

Tray 9–F. Design Principles for Carrying Tasks*

1. Eliminate the need to carry by rearranging the workplace to eliminate unnecessary materials movement and using the following mechanical handling aids, when applicable:
 - Conveyors (all kinds)
 - Lift trucks and hand trucks
 - Tables or slides between workstations
 - Four-wheel carts or dollies
 - Air or gravity press ejection systems
2. Reduce the weight that is carried by
 - reducing the weight of the object,
 - reducing the weight of the container,
 - reducing the load in the container, and
 - reducing the quantity per container to suppliers.
3. Reduce the bulk of the materials that are carried by
 - reducing the size or shape of the object or container,
 - providing handles or hand-grips that allow materials to be held close to the body, and
 - assigning the job to two or more persons.
4. Reduce the carrying distance by
 - moving receiving, storage, or shipping areas closer to production areas, and
 - using powered and nonpowered conveyors.
5. Convert carry to push or pull by
 - using nonpowered conveyors, and
 - using hand trucks and push carts.

*Adapted from design checklists developed by Dave Ridyard, CPE, CIH, CSP. Applied Ergonomics Technology, 270 Mather Road, Jenkintown, PA 19046-3129.