

Harvest Penetrometer Interface Mini™

Industry: Agriculture, CPG

Summary

Customer Challenge

Professionals in agriculture, food storage, and produce quality control require a reliable and quantifiable method to assess the ripeness of fruits and vegetables. To improve quality control operators need a force measurement solution capable of determining ripeness by measuring the penetration force required to dent or puncture the flesh of produce.

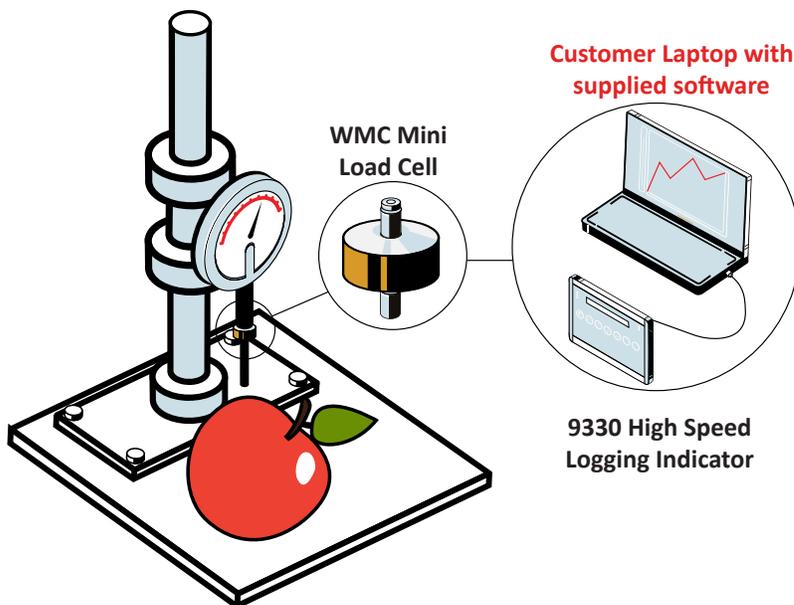
Interface Solution

Interface suggested implementing the WMC Stainless Steel Miniature Load Cell, which was integrated into a penetrometer device equipped with a penetrating tip. During the test, the user presses the handheld assembly into the produce sample. The WMC captures the penetration force throughout the test and captures the data. When connected to the 9330 Battery Powered High Speed Data Logging Indicator, results can be displayed through the customer's PC or laptop.

Results

With Interface's miniature load cell technology, operators were able to determine with confidence. The peak penetration force data provided clear readings that supported better harvest timing, improved storage decisions, and higher quality produce delivery.

Harvest Penetrometer



Materials

- WMC Sealed Stainless Steel Mini Load Cell
- 9330 Battery Powered High Speed Data Logging Indicator
- Customer PC or Laptop

How It Works

1. A WMC Stainless Steel Miniature Load Cell is mounted inside a penetrometer with a penetrating tip attached to the front of the assembly.
2. The customer presses the device into the flesh of the fruit or vegetable. As the tip penetrates the specimen, the WMC Load Cell measures the applied force in real time throughout the test.
3. The WMC is connected to the 9330 Battery Powered High Speed Data Logging Indicator, and results can be displayed through the customer's PC or laptop.