



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 9132:2006**

ICS 03.120.10  
49.020

**AEROSPACE SERIES - QUALITY  
MANAGEMENT SYSTEMS - DATA MATRIX  
QUALITY REQUIREMENTS FOR PARTS  
MARKING**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 9132**

April 2006

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English Version

**Aerospace series - Quality management systems - Data Matrix  
Quality Requirements for Parts Marking**

Série aérospatiale - Systèmes de management de la  
qualité - Exigences qualité du marquage des pièces en  
code-barres Data Matrix

Luft- und Raumfahrt - Qualitätsmanagementsystem - Data  
Matrix Qualitätsanforderungen für Teilemarkierung

This European Standard was approved by CEN on 3 February 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## **Foreword**

This European Standard (EN 9132:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## EN 9132:2006 (E)

# 1 Introduction

## 1.1 Scope

This standard defines uniform Quality and Technical requirements relative to metallic parts marking performed in using "Data Matrix symbology" used within the aerospace industry. The ISO/IEC 16022 specifies general requirements (data character encodation, error correction rules, decoding algorithm, etc.). In addition to ISO/IEC 16022 specification, part identification with such symbology is subject to the following requirements to ensure electronic reading of the symbol.

The marking processes covered by this standard are as follows:

- Dot peening
- Laser
- Electro-chemical etching

Further marking processes will be included if required.

This standard does not specify information to be encoded

Unless specified otherwise in the contractual business relationship, the company responsible for the design of the part shall determine the location of the Data Matrix Marking. Symbol position should allow optimum illumination from all sides for readability.

## 1.2 Convention

The following conventions are used in this standard:

- The words "shall" and "must" indicate mandatory requirements.
- The word "should" indicates requirements with some flexibility allowed in compliance methodology. Producers choosing other approaches to satisfy a "should" must be able to show that their approach meets the intent of the requirement of this standard.
- The words "typical", "example", "for reference" or "e.g." indicate suggestions given for guidance only.
- Appendices to this document are for information only and are provided for use as guidelines.
- Dimensions used in this document are as follows. Metric millimetre sizes followed by Inches in brackets unless otherwise stated.

# 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 16022, *Information Technology — International Symbology Specification — Data Matrix*.

EN 9102, *Aerospace series — Quality Systems — First article inspection*.

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