



LICENSE PLATING TRACEABILITY



portable
intelligence inc.

FREE EBOOK

Portable Intelligence Inc. has been in the warehousing game for over 20 years, so naturally we take best practises very seriously! There is just something extremely satisfying when it comes to inventory accuracy, organized racks and discovering innovative ways to improve warehousing functions. After all, it's really the heart of your (and our) business operations!

This volume, we want to touch on traceability and license plating, which are topics we really don't see enough discussion on. In the process, we hope, as always, to clarify some of the mysteries surrounding the topics at hand and hopefully introduce, you guessed it, best practices that will increase productivity, maximize profit and save you time.

9 BEST PRACTISES FOR TRACEABILITY

“Farm to Fork” and “Ocean to Plate” are deceptively simple terms used to describe the scope of traceability.

However, it is arguably the most complex of supply chain topics. There is no shortage of white papers, scholarly articles, and industry groups providing both education and standard practices.

The Canadian Food Inspection Agency defines a traceability system as the identification of an animal/product, premises location, and tracking the movement of the animal/product. In everyday use, traceability systems allow your supply chain partners to determine if your product has been handled properly while enroute to their facility, identify its origins, and allow for efficient processing and tracking. In an emergency, traceability allows for the efficient and targeted identification and location of all affected products through a series of common attributes.

We'll be focusing on these common attributes. How you use and display them is largely determined by your industry association, government groups, and your supply chain partners.

1. GTIN or Global Trade Index Number

Refers to a family of barcodes that you will need to acquire if you sell to a retailer. Obtained from GS1 www.gs1.org they will assign you a unique supplier ID and product code. Depending on both the product and country, you'll be issued a 8, 12, 13, or 14 digit barcode. Popular examples include EAN-8 used on small items and UPC-A which is used widely by all North American retailers.

2. Lot

This is a number used to represent a particular production batch. In the food industry, it is very common to see the Julian date as the lot #. In the steel industry, the Heat # is used as the lot # and in the automotive industry the VIN – vehicle identification number contains both the lot # and serial # of the car.

3. Serial

This is unique number that basically identifies the item individually. Typically used for items carrying a warranty. It is not uncommon to see it used extensively like the aerospace industry where virtually every nut and bolt is serialized.

4. Pallet Identifier or License Plate

Using the license plate and linking it (through scanning) to the non-unique case number. This will allow for better stock rotation as FIFO principles can be applied based on the license plate.

5. ASN or Advance Ship Notice

As ASNs contain detailed information about the shipment such as PO, case GTIN, pallet (SSCC), quantities, ship date, manifest, etc. This data can be used to plan inbound or cross dock logistics but also support traceability queries.

6. EDI or Electronic Data Interchange

This standard communication protocol is an absolute must if you plan to communicate with your supply chain partners efficiently. It also provides for an easy to access audit trail of product movement.

7. Human Readable Data

Barcodes get damaged so make sure your labels show in human readable format, the supplier name, product description, and lot number.

8. Supplier Pallet ID and Case ID

Incorporating this supplier data into your inventory tracking system will allow for easier traceability and provides an essential link back to your supplier.

9. UCC 128 Label

This 'super' barcode allows you to encode virtually any information into a single barcode. There is a standards format and uses application identifiers for each type of data you're putting into your UCC label. To get an idea for the wide range of datasets you can put into this label see <http://en.wikipedia.org/wiki/GS1-128>

At its core traceability is about cooperation and abiding to 'standards' of communications and labeling between all parties. After all your traceability program is only as strong as its weakest link.

LICENSE PLATING AND YOUR WAREHOUSE

A license plate is simply an additional form of unique identification to mark a pallet or some grouping of products or materials. It's used to rapidly move this group of product from one location to another without having to scan the individual contents of that group.

This is one of our favorite areas and we've seen it used many ways by our customers to solve material tracking problems both creatively and efficiently.

This warehouse best practice requires that you have a warehouse management system or some way of producing an identifying label or placard that can be tracked in a WMS or just a spreadsheet

1. Pallet Profiling

Use the license plate to be more than just a unique identifier. Associate the LP with a lot #, part #, date created, good to date, expiry date, production date, quantity, etc. Such that a simple scan gives the worker a detailed history of the pallet and this also supports more efficient stock rotation through FIFO or LIFO practises.

2. Receiving

Apply a license plate at receiving, this will support rapid put away and/or cross docking.

3. Work in Progress Goods Tracking

WIP areas are the black holes of manufacturing. This is the stage where raw materials are converted into finished goods. During this "in between stage" goods are not visible to your WMS or MRP. However, applying a license plate label to these products now makes them visible for tracking and profiling purposes. This will make it easy to move products to other work cells, store them away (in the case of food products), or identify the stage and quantity of WIP production.

4. Picking

Perhaps the most common use of license plates is the picking process. This is especially helpful if you're doing a batch pick where you need to identify which items belong to which order. Also in a paperless environment, license plates help the folks in Shipping identify which orders to load.

5. Shipping

Use license plates during the staging process. Attribute the staged shipment to a single license plate applied on the first pallet and the last pallet. Which means confirmed movement of the staged shipment into a truck you need only scan the start of load license plate and the end of load license plate. This also supports last second additions to the load as the license plate acts as a locator in the shipping area.

6. Trace

In the food industry, all consumable items come with a lot number. In many situations, they are not barcoded nor easily read by a scanner. Capturing this lot # slows the receiving process down and is very error prone. For companies in food distribution where their mantra is turns, turns, turns – they can ill afford to manually enter this lot#. However, they still need some form of traceability in the event of a recall. A license plate can be produced which has a unique identifier which can have the printing or receiving date along with a part number. And if your WMS can do it, it can also generate a "good to date" based the part profile and receiving date, thereby preventing stale dated product from reaching your customers. The BIG BIG benefit is that you can better enforce FIFO picking to get better stock rotation.

Other Applications. Use it to identify return stock to vendor, for quarantine or holds, and reserve materials ordered for special projects. If you're a manufacturer, give them to your third-party processors to apply them to product coming back to your facility.

About Portable Intelligence

Portable Intelligence offers RF Plus™, a WMS specifically designed to integrate with and help you collect the data that you need. RF Plus™ allows for wireless, real-time inventory, from the receipt of purchased goods at the dock doors, to issuing raw materials, transfers in the warehouse and back to the dock doors for shipping. RF Plus™ provides this in one configurable package.