

Veri-Logic LLC



VERI-LOGIC™ Pallet Trak System

Veri-Logic LLC is a leading supplier of turn-key industrial labeling solutions. We have extensive experience in the integration of bar code labeling equipment and associated devices, which we interface to our customers' Warehouse Management and Enterprise Systems. Veri-Logic LLC, founded in 1989, is a master distributor of Apax *Versapply*® labeling equipment, a Certified Symbol® Technologies Business Partner as well as a Distributor & Authorized Service Provider of Zebra® Technologies bar code label printers and Accu-Sort® fixed scanning equipment. The VERI-LOGIC™ design and implementation of bar code solutions and bar code systems for the manufacturing and wholesale distribution industries is the solution you need.

The VERI-LOGIC™ system was developed to automate pallet identification applications. This system is designed to automatically identify each pallet with one to four UCC128 (Universal Container Code) bar code compliance labels, validate each label and report pallet production data to the user's Warehouse Management or Enterprise System. It allows users to track pallet loads from production, through distribution, all the way to the end user. By identifying and tracking each individual pallet, users can facilitate product recalls by limiting the recall to specific pallets rather than an entire shift or day's worth of production.

Here is an overview of how a component of VERI-LOGIC™, the *Pallet Trak* system, operates (There is also a system diagram in the back of this booklet.)

Application Modules

First, the system must determine what products are being produced (in order to produce a unique UCC128 label). There are a number of ways to gather this information, depending on the user's situation. *Pallet Trak* could be configured to either scan a pre-printed carton bar code and look up the product data off the host mainframe/server; apply a pre-printed sequential bar code Line # label to the pallet and perform a look-up; or gather the output from an existing device (PLC, mainframe, etc.).

Pallet Trak will retrieve that data as product enters the queue prior to stretch wrapping. After stretch wrapping, *Pallet Trak* will format the pallet/product data and send it to the printer/applicator(s) to print and apply one to four unique UCC bar code labels to the pallet. These labels can also include product descriptions, date codes, production codes, order numbers, etc. *Pallet Trak* will then report product production data to the host Warehouse Management or Enterprise System.

Pallet Trak is a very powerful, intelligent front-end to your host system which is executed on a PC platform under Windows NT®. A variety of modules can be used individually or in conjunction with each other to perform specific functions. This offers customers the ability to add modules as their needs change. *Pallet Trak* reports activity to the host as pallets are processed, providing real-time production activity tracking. Veri-Logic's *Pallet Trak* also ensures correct label formats with accurate data are applied to each pallet at rates up to 20 pallets per minute.

The interface module of *Pallet Trak* maintains communication between your Warehouse Management System mainframe/server and *Pallet Trak*'s controlling PC. This module uses TCP/IP connectivity to provide real-time communication to a variety of mainframes including IBM®, HP® and DEC®. Supported servers include Novell® and Windows NT®. Data can be retrieved from the host system on a real-time basis or stored/retrieved on the controlling PC.

Control Module

Pallet Trak's control module identifies pallets and precisely tracks movement of pallets being transported down one or multiple conveyor lines. By identifying and controlling each pallet, *Pallet Trak* can determine what label format and information should be printed and applied to each pallet. The control module will either halt production or provide appropriate signals to line personnel if mislabeled, or unlabeled, pallets are detected. This module can also communicate with your Automated Guided Vehicle (AGV) control system, palletizer PLC or fixed bar code scanners. It can identify which pallets have been loaded on the AGV system or provide error messages to the AGV system for special handling. This module's logic can be easily modified to meet your specific operational requirements.

Label Module

The *Pallet Trak* label module works in conjunction with the interface and control modules to format the data that is to be printed on each pallet as it passes through the system. *Pallet Trak* label module can provide fully compliant UCC128 or any other bar code label. These can also include product descriptions, date codes, order numbers and more, at speeds up to 10 pallets per minute. Using this module, labels can be generated by retrieving the required data fields and formatting the label accordingly. This module controls automatic printer/applicators as well as stand-alone printers used in hand-stacking areas.

Validation Module

Once the pallets have labels applied, *Pallet Trak's* validation module will verify that each label is applied, identical to the others and correct for that particular pallet. Upon validation, the mainframe/server will be updated to indicate successful label application and report production activity.

Security Module

The *Pallet Trak* security module prevents unauthorized use of the system by establishing authorized log-on names and passwords. This module also generates an event log to track all labeling activity.

Weigh Scale Module

This module works in conjunction with the other modules and allows *Pallet Trak* to incorporate data from a weigh scale into a label format. This information can also be transmitted to your shipping or host system to calculate freight charges.

RF Capabilities

With any new installation, installing data cables to support numerous printer/applicators and stand-alone printers can be very expensive and operationally restrictive as your needs change. Veri-Logic can modify most thermal transfer printers to provide RF (Radio Frequency) connectivity, eliminating the need for data cables. Also, mobile printing stations can be established to provide a flexible labeling solution anywhere in your facility.

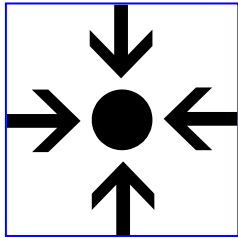
Support and Service

In addition to designing and implementing *Pallet Trak* to best suit your order fulfillment and shipping needs, Veri-Logic will also provide hands-on training for your IS staff, line operators and maintenance staff. Once installed, we can diagnose and analyze system problems in real-time with remote diagnostics which reduces downtime and optimizes productivity. In addition to our technical service and engineering staff based in Bolingbrook, Illinois, Veri-Logic can also provide nationwide service contracts with local support through our highly qualified service partner.

Turn-Key Systems

Veri-Logic LLC is a turn-key supplier in the truest sense of the word. We take complete and total responsibility for all aspects of the job – installation, testing, training, documentation and final system acceptance. If there is a problem with *any* component used in your system: software, scanners, photo cells, printer/applicators, scales, encoders, stand-alone printers, labels, ribbon, Programmable Logic Controls (PLCs), etc. – it is our responsibility.

To successfully implement *Pallet Trak* into your organization, all we need is 5-7 feet of conveyor, a data connection to your host, file and label layouts and communication parameters. We will take care of all the rest...that's what we mean by "turn-key".



How Can We Help You?

We would be happy to evaluate your application to determine how *Pallet Trak* can help you automate your shipping system, provide more timely order status information and generate higher levels of customer satisfaction. You can phone us at (630) 759-8400 or fax us at (630) 759-8476.



Apax printer/applicator applying a UCC128 label to the front panel of a pallet. This system can print and apply unique labels to pallets at a rate of 20 labels per minute.



The Apax print/apply labeling systems used in the Pallet Trak system feature an adjustable swing arm that provides front/side or side/rear pallet labels. Some suppliers make the mistake of recommending corner-wrap labeling equipment for pallet identification applications. While suitable for carton applications, our experience has been that pallet loads do not present the standard, consistent corner position necessary for corner-wrap labeling systems to function properly. As a result, only a portion of the long label ends up on the proper area of the pallet. Apax's swing arm design ensures that one to four individual labels are properly applied. Because it is adjustable, labels can be applied to left or right corners or in the center of the pallet load.

