# **NüminaGroup**

## PFI™ Automated Print-Fold-Insert

## **Automated Document Insertion Removes Touches and Streamlines Packing and Shipping Operations**

PFI<sup>™</sup> Print-Fold-Insert is part of Numina Group's highly advanced family of document print and insert, and print and apply labeling technologies that provide proven ROI. When integrated into automated packing lines, these technologies lower labor costs and increase accuracy and throughput rates across the Pick, Pack, and Ship Operation. PFI<sup>™</sup> combines the industry's fastest pack sheet laser printer with automated folder/inserter technologies. PFI<sup>™</sup> performs document print on demand and precision placement of documents into an open carton or tote.

PFI™ employs the industry's fastest ondemand printing technology and supports both single sided or duplex printing with graphics or customer logos onto blank paper or pre-printed forms. A single unit performs 12-13 cartons per minute, CPM. Two or three PFI™'s in a high speed pack line can be used to automate 30+ CPM. Pack automation lines can be tailored to customer's specific needs for automating print and insertion of documents such as return labels, promotional materials, coupons and new product announcements. The line can also include inline vision capture/ audit, weight inspection, and semi-automatic or auto-taper sealers. Carton shipment labor can be further streamlined by adding inline scan, weigh, dimensioning and print and apply labeling to automate retail label application, and UPS/FedEx shipping, labeling, and order manifesting.

PFI<sup>™</sup> carton height detection automates the placement of the document based on the carton height. The unit accurately prints, folds and places one to ten  $8.5'' \times 11''$  printed sheets into cartons ranging from 4'' to 30'' in height.

### **PFI™** Benefits:

- Increases accuracy and throughput while minimizing costs
- Eliminates bottlenecks in packing
- Eliminates manual packing labor and manually folded pack sheets
- Reduces 35 seconds or more of labor from every shipment
- Improves customer service
- Automates and validates medical document mandates
- ROI in 18 months or less



**Numina Group** is a reliable and proven material handling automation integrator with 30 plus years of industry expertise. We design and implement technologies and warehouse control software to improve productivity in order fulfillment and manufacturing operations. Our solutions combine best practices with innovative automation technologies to eliminate problems found throughout distribution processes. Our solutions and technology reduce labor and increase throughput, enabling clients to gain a competitive advantage in the markets they serve!

**Real-time Distribution System, RDS™** is our versatile Warehouse Execution and Control System, (WCS). It combines the latest advancements in speaker independent voice picking with real-time control of material handling in manufacturing and distribution.

**RDS™** manages process improvements in Omni-channel, E-commerce, Medical and other manufacturing applications. The software is modular, scalable, and highly flexible with the ability to be customized to the customer's specific requirements. It supports integrating picking, conveyors, sorting controls, vertical storage carousels, ASRS, document print-insertion and print and apply labeling into a unified application. RDS™ interfaces to existing ERP and WMS to enable best practices and lean process improvements with real-time material handling automation.

### RDS™ - WCS Pre-developed application control modules include:

- Receiving/Cross Docking Inbound Audit with Print and Apply Labeling
- **Cartonization** Carton selection for split case picking based on SKU cube and weight
- Order Release Optimization Omni-channel work load balancing with order release matched to shipment type and delivery rules
- **RDS Voice™** Picking, Replenishment, Receiving, and other voice directed work tasks
- Order Validation Inline Weight, Barcode & Vision Capture, and Audit
- Conveyor Controls Including Carton Zone Routing for split case orders
- Sorting Sorter controls including Shoe, Tilt-Tray, Bombay, and Cross-Belt
- Vertical Storage Units ASRS Systems and other goods to man automation
- In-Line Packing Void fill, Pack sheet generate/insert, and Carton sealing
- **Print and Apply Labeling** Automated labeling for Packing Slips, Pack Sheets, Shipping and Compliance labels
- **Labor Management** Operational performance Web based diagnostics reporting tools.

**Numina Group will partner with your team** to define lean processes that eliminate bottlenecks and excessive labor. We accelerate performance and profitability throughout order fulfillment operations. As a full service integrator, we consult, design and implement WCS, control system upgrades, streamline pick, pack, and ship operations, conveyor systems and material handling requirements for existing and new distribution centers. Call Numina Group's experienced team to explore how we can work together and develop the right solution for your requirements.

Call 630-343-2629 and find out what a leaner process coupled with **Smarter**, **Faster**, **Better Automation will do for your operation!** 

phone: 630-343-2600 fax: 630-343-2636 www.numinagroup.com