Salt removal rate up to 80% Operating temperature, max. 60°C
Low energy consumption ,
Compared with other processes, the pre-treatment conditions are simple and the pre-treatment process cost is economical.



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