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[Advanced Search](#) | [A-Z Index](#)

[<<< Back to Crane, Derrick, and Hoist Safety - Hazards and Solutions](#)

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## Mobile Crane Inspection Guidelines for OSHA Compliance Officers

This information booklet is intended to provide a generic, nonexhaustive overview of a particular standards-related topic. This publication does not itself alter or determine compliance responsibilities, which are set forth in OSHA standards themselves and the Occupational Safety and Health Act. Moreover, because interpretations and enforcement policy may change over time, for additional guidance on OSHA compliance requirements, the reader should consult current administrative interpretations and decisions by the Occupational Safety and Health Review Commission and the courts.

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### Mobile Crane Inspection Guidelines for OSHA Compliance Officers

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Occupational Safety and Health Administration  
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### TABLE OF CONTENTS

- [ACKNOWLEDGEMENTS](#)
- [ABSTRACT](#)
- [EXECUTIVE SUMMARY](#)
- [1.0 INTRODUCTION](#)
- [2.0 MOBILE CRANES](#)
  - [2.1 Lifting Principles](#)
  - [2.2 Operational Considerations](#)
- [3.0 REQUIREMENTS FOR MOBILE CRANES](#)
  - [3.1 OSHA Construction Requirements](#)
  - [3.2 ASME/ANSI and PCSA Requirements](#)
- [4.0 INSPECTING A MOBILE CRANE](#)
  - [4.1 Preinspection](#)
  - [4.2 Crane Setup](#)
  - [4.3 Electrical Hazards](#)
  - [4.4 Load Charts](#)
  - [4.5 Safe Operating Precautions](#)
  - [4.6 Inspection Types](#)
  - [4.7 Starting the Inspection](#)
  - [4.8 Specific Inspection Items and References](#)

- [APPENDIX A - GENERAL TERMS AND DEFINITIONS](#)
- [APPENDIX B - GENERAL LOAD CHARTS AND OPERATIONAL CONSIDERATIONS](#)
- [APPENDIX C - BASIC CRANE COMPONENTS](#)

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## ABSTRACT

This document provides background information about lifting principles and serves as a guideline for inspecting mobile construction cranes. The relationship of many components of cranes and their inter-dependence in lifting operations, OSHA requirements for proper maintenance schedules, and safe crane operations will be discussed in this document.

This document contains a listing and description of major components or operations to be considered or examined when inspecting lifting equipment. Two types of commonly used cranes, a crawler lattice boom crane and a hydraulic rough terrain crane, were selected as examples in developing these guidelines. Descriptive text and photographs illustrate 18 inspection items critical to most crane inspections.

## EXECUTIVE SUMMARY

OSHA compliance officers, project safety and health managers, and insurance inspectors are often required to inspect construction cranes. Inspections normally include lengthy checklists that identify mechanical components and maintenance schedules without adequate descriptions or explanations, pertinent to the relationship between these components and the crane's overall function. Although some crane inspection checklist items are self-explanatory, it must be recognized that due to increasing applications of developing technology in the design and manufacture of cranes, OSHA compliance officers need a better understanding of crane operations and their basic lifting principles, and to keep abreast of related developments in today's construction industry.

Since cranes affect a large segment of work at any construction site, crane inspections by the compliance officer and project safety manager must include a survey of the entire operation questions on how the crane will be operating and how other crafts will be affected by working with and around the crane.

Observing crane operations prior to an inspection, or asking questions about how it will or has been operating, can indicate possible problem areas that may need a closer review during the inspection process.

This document provides an overview and background information on lifting principles of mobile cranes for OSHA inspectors. Also discussed is the relationship between various components of mobile cranes to their lifting capacity and the manufacturers' requirements for conducting proper maintenance schedules are also discussed.



Typical Construction Site  
Load Block Lowered for Inspection

[▲ Back to Top](#)

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