ANSI MH30.1-2015 Revision of ANSI MH30.1-2007



Performance and Testing Requirements for Dock Leveling Devices



An Industry Group of MHI 8720 Red Oak Blvd., Suite 201 Charlotte, NC 28217-3992 standards@mhi.org

© 2015 MHI All rights reserved.

American National Standard

Approval of an American National Standard requires verification by the American National Standards Institute (ANSI) that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken periodically to reaffirm, revise or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Published by

Loading Dock Equipment Manufacturers An Industry Group of MHI 8720 Red Oak Blvd., Suite 201, Charlotte, NC, 28217-3992 Telephone: (704) 676-1190 Fax: (704) 676-1199 www.mhi.org/lodem standards@mhi.org

© 2015 by MHI All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the publisher.

ANSI MH30.1-2015 Revision of ANSI MH30.1-2007

American National Standard

Performance and Testing Requirements for Dock Leveling Devices

Loading Dock Equipment Manufacturers (LODEM) An Industry Group of MHI

Approved August 11, 2015 American National Standards Institute, Inc. **FOREWORD**. This standard, which was developed under the American National Standards Institute (ANSI) Canvass method and approved by ANSI on August 11, 2015, represents suggested design practices and operational requirements for dock leveling devices. It was developed by MHI, along with the Loading Dock Equipment Manufacturers ("LODEM"), one of its Industry Groups, and is intended to provide useful information and guidance for owners, users, designers, purchasers or specifiers of material handling equipment or systems. It is advisory only and should only be regarded as a simple tool that its intended audience may or may not choose to follow, adopt, modify, or reject. A standard may be part of, but does not constitute a comprehensive safety program that cannot guard against pitfalls in operating, selecting and purchasing such a system, and should not be relied upon as such. Such a program should be developed by a qualified professional.

VOLUNTARY. The use of this document is completely voluntary. Its existence does not in any respect preclude anyone, whether it has approved this standard or not, from following procedures and assuming responsibilities not conforming to this standard.

DISCLAIMER OF LIABILITY. MHI, LODEM and their members assume no responsibility and disclaim all liability of any kind, however arising, as a result of acceptance or use or alleged use of this standard. Anyone using this standard specifically understands and agrees that MHI, LODEM, their members, officers, agents, and employees shall not be liable under any legal theory of any kind for any action or failure to act with respect to the design, erection, installation, manufacture, and preparation for sale, sale, characteristics, features, or delivery of anything covered by this standard or any other activity covered by this standard. Any use of this information must be determined by the user to be in accordance with applicable federal, state, and local laws and regulations.

DISCLAIMER OF WARRANTY. MHI, LODEM and their members make NO WARRANTIES of any kind, express or implied, in connection with the information in this brochure and SPECIFICALLY DISCLAIM ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR PARTICULAR PURPOSE.

INDEMNIFICATION. By referring to or otherwise employing this standard, its user agrees to defend, protect, indemnify, and hold MHI, LODEM, their members, officers, agents, and employees harmless from and against all claims, losses, expenses, damages, and liabilities, direct, incidental, or consequential, arising from acceptance or use or alleged use of this standard, including loss of profits and reasonable attorneys' fees which may arise out of the acceptance or use or alleged use of this document. The intent of this provision is to absolve and protect MHI, LODEM, their members, officers, agents, and employees from any and all loss relating in any way to this document, including those resulting from the user's own negligence.

The **Loading Dock Equipment Manufacturers** (LODEM) is comprised of companies that design and manufacture loading dock leveling devices in North America. This standard is the result of LODEM's recognition of the need to standardize performance, and design criteria for the proper utilization of dock leveling devices, and was formulated under MHI procedures approved by ANSI.

LODEM formed the MH30 Committee in 1990 after the American Society of Mechanical Engineers (ASME) submitted the American National Standard ANSI/ASME MH 14.1-1984 and addenda 1a-1985 and 1b-1986 for withdrawal. These withdrawals were approved September 18, 1989.

This standard, which was originally approved by ANSI on December 16, 1993, and revised in 2000 and 2007, represents design, operating and testing practices and performance criteria that may be used in determining product utilization.

On the date of approval of this standard, LODEM consisted of the following member companies:

- 4Front Entrematic
- Blue Giant Equipment Corporation
- Bluff Manufacturing, Inc.
- Nova Technology
- Pentalift Equipment Corporation
- Rite-Hite Corporation
- Systems, Incorporated

Questions or suggestions for improvement regarding of this standard are welcome. Suggestions should be sent to: MH30.1 Committee, MHI, 8720 Red Oak Blvd., Suite 201, Charlotte, NC 28217; standards@mhi.org.

Performance and Testing Requirements for Dock Leveling Devices

Contents

1	Purpose and Scope	.1
	1.1 Purpose	
	1.2 Equipment Covered	
2	Other Applicable Specifications	.1
3	Definitions	2
4	Dock Leveling Device Design and Structural Requirements	4
	4.1 Structure	4
	4.1.1 Materials	
	4.1.2 Welding	
	4.2 Burrs or Sharp Edges	
	4.3 Overlaps and Overlapping Transitions	
	4.4 Guards	
	4.4.1 Toe Guards	
	4.4.2 Run-Off Guards	
	4.5 Lifting Aides	
	4.6 Controls	
	4.7 Maintenance Device	
	4.7 Maintenance Device	
	4.9.1 Manufacturer's Nameplate	
_	4.9.2 Warning Labels	
5		
	5.1 Professional Engineer Requirements	
	5.2 Structural Testing	
	5.3 Deck Plate Test	
	5.4 Structural Test Results	
	5.5 Transfer of Test Results	
	5.6 Caution	.9
6	Information for Use	. 9
7	Owner/User Requirements	.9
	7.1 Intended Current and Future Use	.9
	7.2 Installation	.9
	7.2.1 Placards and Warnings	.9
	7.2.2 Dock-Face Mounted Leveling Devices	
	7.2.3 Fixed Leveling Devices	10
	7.2.4 Rail Dock Leveling Devices	
	7.3 Modifications to Dock Leveling Devices	10
	7.4 Information for Use	
	7.5 Operator Training	
	7.6 Operations	
	7.7 Transport Vehicle Requirements	
	7.7.1 Transport Vehicle Position	
	7.7.2 Use of Positive Restraints	
	7.8 Inspection	
	7.9 Maintenance	
	7.9 Maintenance	
	7.10 Damage	
٨	ppendix A (normative) ANSI MH30.1-2015 Submittal Form	1/
		14