TECHNICAL REPORT

ISO/TR 10314-2

First edition 1991-06-01

Industrial automation — Shop floor production —

Part 2:

Application of the reference model for standardization and methodology

Automation industrielle - Production en atelier -

Partie 2: Application du modèle de référence pour la normalisation et la méthodologie



ISO/TR 10314-2:1991 (E)

Contents

0	Introduction			iv
1	Scope			1
2	Methodology for identification of areas of standards			2
	2.1 An overview of the reference model			2
	2.2	Procedures		6
	2.3	3 Classification of areas for standards		7
3	Guide to using the procedures: structured questions			9
	3.1 Structured questions			9
	3.2	Procedure A1:	Subject-Action Interrelationships	10
	3.3	Procedure A2:	Subject-Subject Interrelationships	12
	3.4	Procedure A3:	Action-Action Interrelationships	14
	3.5	Procedure B1:	Horizontal (Contextual) Interrelationships	16
	3.6	Procedure B2:	Vertical Interrelationships	17
4	Identification of areas for standardization			18
	4.1	Procedure A1		18
	4.2	Procedure A2		20
	4.3	Procedure A3		22
	4.4	Procedure B1		24
	4.5	Procedure B2		25
5	Rec	ommendations		25
An	nexes	3		
A	Mapping of existing standards activities onto the model			26
В	Illustrative areas of standards for cells of the matrices			34

c. ISO 1991

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

ISO/TR 10314-2: 1991 (E)

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.

The main task of ISO technical committees is to prepare International Standards. In exceptional circumstances a technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art"), for example.

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed Into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/TR 10314-2, which is a Technical Report of type 3, was prepared by Technical Committee ISO/TC 184, *Industrial automation systems and integration*.

This document is being published in the form of a Technical Report because it is not possible, in view of the current state of the art of modelling for manufacturing, to draw up an International Standard which would be complete and precise, and which would not be too restrictive in this rapidly changing field. This Technical Report is intended as a guideline and will be reviewed and augmented periodically,

ISO/TR 10314 consists of the following parts under the general title *Industrial automation—Shop floor production:*

- Part 1: Reference model for standardization and a methodology for identification of requirements
- Part 2: Application of the reference model for standardization and methodology