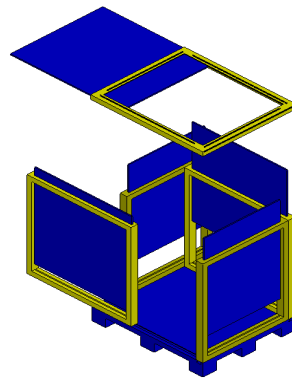# Identifying Returnable Packaging Items

Returnable packaging items are used in many areas of shipping. The "container" in many cases is made of several components, including posts, sides and even re-useable packing materials.

While the identification of the contents of the container is important and can be covered by the use of an EPCglobal™ or 18000-6 RFID tag, it is just as important to identify the individual parts of the container to ensure that they are returned to the supplier.

In many cases these assets break down and are packed flat for return purposes. While it is not important in most cases to know that the exact panel is returned (it may be in some cases), it is always important to know that the correct quantity have been returned.

This concept of a container that is broken down extends over all the levels of packaging in the supply chain. In the future even the TEU container may be manufactured in a way that it can be broken down for easy transport when empty (empty containers are one of the major headaches in our ports today).

The illustrations show the concept of a Returnable Packaging Item (RPI). In the first case it is made up of a pallet, four posts and six trays. In the second it is a pallet, five panels and five frames (though the panel/frame combo may be a variety of sizes).

If we are to define an RPI we might say:

> A collection of packaging forms, assembled to form a means of conveyance to allow shipping of materiel. The components of the RPI are designed to be re-used and may be broken down from the final form to allow easy shipping when the RPI is empty.

So the questions to be answered become:

- How are the individual packaging forms identified?
- Are they "uniquely" tagged?
- How does a "system" deal with multiple tags per package
- Do we need to show a "collective" of parts or just the parts?
- ...

Steve Halliday
High Tech Aid
steve@hightechaid.com
2009-09-18