



# SLOVENSKI STANDARD SIST EN ISO 9946:2003

01-oktober-2003

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SIST EN 29946:1998

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## Manipulirni industrijski roboti – Predstavitev lastnosti (ISO 9946:1999)

Manipulating industrial robots - Presentation of characteristics (ISO 9946:1999)

Industrieroboter - Darstellung charakteristischer Eigenschaften (ISO 9946:1999)

Robots manipulateurs industriels - Présentation des caractéristiques (ISO 9946:1999)

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**Ta slovenski standard je istoveten z: EN ISO 9946:1999**

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### **ICS:**

25.040.30	Industrijski roboti. Manipulatorji	Industrial robots. Manipulators
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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN ISO 9946

April 1999

ICS 25.040.00

Supersedes EN 29946:1992

English version

Manipulating industrial robots - Presentation of characteristics  
(ISO 9946:1999)

Robots manipulateurs industriels - Présentation des  
caractéristiques (ISO 9946:1999)

Industrieroboter - Darstellung charakteristischer  
Eigenschaften (ISO 9946:1998)

This European Standard was approved by CEN on 1 March 1999.

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.

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

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

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EN ISO 9946:1999

## Foreword

The text of the International Standard ISO 9946:1999 has been prepared by Technical Committee ISO/TC 184 "Industrial automation systems and integration" in collaboration with Technical Committee CEN/TC 310 "Advanced Manufacturing Technologies", the secretariat of which is held by BSI.

This European Standard supersedes EN 29946:1992.

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 1999, and conflicting national standards shall be withdrawn at the latest by October 1999.

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 9946:1999 was approved by CEN as a European Standard without any modification.

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

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**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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 8373	1994	Manipulating industrial robots - Vocabulary	EN ISO 8373	1996
ISO 9283	1998	Manipulating industrial robots - Performance criteria and related test methods	EN ISO 9283	1998
ISO 9409-1	1996	Manipulating industrial robots - Mechanical interfaces - Part 1: Plates (form A)	EN ISO 9409-1	1996
ISO 9787	1990	Manipulating industrial robots - Coordinate systems and motions	EN 29787	1992

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# INTERNATIONAL STANDARD

**ISO**  
**9946**

Second edition  
1999-04-01

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## **Manipulating industrial robots — Presentation of characteristics**

*Robots manipulateurs industriels — Présentation des caractéristiques*

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Reference number  
ISO 9946:1999(E)

## ISO 9946:1999(E)

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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 9946 was prepared by Technical Committee ISO/TC 184, *Industrial automation systems and integration*, Subcommittee SC 2, *Robots for manufacturing environment*.

This second edition cancels and replaces the first edition (ISO 9946:1991) of which it constitutes a technical revision.

Annexes A and B of this International Standard are for information only.

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## Introduction

ISO 9946 is part of a series of International Standards dealing with manipulating industrial robots. Other International Standards cover such topics as safety, performance criteria and related testing methods, coordinate systems, terminology, and mechanical interfaces. It is noted that these standards are interrelated and also related to other International Standards.

The number of manipulating industrial robots used in a manufacturing environment is constantly increasing and this has underlined the need for a standard format for the specification and presentation of robot characteristics.

The objective of ISO 9946 is to assist users and manufacturers in the understanding and comparison of various types of robots.

ISO 11593:1996 contains a vocabulary and a format for the presentation of automatic end effector exchange systems characteristics.

Annex A of this International Standard provides a recommended format for the presentation of robot specification.

Annex B provides a description of the symbols of performance criteria.

NOTE For the purposes of this International Standard, the term "robot" means "manipulating industrial robot".

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