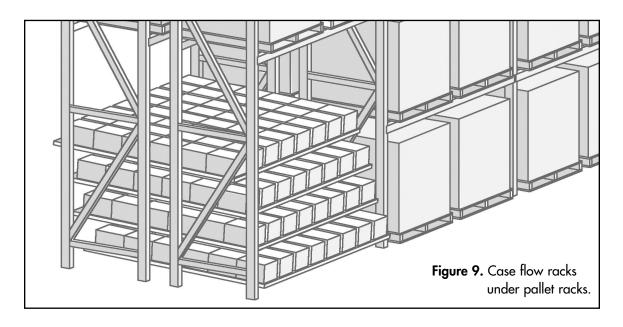
Five Sample Tips

When you face a space shortage in your facility, your choices are limited to either adding new space through expansion, leasing additional space, or creating more space within the existing facility. The latter choice may sound contradictory. If there is a shortage, how could more space be found in the same facility? The obvious explanation is that, in most cases, there is a lot of hidden space available within the facility and the shortage is an illusion.

There are a number of ways to identify this hidden space and make it usable for day-to-day operations. The purpose of this manual is to review as many of these ways as possible. Some of these methods involve physical changes only, while others require management decisions or procedural changes as well.

Following are five examples from the text, which illustrate the range of strategies in *How to Save Warehouse Space: 153 Tested Techniques*:

- 17. Store obsolete material offsite. One way to encourage management to take action on excess and obsolete inventory is to make the cost of keeping it obvious. Using outside storage will do just that. If you need outside storage anyway, it also makes the most reasonable place to keep the material from an inventory management perspective. Moving out excess and obsolete material leaves space in the warehouse for more active items. If you store inactive material in a public warehouse, you will eliminate the in-and-out charges associated with active products. Since this is inactive material, you can allow the public warehouse to maximize the storage density of the product and negotiate a lower rate on this basis.
- **29. Eliminate inbound inspection.** The space required for inbound inspection often represents the most underutilized warehouse cube because the material must be stored in a way that will allow access to every unit to assure random sample selection. In many companies, sample selection is a part-time activity for an inspector, resulting in large accumulation areas to compensate for infrequent sampling. Vendor certification programs that eliminate in-house inspection obviate the need for space to store material that is not available for production or sale.
- **63. Store in the aisles.** This may sound like a heretical statement. Storing in the aisles has been used as an example of bad warehousing practice. It usually is, but if it is properly planned it can work out well. In a racked warehouse, planned temporary use of some aisles may be enough to work through a peak condition. The first requirement is to know that it will happen. The rest is planning. Select a short aisle. Pick a product with a large quantity that will arrive at one time and that does not require strict First-In/First-Out handling. Plan to use an aisle that will not be very



active. Better yet, plan to use the aisle with the same product in the racks. Make sure the product will stack well. Stretch-wrap the product if necessary to get stable pallets. Ship the product in the aisle first. When used this way, the racks become a part of deep bulk storage, an extremely dense storage technique that "creates" space.

69. Put case flow racks under pallet racks. (*Figure 9*) The floor level of the pallet rack area can be a picking area in either wide or very narrow aisle layouts. Install case flow racks for slow moving products under the pallet racks. The picking activity in the aisle will be low if low-volume products are located here. Storing the same low-volume products in the racks above can control the storage activity. This technique will save the aisle space that would be devoted to picking the low-volume products. This option works best when picking and storage/retrieval activity are on different shifts, so as to minimize interference in the aisles.

89. Use horizontal carousels. (Figure 21) By moving the shelf to the picker,

horizontal carousels almost eliminate the picking aisle. The only aisle needed is the equivalent of a cross-aisle in a conventional shelf storage layout. The mechanism to support and rotate the shelves does require some space, but not as much as a picking aisle. This is a case in which collapsing the space may improve productivity by significantly reducing travel time for those who are picking.

