

First Commercial Deep Seawater Cooling Project Now Operating

On May 1st, 2006, the world's first commercial deep seawater air-conditioning system opened for business at the ***Intercontinental Resort and Thalasso Spa Bora Bora***, French Polynesia. The energy-efficient project was designed by Makai Ocean Engineering, Inc. of Hawaii.

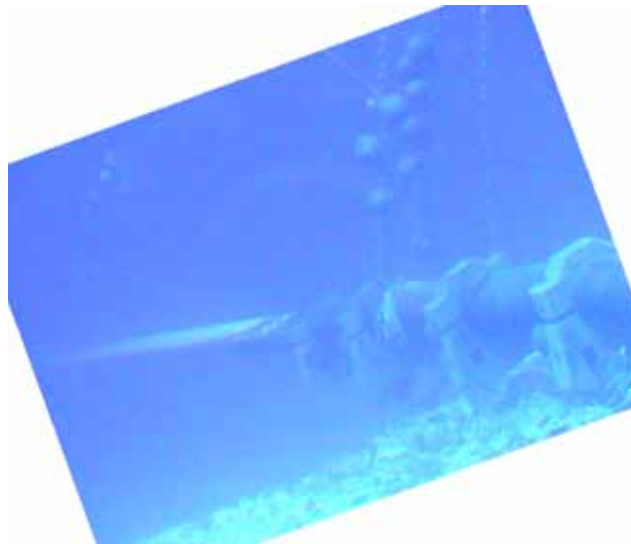
The new hotel's air-conditioning pipeline supplies frigid 5°C (41°F) pure seawater from 900 meters (2950 feet) deep to eliminate typical air conditioner machinery driven by large electric motors. The seawater passes through a titanium heat exchanger to cool the hotel-wide freshwater cooling network. By using the naturally cold water, the hotel's 15 kilowatt seawater pump provides cooling that would otherwise consume 300 kilowatts of electricity. The annual electrical savings will be ninety percent.

The Bora Bora pipeline is two kilometers long and 400mm in diameter. The system uses high-density polyethylene pipeline technologies similar to other Makai-designed deep cooling pipelines used by the city of Toronto, Cornell University in New York State, and a government facility at the Natural Energy Laboratory of Hawaii.

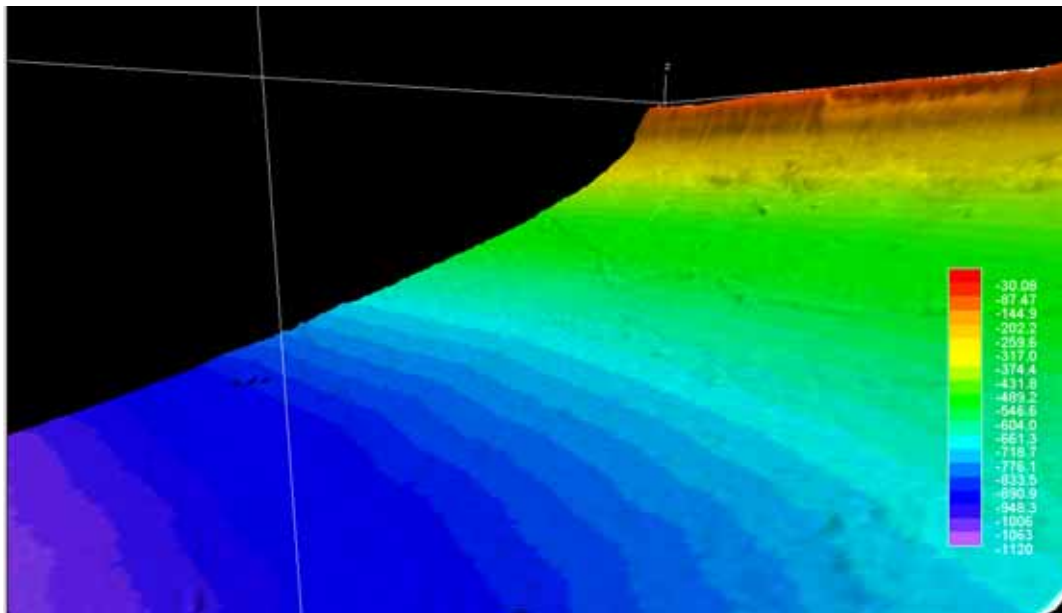
Websites: www.makai.com & www.boraboraspa.interconti.com



The Intercontinental Resort and Thalasso Spa Bora Bora is on a long, slender islet that separates the lagoon on the left from the ocean on the right.



View of the HDPE pipe soaring away from a vertical cliff at 55m deep, touching the seabed again at 125m deep. (Note the spherical buoys holding the chain vertically.)



Steep 1100-meter deep bathymetry visualized using Makai Ocean Engineering's software. The notched cliff edge is offshore of the hotel grounds.

Aerial photo of the hotel courtesy of Intercontinental Hotels and Tahiti Beachcomber SA.

Other images courtesy of Makai Ocean Engineering, Inc.