

17—Building Construction and Maintenance

from steel tools are capable of igniting substances such as explosives, lint, carbon disulfide, and ethyl ether

Nonferrous tools need inspection before each use to be certain that they have not picked up steel particles, which could produce friction sparks

Keeping up-to-date

The maintenance department should not overlook the potentialities of new products, cleaners, lubricants, paints, wood preservatives, insulation, floor repair materials, protective coatings, alloys, and other developments. It should also keep up with new applications of existing products. New products or applications usually lead to better methods and safer practices.

Increased mechanization requires careful assessment of new potential hazards, especially in high-speed equipment and processes. Use of color throughout the plant, as specified

in the previous chapter will contribute to accident prevention and help develop high standards of operation.

Sometimes mechanical means help to offset potential hazards. Centralized lubrication, floor cleaning machines, centralized spray painting equipment, steam cleaners, and other devices will help make a maintenance program safer. For frequently performed maintenance jobs, permanent accessories, such as hoists, fixed ladders, and catwalks, should be provided.

Maintenance procedures should be reexamined periodically for safer ways to do the job. A suggestion system should be set up for maintenance men so that they will be able to present new ideas or corrective measures.

Engineering books and service manuals should be a part of the maintenance program. Workers should be familiar with them and use them when necessary.

References

- American Institute of Architects, 1735 New York Ave NW, Washington, DC 20006
Standard Form of Agreement Between Owner and Contractor
- American National Standards Institute, 1430 Broadway, New York, NY 10018
"Cranes, Derricks, Hoists, Hooks, and Jacks," B30 Series
Practice for the Inspection of Elevators, A17.2
Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks, A17.1
Safety Code for Portable Wood Ladders, A14.1
Safety Color Code for Marking Physical Hazards, Z53.1
Safety in Welding and Cutting, Z49.1
Safety Requirements for Demolition, A10.6
Safety Requirements for Fixed Ladders, A14.3
Safety Requirements for Floor and Wall Openings, Railings, and Toeboards, A12.1
Safety Requirements for Job-Made Ladders, A14.4
Safety Requirements for Personnel Hoists, A10.4
Safety Requirements for Portable Metal Ladders, A14.2
Safety Requirements for Scaffolding, A10.8
Safety Requirements for Steel Erection, A10.13
Safety Requirements for Temporary and Portable Space Heating Devices and Equipment Used in the Construction Industry, A10.10
Scheme for the Identification of Piping Systems, A13.1
Specifications for Industrial Accident Prevention Signs, Z35.1
- Armstrong, Ralph W. "Masonry Walls Against Wind," *Construction Section Safety Newsletter*, September 1967.
- Associated General Contractors of America, Inc., 1957 E St NW, Washington, DC *Manual of Accident Prevention in Construction*
- Huntington, Whitney Clark. *Building Construction Materials and Types of Construction*, 3rd ed. New York, NY, John Wiley & Sons, Inc. 1963.