Selecting the Right Hygienic Pallet for your Food Processing Plant

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Today’s Objectives

• How reusable pallets support plant cleanliness
  – Cleanability
  – Color Coding
  – Load Segregation
  – Allergan Management
  – Use of a top cap in applications
• Proven 5-step approach to implementation
  – Analyze
  – Prove
  – Design
  – Implement
  – Evolve
• Implementing change and how we help
“The rule of thumb is that anything moving into the production area is moved on a plastic pallet. A plastic pallet can be cleaned and sanitized, and it eliminates the potential contamination from wood and metal (nails or staples) in a production area.”

“Not only are plastic pallets safer for the food and beverage industries, but they are also more eco-friendly and cost-effective compared to their wooden counterparts. By switching to a plastic pallet provider to ensure your shipments arrive in excellent condition.”

--Plastic Pallets vs. Wood Pallets in the Food and Beverage Supply Chain, Freight Supply Chain, Adam Robinson, July 30, 2013
“Even minor, isolated problems require descriptive record keeping of corrective actions performed to reduce the likelihood of the problem ever occurring again. **Ignoring pallets, perhaps the single most ubiquitous (constantly encountered) item in the supply chain, would be like ignoring the grass on a golf course.**”

World-class food companies are seeking safe, hygienic and reliable solutions to store, handle and move product throughout their supply chain.

Warehouses/Distribution Centers
- Racked Storage
- Automated Systems

Transportation
- Standard 53’ trailers
- Ocean containers

Processing
- Racked Storage
- Floor Storage
- Finished Goods Packaging

Retail
- Point-of-Purchase Displays
- End Caps 3
Food Plant Trends

• **Automation** – Design the automation around the pallet versus designing the pallet around automation.
• **Robotics** – Plants with robotics better equipped at tracing products. More accurate counts.
• **New Plants** being built; older plants being retrofitted and renovated to support food safety compliance
• **New Technology:**
  – Separation equipment, including metal detection equipment and X-ray detection equipment
  – Pallet washers and rinsers
  – Allergen management processes
  – Tracking/identification/traceability
  – Antimicrobial materials
• **Pallet Materials**: 38% of pallet users are turning to plastic pallets. Reusability and durability are top factors in overall pallet decision making. (MMH)
Today, does your packaging...

- Keep your equipment clean?
- Promote a clean environment (no dust, chips, etc.)
- Absorb moisture?
- Dry fast?
- Allow for temperature ranges from cold storage to high-heat washing?
- Support Good Manufacturing Practices (GMPs)?
- Have nails, splinters or loose boards to damage cases?
Hygienic Pallets: Defined

Hygienic pallets are easily sanitized, non-porous platforms designed to cleanly move and store food product within a facility and support sanitary conditions.
Important Design Characteristics

- One-piece design
- Minimized areas for contaminants to collect, with no hidden cavities or hollow areas, regardless of orientation.
- Open deck for flow-through for easy cleaning and fast drying.
- Contoured surfaces/corners that lowers risk of product damage from punctures or snags.
- No rust, nails, staples or loose boards. Non-rusting.
- Does not absorb moisture or odor
Important Material Considerations

- FDA-approved material, for direct food contact. FDA-approved material has 100% virgin content.
- Materials that do not readily absorb environmental contaminants like odors, bacteria, pesticides, etc.
- Materials that allow for high-temperature washing.
- Materials that can be X-ray and metal detectable.
- Custom colors to color code and segregate loads (allergen mgt, sorting lot #s, etc.)
- Labels/hot stamping to identify pallets for lot numbers.
- No dust or wood chips slow down equipment
Other reusable solutions to support cleanliness

- **Top Caps**
  - Creates a stackable unit load for pallets
  - Able to drain if left outside. Keeps dust and debris away from finished goods or WIP material
  - Nests with one piece hygienic pallets.
  - Works with a variety of plastic totes.

- **Ventilated Totes**
  - Nestable and stackable totes
  - Ventilated for easy cleaning and fast drying
  - Available in FDA approved materials
Pallet Selection Best Practices

Since the pallet will have the most touches with your product and equipment on a regular basis, pallet selection is critical.

Step #1: Analyze
- Review your product’s life cycle
- Identify product load characteristics: Type (boxes/cases, powder, liquid, etc.), Temperature requirements, Dimensions and weight, Value, Load distribution.
- Determine level of cleanliness needed

Step #2: Select/Design
- Determine required footprint: GMA, Euro-sized
- Determine pallet style: Rackable, nestable, stackable

Step #3: Justify
- Compare annual pallet costs
- Compare environmental impacts of pallet alternatives
- Compare hygienic characteristics of pallet alternatives

Step #4: Implement
- Get all stakeholders engaged (operations, material handling, maintenance, etc.)
- Conduct a small trial
- Train, train, train

Step #5: Evolve/Continuous Improvement
- Explore new materials
- Add facilities and expand pallet usage
Implementing Change into your Organization, with assistance from Jack Welch

What you need to do

- **Leading change** - Are senior leaders publicly supporting your effort?
- **Creating a shared need** - Do your associates understand and agree with why the change is needed?
- **Shape the vision** - Has the vision of what the future looks like been clearly communicated and understood?
- **Mobilize Commitment** - Are the communications for the change effort well planned and executed? Is there support? How can you get it?
Support can ease change

Seek partners with:

– Expertise in the food supply chain
– Implementation experience
– Design and material insight
– Proven examples of success
– Innovation
Looking to the Future

Update your pallet program as needed – It should be dynamic and respond to changes within the supply chain, including:

- New or upgraded automated equipment
- New or upgraded material handling equipment
- New plant or facility
- New material flow
- New products
- New labor practices
- New production processes
- New supply chain partners
Sources and Resources


Welch Way- presented by Skillsoft
Q&A