

ACCURATE BAR CODES HELP DRIVE SUPPLY CHAIN EFFICIENCY

Almost every industry today is affected by the reliance on bar code technology. A bar code provides the world's least expensive and most robust method of data entry – every product has a bar code associated with it at some point in its life. From automotive to healthcare, retail to pharmaceutical, consumer packaged goods to department stores, business utilizes bar codes for internal logistics, cross docking and manufacturing operations. Accurate bar codes are key in maintaining the efficiency in today's supply chain.

This has increased the importance for bar code quality and assurance. Every bar code must read every time. The implication of bad bar codes at any point in the supply chain is great and far reaching.

- Chargebacks
- Delayed shipments
- Lost productivity
- Non-compliance fees
- Slow production lines

THE PRINTRONIX SOLUTION

Printronix has recognized this growing need since 1999 and has stayed committed to providing customers with an array of comprehensive bar code verification solutions. The results have had a positive impact on operations, costs and the competitive advantage of customers worldwide.

- Improved efficiencies in distribution centers
- Reduction in costly downtime
- Maximized productivity
- Increased vendor compliance
- Stronger customer relationships





ONLINE DATA VALIDATION (ODV™)

Printronix Online Data Validation (ODV), in conjunction with the high performance T5000 thermal bar code printers and the SL5000 RFID printers, identifies and corrects bad bar codes before they enter the production or distribution system.

ANALYZING THE BAR CODE

Completely automated ODV follows a series of specific steps every time to assure 100% bar code accuracy.



- Analyzes incoming data stream to identify bar codes commands for very label
- Once the label is printed the bar code image is scanned and tested to assure the print image falls within the bar code's published quality/symbology specs
- ODV then correlates to the bar code commands
- If the label does not meet specifications, ODV cancels the bad label
- Immediately a replacement label is printed

The benefits are immediate as these simple steps, conducted as part of the printing process, save time, minimize costs and maintain productivity, all without human intervention.

ODV DATA MANAGER

Printronix closed-loop quality control system monitors the critical bar code process with ODV Data Manager.

- Allows enterprise wide remedies for error conditions by capturing and displaying all bar code quality data and detailed validation information
- Store all of your bar code quality data in common database such as Oracle and DB2

Combined with Printronix PrintNet® Enterprise Suite, ODV closes the loop on bar code quality control and provides unprecedented visibility of mission-critical print operations.

CALCULATE THE SAVINGS

To compare your current printing costs with that of a fully implemented Printronix T5000r/ODV/supplies solution visit Printronix online at www.primtronix.com.

CUSTOMER SUCCESSES

48% IMPROVEMENT IN SCAN RATES

An international distribution center responsible for millions of SKUs, thousands of shipping points and trading partners relied heavily on innovative supply chain techniques to move merchandise quickly to the consumer.

Current systems generated a high volume of non-compliant bar code labels resulting in problems throughout the supply chain. To improve inventory operations and keep distribution lines flowing, it was critical that the company implemented an integrated solution to ensure 100-percent bar code accuracy.

To resolve these issues, Printronix recommended the T5000 printer with Online Data Validation, which provided a cost-effective, hand-free quality control process that ensures faulty bar codes would not be affixed to products.

This solution allowed the company to move 250,000 additional cartons and improve scan rates by 48%.

PRINTRONIX

Expected Cost Savings Through Use of Printronix T5000® Printers with Online Data Validation
Internal Logistics and Manufacturing Applications ROI

This spreadsheet will allow you to analyze ROI for Internal Logistics and Manufacturing Applications, comparing the current situation with a fully implemented Printronix T5000/ODV/Supplies solution. This analysis assumes that label usage, ribbon usage, and maintenance costs will remain constant over a 3 year period. If label usage is expected to increase, the cost savings will be expected to increase as well.

Please fill in the green shaded areas with the appropriate data.

COST ASSESSMENT	
Number of labels printed per day (quantity)	5000
Percent of labels not readable/scannable (%)	1%
Number of labels reworked per day (quantity)	50
Cost to rework each label (in Dollars)	\$3.00
Total bar code rework cost per day	\$150
Working days per year	250
Total bar code rework cost per year	\$37,500

TOTAL 3 YEAR SAVINGS

\$103,900

Avg. Monthly Savings \$2,896
ROI in Months 2.29

CURRENT COST	Year 1	Year 2	Year 3	3 Year Total
Estimated Label Cost (per year in Dollars)	\$15,000	\$15,000	\$15,000	\$45,000
Estimated Ribbon Cost (per year in Dollars)	\$10,000	\$10,000	\$10,000	\$30,000
Estimated Printer Maintenance (per year in Dollars)	\$2,500	\$2,500	\$2,500	\$7,500
Rework Costs	\$37,500	\$37,500	\$37,500	\$112,500
Total Costs - Current Situation	\$65,000	\$65,000	\$65,000	\$195,000



CUSTOMER SUCCESSES

\$250,000 IN FEES ELIMINATED

A national apparel manufacturer distributes over 720,000 garments a day, via 36,000 outbound cartons to thousands of locations with bar code labels affixed to each garment and carton shipped.

Their customer has strict requirements regarding bar code compliance. In this case low-bar code quality was costing the company more than \$225,000 per year. The current process of visual validation often resulted in overlooked smudged or unreadable bar codes. The company needed a streamlined solution to eliminate mistakes and improve bar code printing.

The Printronix solution was the T5000e thermal printer with Online Data Validation, which helped to streamline printing of 100% scannable bar code labels and reduce employee training. The most compelling aspect was the system's ability to store data allowing the company to better manage customer claims.

During a two-month period the company experienced a 90% drop in bar code failures. Within 90 days the company had recouped its investment and was compiling valuable data.

RJS SCANNERS AND VERIFIERS

For companies currently utilizing non-Printronix printers, other verification systems offering excellent performance are available.

ONLINE VERIFICATION SYSTEM

The SV Series Scanner/Verifier provide both fixed position scanning and high-speed on-line ANSI method verification for a turnkey method of monitoring the printing process with some human intervention.

- Identifies errors by checking for burned out pixels, ribbon wrinkle, and clogged inkjet nozzles
- Scans the bar code, then decodes and reports the encoded data
- Stops to wait for an operator to correct the problem if a bad bar code gets printed
- Available for most thermal printer models and high-speed or conveyor applications



PORTABLE VERIFICATION SYSTEMS

Portable verifiers are ideal for checking bar codes at QC checkpoints or receiving.

- INSPECTOR® D4000 adapts to practically any linear bar code verification application requiring a portable unit
- INSPECTOR® 4000 fulfills the ANSI method standards like no other verifier on the market
- INSPECTOR® 1000 designed for maximum ease of use, even traditionally hard to verify bar codes are accurately analyzed

