SLOVENSKI STANDARD
SIST EN ISO 11593:1998

01-junij-1998

Manipulating industrial robots - Automatic end effector exchange systems - Vocabulary and presentation of characteristics (ISO 11593:1996)

Manipulating industrial robots - Automatic end effector exchange systems - Vocabulary and presentation of characteristics (ISO 11593:1996)

Industrieroboter - Automatische Wechselsysteme für Endeffektoren - Begriffe und Darstellung charakteristischer Eigenschaften (ISO 11593:1996)

Robots manipulateurs industriels - Systèmes de changement automatique de terminal - Vocabulaire et présentation des caractéristiques (ISO 11593:1996)

Ta slovenski standard je istoveten z: **EN ISO 11593:1997**

ICS:

01.040.25	Izdelavna tehnika (Slovarji)	Manufacturing engineering (Vocabularies)
25.040.30	Industrijski roboti. Manipulatorji	Industrial robots. Manipulators

SIST EN ISO 11593:1998 **en**

EUROPEAN STANDARD

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English version

Manipulating industrial robots - Automatic end effector exchange systems - Vocabulary and presentation of characteristics (ISO 11593:1996)

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This European Standard was approved by CEN on 18 September 1997.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN ISO 11593:1997 E

Foreword

The text of the International Standard from Technical Committee ISO/TC 184 "Industrial automation systems and integration" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 310 "Advanced Manufacturing Technologies", the secretariat of which is held by BSI.

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 April 1998, and conflicting national standards shall be withdrawn at the latest by April 1998.

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

Endorsement notice

The text of the International Standard ISO 11593:1996 has been approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

Annex ZA (normative)
Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

Publication	Year	Title	EN	Year
ISO 8373	1994	Manipulating industrial robots - Vocabulary	EN ISO 8373	1996
ISO 9409-1	1996	Manipulating industrial robots - Mechanical interfaces - Part 1: Plates (Form A)	EN ISO 9409-1	1996
ISO 9409-2	1996	Manipulating industrial robots - Mechanical interfaces - Part 2: Shafts (Form A)	EN ISO 9409-2	1996
ISO 9787	1990	Manipulating industrial robots - Coordinate systems and motions	EN 29787	1992

INTERNATIONAL STANDARD

ISO 11593

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Manipulating industrial robots — Automatic end effector exchange systems — Vocabulary and presentation of characteristics

Robots manipulateurs industriels — Systèmes de changement automatique de terminal — Vocabulaire et présentation des caractéristiques

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Contents

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 11593 was prepared by Technical Committee ISO/TC 184, *Industrial automation systems and integration,* Subcommittee SC 2, *Robots for manufacturing environment.*

Annex A of this International Standard is for information only.

Introduction

ISO 11593 is one of a series of standards dealing with the requirements of manipulating industrial robots. Other documents cover such topics as terminology, general characteristics, coordinate systems, performance criteria and related test methods, safety, robot programming languages, and robot companion standards to MMS. It is noted that these standards are interrelated and also related to other International Standards.

Automatic exchange systems for end effectors increase in importance for handling devices. This International Standard contains the vocabulary and presentation of characteristics, e.g. forces, moments (torques), and exchange times, for end effector exchange systems. This International Standard does not contain any details for the development and design of these systems.

Manipulating industrial robots — Automatic end effector exchange systems — Vocabulary and presentation of characteristics

1 Scope

This International Standard defines terms relevant to automatic end effector exchange systems used for manipulating industrial robots operated in a manufacturing environment.

The terms are presented by their symbol, unit, definition and description. The definition includes applicable references to existing standards.

Annex A provides a format for the presentation of automatic end effector exchange systems characteristics.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8373:1994, *Manipulating industrial robots — Vocabulary.*

ISO 9409-1:1996, *Manipulating industrial robots — Mechanical interfaces — Part 1: Plates (form A).*

ISO 9409-2:1996, *Manipulating industrial robots — Mechanical interfaces — Part 2: Shafts (form A).*

ISO 9787:1990, *Manipulating industrial robots — Coordinate systems and motions.*

3 Terms and definitions

For the purposes of this International Standard, the definitions given in ISO 8373 apply.