

WAVE ENERGY

INDUSTRIES: ENERGY

SUMMARY

Customer Need / Challenge

A scientist has been tasked to create electric energy by using the force that is generated by ocean waves.

Interface Solution

As electricity is generated by ocean waves, an Interface load cell will measure tether line tension using a submersible Model 3200 series LowProfile™ load cell, the mooring line was attached to the load cell base and the platform generator was connected to the load cell hub. This measured the forces that were generated by the ocean waves and was later analyzed by the customer's Data Acquisition System (DAQ).

Results

Scientists can use force data to make adjustments to tether line. Also, if tether line breaks free, the scientist can be notified immediately.

MATERIALS

Interface Products

- Model 3200 Submersible LowProfile™ Load Cell

Additional Materials

- Tether line
- Wave energy generator
- Customer DAQ

HOW IT WORKS

1. Model 3200 Series Submersible Load Cell is connected between a mooring connection on the sea floor and a wave energy generator platform.
2. Load cell cable is connected to customer's DAQ.
3. As electricity is generated by ocean waves, force readings from load cell are recorded in the DAQ.
4. Results are analyzed by a scientist and adjustments to the tether line are made accordingly.

