

Mountain Bike Shocks Testing Load Cell

Industry: Test and Measurement

Summary

Customer Challenge

A mountain bike manufacturing company wants to test the durability of the forks on the front of their bikes, and the rear shocks of their bikes as well. They want to test the front suspension, and ensure that the bikes shocks absorption is working properly for bike riders.

Interface Solution

Interface suggests installing the 1000 High Capacity Fatigue-Rated LowProfile™ Load Cell in a fatigue frame using the company's bike forks. The forks undergo a fatigue test for a number of hours. Test results from the 1000 High Capacity Fatigue-Rated LowProfile™ Load Cell will be sent to the INF-USB3 Universal Serial Bus Single Channel PC Interface Module where the customer can view, log, and graph the results on their PC computer or laptop with provided software.

Results

The customer was able to test the bike's front and rear shocks using Interface's products. They determined if there were any weak spots in the forks or if it was working properly.

Materials

- 1000 High Capacity Fatigue-Rated LowProfile™ Load Cell
- INF-USB3 Universal Serial Bus Single Channel PC Interface Module
- Customer's PC or Laptop

How It Works

1. The 1000 High Capacity Fatigue-Rated LowProfile™ Load Cell is attached to the actuator of the fatigue testing machine.
2. The bike's forks undergoes a fatigue cycling test where force results are collected by the 1000 High Capacity Fatigue-Rated LowProfile™ Load Cell.
3. The results captured by the 1000 High Capacity Fatigue-Rated LowProfile™ Load Cell is sent to the INF-USB3 Universal Serial Bus Single Channel PC Interface Module, where results can be graphed and logged on the customer's PC with provided software.

