

Equipment and Pricing

Each IRD kit includes a hard case, USB interface charger and PCIRD software.

-Single IRD kit with tablet. Includes protective case for PCIRD 4.5 preloaded tablet.

\$5950.00 USD

-Single IRD kit.

\$5150.00 USD

-PCIRD 4.5 software upgrade.

\$500.00 USD

All IRD's are made to customer specifications at time of order.

IRD colors and sizes.

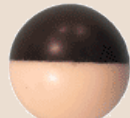
Egg Grade A



2.25 in/57mm
100 g. est.



2.5in/63 mm
125 g. est.



3in/76mm
200 g. est.



Oblong
275 g. est.



3.5in/89mm
400 g. est.



4.75in/121mm
800 g. est.



Colors: Orange, Blue, Yellow, Red, Black, White, Pink, Purple, Maroon or 2 color combination.

Sizes: 57,63,70,76,89 and 121mm sphere. 80x90x60mm flattened sphere (oblong)

Techmark's IRD is useful for evaluating and reducing bruise in many commodity types including;

- Apples
- Potatoes
- Kiwi
- Citrus
- Onion
- Eggs
- Peaches
- and many more...



For more information please contact Techmark at 517-322-0250 or visit our website at www.techmark-inc.com

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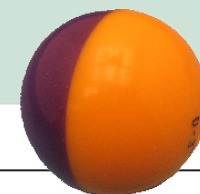


TECHMARK, INC.

Technology from the ground up

Techmark's Impact Recording Device

Only the IRD uses both impact acceleration and surface characteristics to estimate bruise severity



TECHMARK, INC.

Technology from the ground up

Techmark is an international agricultural engineering firm. Committed to high quality, innovative technology based solutions to grower and producer defined opportunities.

The Impact Recording Device (IRD) is an innovative tool for monitoring potentially damaging impacts to your fruits, vegetables and food products. From the field to the processed package and all points in between, Techmark's IRD will identify potential sources of damage causing impacts.

Features

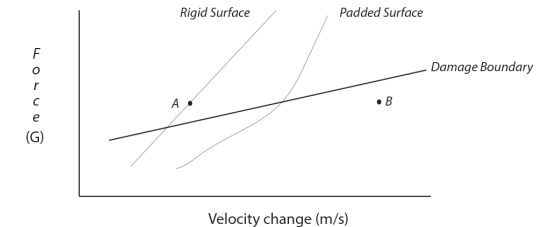
- Rugged, water resistant construction allows use in harvesting, transporting, processing and packaging systems.
- Detects impacts from all angles using a triaxial accelerometer.
- Impact data is collected and stored in the unit.
- The IRD detects and measures impacts above a user defined threshold.
- Measures impacts up to 500G.
- Customize design to simulate different commodities.
- PCIRD software makes data analysis effective and actionable.
- Tablet compatible for portability during testing.

How much does bruise damage cost your operation each season?

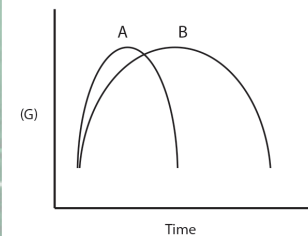
Impact Recording Device

The IRD is operated through the PCIRD software platform. The user pre-sets the parameters for the system under investigation. The IRD is then run through the system; the IRD records all impacts above the user-defined threshold, this prevents minor impacts and background vibrations from affecting the analysis of the handling system. Following the collection of impact data, the information is downloaded from the IRD using PCIRD. PCIRD is simple to use and will generate data in both graphical and tabular form for user analysis. **The data set includes both duration and velocity change of the recorded impact - this is the key to understanding bruising potential.** The final report includes a graph of peak acceleration vs. velocity change for each recorded impact. The graph includes damage threshold guidelines for several commodities and can be customized for your commodity needs.

Figure A shows the importance of measuring G force and velocity change over time. Impacts A and B are of the same force but impact A is more likely to cause bruising than impact B because of the amount of time over which the impact occurs.



A.



This figure shows 2 impacts, A and B. Both Impacts have the same force (G) but different durations because they occurred on different surfaces. Impact A is more likely to cause bruise damage in most fruits and vegetables.

