



## **INTRODUCING HMI**

The Hoist Manufacturer's 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. 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.

HMI member companies 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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## 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.



## **MEMBERS\* of the HOIST MANUFACTURERS INSTITUTE**

Acco Chain & Lifting Products  
P.O. Box 792  
York, PA 17405-0792  
(800) 967-7333

Ace World Companies, Inc.  
10200 Jacksboro Hwy.  
Fort Worth, TX 76135  
(817) 237-7700

Chester Hoist, Inc.  
P.O. Box 449  
Lisbon, OH 44432  
(330) 424-7248

Columbus McKinnon Corporation (CM)  
140 John James Audubon Parkway  
Amherst, NY 14228-1197  
(716) 689-5400

Demag Cranes and Components Corporation  
29201 Aurora Road  
Solon, OH 44139-1895  
(440) 248-2400

Electro Lift Inc.  
204 Sargeant Avenue  
Clifton, NJ 07013  
(973) 471-0204

Harrington Hoists Inc.  
401 West End Avenue  
Manheim, PA 17545  
(717) 665-2000

Ingersoll-Rand Company  
P.O. Box 970  
Annandale, NJ 08801  
(908) 238-7000

Lift-Tech International, a division of Columbus  
McKinnon Corporation  
P.O. Box 769  
Muskegon, MI 49443  
(231) 733-0821

Morris Material Handling, LLC  
315 West Forest Hill Avenue  
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R & M Materials Handling Inc.  
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Springfield, OH 45502-9339  
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Ratcliff Hoist Company, Inc.  
1655 Old County Road  
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(650) 595-3840

Saturn Engineering Corporation  
10 Main Street  
Newark, NJ 07105  
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Shepard Niles Inc.  
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Montour Falls, NY 14865  
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