

MH10.8.1 – 2005



Automatic Identification and Data Capture Techniques Used in Shipping, Receiving, and Transport Applications

Approved: 26 September 2005

Abstract

Specifies minimum requirements for design of labels containing linear bar code and two-dimensional (2D) symbols on transport units to convey data between trading partners; provides for traceability of transported units via a Unique Transport Unit Identifier (license plate); provides guidance for formatting data; provides specific symbology recommendations; specifies quality requirements; makes recommendations as to label placement, size, free text and graphics; provides label material guidance.

Developed by:

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

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Foreword (This foreword is not part of American National Standard MH10.8.1 – 2005)

This standard is an application standard for the marking of product packages with linear bar code and two-dimensional symbols. It defines minimum requirements for identifying product packages that are distributed outside the originating location. It specifies label data content and requirements, including data element requirements; data representation; rules for encoding of mandatory and optional data elements in machine-readable symbols; and human readable information.

Bar codes and Two-Dimensional (2D) Symbols for Product Packaging provides the option of one of four different linear bar code symbols and one of three different two-dimensional symbols. It relies upon the technology standards and data semantic and syntax standards developed within ASC MH10. These standards have in turn been published internationally through the work of ISO/IEC JTC 1/SC 31.

The international equivalent of this standard is the international standard ISO 22389, developed by ISO Technical Committee 122/Working Group 7. ANSI MH10.8.6 and ISO 22389 were developed concurrently and differ primarily with a recommended/preferred two-dimensional symbol in the ANS while the ISO standard provides no such recommendation or preference.

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

AIM, USA
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American Wood Packaging Association
APA – The Engineered Wood Association
Association of American Railroads
Assoc. of Professional Material Handling Consultants
ASTM
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IMC & WD, Product Section - Material Handling Industry
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U.S. Dept. of Defense Logistics
U.S. Forest Products Laboratory
Uniform Code Council
United Fresh Fruit & Vegetable Association
United Parcel Service/Intermec Technologies Corporation

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 mhstandards@mhia.org.

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Used in Shipping, Receiving, and Transport Applications**

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1 Scope

This American National Standard:

- specifies the minimum requirements for the design of labels containing linear bar code and two-dimensional (2D) symbols on Transport Units to convey data between trading partners;
- provides for traceability of transported units via a Unique Transport Unit Identifier (license plate);
- provides guidance for the formatting on the label of data presented in linear bar code, 2D symbol, or human readable form;
- provides specific recommendations regarding the choice of linear bar code and 2D symbologies, and specifies quality requirements;
- makes recommendations as to label placement, size, and the inclusion of free text and any appropriate graphics;
- provides guidance in the selection of label material.

2 Normative references

This American National Standard incorporates, by dated and undated references, provisions from other publications. These normative references are listed as follows. For dated references subsequent amendments to or revisions of any of these publications apply to this American National Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ANS MH10.8.2	Data Identifier and Application Identifier Standard
ISO/IEC 2382	Information technology – Vocabulary
ANS MH10.8.3	Transfer Syntax for High Capacity ADC Media
General EAN.UCC Specifications	Available from Uniform Code Council (UCC), 7887 Washington Village Drive, Suite 300, Dayton, OH, 45459-8605. Telephone: (937) 435-3870 • Telefax: (937) 435-7317
ISO/IEC 15415	Information technology – Automatic identification and data capture techniques – Bar code print quality test specification – Two-dimensional symbols
ISO/IEC 15416	Information technology – Automatic identification and data capture techniques – Bar code print quality test specification – Linear symbols
ISO/IEC 15417	Information technology – Automatic identification and data capture techniques – Bar code symbology specification – Code 128