



## **INTRODUCING HMI**

Founded in 1956, **The Hoist Manufacturers Institute (HMI)**, an affiliate of Material Handling Industry, is a trade association of manufacturers of overhead handling hoists. The products of its member companies include hand chain hoists, ratchet lever hoists, trolleys, air chain and air rope hoists, and electric chain and electric wire rope hoists.

HMI operates through committees with programs and policies reviewed and adopted by the membership with representation from each member company. Its many activities include an active engineering committee. HMI is represented on a number of standards developing committees and actively supports the development and certification of safety standards by the ANSI consensus method.

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### **Our Members**

HMI member companies are recognized as the leading authority and the principle resource in the Hoist Industry. The HMI members are concerned, conscientious manufacturers affiliated in an industry association to provide voluntary standards for the mechanical, structural and electrical design of hand chain hoists, ratchet lever hoists, trolleys, air chain and air rope hoists, and electric chain and electric wire rope hoists and to formulate guidelines for the proper use, operation and maintenance of that equipment.

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### **Our Association**

HMI is a member driven organization. To qualify for membership a company must manufacture or as a partial manufacturer of overhead hoists has engineered and designed its own overhead hoists and assembled continuously the major hoist components for at least a three-year period prior to its application for membership.

Member companies of HMI meet regularly to review, discuss and revise the standards for design, performance and proper operation. HMI member companies have committed to the development, maintenance and publishing of industry standard specifications.

Additionally, HMI has prepared, published and distributes Training, Inspection and Maintenance recommendations that are available to all hoist users, such as the Hoist Operators Manual, Hoist Inspection and Maintenance Personnel Manual, Manually Lever Operated Hoist Inspection and Hoist Maintenance Personnel Manual, and the Manually Lever Operated Hoist Operators Manual.

The Occupational Safety and Health Administration (OSHA) recently announced an alliance with the Monorail Manufacturers Association (MMA), the Crane Manufacturers Association of America (CMAA) and the Hoist Manufacturers Institute (HMI). The purpose of this alliance is to provide monorail systems, crane and hoists owners and operators with information, guidance, and access to education and training resources that will advance their workplace safety and health.

Member companies participate in a requisite number of regularly scheduled meetings which among other things further the ongoing process of revising and updating today's standards to meet the ever-changing demands of technology and the modern industrial environment.

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## RECOMMENDED PRACTICES ELECTRIC AND AIR POWERED HOISTS

Because the manufacturer has no direct control over the hoist and its operation, conformance with good safety practice is the responsibility of the user and operating personnel. ANSI/ASME B30.16 has been used as a guide in preparing this list of SHALL's and SHALL NOT's. Ask your supervisor for a copy. Each is identified according to ANSI/NEMA Z535.4 with either the signal word CAUTION or WARNING to indicate the degree of seriousness.



### WARNING

Improper operation of a hoist can create a potentially hazardous situation which, if not avoided, could result in death or serious injury. To avoid such a potentially hazardous situation, the operator shall:

1. **NOT** operate a damaged, malfunctioning or unusually performing hoist.
2. **NOT** operate the hoist until you have thoroughly read and understood the manufacturer's Operating and Maintenance Instructions or Manuals.
3. **NOT** operate a hoist which has been modified without the manufacturer's approval or without certification that it is in conformity with ANSI/AMSE B30 volumes.
4. **NOT** lift more than rated load for the hoist.
5. **NOT** use hoist with twisted, kinked, damaged, or worn load chain or wire rope.
6. **NOT** use the hoist to lift, support, or transport people.
7. **NOT** lift loads over people.
8. **NOT** operate a hoist unless all persons are and remain clear of the supported load.
9. **NOT** operate unless load is centered under hoist.
10. **NOT** attempt to lengthen the load wire rope or chain or repair damaged load wire rope or chain.
11. Protect the hoist's load wire rope or chain from weld splatter or other damaging contaminants.
12. **NOT** operate hoist when it is restricted from forming a straight line from hook to hook in the direction of loading.
13. **NOT** use load wire rope or chain as a sling, or wrap load wire rope or chain around load.
14. **NOT** apply the load to the tip of the hook or to the hook latch.
15. **NOT** apply load unless load chain is properly seated in the chain wheel(s) or sprocket(s) or wire rope is properly seated in its groove(s).
16. **NOT** apply load if bearing prevents equal loading on all load supporting ropes or chains.
17. **NOT** operate beyond the limits of the load wire rope or chain travel.
18. **NOT** leave load supported by the hoist unattended unless specific precautions have been taken.
19. **NOT** allow the load wire rope, chain or hook to be used as an electrical or welding ground.
20. **NOT** allow the load wire rope, chain or hook to be touched by a live welding electrode.
21. **NOT** remove or obscure the warnings on the hoist.
22. **NOT** operate a hoist on which the safety placards or decals are missing or illegible.
23. **NOT** operate a hoist unless it has been securely attached to a suitable support.
24. **NOT** operate a hoist unless load slings or other approved single attachments are properly sized and seated in the hook saddle.
25. Take up slack carefully - make sure load is balanced and load holding action is secure before continuing.
26. Shut down a hoist that malfunctions or performs unusually and report such malfunction.
27. Make sure hoist limit switches function properly.
28. Warn personnel of an approaching load.



### CAUTION

Improper operation of a hoist can create a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. To avoid such a potentially hazardous situation, the operator shall:

1. Maintain a firm footing or be otherwise secured when operating the hoist.
2. Check brake function by tensioning the hoist prior to each lift operation.
3. Use hook latches. Latches are to retain slings, chains, etc. under slack conditions only.
4. Make sure the hook latches are closed and not supporting any parts of the load.
5. Make sure the load is free to move and will clear all obstructions.
6. Avoid swinging the load or hook.
7. Make sure hook travel is in the same direction as shown on the controls.
8. Inspect the hoist regularly, replace damaged or worn parts, and keep appropriate records of maintenance.
9. Use the hoist manufacturer's recommended parts when repairing the unit.
10. Lubricate load wire rope or chain per hoist manufacturer's recommendations.
11. **NOT** use the hoist load limiting or warning device to measure load.
12. **NOT** use limit switches as routine operating stops unless allowed by manufacturer. They are emergency devices only.
13. **NOT** allow your attention to be diverted from operating the hoist.
14. **NOT** allow the hoist to be subjected to sharp contact with other hoists, structures, or objects through misuse.
15. **NOT** adjust or repair the hoist unless qualified to perform such adjustments or repairs.

## DISCLAIMER

Under no circumstances does the Hoist Manufacturers Institute (HMI) assume any liability for the use of these voluntary recommendations, and no warranty whatsoever is made in connection with them. The recommendations do not take precedence over existing plant safety rules and regulations, OSHA regulations or instructions issued by the Hoist Manufacturer. It is the user's intent to absolve and protect HMI from any and all liability, in tort or otherwise.



HOIST MANUFACTURERS INSTITUTE

## Members of the Hoist Manufacturers Institute, Inc.

### **Acco Chain & Lifting Products**

*Member Date 1966*  
P.O. Box 792  
76 Acco Drive  
York, PA 17405-0792  
(800) 967-7333  
[www.accolifting.com](http://www.accolifting.com)

### **Ace World Companies Inc.**

*Member Date 1993*  
10200 Jacksboro Highway  
Fort Worth, TX 76135  
(817) 237-7700  
[www.aceworldcompanies.com](http://www.aceworldcompanies.com)

### **Chester Hoist**

*Member Date 1970*  
P.O. Box 449  
7573 State Route 45, North  
Lisbon, OH 44432  
(330) 424-7248  
[www.cmworks.com](http://www.cmworks.com)

### **Coffing Hoists**

*Member Date 1957*  
P.O. Box 411245  
Charlotte, NC 28241-7010  
(704) 583-0095  
[www.cmworks.com](http://www.cmworks.com)

### **Columbus McKinnon Corporation**

*Member Date 1968*  
140 John James Audubon Parkway  
Amherst, NY 14228-1197  
(716) 689-5400  
[www.cmworks.com](http://www.cmworks.com)

### **Demag Cranes & Components Corp.**

*Member Date 1985*  
29201 Aurora Road  
Solon, OH 44139-1895  
(440) 248-2400  
[www.demag-us.com](http://www.demag-us.com)

### **Electrolift, Inc.**

*Member Date 1984*  
204 Sargeant Avenue  
Clifton, NJ 07013  
(973) 471-0204  
[www.electrolift.com](http://www.electrolift.com)

### **Harrington Hoists Inc.**

*Member Date 1976*  
401 West End Avenue  
Manheim, PA 17545  
(800) 233-3010  
[www.harringtonhoists.com](http://www.harringtonhoists.com)

### **Ingersoll-Rand Company**

*Member Date 1968*  
P.O. Box 970  
Annandale, NJ 08801  
(908) 238-7000  
[www.irco.com](http://www.irco.com)

### **J.D. Neuhaus L.P.**

*Member Date 2003*  
9 Loveton Circle  
Sparks, MD 21152  
(410) 472-0500  
[www.jdneuhaus.com](http://www.jdneuhaus.com)

### **Morris Material Handling, LLC**

*Member Date 1970*  
315 West Forest Hill Avenue  
Oak Creek, WI 53154  
(414) 764-6200  
[www.morriscranes.com](http://www.morriscranes.com)

### **R&M Materials Handling, Inc.**

*Member Date 1947*  
4501 Gateway Boulevard  
Springfield, OH 45502-9339  
(937) 328-5100  
[www.rmhoist.com](http://www.rmhoist.com)

### **Ratcliff Hoist Company**

*Member Date 1973*  
1655 Old County Road  
San Carlos, CA 94070  
(650) 595-3840  
[www.beratcliff@yahoo.com](mailto:www.beratcliff@yahoo.com)

### **STAHL CraneSystems, Inc.**

*Member Date 2003*  
6420 Dorchester Road  
Charleston, SC 29418  
(843) 767-1951  
[www.stahlus.com](http://www.stahlus.com)

### **Yale Lift-Tech**

*Member Date 1970*  
P.O. Box 769  
Muskegon, MI 49443-0769  
(231) 733-0821  
[www.cmworks.com](http://www.cmworks.com)