Flexible Print & Apply Automation Without Production Line Modifications

Case Study:
IBC International Bar Coding
Delivers a Multi-Axis Print & Apply Solution for a Pacific Northwest Fruit Packing Facility

Executive Summary

A small Pacific Northwest fruit packing facility needed to automate its case labeling process while avoiding the significant costs typically associated with conveyor modifications and material handling upgrades. Packing a wide range of case sizes, trays, and reusable plastic containers (RPCs) for both domestic and international markets, the facility required a flexible solution capable of adapting to changing packaging formats without disrupting existing production.

The facility partnered with **IBC International Bar Coding Systems & Consulting** to implement an automatic **multi-axis label print-and-apply system** engineered to integrate directly into its existing material flow. Unlike conventional labeling systems that often require box turners, case orienters, conveyor modifications, or complete line replacements, the IBC solution accurately applied labels to multiple package types without additional material handling equipment.

The result was a highly adaptable automation system that reduced labeling costs from approximately **$0.45 CAD per box to just $0.02 CAD per box**, while improving labeling consistency, increasing throughput, and preserving the facility's existing production infrastructure.

The Challenge

Fresh produce packing operations require flexible labeling systems capable of handling numerous package configurations while meeting retailer, export, and traceability requirements. This facility packed everything from corrugated cases and produce trays to reusable **IFCO RPCs**, each requiring different label placement depending on customer specifications.

Traditional print-and-apply solutions would have required expensive box turners, case orienters, or even replacement of the primary conveyor system to properly position products for label application. For a smaller packing operation, these additional capital costs and production downtime made conventional automation difficult to justify. The facility needed a solution that could automate labeling without changing the existing material flow

The Solution

IBC International Bar Coding designed and installed a multi-axis automatic print-and-apply labeling system capable of applying labels while products remained in their normal travel orientation on the conveyor. The result was a reliable labeling process that minimized downtime, increased productivity, and seamlessly integrated into the existing production line.

Key capabilities included:

- Automatic labeling of multiple case sizes and tray formats
- Support for corrugated cartons and reusable **IFCO RPCs**
- Labeling for both domestic and international shipping requirements
- Multi-axis application without box turners or conveyor modifications
- Integration into the existing production line with minimal disruption

The system was engineered specifically around the facility's existing workflow, allowing automation without the cost and complexity of redesigning the production line.

IBC's multi-axis print-and-apply solution reduced labeling costs by more than 95% while enabling fully automated labeling without replacing the facility's existing production line or adding costly material handling equipment.

Results & Benefits

The implementation produced immediate and measurable benefits:

- Reduced labeling costs from **$0.45 CAD per box to approximately $0.02 CAD per box**
- Eliminated manual label application across multiple packaging formats
- Improved label placement accuracy and consistency
- Avoided costly conveyor modifications and additional handling equipment
- Increased production throughput with minimal operator intervention
- Created a scalable solution capable of supporting future packaging and customer requirements

IBC Al Code Multi-Axis Label Printer Applicator

Conclusion

By partnering with IBC International Bar Coding, this Pacific Northwest fruit packing facility successfully automated one of its most labor-intensive packaging processes while preserving its existing production infrastructure. The multi-axis print-and-apply system provided the flexibility to label a wide variety of package styles without requiring expensive conveyor modifications, creating a solution that is both operationally efficient and financially sustainable.

INTERNATIONAL BAR CODING
SYSTEMS & CONSULTING

Phone: 250 493 3201
Website: www.ibcworld.net
Email: sales@ibcworld.net