

MH30.3 - 2005



***Vehicle Restraining Devices:  
Safety, Performance, and Testing***



LOADING DOCK EQUIPMENT MANUFACTURERS

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American National Standard  
**Vehicle Restraining Devices:  
Safety, Performance, and Testing**

**Loading Dock Equipment Manufacturers (LODEM)**

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

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**Foreword** (This foreword is not part of American National Standard MH30.3 – 2005)

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 equipment in the United States. This standard is the result of LODEM's recognition of the need to develop a comprehensive safety standard and establish minimum design and performance criteria to ensure the safe application and utilization of vehicle restraining devices, and was formulated under American National Standards Institute (ANSI) procedures.

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

Bluff Manufacturing, Inc.  
Kelley  
Pentalift Equipment Corporation  
Poweramp Division of Systems, Inc.  
Rite-Hite Corporation  
Serco  
W.B. McGuire Company Inc.

Suggestions for improvement, and questions regarding interpretation, of this standard are welcome. They should be sent to: MH30.3 Committee, Material Handling Industry of America, 8720 Red Oak Blvd., Suite 201, Charlotte, NC, 28217-3992; [standards@mhia.org](mailto:standards@mhia.org).

## **Vehicle Restraining Devices: Safety, Performance, and Testing**

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# Vehicle Restraining Devices Safety, Performance, and Testing

## 1 SCOPE AND PURPOSE

This standard defines safety, performance, and testing requirements with regard to design, use, performance and maintenance of vehicle restraining devices. The purpose of this standard is to provide a uniform means of comparison, improve user confidence and knowledge, and define safety requirements of vehicle restraining devices.

### 1.1 VEHICLE RESTRAINING DEVICES

A vehicle restraining device is a manufactured structure designed to interface between a loading dock and a transport vehicle. It is designed to facilitate safe and efficient freight transfers by limiting vehicle creep and preventing unscheduled departure. Most vehicle restraints incorporate a communication light system between the dock worker on the inside of the building and the truck driver on the outside. The two types of vehicle restraining devices within the scope of this Standard are described in the following paragraphs.

- **rear impact guard (RIG) type:** This is the most common type of vehicle restraint. It is a vehicle restraint that engages the RIG of a transport vehicle, inhibiting uncontrolled separation of the vehicle from the dock face.
- **wheel dependent type:** A vehicle restraint that engages one or more wheels of a transport vehicle, inhibiting uncontrolled separation of the vehicle from the dock face.

Vehicle restraining devices are further classified according to manual vs. powered operations:

- **manually operated:** A vehicle restraining device that is both engaged and released manually.
- **power operated:** A vehicle restraining device that is both engaged and released through a powered means either with a push-button or automatic operation.

## 2 DEFINITIONS

- 2.1 automatic operation:** placement of a vehicle restraint device in its operating position by powered means not initiated by the loading dock operating personnel.
- 2.2 barrier:** the portion of a vehicle restraint device that engages the transport vehicle to prevent movement.
- 2.3 chock:** verb – to place a wheel chock in front of a wheel of a transport vehicle to inhibit movement of the vehicle away from a loading dock. Noun – see “wheel chock” (2.34).