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## ✱ **MBI Products & Services**

Industrial & Commercial

[www.mbips.com](http://www.mbips.com)

### **Technical Support Services:✱**

**Electrical Support Services ✱ Drafting / AutoCAD ✱ Project Coordination ✱ Electrical Field Assessment**  
**Electrical System Modeling ✱ Equipment Loading Analysis ✱ Voltage Drop Evaluations**  
**Power Factor Correction Recommendations ✱ Electrical System Fault Current Analysis**  
**Equipment Faulting Analysis ✱ Over-Current Protection Coordination**  
**Incident Energy Calculations ✱ Reduction of Arc Flash Intensity**

## **Are your Electrical Equipment Warning Labels out of Date?**

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**Let us help you comply with the following NFPA and OSHA regulations: NEC ([NFPA 70](#)), [NFPA 70E](#), [OSHA 1910.132](#), [OSHA 1910.335](#), and [IEEE 1584](#)**

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### **Quick Facts:**

**OSHA** considers Electrical Equipment Arc Flash Hazards Warning Labeling to be the responsibility of the equipment owners, rather than the manufacturer or installer.

**Arc Flash Hazard safety is regulated by [OSHA 29 CFR 1910 Subpart S](#)**, which defines the qualifications needed to work on energized equipment, and states "Safety related work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts...."

**[OSHA 29 CFR 1910](#)** refers to the standards established by the **[National Fire Protection Association \(NFPA\)](#)** for specific work practices.

The **National Electric Code ([NFPA 70](#)) 110.16** states "Electrical Equipment, such as switchboards, panel boards, industrial control panels, meter socket enclosures, and motor control centers, that are in other than dwelling occupancies and are likely to require examination, adjustment, servicing, or maintenance while energized shall be field marked to warn qualified persons of potential electric arc flash hazards."

**2009 [NFPA 70E](#) Section 130.3(C)** states "Equipment shall be field-marked with a label containing the available incident energy or required level of (Personal Protective Equipment) PPE."

## Frequently Asked Questions:

**Why should I have an Arc Flash Analysis?** To prevent loss of life, improve safety, reduce exposure to liability, reduce lost production, and comply with OSHA/NFPA/IEEE regulations and guidelines. Think about it!

**Who will perform my Electrical Equipment Arc Flash Hazard Analysis?** Monzon Brothers Inc. ( MBI ) will send a Team to gather the information needed to perform the Arc Flash Analysis and provide the information needed for a NFPA 70E complaint label.\*

**Can Arc Flash Labels be purchased from MBI ?** MBI can provide your Arc Flash Hazard Labels with the required Arch Flash Hazard Analysis information.

**How often do I need an Arc Flash Analysis on my Electrical Equipment?** Per 2009 NFPA 70E (130.3) "arc flash hazard analysis shall be updated when a major modification or renovation takes place. It shall be reviewed periodically, not to exceed five years..."

Please visit us @: [www.mbips.com](http://www.mbips.com) or [www.mbicraneandhoist.com](http://www.mbicraneandhoist.com)



*Black Bear Master Distributor*

**MBI Crane & Hoist**

[www.mbicraneandhoist.com](http://www.mbicraneandhoist.com)



**Material Handling Products & Services \* OSHA Compliance Inspections \* Load Testing \* Maintenance \* Sales**

## Have you had your OSHA Compliance Inspection?

**Sales: (504) 616-8789 Fax: (504) 361-8689**

Let us help you comply with your [OSHA](#) regulation.

[OSHA regulation 29 CFR 1910.179\(j\)\(1\)\(ii\)](#)

### Why should I have my crane inspected?

To prevent loss of life, improved safety, reduced exposure to liability, lost production, increased equipment longevity, and comply with OSHA/ANSI/ASME regulations. Think about it!

### How often do I need my crane inspected?

**MBI Crane & Hoist Services** will customize a schedule based on service, environmental, operational requirements, and the manufacturer recommendations. Frequent or Periodic {OSHA - 1910. 179 (j)(1)(ii)(a)(b)}

### Who will perform my inspection?

**MBI Crane & Hoist Services** will send a Technician who is qualified to perform all aspects of an inspection and has a working knowledge of how to identify deficiencies in mechanical, structural, electrical systems and components of cranes. Our inspection is conducted in accordance with OSHA/ANSI/ASME regulations.

### When can my overhead crane be inspected?

**MBI Crane & Hoist Services** would prefer to inspect your equipment during normal business hours. Special arrangements can be made to tailor a program for an after-hours inspection.

### **What will be inspected on my overhead crane?**

**MBI Crane & Hoist Services** will inspect the actual condition and function of 10 critical components

- |                      |                 |
|----------------------|-----------------|
| 1) Support Structure | 6) Power Supply |
| 2) Electrification   | 7) Controls     |
| 3) Bridge            | 8) Trolley      |
| 4) Hoist             | 9) Runway       |
| 5) Hook and Block    | 10) Wire Rope   |

Standard inspections do not include components that are filled with lubricants and sealed items.

### **When should I expect my inspection results and my inspection certificate?**

Pursuant to OSHA guidelines, a detailed report listing all units, the serial number of the each unit, the date of the inspection, and the signature of the inspector will be submitted to you within 7 days after the completion of the inspection. Our confidential report will also include discrepancies found, priority codes, and corrective actions for all repairs. This report must be kept with your crane records.

### **How will I know when it is time for my compliance inspection?**

**MBI Crane & Hoist Services** will notify you in advance to schedule your inspection.

### **When is load-testing required?**

A full functional load test at 125% of the rated capacity is only required on a new installation, moving existing equipment or when repairs have been performed on the load bearing components of the crane or hoist. The certificate or report outlining the load test must be maintained with the equipment records. If this certificate is missing or the initial load test was never performed, the equipment should be placed out of service until another initial inspection can be performed.

### **Is load-testing part of the inspection?**

A full functional load test at 125% of the rated capacity is not part of the inspection, but it is available upon request. If your records are lost or you don't have one available, contact us to perform the test. A new certificate will be presented for your records.

# **Occupational Safety & Health Administration**

*The following is not printed in its entirety.*

## **1910.179(j) INSPECTION**

### **(1) Inspection classification.**

(i) Initial inspection. Prior to initial use all new and altered cranes shall be inspected to insure compliance with the provisions of this section.

(ii) Inspection procedure for cranes in regular service is divided into two general classifications based upon the intervals at which inspection should be performed. The intervals in turn are dependent upon the nature of the critical components of the crane and the degree of their exposure to wear, deterioration, or malfunction. The two general classifications are herein designated as "frequent" and "periodic" with respective intervals between inspections as defined below:

(a) Frequent inspection - Daily to monthly intervals.

(b) Periodic inspection - 1 to 12-month intervals.

### **(4) Cranes not in regular use.**

(i) A crane which has been idle for a period of 1 month or more, but less than 6 months, shall be given an inspection conforming with requirements of paragraph (j)(2) of this section and paragraph (m)(2) of this section before placing in service.

(ii) A crane which has been idle for a period of over 6 months shall be given a complete inspection conforming with requirements of paragraphs (j)(2) and (3) of this section and paragraph (m)(2) of this section before placing in service.

(iii) Standby cranes shall be inspected at least semi-annually in accordance with requirements of paragraph (j)(2) of this section and paragraph (m)(2) of this section.

## 1910.179(k) TESTING

(2) **Rated load test.** Test loads shall not be more than 125 percent of the rated load unless otherwise recommended by the manufacturer. The test reports shall be placed on file where readily available to appointed personnel.

## 1910.179(k) MAINTENANCE

(1) Preventive maintenance. A preventive maintenance program based on the crane manufacturer's recommendations shall be established.

(3) Adjustments and repairs. (i) Any unsafe conditions disclosed by the inspection requirements of paragraph (j) of this section shall be corrected before operation of the crane is resumed.

## 1910.179(a) Definitions

### 1910.179(a)(1)

A "**Crane**" is a machine for lifting and lowering a load and moving it horizontally, with the hoisting mechanism an integral part of the machine. Cranes whether fixed or mobile are driven manually or by power.

### 1910.179(a)(53)

"**Runway**" means an assembly of rails, beams, girders, brackets, and framework on which the crane or trolley travels.

### 1910.179(a)(21)

"**Bridge**" means that part of a crane consisting of girders, trucks, end ties, foot walks, and drive mechanism which carries the trolley or trolleys.

### 1910.179(a)(63)

The "**Trolley**" is the unit which travels on the bridge rails and carries the hoisting mechanism

### 1910.179(a)(42)

A "**Hoist**" is an apparatus which may be a part of a crane, exerting a force for lifting or lowering.

## **Links and Standards**

{OSHA}

[OSHA – 29 CFR 1910.179 {Overhead and gantry cranes}](#)

[OSHA – 29 CFR 1926.554 {Safety and Health Regulations for Construction Overhead hoists}](#)

[OSHA – 29 CFR 1910.6 {Incorporation by reference}](#)

{ANSI}

[American National Standards Institute](#)

{ASME}

[American Society of Mechanical Engineers](#)

### **B30.2**

Top-running single-girder or multiple-girder bridge, with one or more top-running trolley hoists used for vertical lifting and lowering of freely suspended, unguided loads consisting of equipment and materials.

### **B30.10**

Applies to hooks used in conjunction with equipment addressed in ANSI/ASME B30 Standard.

### **B30.11**

Underhung cranes and monorail systems where load-carrying members, such as end trucks or carriers (trolleys), travel either on the external or internal lower flange of a runaway track section, single monorail track, crane bridge girder, or jib boom

### **B30.16**

Hand chain-operated chain hoists and electric and air-powered chain and wire rope hoists used for, but not limited to, vertical lifting and lowering of freely suspended, unguided, loads which consist of equipment and materials.

### **B30.17**

Top-running single girder bridge, with one or more underhung hoists operating on the lower flange of the bridge girder, used for vertical lifting and lowering of freely suspended, unguided loads