Pallet labelling

Creating compliant Serial Shipping Container Code (SSCC) Labels

Matthews
INTELLIGENT IDENTIFICATION

EXECUTIVE SUMMARY

The key causes of incorrect pallet labelling reported by major retail chains are listed below in descending order of occurrence (Source: GS1). A label printer applicator (LPA) with an unattended scanner integrated with a package code management system, like iDSnet, on the packaging line to automate the print, apply and verify process for both GTIN carton and SSCC Pallet labelling can resolve these issues.
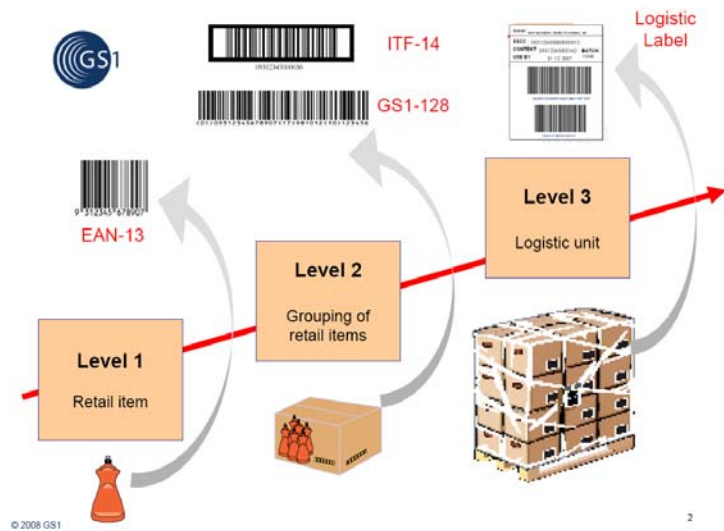
Label position incorrect	• An automated print and apply system can apply labels in the exact position required and avoid the issues of hand apply
No label in use	• An automated print and apply system integrated with a scanner can apply correct labels in the required position and verify that the label is scannable
Duplicated/Mismatch SSCC	• A print and apply system integrated with a package code management sytem like iDSnet can verify SSCC labels from the central database to ensure the label is correct and not duplicated
Damaged Label	• A print and apply system integrated with a scanner or vision systems can verify that the label is not damaged at the time of label application
Will not Scan	• A print and apply system integrated with a scanner can verify that the label is scannable at the time of application
Under Stretch Wrap	• A print and apply labelling system installed after the stretch wrapper overcomes this problem
Pallet Label on 1 side only	• A print and apply labelling system integrated with a stretch wrapper turntable and networked with iDSnet can apply two labels on fork entry sides of a pallet
Incorrect Product Label	• A print and apply system integrated with a package code management sytem like iDSnet can verify SSCC labels from the central database and cross verify them with the carton labels to ensure correct product labels
Duplicated (SSCC number already used in last 12 months)	• A print and apply system integrated with a package code management sytem like iDSnet can verify SSCC labels from the central database to avoid this

This paper covers the solution in detail.

BACKGROUND: PALLET LABELLING

In recent times, end to end product traceability is becoming a key concern for retailers and consumer bodies. Pallet labeling is a key step in ensuring traceability throughout the supply chain and is delivered by the use of the GS1 Serial Shipping Container Code (SSCC) and Advanced Ship Notice (ASN*) that is globally unique for every pallet produced anywhere in the world.

The importance of accurate pallet labelling cannot be emphasized enough in this dynamic retail environment. Any warehouse or distribution center will need to store and dispatch pallets based on the type of product, expiry dates, the manufacturer and other information that is on the SSCC label. Increasingly many distribution centers have a high degree of automation and handle high volumes and therefore correct labelling becomes critical. Any incorrect labels will not only cause the automated system to fail, it will also cause delay in the process since manual intervention is needed.

GS1 is the international body responsible for utilising open standard e-commerce technologies to achieve best practice supply chain management.

THE ISSUES

Australian Grocery Retailer Requirements is a GS1 Logistics Label to be placed on each fork entry side. Major retailers have said that the biggest emerging problem in their supply chain is incorrect SSCC Labelling. According to GS1, listed below are some of the major reporting criteria on pallet labels that vendors are measured against by major retail chains.

1. Label position incorrect
2. No label in use
3. Duplicated/Mismatch SSCC
4. Damaged Label

5. Will not Scan
6. Under Stretch Wrap
7. Pallet Label on 1 side only
8. Incorrect Product Label
9. Duplicated (SSCC number already used in last 12 months)

Many production and packaging lines still hand print and apply pallet labels. While hand-apply maybe economical, it can cost the manufacturer a lot more if the pallet is rejected and returned. Also with stringent criteria on the SSCC label position, a high degree of accuracy is needed that is hard to achieve manually.

A robust print and apply system with an evolved package code management system that is networked to a central database can solve these issues.

THE SOLUTION

A label printer applicator (LPA) can be commissioned on the packaging line to automate the print and apply process for SSCC Pallet labelling.

The beauty of the system is that it can be set up to apply the two complaint SSCC labels in the exact positions that are required, on the two fork entry sides of the pallet. The height at which they need to be applied from the base as well as the distance from the side can also be accurately set up.

It is highly recommended that any LPA system for SSCC Pallet labelling be integrated with a fixed/unattended scanner to validate the label once it is applied. The fixed scanner ensures that the labels that are applied can be scanned as well as ensuring that the SSCC number is correct on BOTH sides. If in any case the label is not applied, the system can be set up to alarm to either alert the operator to investigate or to automatically re-initiate the process that applies the label. It also ensures that the label is not damaged or under the shrink wrap.

If this LPA system is networked with a package code management system like iDSnet, it can check from an existing central database if the barcode and information on the SSCC label is
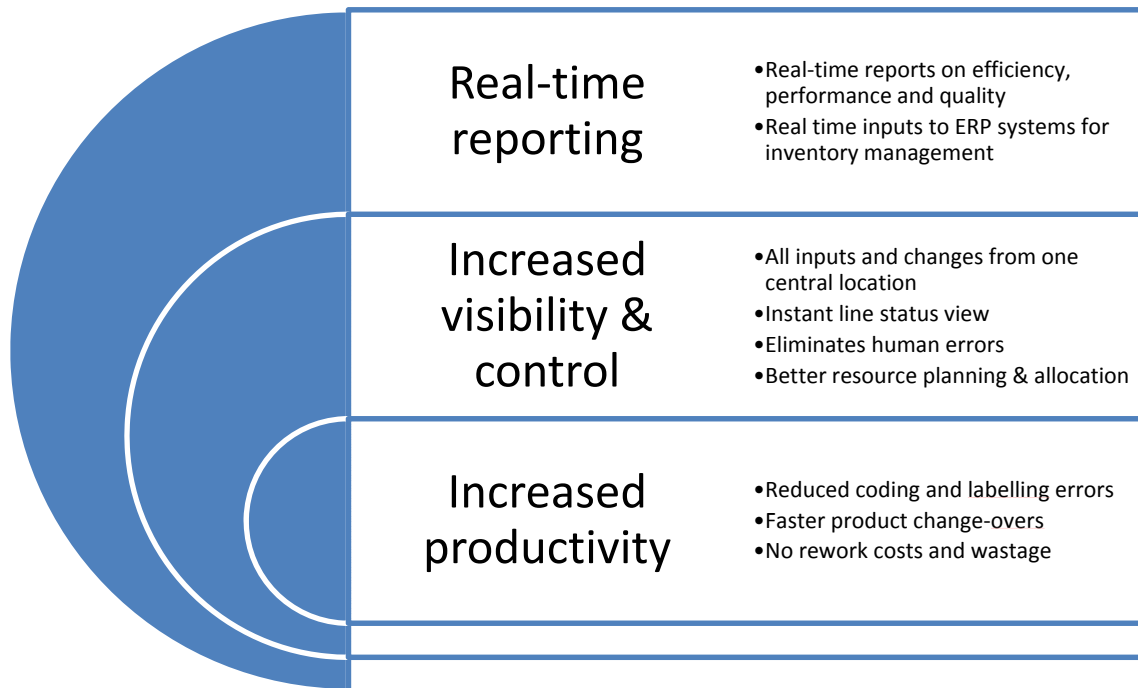
correct. It can also cross validate the labels on the carton with the pallet label. This avoids incorrect labelling and duplicate labelling.

Matthews Intelligent Identification has provided pallet labelling solutions to many manufacturers across the country. Each of these solutions are designed to meet the specific requirements of that line and have advanced capabilities like ERP integration to automatically update production and dispatch numbers. There are also applications where the pallet is on a turn table and the iDSnet manages the system to print and apply the right labels at the right time and the exact locations specified on opposite sides (fork entry) of the pallet.

BUSINESS BENEFITS

In addition to ensuring correct SSCC pallet labelling, this system is designed to meet all the business requirements of the enterprise. The system easily integrates into ERP and WMS systems and iDSnet Manager can provide real-time reports on production and in-depth shop floor visibility.

Some of the benefits are highlighted below.

Real-time reporting	•Real-time reports on efficiency, performance and quality •Real time inputs to ERP systems for inventory management
Increased visibility & control	•All inputs and changes from one central location •Instant line status view •Eliminates human errors •Better resource planning & allocation
Increased productivity	•Reduced coding and labelling errors •Faster product change-overs •No rework costs and wastage

ABOUT MATTHEWS INTELLIGENT IDENTIFICATION

Matthews Intelligent Identification is an Australian leader in coding, labelling and product traceability solutions. Our capabilities range from applying simple alpha-numeric codes by small stand-alone printers, right through to designing and installing networked hardware and software systems for highly sophisticated production and packaging environments for primary, secondary and pallet packaging across a wide range of industries.

Matthews is constantly at the forefront of technology. For instance, we are the first company in Australia to offer Label Printer Applicators for RFID labels. We have significant R&D investments and have developed the award-winning iDSnet^{TM} solution. iDSnet centralizes control to ensure that the correct code, such as a barcode, datecode or batchcode, is always placed on the correct product at the correct time. By networking all coding and labelling devices back to a central database, product changes are effected down an entire production line with one simple operator action.

Our unmatched solution capability is backed by our 24x7 technical support and customer service to support all installations across the country to give you peace of mind. It is streamlined to ensure less downtime for customers and our first-time fix rate is 97%.

No matter what your coding, labelling or data capture application, Matthews is the only company in Australia that can provide you with a complete range of end-to-end intelligent identification solutions.

To find out more about how we can be of service to you, call us on 1300 CODING, visit www.matthews.com.au or email info@matthews.com.au