CHAPTER 17

MANUAL HANDLING AND STORAGE OF MATERIALS

Manual handling: lifting team lifting and carrying . handling specific shapes . . machines and other heavy objects 17-1

Accessories for manual handling: hand tools . . . jacks . . hand-trucks, dollies, and wheelbarrows 17-7

Storage of specific materials: rigid containers uncrated stock 17-11

Problems with hazardous materials: liquids . solids 17-14

Shipping and receiving: floors, ramps, and aisles . . lighting . . . ladders and bridge plates . . machines and tools . . steel strapping and sacking glass and nails pitch and glue . barrels and kegs boxes and cartons . car loading 17-21

Personal protection 17-26

The problems involved in the manual handling of materials are discussed in this chapter as are storage, shipping, and receiving of materials, and specific precautions that must be taken to prevent injuries Other specialized material handling equipment is covered in the next four chapters

Manual Handling

Accidents in manual handling of materials are primarily the result of unsafe working habits—improper lifting, carrying too heavy a load, incorrect gripping, and failing to wear personal protective equipment Training in safe work habits, breakdown and study of even the simplest job operations, and adequate supervision can help minimize these accidents

Pre-employment examination and periodic reexamination should point out those persons predisposed to hernia, knee or back strain when assigned to materials handling jobs that involve heavy physical exertion

Lifting

Physical differences make it impractical to set up safe lifting limits for all workers Height and weight do not necessarily indicate lifting ability Some small, wiry men can handle heavier loads than can tall heavy men

State codes limiting the load a worker may be required to lift in repetitive operations differ widely. Each employer should know the provisions of his own state code

When a worker is to lift a heavy object

This chapter was revised by Paul Schleich, based upon reviews by selected members of the National Safety Council