**CASE STUDY** 





## SNJ BREWERIES PRIVATE LIMITED



**Difficulty:** SNJ Breweries Requires Soft water of Total Hardness less than or equal to 5 ppm for Beer Production and Utilities. Available water have more contamination viz., TDS, Hardness, Silica and other impurities which has to be treated in Water treatment plant to meet Standard norms of Feed water in Beer production and to avoid Scale formation in Boiler and Cooling towers. They have to recycle the Caustic water from their bottler washer to reduce the raw water consumption. This was a challenge to Client to treat their Raw water to meet feed water requirements for Beer production, Boilers and Cooling towers.

**Solutions:** Zion Enviro offered a solution to treat their raw water to their expectation level to fulfill Feed water norms for Beer production and also offered a cost effective solutions to treat their caustic water to recycle into their process to reduce raw water consumption.

## Scheme and Capacity:

Softener Plant	: MGF →ACF→SOFTENER	Capacity: 70 M3/hr
Water Treatment plant	: MGF→ACF→R.O.I→R.O.2→DG	Capacity: 100 M3/hr
Caustic Recovery Recycle plant	: Heat Exchanger $\rightarrow$ MGF $\rightarrow$ ACF $\rightarrow$ WAC $\rightarrow$ DG $\rightarrow$ ACF $\rightarrow$ BAG FILTER	Capacity: 15 M3/hr

## Scope of work:

Design, Engineering, Procurement, Supply, Erection & Commissioning.

## Advantage:

- 1. Maintaining < 2 ppm hardness even after 4 years of Commissioning and without adding top up of resins.
- 2. Treated water Meets Feed water limits for Beer production.
- 3. Reduction of Effluent quantity by treating and recycling Caustic water into their process.