

Objective: Upon successful completion of this unit of study you will be able to...

- Identify the steps of category one and category five safety testing procedures specific to traction elevators
- Explain the purpose of the safety testing process in preparation for annual and five year inspections
- Conduct annual and five year safety tests for traction elevators

Course Outline

Safeties Inspection and test requirements

1. Periodic Tests required for Electric Elevators

(a) Oil Buffers

(b) Types of Safeties

1. Type A Safeties- Instantaneous

2. Type B Safeties- Wedge Clamp and Flexible Guide

3. Type C Safeties- Type A with Buffers

(c) Governors

(d) Slack Rope Devices on Drum Machines

(e) Normal and Final Terminal Stopping Devices

(f) Firefighters Emergency Operation

(g) Standby or Emergency Operation

(h) Power Operation of Door Systems

(i) Broken Rope, Tape or Chain Switch

2. Five Year tests required for Electric Elevators

- (a) Oil Buffers
- (b) Types of Safeties
 - (1) Type A Safeties- Instantaneous
 - (2) Type B Safeties- Wedge Clamp and Flexible Guide
 - (3) Type C Safeties- Type A Safeties with Buffers
- (c) Governors
- (d) Slack Rope Devices on Drum Machines
- (e) Firefighters Emergency Operation
- (f) Standby or Emergency Power Operation
- (g) Power Operation of Door System
- (h) Braking System
- (i) Emergency Terminal Stopping and Speed Limiting Devices
- (j) Leveling Zone and Leveling
- (k) Emergency Stopping Devices

3. Examples of Safety Test Forms

- (a) Annual Safety Test Form
- (b) Five Year Safety Test Form

4. Appendix A ASME A17.1

5. Appendix B ASME A17.2

Copyright 2013 National Elevator Industry Educational Program Trust Fund. The material contained herein may not be reproduced or used in any manner without the express written permission of the Board of Trustees of NEIEP. This course, like all other National Elevator Industry Educational Program publications, is intended to further the job-related education of each student enrolled in a NEIEP course. While recognizing that other procedures may produce like results, the NEIEP text material is intended to provide the student with tested procedures which have become standards within the elevator industry. The NEIEP writers and staff strive for accuracy and authenticity in this course and in all their publications. However, NEIEP neither claims nor accepts legal responsibility for absolute accuracy in its publications. NEIEP recognizes that the information presented in this course must be used only in conjunction with the applicable manufacturer's instructions, the Standard Agreement, and national, state, and local codes.