MH30.1 - 2007 (a revision of MH30.1 - 2000)



For the Safety, Performance and Testing of Dock Leveling Devices



A Product Section of Material Handling Industry of America A Division of Material Handling Industry 8720 Red Oak Blvd., Suite 201 Charlotte, NC 28217-3992 standards@mhia.org

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American National Standard

For the Safety, Performance and Testing of Dock Leveling Devices

Loading Dock Equipment Manufacturers (LODEM)

A Product Section of Material Handling Industry of America, A Division of Material Handling Industry

Approved July 2, 2007

American National Standards Institute, Inc.

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This standard, which was developed under the ANSI Canvass method and approved by ANSI on July 2, 2007, represents suggested design practices and performance testing criteria for dock leveling devices. It was developed with the sole intent of offering information to parties engaged in the manufacture, marketing, purchase, or use of dock leveling devices. This standard is advisory only and acceptance is voluntary and the standard should be regarded as a guide that the user may or may not choose to adopt, modify, or reject. The information does not constitute a comprehensive safety program and should not be relied upon as such. Such a program should be developed and an independent safety adviser consulted to do so.

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Foreword (This foreword is not part of American National Standard MH30.1 – 2007)

The Loading Dock Equipment Manufacturers (LODEM), a Product Section of Material Handling Industry of America, a division of Material Handling Industry, is comprised of a substantial portion of the major companies that design and manufacture loading dock leveling devices in the United States. This standard is the result of LODEM's recognition of the need to standardize safety, performance, and testing criteria to ensure the safe utilization of dock leveling devices, and was formulated under MHIA procedures approved by the American National Standards Institute (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 Decmeber 16, 1993 and revised in 2000, represents recommended safety practices and performance testing criteria that may be used in determining product utilization. It was developed to offer information to parties engaged in the manufacture, marketing, purchase, or use of dock leveling devices.

Suggestions for improvement of this standard are welcome. They should be sent to the sponsor, the Loading Dock Equipment Manufacturers Product Section of Material Handling Industry, 8720 Red Oak Boulevard, Suite 201, Charlotte, NC 28217 or standards@mhia.org.

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

4Front Engineered Solutions
Blue Giant Equipment Corporation
Bluff Manufacturing, Inc.
JH Industries, Inc.
Pentalift Equipment Corporation
Rite-Hite Corporation
Systems, Incorporated

Suggestions for improvement, and questions regarding interpretation of this standard are welcome. They should be sent to: MH30.1 Committee, Material Handling Industry of America, 8720 Red Oak Blvd., Suite 201, Charlotte, NC 28217-3992; standards@mhia.org.

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1 PURPOSE, SCOPE, AND DEFINITIONS

The purpose of this standard is to provide safety, performance, and testing requirements with regard to dock leveling devices. The standard provides a uniform means of comparison and is meant to improve user confidence and knowledge in the safe and effective operation of dock leveling devices.

1.1 Types of Dock Leveling Devices Covered

A dock leveling device is a manufactured structure designed to span and compensate for space and height differentials between a loading dock and a transport vehicle to facilitate safe and efficient freight transfers. The three types of dock leveling devices within the scope of the Standard are described in the following paragraphs.

- dock-face mounted type: A dock-face mounted dock leveling device is permanently affixed to the face of a dock.
- fixed type: A fixed dock leveling device is affixed to the dock structure and usually
 incorporates a mechanism to aid in positioning the leveling device with respect to a
 transport vehicle. Fixed types include both horizontal and vertical storing levelers.
- rail dock leveling device: A rail dock leveling device is a manufactured structure
 designed to span and compensate for space and height differences between a rail car
 loading dock and a rail car to facilitate safe, efficient freight transfer or passage.
 - fixed type: a structure designed for stationary mounting to the dock, located at
 either the dock face or recessed into a pit. Placement of the bridging structure into a
 working or stored position will usually be aided by a mechanism incorporated into the
 design.
 - sliding type: a structure designed to be permanently mounted to a dock face with a
 mounting assembly that allows for lateral movement of the bridging structure parallel
 to the dock face. Placement of the bridging structure, either laterally along the dock
 or into the stored or working position, may be manual or with a mechanism designed
 to aid in such positioning.

Portable dock boards and dock plates are not covered in this standard, but are covered in MH30.2, Portable Dock Leveling Devices: Safety, Performance and Testing.