GOT A LICENSE PLATE FOR THAT PALLET?

How license plating helps drive operational efficiency for food manufacturers

RFgen

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Food manufacturers have some of the most complex supply chain challenges of any industry. Like any manufacturer, you need to keep items flowing from the receiving dock to storage to the shop floor and on to the warehouse and shipping area. But beyond that, food manufacturers must also have the ability to associate critical information with each lot of items and then trace each lot through the supply chain. In the event of a recall, you must identify which customers were shipped affected lots and get the word out within hours.

LICENSE PLATING IN FOOD MANUFACTURING OPERATIONS

License plating is a method of grouping and managing inventory that can help food manufacturers improve operational efficiency and overcome supply chain challenges. License plating can help manufacturers speed up warehouse and shop floor transactions, reduce errors, and improve traceability.

This guide will introduce basic license plate concepts and then dive deeper to explore:

▷ How to tell if your business operations are in need of license plating.

▷ Where license plating can make the biggest impact in your enterprise.

▷ What to think about as you plan to add license plating to your workflows.

▷ The key benefits that food manufacturers gain from license plating.

▷ How the RFgen License Plating Solution compares to ERP and other data collection solutions.

| Improve efficiency | Shop floor transactions | Speed up warehouse | Reduce errors | Improve traceability |

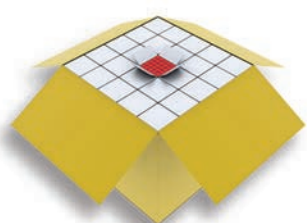**RFgen**

LICENSE PLATING BASICS

License plating, also known as pallet labeling, is a method of grouping inventory together in a common container for easier management. License plating benefits food manufacturers in several ways, including higher productivity and efficiency, better customer relationships and enhanced tracking and tracing.

You can create a license plate for any container of items at any point in the food manufacturing process, including receiving, work-in-progress, handling finished goods, picking and shipping. Any container identified with a unique serial number can have a license plate, from barrels and pallets to trucks and ocean freight containers. License plates do not even have to represent a physical container. You can apply a license plate to any object that holds items, including a virtual "container," such as a work order.

WHAT TYPES OF INFORMATION CAN BE CONTAINED IN A LICENSE PLATE?

A license plate can contain like material or mixed products. Once information is associated with the license plate, a dedicated barcode or RFID tag can be placed on the container, so that a single scan identifies and tracks every item without additional individual scans. A license plate can be associated with detailed, specific information that can include:

· Part numbers	· Date of manufacture
· Item	· Expiration date
· Quantity	· Location
· Revision	· Inventory status
· Lot number	· Subinventory
· Serial number	· And more
· Organization	

License Plate Numbers (LPNs)

Group like materials or mixed products

LPN

A single scan identifies and tracks every item on the pallet

8 COMMON SIGNS OF A MANUFACTURING PROCESS IN NEED OF LICENSE PLATING

1. **Your warehouse operations are too slow.** If your warehouse is fully staffed but remains slow, you need efficiency gains to contain labor costs. Consider license plating to help avoid delays in receiving or a backup in shipments caused by slow picking. It speeds up operations by reducing manual data entry and requiring fewer scans to receive, put away and pick.

2. **You are seeing too many inventory errors.** Mistakes in inventory management are usually caused by human error—someone skipped a step, misunderstood the process, or made a data entry error. Barcode scanning items and license plating containers can both help to minimize operator error.

3. **Work stoppages occur because you run out of inputs on the shop floor.** Lack of the right ingredients at the right time in your manufacturing process can cause slowdowns or even stoppages.

4. **You can't comply with some of your customers' labeling requests.** License plates, or pallet labels, don't just make life easier for your employees—they also significantly improve the receiving process for your customers. Many of the largest retailers insist on it.

5. **Tracking your products in the warehouse or in transit is difficult.** Is it difficult to track inputs and products through your manufacturing process and warehouse? Do you have trouble identifying where a pallet or container went missing in transit? License plating can help you see items move throughout the supply chain.

6. **You are worried about lot tracking and food traceability.** Has your company experienced difficulties with a recall? If you have concerns about traceability, license plating can make capturing critical tracking information easier and more efficient.

7. **It's difficult to plan and manage loads and shipments.** If your employees have difficulty planning which shipments should be placed on the same load, a license plating solution with load management capabilities might be in order.

8. **You want to create Advance Ship Notices (ASN) and use UCC 128 labels and/or Serial Shipping Container Codes (SSCC).** Most large retailers now require ASNs to be one of the documents delivered via EDI prior to the arrival of a shipment of products. The UCC 128 label enables the retailer to scan a barcode on the label and instantly know the contents of a carton prior to opening it. An SSCC is a unique serial number that can be assigned to cartons or containers in shipments or truckloads. License plating enables you to comply with any of these requirements.

RFgen

WHERE CAN YOU USE LICENSE PLATING IN YOUR ENTERPRISE?

When you see license plating mentioned, it is often in conjunction with outbound shipments, however license plating can be used throughout the food manufacturing enterprise. Track the contents of any container during receiving, in the warehouse, on the shop floor, or as it is shipped out and in-transit.

IN RECEIVING

▷ **Receive shipments faster.** Assign license plates to incoming raw materials or parts from vendors to speed up the receiving process. Or, if your vendors also have a license plating process, ask them for shipment details ahead of time, so you can use their license plate barcode or RFID tag in your system and receive many items at once with just one scan.

▷ **Put away items in kits.** If multiple items will be kitted together during your manufacturing process, simply create one license plate at the receiving dock to put away all of the items in that kit.

▷ **License plating offers greater flexibility in receiving.** You can pack, unpack, consolidate, and split shipments in receiving, by scanning and updating license plates.

ON THE SHOP FLOOR

▷ **Use license plates with work orders to stage multiple inputs.** Staging is a complex process in food manufacturing that can be aided by license plating. Link license plates with work orders to gather and preposition inputs on the shop floor:

- Create a license plate of raw materials—essentially a parts list you need in order to complete a work order.

- Pick these items from the warehouse or cold storage and deliver the entire license plate of materials to the shop floor. Stage the materials around the workflow.

- When it's time to use the material, workers can simply scan the license plate and then measure how much material is being issued for the process. Subtract the amount consumed from inventory.

- View inventory on hand balances by license plate, so you will know when it is time to stage more materials. This helps avoid any manufacturing interruptions.

888-426-2286 | info@rfgen.com

IN THE WAREHOUSE

▷ **Simplify your picking process.** Speeding up your picking process is all about identifying the most popular items in your warehouse and ensuring that the pick routes to those items are short and timely. License plating can enhance your inventory management process to allow for faster picking.

First, you can use license plates to group products that are normally purchased together. Now instead of scanning the individual products when an order for the group of products comes in, you can simply scan the license plate for the group.

License plating also supports nontraditional forms of picking, such as directed picking and wave picking. You can use your license plating solution to organize your picks in an order that may be different from how you want the products set up in your ERP.
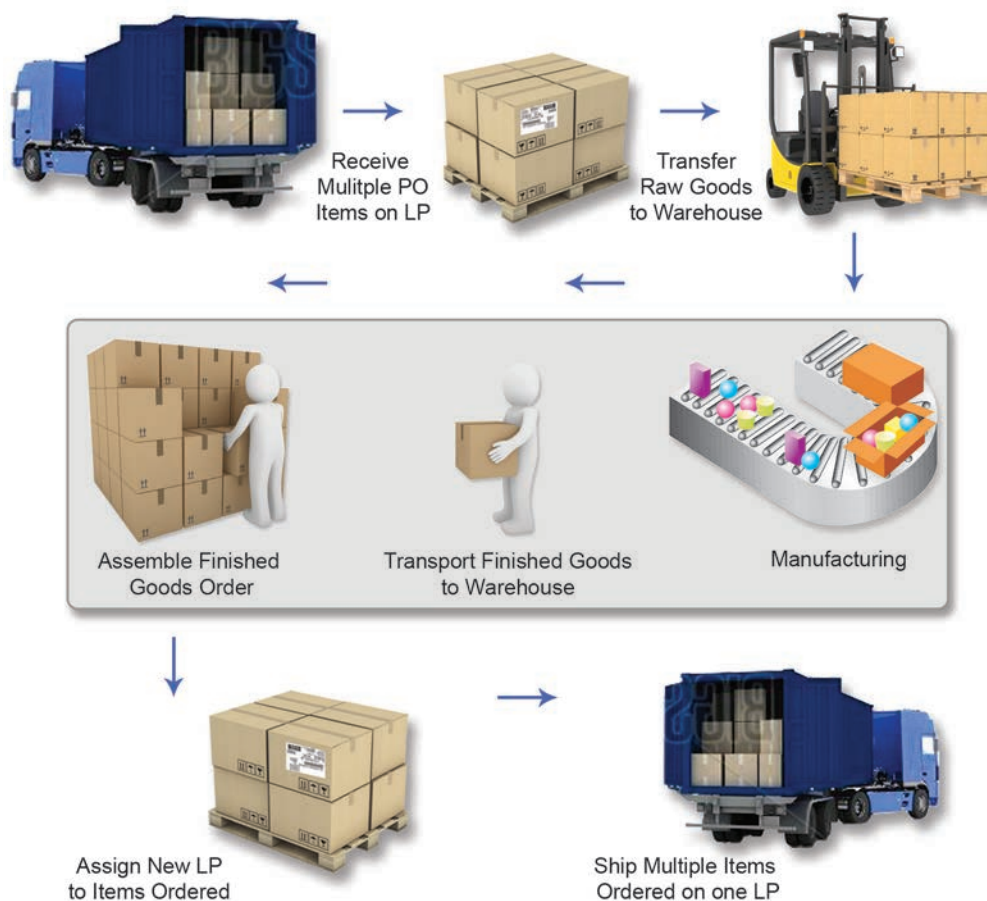
ON THE SHIPPING DOCK

▷ **Confirm and track shipments and manage customer expectations.** Confirming the pallets as they are loaded onto the outbound trailer ensures that all pallets for a load have indeed been loaded. This improves load accuracy and can eliminate shipping shortages due to loading. As pallets and containers navigate their way through the supply chain, quick scans of their license plates can help manufacturers inform customers about where their products are and how long shipments will take to arrive.

▷ **Build and manage loads more easily.** License plating solutions with load management functionality can make planning loads a lot easier. The software uses the information contained in multiple license plates to plan and manage routes, work within weight restrictions and create proper shipping documents.

These solutions generate nested license plates to create a load. Start by creating a license plate for shipment of one order containing one or many containers. Then build a complete load by adding more orders as the route, weight and logistics allow. The nested license plate hierarchy means that a finished load can be scanned as a single overarching license plate, and as shipments are delivered, they can be scanned and removed from the load license plate.

RFgen

▷ **Print labels and reports about container contents, including Advanced Ship Notices (ASN).** License plating solutions will generate reports more efficiently and print labels and shipping documents including bills of lading and ASNs. A good system will also ensure that a copy has been filed electronically for future reference and traceability.

An ASN is a notification of a pending delivery, similar to a packing list. It can be transmitted to a customer electronically via Electronic Data Interchange (EDI). Once you've provided an ASN to your customer via EDI, a simple scan of the pallet labels at receiving reveals exactly what is in a container or on a pallet. By receiving your ASNs ahead of shipments, your customers can better plan their receiving dock workloads and receive shipments more quickly.

License Plate Warehouse Flow

Receive Mulitple PO Items on LP

Transfer Raw Goods to Warehouse

Assemble Finished Goods Order

Transport Finished Goods to Warehouse

Manufacturing

Assign New LP to Items Ordered

Ship Multiple Items Ordered on one LP

888-426-2286 | info@rfgen.com

TOP BENEFITS OF LICENSE PLATES OR PALLET LABELS IN FOOD MANUFACTURING

1. **Reduce inventory errors with less scanning.** A less complicated process will reduce human error and increase the accuracy of your inventory.

2. **Speed up operations with faster transactions.** Whether in the manufacturing process or the warehouse, license plating is a quick and efficient way to move items.

3. **Save warehouse space.** Grouping material and moving the inventory by license plate reduces effort and saves space.

4. **Contain labor costs by improving productivity.** If employees conduct faster inventory transactions, you may avoid needing to hire as your business grows.

5. **Trace food products more quickly.** Detailed information about pallets and containers contributes to better food traceability.

6. **Ease the learning curve for warehouse employees.** When you onboard new employees or seasonal workers, a simplified picking process helps them learn quickly.

7. **Win new and larger customers.** Many big box retailers, including Walmart, have specific documentation and labeling requirements for receiving shipments from their vendors. If you don't play by their rules, you simply can't sell to these behemoths.

RFgen

TIPS FROM THE TRENCHES: HOW TO GET STARTED WITH LICENSE PLATING

Advanced planning will help you get the most out of adding license plating to your warehouse, shop floor, or shipping. The experts at RFgen have rolled-out license plating for many different types of manufacturing clients. We've seen it all!

Here are a few tips from our implementation team about what you should be thinking about prior to evaluating, purchasing and implementing a license plating solution:

▷ **Think about labeling before you start using license plates.**

- When in your processes will you label? Raw goods? Finished goods? Both?

- Will you use pre-printed barcode labels?

▷ **Define what a license plate will refer to within your organization.**

- Will a license plate refer to a pallet? A tote? Drum? Cargo container?

▷ **For outbound processes, decide if you want license plates to support loads.**

- How do you want to build and manage loads?

- Do you want to be able to group multiple license plates under an overarching "load" license plate?

▷ **For shop floor operations, decide if you want to use license plates to hold your finished goods or to facilitate picking raw materials for a manufacturing order.**

- How do you want to manage the flow of materials through the shop floor?

- Do you want to organize raw materials into containers and issue the contents at once?

- Do you want to pre-stage weighed raw material and be able to track it until it is consumed?

WHAT MAKES RFGEN LICENSE PLATING DIFFERENT FROM OTHER SOLUTIONS?

When it comes to license plating or pallet labeling, the RFgen License Plating Solution offers unparalleled flexibility that helps manufacturers enjoy a high return on their software investment. Although license plating functionality is offered by many ERP and data collection systems, most solutions only support license plating for outbound products. RFgen can be used across the enterprise and is flexible enough to support shop floor work orders, nontraditional picking and comprehensive load management. RFgen can also be used for many automated data collection tasks beyond license plating—the solution was developed with open source code, so clients can easily customize transactions or develop new ones.

RFgen Advantage #1: License Plating in Receiving. Start using license plating before materials are even received from your vendors. RFgen's Interbranch License Plate Transfer capability provides a better method of moving inventory between facilities using a simple inventory transfer combined with the advantages of a receiving document and the enforcement of process rules. This solution brings visibility to "in transit" inventory and guarantees the receipt of materials as they were shipped from the destination.

RFgen Advantage #2: License Plating on the Shop Floor. Use license plates to stage the materials you will need to satisfy a work order. With RFgen, you can containerize raw materials and enable the shop floor to better manage inventory consumption and improve the process of moving unused material back to the warehouse.

RFgen Advantage #3: Load Management Workbench (Outbound). Using RFgen's Load Management Workbench, select the orders to include in a load, assign routing and delivery instructions, meet weight requirements, and pick the contents of the load. Shipping documents including bill of lading and ASN can be printed, emailed, or archived. A driver signature can also be captured and printed on the documents.

RFgen Advantage #4: Auditability. Behind the scenes, RFgen tracks every change that is ever made to a license plate, including who made each change. A license plate history inquiry will reveal who created the license plate and every person who moved or altered its contents for full audit traceability.

RFgen

CASE STUDY: TRIDENT SEAFOODS

To meet the demands of some of its largest customers, Trident Seafoods needed to provide its customers certain pallet-level information available on pallet labels.

INDUSTRY:

Frozen seafood

APPLICATION:

Oracle's JD Edwards and RFgen Mobile Foundations for JD Edwards with License Plating

CHALLENGE

To meet the demands of some of its largest customers, Trident Seafoods needed to provide its customers certain pallet level information available on pallet labels (license plates) so they could process product into their warehouses immediately upon receipt.

RESULTS

For nine years, Trident Seafoods has used RFgen to capture critical information and record transactions in JD Edwards, such as inventory transfers, work orders, order picks, and pallet labels. RFgen collects initial transactions at remote plants, where fish is prepared for transport and captures all intercompany (IC) transactions as seafood is sent through value-add plants in Washington, Oregon, and Minnesota. RFgen License Plating enables warehouse workers to assemble all of the critical information about an outgoing pallet during the pick and send it to the customer as the pallet ships out. RFgen transactions are the foundation for all of the inventory in Trident Seafoods' ERP system. More than 150 workers use RFgen to:

▷ Transfer and receive material between plants.

▷ Add material to inventory and place it into storage freezers.

888-426-2286 | info@rfgen.com

▷ Record materials used in the production of value-added products.

▷ Add finished products to inventory and place them into storage.

▷ Move products to the staging area when ready to ship.

▷ Pick products and produce pallets and/or containers.

▷ Label and ship pallets to customers.

RFgen License Plating helps Trident Seafoods assemble and document each pallet as they put a pick together and prepare to ship it out. As they pick orders and assemble shipments, they capture information about products on each pallet—right down to the lot numbers because their products are lot-controlled. Prior to shipping, Trident Seafoods forwards the pallet information to the customer through an EDI 856 transaction.

"When the customer receives the pallet, all they have to do is scan the label and they know all of the information about the items on it—right down to individual product lot numbers. This is a critical improvement for some of our larger customers."

~ Mike Wheeler
Business Analyst

Assembled and documented each pallet

Achieved reliable lot tracking

Improved efficiency and speeded up warehous

CLICK HERE TO READ FULL STUDY

RFgen

CONCLUSION

Grouping items together with license plating helps things run more smoothly in a manufacturing operation. License plating with barcodes or RFID tags reduces the total number of scans required takes to move materials or finished goods through your manufacturing, warehouse and shipping processes.

License plating results in a number of benefits for food manufacturers, including the ability to:

- Enhance lot and product traceability.

- Simplify inventory management and save space in the warehouse.

- Improve worker productivity and reduce human error.

- Comply with customer labeling and shipping requests.

- Build and manage loads more easily.

Food manufacturers have a choice of ERP modules and automated data collection solutions to consider for their license plating needs. To evaluate and select a license plating solution, concentrate first on key planning criterion—in particular, how and when labels will be applied in your processes, what constitutes a "container" for a license plate, and how you want to build out loads.

For a superior return on investment, choose an automated data collection solution that enables you to use license plating throughout the enterprise instead of only for outbound products. You can further enhance ROI by selecting a solution that is flexible enough to be used in other types of transactions in your operations beyond license plating.

> To evaluate and select a license plating solution, concentrate first on key planning criterion—in particular, how and when labels will be applied in your processes, what constitutes a "container" for a license plate, and how you want to build out loads.

888-426-2286 | info@rfgen.com

RFGEN SOFTWARE
THE DATA COLLECTION EXPERTS

Improve your organization's inventory visibility with RFgen Software— **one of the industry's most reliable and flexible mobile data collection solutions on the market today.**

RFgen is a market leader in barcoding software solutions for mobile data collection, warehouse automation and inventory management, providing the industry's most reliable and flexible platform since 1983. We provide an end-to-end guided experience with a knowledgeable team of experts to help you establish a self-sustaining digital ecosystem that ensures long-term viability.

As your trusted advisor in this process, we are fully invested in your success and to position your organization for growth through transparency, visibility and mobility enablement of your inventory and fixed assets. After implementation, RFgen consultants will continue to provide support by empowering your team through training and education to maximize your investment and assure future self-sufficiency.

RFgen isn't just a solution to your business challenge. Our brand promise is to equip each of our customers to meet the competitive challenges of the 21st century. By introducing key technology solutions that extend existing software platforms and infrastructure, we help customers unlock hidden efficiencies to achieve significant gains in daily operations with downstream benefits to your enterprise, supply chain and business partners

Whether you are looking for solutions to automate your warehouse and better manage your inventory, comply with government regulations, ensure 24/7 warehouse operations, track and trace your products, voice-enable your warehouse, or manage your remote inventory, RFgen is the smart choice.

To learn more, please call us at 888-426-2286, or click here to Request a Software Demo

RFgen

1101 Investment Blvd, Suite 250
El Dorado Hills, CA 95762
(888) 426-2286
www.rfgen.com

RFgen