Pallet Users State Their Preferences for Used Pallets

Companion Stringers Cited as Biggest Problem

A study recently completed by VA Tech in Blacksburg, VA, found that half companion stringers have the greatest negative impact on purchasers of used pallets, followed by split deckboards, protruding nails, and full companion stringers. Repairs using metal plates had relatively little affect on the value of the pallet. The study provides new information concerning the needs of repaired pallet users in the grocery distribution industry. This research looked at how selected characteristics of repaired pallets affect a buyer’s willingness to purchase the pallet. The results will help pallet recyclers who serve this industry segment to maximize the value of the products they offer profit in an increasingly competitive market.

The study involved interviewing over 50 pallet buyers at grocery distributors in the Eastern U.S. The buyers were shown 29 pictures of a 48" by 40" GMA style pallet. In each picture, the pallet differed only on certain attributes: split deckboards, protruding nails, price, metal reinforcement plates, full companion stringers, and one-half companion stringers. Buyers indicated their willingness to purchase the pallet depicted in each picture at the specified price. These data were then analyzed using a computerized technique called conjoint analysis. (see chart on page 4.)

Obviously, the pallet with the highest value is one with a low price and no split deckboards, no protruding nails, no companion stringers, etc. In reality, however, some of these features may be unavoidable in repaired pallets. Given this fact, which features have the greatest impact on pallet value?

The effect of several features on value was not simply linear. For example, the reduction in value (and likelihood of purchase) caused by two half companion stringers was found to be larger than twice the effect of one half companion. Likewise, two split deckboards had a larger affect than two...
times the value loss of one split deckboard.

Since price was included in the study, it was possible to use a simulation technique to determine how much buyers appear willing to pay to obtain pallets without certain defects or repairs. Protruding nails and both full and half companion stringers had an estimated $3 impact on the test pallet. Metal plate repairs had the smallest impact, an estimated $1.20.

This research is part of NWPCA's Pallet Recycling Research Initiative and was conducted by Dr. Bob Bush and Ronen Roudik of the Center for Forest Products Marketing at VA Tech, along with Philip Araman of the USDA - Forest Service, Southern Research Station. Dr. Bush presented the results of this study at the recent NWPCA Recycling & Repair Seminar in Chicago, IL. A tape of his comments is available from ACTS Taping Company. To order, call ACTS directly at 314/394-0622 and ask for tape number WP9524.