



L1F™ (Last-100-Feet) and Cartonization optimization

Integration from order checkout to packaging to shipping



FastTrak[®] WM+ L1F™
Integration made easy™

L1F™ is the last-100-feet in a distribution center. It incorporates a range of operations from order checkout to packaging to shipping. This area is often labor intensive, prone to errors, contains various equipment and subsystems, is slowed by bottlenecks, and increases unnecessary bottom line costs.



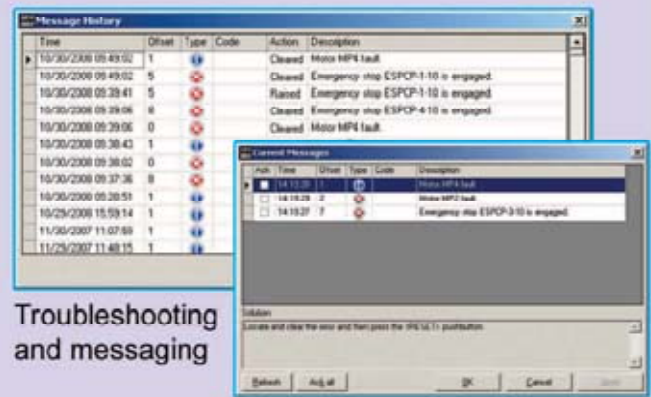
GRSI is at the forefront of technology in L1F™ operations. Innovation, meticulous attention to detail, and flexible software have shaped GRSI to become the industry leader with proven solutions.

GRSI *FastTrak* WM+ L1F™ software is a powerful tool for integrating WMSs, ERPs, TMSs, L1F™ equipment and subsystems, PLCs, and shipping software into a cohesive, streamlined solution. It provides a real-time manifesting interface to shipping software, troubleshooting and messaging screens, browser-based monitoring and reporting tools, HMIs, and dashboard displays. *FastTrak* manages conveyor routing, product and document insertion, in-motion scales, packaging machines, void-fill machines, print and apply labelers, RFID systems, palletizers, and shipping sorters to provide speed and accuracy.

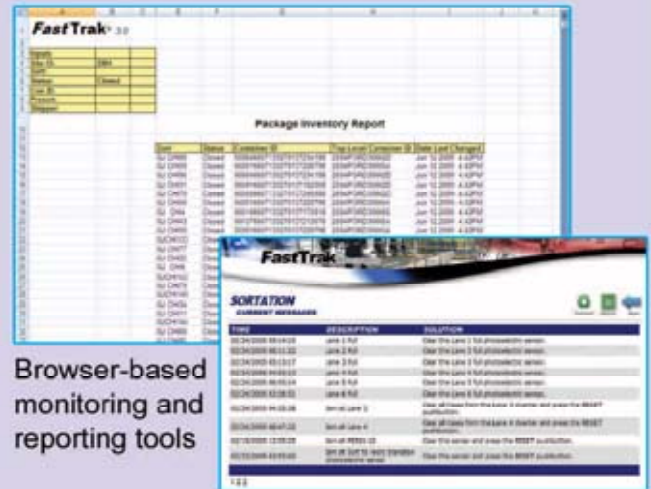
The *FastTrak* Cartonization software module analyzes the business rules, fragility, dimensions, weight, position, and special needs of each item in an order to determine the orders packaging requirements. It provides tools to generate batches based on orders' packaging needs and routes them to specific packaging lines. A detailed analysis allows GRSI to identify key opportunities for automation and innovative packaging technologies.

Benefits

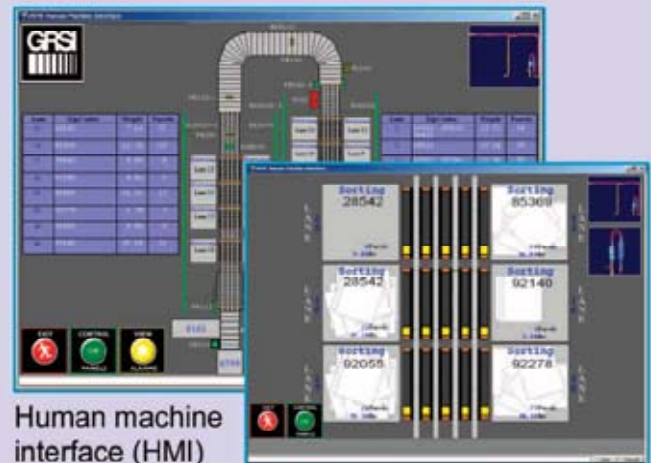
- Less material, labor, and freight costs
- Increased throughput
- Streamlined order flow
- No finger pointing - GRSI takes full responsibility
- Increased sustainability



Troubleshooting and messaging



Browser-based monitoring and reporting tools



Human machine interface (HMI)

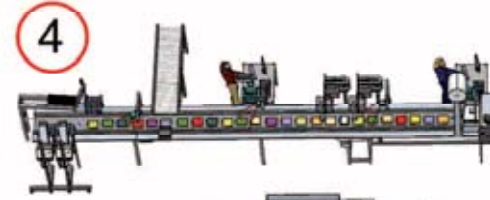


Dashboard displays

Manual carton packaging line



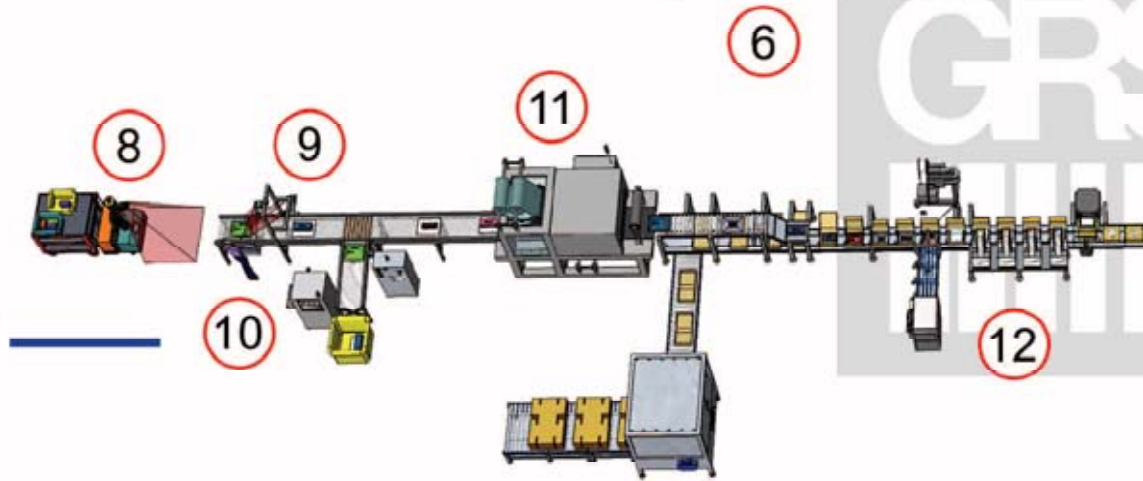
Automated cold seal line



Automated polybag line



Automated carton packaging line

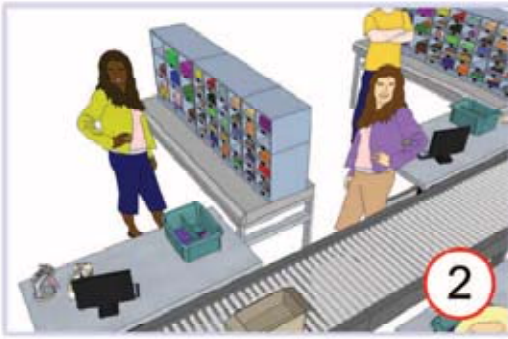


Integration made easy™

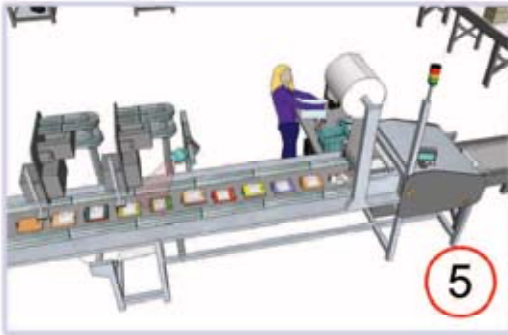


610-397-1050
solutions@grsinc.com
www.grsinc.com

© 2010 Glen Road Systems, Inc. All rights reserved.



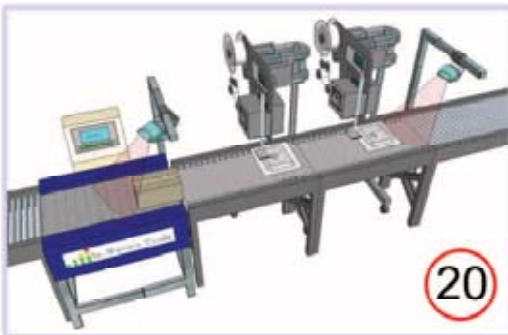
FastTrak Cartonization is the method of using SKU and order data with business rules to make improved packaging decisions. The software examines the dimensions, fragility, weight, position, and special needs of each item in an order and the interaction of items in the order to determine the order's specific packaging requirements.



Cold seal packaging completes over 1,000 orders per hour with only one operator. Orders are identified and automatically fed through the machine. An LPN bar code is inkjet printed onto the material (Patent pending) and the order is wrapped. The order's LPN is scanned and associated with the order. The result is decreased labor and freight costs with higher order accuracy.



FastTrak triggers automatic feeders to dynamically insert customer specific materials such as marketing literature and coupons into containers or onto conveyors. This is an essential tool for integrating marketing campaigns. It communicates information to and from the host and shipping system. It sends this information to high-speed laser/inkjet printers and printer applicators to create pack lists, invoices, forms, and other documents.

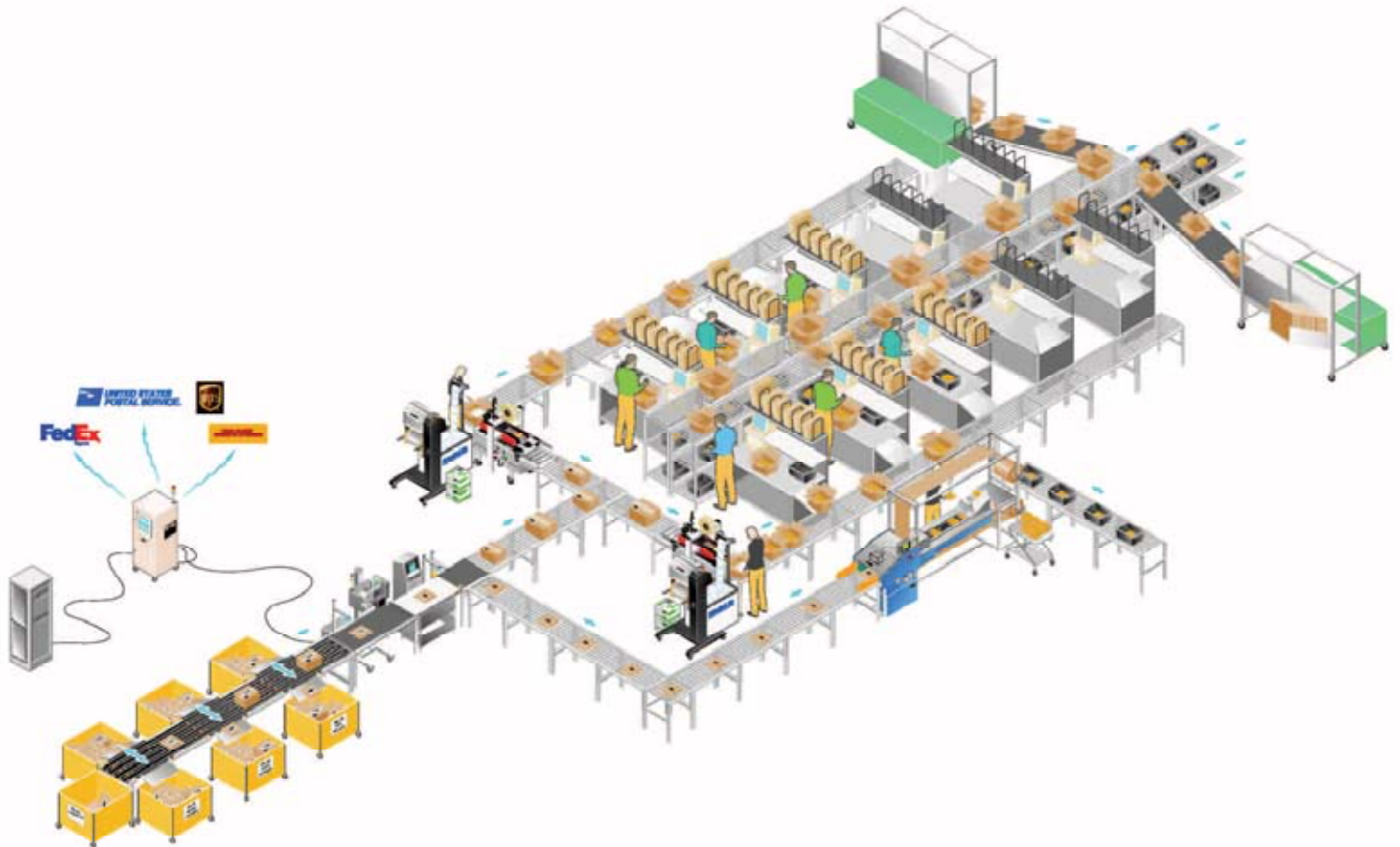


Printer applicators automatically print and apply labels to achieve rapid throughput rates. Labels can be top or side applied onto a range of substrates including cardboard, poly, paper, shrink film, plastic, and others. *FastTrak* communicates with the host and shipping systems to gather necessary label information. Labels are printed, applied, and scanned for verification. *FastTrak* can simultaneously communicate data between multiple label printers to streamline operations.

Integration capabilities

1. Carton erectors
2. Order consolidation light wall
3. Manual pack stations
4. Product and document inserters
5. Cold seal packaging machine
6. Light directed order consolidation matrix
7. Automated polybagger
8. Self-guided vehicle robot
9. Scanners and cameras
10. **FastTrak**® WM+ workstation
11. Shrink wrap machine
12. Pack list and document inserters
13. Conveyor routing
14. **FastTrak**® WM+ electrical control panel and server (real-time manifesting)
15. Dynamic document inserters
16. Pack list inserter
17. Calculated void-fill machine
18. Carton closer and taper
19. In-motion scale (QC check/weigh)
20. Shipping label printer applicators
21. RFID tunnel
22. Robotic pallet builder
23. Stretch wrapper and pallet labeler
24. RFID lift truck
25. Shipping carrier and exception sorter
26. **FastTrak**® WM+ main screen

Innovation • Automation • Integration • **Proven solutions**



FastTrak® WM+ L1F™ interfaces to any WMS, ERP, TMS, and shipping software via single-port connectivity. It manages all L1F™ (Last-100-Feet) equipment and subsystems to streamline operations.



Glen Road Systems, Inc.
401 East Elm St., Suite 100
Conshohocken, PA 19428
T: 610-397-1050
E: solutions@grsinc.com

www.grsinc.com