



## **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.

Hoist Manufacturers Institute  
8720 Red Oak Boulevard  
Suite 201  
Charlotte, NC 28217-3992  
Ph.: (704) 676-1190  
Fax: (704) 676-1199  
[www.mhia.org/hmi](http://www.mhia.org/hmi)

## RECOMMENDED PRACTICES MANUALLY LEVER OPERATED CHAIN 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 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 certification to be in conformity with applicable OSHA regs.
4. **NOT** lift or pull more than rated load for the hoist.
5. **NOT** use damaged hoist or hoist that is **Not** working properly.
6. **NOT** use hoist with twisted, kinked, damaged, or worn load chain.
7. **NOT** operate with any lever extension (cheater bar).
8. **NOT** attempt to "free-chain" the hoist while a load is applied.
9. **NOT** use the hoist to lift, support, or transport people.
10. **NOT** lift loads over people and make sure all personnel remain clear of the supported load.
11. **NOT** attempt to lengthen the load chain or repair damaged load chain.
12. Protect the hoist's load chain from weld splatter or other damaging contaminants.
13. **NOT** operate hoist when it is restricted from forming a straight line from hook to hook in the direction of loading.
14. **NOT** use load chain as a sling or wrap load chain around load.
15. **NOT** apply the load to the tip of the hook or to the hook latch.
16. **NOT** apply load unless load chain is properly seated in the chain wheel(s) or sprocket(s).
17. **NOT** apply load if bearing prevents equal loading on all load supporting chains.
18. **NOT** operate beyond the limits of the load chain travel.
19. **NOT** leave load supported by the hoist unattended unless specific precautions have been taken.
20. **NOT** allow the chain or hook to be used as an electrical or welding ground.
21. **NOT** allow the chain or hook to be touched by a live welding electrode.
22. **NOT** remove or obscure the warnings on the hoist.
23. **NOT** operate a hoist which has **Not** 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. **NOT** lift loads that are **Not** balanced and that the holding action is **Not** secure, taking up slack carefully.
26. **NOT** operate a hoist unless all persons are and remain clear of the supported load.
27. Report malfunctions or unusual performances of a hoist, after it has been shut down until repaired.
28. **NOT** operate a hoist on which the safety placards or decals are missing or illegible.
29. Be familiar with operating controls, procedures, and warnings.



### 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 or pulling 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. Avoid lever "fly-back" by keeping a firm grip on the lever until operating stroke is completed and the lever is at rest.
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 chain per hoist manufacturer's recommendations.
11. **NOT** use the hoist load limiting or warning device to measure load.
12. **NOT** operate except with manual power.
13. **NOT** permit more than one operator to pull on lever at the same time. More than one operator is likely to cause hoist overload.
14. **NOT** allow your attention to be diverted from operating the hoist.
15. **NOT** allow the hoist to be subjected to sharp contact with other hoists, structures, or objects through misuse.
16. **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  
Oak Creek, WI 53154  
(414) 764-6200

R & M Materials Handling Inc.  
4501 Gateway Blvd.  
Springfield, OH 45502-9339  
(937) 328-5100

Ratcliff Hoist Company, Inc.  
1655 Old County Road  
San Carlos, CA 94070  
(650) 595-3840

Saturn Engineering Corporation  
10 Main Street  
Newark, NJ 07105  
(973) 465-0224

Shepard Niles Inc.  
250 North Genesee Street  
Montour Falls, NY 14865  
(607) 535-7111

Yale Industrial Products, Inc.  
P.O. Box 411245  
Charlotte, NC 28241-7010  
(704) 583-0095