

VERYX® BioPrint®

VERYX BioPrint is Key Technology's next-generation sorting system for nuts. It consistently delivers even the most stringent product quality grades, while increasing pack yield and line profitability.

BioPrint is an all-new hyperspectral inspection technology that processes more information about every object seen by the sorter. This additional information enables VERYX to identify and sort out product defects and foreign materials with superior accuracy.

VERYX BioPrint is unmatched in its ability to remove shells and foreign materials down to 2mm in size, including rocks, sticks, glass, plastics, rubber and more. VERYX BioPrint sorts out any moisture-related defects, insect damage, nut meat with embedded shell or other surface defects, rot, mold and more. It also performs accurate color grading and shape sorting of the nut meat.

BioPrint Hyperspectral Inspection

Ensures consistent quality grading and sort performance even on product batches with high defect loads- 40% or more. Superior sort accuracy reduces "false positives" and minimizes yield loss to less than 1%.

See the Invisible

BioPrint chemometric inspection can detect internal defects and product conditions, such as bitter taste in almonds.

Pixel Fusion® Integration with VERYX Color Cameras

The combination of BioPrint with VERYX high-resolution color cameras delivers outstanding shell and FM removal, plus the ability to manage subtle color-based defects and perform accurate color grading of the nut meat.



No Moving Parts or Optics

Compared to scanner-based sensor technology, VERYX BioPrint offers more reliable performance, less maintenance and a longer lifetime.

Intuitive 'Set & Forget' Operation

Easy to store and recall product recipes and a clear user interface reduce training time and ensure consistent sort results including across different machines.

An Information Center for your Line

VERYX Information Analytics gives you valuable insight for optimizing upstream and downstream line operations. It also provides data to generate reports about the quality profile of each product batch.

Detect More Types of Foreign Materials, Defects and Product Conditions

VERYX is the only nut sorting system capable of integrating information from different sensor types into every image pixel. The fused superset of sensor information allows VERYX BioPrint to know everything there is to know about each object in the product stream:

- Material composition
- Internal and chemical properties
- Shape and size
- Color
- Surface characteristics



Easy to Learn, Easy to Use

VERYX BioPrint is designed to run unattended during normal production and requires minimal training. A new operator without a technical background can learn how to operate VERYX in less than one hour. Recipe-driven operation supports managing a library of sort recipe programs to meet various grade objectives, to satisfy the requirements of different customers.

Color Camera	 Object	 Light Amber	 Amber	 Light	 Light
BioPrint®	 FM	 Shrivel	 Good Meat	 Good Meat	 Shell
Pixel Fusion®	 FM	 Shrivel	 Amber Walnut	 Light Walnut	 Shell

A Complete Line of Process Solutions

Key Technology engineers turnkey integrated solutions tailored to your nut processing requirements. Our capabilities include:

- Sorting systems
- Feed and collection conveyors
- Packaging distribution systems
- Box filling systems
- Mechanical size graders
- Fines and small particles separation conveyors
- Product inspection conveyors
- Dust aspiration and air separation systems

