

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



Performance and Testing Requirements for Dock Leveling Devices



LOADING DOCK EQUIPMENT MANUFACTURERS

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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.

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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

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Performance and Testing Requirements for Dock Leveling Devices

1 Purpose and Scope

1.1 Purpose

The purpose of this standard is to serve as the guide for designers, manufacturers, sellers, installers, owners, users and governing bodies of dock levelers and to achieve the following objectives:

- to provide guidelines for the design and testing of dock leveling devices;
- to promote the understanding of the respective responsibilities of manufacturers, sellers, installers, owners, users and governing bodies associated with dock leveling devices; and
- to provide a uniform means of comparison for dock leveling devices.

1.2 Equipment 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 freight transfers in an effective and efficient manner. The three types of dock leveling devices within the scope of this standard are described in the following paragraphs.

- a) **dock-face mounted type:** A dock-face mounted dock leveling device is permanently affixed to the face of a dock. Also known as edge of dock (EOD) levelers.
- b) **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.
- c) **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 effective and efficient freight transfer or passage.
 - i. **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.
 - ii. **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.

Performance and testing requirements for portable dock leveling devices are provided in ANSI MH30.2 2015.

2 Other Applicable Specifications

Parts of this standard refer to certain portions of other applicable specifications or standards. The publications of the following organizations are mentioned in the text:

ANSI MH30.2-2015, *Portable Dock Leveling Devices: Performance and Testing*

ANSI MH30.3-2015, *Vehicle Restraining Devices: Performance and Testing*

ANSI Z535.1, *Safety Color Code*

ANSI Z535.4, *Product Safety Signs and Labels*

NFPA 70, *National Electrical Code*, National Fire Protection Association (www.nfpa.org)