Labeling and Direct Product Marking with Linear Bar Code and Two-Dimensional Symbols

Approved: 26 September 2005

Abstract

This standard establishes the machine-readable (linear, two dimensional, and composite symbols) and human readable content for direct marking and labeling of items, parts, and components. This standard provides a means for items, parts and components to be marked, and read in either fixtured or handheld scanning environments at any manufacturer's facility and then read by customers purchasing items for subsequent manufacturing operations or for final end use. Intended applications include, but are not limited to supply chain applications, e.g., inventory, distribution, manufacturing, quality control, acquisition, transportation, supply, repair, and disposal. In this document the terms "part marking" and "item marking" are used interchangeably. The location and application method of the marking are not defined herein. Before implementing this standard, suppliers and manufacturers should review and mutually agree on these details with their trading partners.

Developed by:

MH10 , Unit-Loads and Transport-Packages
Subcommittee 8, Coding & Labeling of Unit-Loads

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Approved September 26, 2005
American National Standards Institute, Inc.

Disclaimer

This standard, which was developed under the ANSI Committee method and approved by ANSI on 26 September 2005, represents suggested design practices and guidance for labeling and direct product marking with linear bar code and two-dimensional symbols. It was developed with the sole intent of offering information to parties engaged in the manufacture, marketing, purchase, or use of automatic identification equipment software and services. 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 MH10.8.7 – 2005)

This standard is an application standard for labeling and direct product marking with linear bar code and two-dimensional symbols. The standard was developed by subcommittee 8 of the MH10 accredited standards committee. This standard was established in response to a growing need for a comprehensive product marking standard for automatic identification purposes for unit-loads and transport-packages.

At the date of approval of this standard, the MH10 Committee, Unit-Loads and Transport-Packages, consisted of the following members:

AIM, USA
American Trucking Associations
American Wood Packaging Association
APA – The Engineered Wood Association
Association of American Railroads
Assoc. of Professional Material Handling Consultants
ASTM
Automotive Industry Action Group
Containerization & Intermodal Institute
Consumer Electronics Association
Fibre Box Association
Flexible Intermediate Bulk Containers Association
Glass Packaging Institute
IDEAlliance
IMC & WD, Product Section - Material Handing Industry
Institute of Packaging Professionals
Integrated Business Communications Alliance
International Cargo Handling Coordination Assoc.
International Food Distributors Association
Intermec Technologies Corporation
International Safe Transit Association
Material Handling Industry of America
Material Handling Management Society
Motorola
National Wooden Pallet & Container Association
Plastic Drum Institute
PMMI
Q.E.D. Systems
Rack Manufacturers Institute
Reusable Industrial Packaging Association
Steel Shipping Container Institute
Textile Bag Manufacturers Association
U.S. Air Force
U.S. Dept. of Agriculture
U.S. Dept. of Defense Logistics
U.S. Forest Products Laboratory
Uniform Code Council
United Fresh Fruit & Vegetable Association
United Parcel Service

Suggestions for improvement, and questions regarding interpretation of this standard will be welcome. They should be sent to: MH 10 Committee (MHIA), Material Handling Industry of America, 8720 Red Oak Blvd., Suite 201, Charlotte, NC, 28217-3992 or standards@mhia.org.

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Labeling and Direct Product Marking with Linear Bar Code and Two-Dimensional Symbols

1 Scope

This American National standard:

- Defines minimum requirements for identifying items;
- Provides guidelines for item marking with machine-readable symbols;
- Covers both labels and direct marking of items;
- Includes testing procedures for label adhesive characteristics and mark durability;
- Provides guidance for the formatting on the label of data presented in linear bar code, two-dimensional symbol or human readable form;
- Is intended for applications which include, but are not limited to, support of systems that automate the control of items during the processes of:
    - production,
    - inventory,
    - distribution,
    - field service,
    - point of sale and
    - repair.
- Is intended to include, but it is not limited to, multiple industries including:
    - automotive,
    - aerospace,
    - chemical,
    - consumer items,
    - electronics,
    - health care,
    - marine,
    - rail, and
    - telecommunications.

The location and application method of the marking are not defined herein. Before implementing this standard, suppliers and manufacturers should review and mutually agree on these details with their trading partners.

This document consists of four sections and a series of annexes to support this application.

Section 1 Defines the purpose of this standard.

Section 2 Lists references to support this standard.

Section 3 Refers to the definitions contained in Annex A.

Section 4 Provides a common set of definitions and parameters for item marking in general.

In this document, the word "shall" indicates a requirement and the word "should" indicates a recommendation. This standard does not supersede or replace any applicable safety or regulatory marking or labeling requirements. This standard is meant to satisfy the minimum item marking requirements of numerous applications and industry groups. As such its applicability is to a wide range of industries, each of which may have specific implementation guidelines for this