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# Manipulating industrial robots — Mechanical interfaces —

## Part 1: Plates

*Robots manipulateurs industriels — Interfaces mécaniques —  
Partie 1: Interfaces à plateau*



Reference number  
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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

ISO 9409-1 was prepared by Technical Committee ISO/TC 184, *Industrial automation systems and integration*, Subcommittee SC 2, *Robots for industrial environments*.

This third edition cancels and replaces the second edition (ISO 9409-1:1996) and the Technical Corrigendum ISO 9409-1:1996/Cor.1:1998, of which it constitutes a technical revision. Clause 5 and Figure 1 have been revised, Figures 2 and 3 have been added, and Table 1 has been revised.

ISO 9409 consists of the following parts, under the general title *Manipulating industrial robots — Mechanical interfaces*:

- *Part 1: Plates*
- *Part 2: Shafts*

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## Introduction

This part of ISO 9409 is part of a series of International Standards dealing with manipulating industrial robots. Other International Standards cover such topics as safety, general characteristics, coordinate systems, performance criteria and related test methods, terminology, and robot programming. It is noted that these standards are interrelated and also related to other International Standards.

Manipulating industrial robots are steadily growing in importance in industrial automation. Depending on the type of application, they may require removable end effectors such as grippers or tools which are attached to the mechanical interface.