

Case Study LB - 2800F in Chile

 **COMMERCIAL**

KATADYN GROUP
SWITZERLAND

Project: LB-2800F in Chile

Customer: INDESPA

Product: LB-2800F

Watermaker

Date: December 2019

Location

Chile's Atacama Desert Coast. No natural fresh water source.

Overview

A solar-powered LB-2800F reverse osmosis system from Spectra Watermakers was installed to support the water needs of a small, off-grid fishing village.

The Client

The watermaker was purchased by a fisherman's trade union in Pan de Azucar, a very small fishing village on Chile's Atacama Desert Coast. The village consists of 22 homes and 3 seafood restaurants and is located in the Pan de Azucar national park, which is home to unique marine flora and fauna. There are no public utilities that reach this village, therefore it solely relies on its own electricity production through photovoltaic generation. Lack of potable water has long been an issue and the town has struggled to survive on water trucked in from the city of Chanaral.

The original requirements were to supply potable water to the seafood restaurants and allow fishing activities to thrive. The project was financed by INDESPA (Instituto de Desarrollo Sustentable de la Pesca Artesanal), a Government Institute for the development of sustainable fishing and small-scale aquaculture. INDESPA worked with the fisherman's trade union to purchase the watermaker and define the fundamental purposes of the project. The goals are to support Pan de Azucar's economy and diversify its fishing industry, as well as aid in future community development. The watermaker will improve the health of the fishermen's families and strengthen their livelihood by providing water for their seafood restaurants and overall village hygiene.

Project Details

For over 35 years, Sea Line and Nauticentro have had a strong presence in the area and have been leaders in providing products and services to the small fishing communities in Chile. Developed within the framework of a government project, INDESPA, Sea Line, and Nauticentro worked together to carry out the installation of the renewable energy-powered watermaker.

Construction began in December of 2019. The entire installation is contained in a 16ft-long fiberglass shed built by Sea Line. One side houses the batteries, inverter, charge controllers, and spare parts while the other side is dedicated solely to the Spectra LB 2800F unit and related components such as the large prefilter, boost pump, and chlorinator tank.



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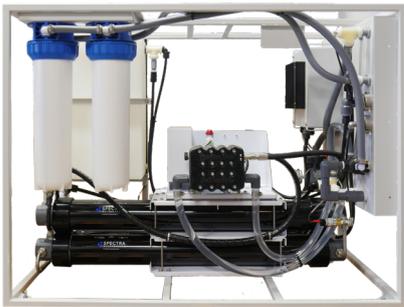


Project Details Continued

A 3-HP electric pump was installed at the pier to capture seawater and move it uphill into two 15000 liter seawater tanks. Two additional 15000 liter tanks were also installed for storing the potable water produced by the LB-2800F. Sea Line provided remote monitoring of the watermaker and on-site training for the fishermen's trade union, who were very satisfied with the installation and the high-quality water produced by the LB-2800F.

About the Watermaker

The LB 2800F is a reverse osmosis watermaker that utilizes the Pearson Pump energy-recovery device. These durable systems are highly energy-efficient, making them a perfect match for solar power. A fixed recovery ratio means membranes last many years and are not considered consumables. Due to the system's simplicity, a highly trained operator is not required. In addition, the Spectra Connect Controller allows the watermaker's operations to be completely automated, with freshwater flushes occurring when necessary. These rugged watermakers can drastically improve the health and quality of life for the population of any water-stressed area with access to seawater or brackish water.



About the Katadyn Group

The Katadyn Group is a global corporate group specialized in the area of self-sufficient nutrition and drinking water supply. Its brands include Katadyn, Trek'n Eat, Alpine-Aire Foods, Optimus, Pharmavoyage, Micropur, Certisil, Steripen, and Spectra Watermakers. With this broad brand portfolio, the group provides products and solutions for the outdoor and marine industries as well as for industrial and municipal needs. Its diverse product palette ranges from freeze-dried specialty meals and outdoor cooking gear to mobile and land-based water desalination systems and specialized disinfection systems for the industry. Indeed, humanitarian aid organizations and the military for years have been regular customers of the Swiss group of companies. With headquarters in Kempththal, the Katadyn Group employs about 200 people at its subsidiaries in Europe, Asia, and the United States.



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