REMINERALIZATION UNIT

Bahrain, 188 m^3/h

Aim of the Project

Remineralization is relevant for several cases such as consumption of drinking water, irrigation water or certain process from the industry sector. It is often placed after a source of demineralized water, usually a reverse osmosis permeate.

Lenntech has engineered and built a remineralization system as part as a desalinization plant in Bahrain. The water is to be used for process purposes in the power plant.

The remineralization system presented here takes up to 188 m3/h, divided in two equal streams. A system of CO2 injection is installed upfront, in order to increase the CO2 concentration and enhance the reaction with the calcite bed, loaded in the blue columns. The media is then consumed, and the water is charged in calcium ions.

Scope of Work

- ✓ Engineering, manufacturing and assembly
- ✓ CO2 injector
- ✓ Calcite loaded columns for remineralization
- ✓ Manual backwash and rinse

Plant specs

❑ **Feed water quality**

TDS: 10 ppm

Calcium: 0 ppm

❑ **Product water quality**

Total Hardness as CaCO3: 80 ppm