

This is a preview of "ISO 10721-2:1999". Click [here](#) to purchase the full version from the ANSI store.

First edition
1999-05-01

Steel structures —
Part 2:
Fabrication and erection

Structures en acier —
Part 2: Fabrication et montage



Reference number
ISO 10721-2:1999(E)

Contents

1 Scope	1
2 Normative references	1
3 Materials	2
4 Fabrication workmanship	3
4.1 Material identification	3
4.2 Bending and pressing	3
4.3 Straightening and flattening	3
4.4 Forging.....	3
4.5 Preparation of edges, ends and surfaces	3
4.6 Holes for bolts and pins.....	4
4.7 Bolts, nuts and washers	5
4.8 Welding.....	8
5 Fabrication tolerances.....	13
5.1 General.....	13
5.2 Cross-section of rolled sections.....	14
5.3 Cross-section of members fabricated from plates (or built up from sections).....	14
5.4 Length.....	17
5.5 Straightness in both axes	17
5.6 Camber.....	17
6 Erection.....	18
6.1 Accuracy of construction	18
6.2 Marking for erection	18
6.3 Delivery, storage and handling	18

© ISO 1999

All rights reserved. Unless otherwise specified, 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
Internet iso@iso.ch

Printed in Switzerland

This is a preview of "ISO 10721-2:1999". [Click here to purchase the full version from the ANSI store.](#)

6.4 Erection of structural steelwork	18
6.5 Alignment	18
6.6 Protective treatment — Site application	18
7 Supports and foundations	18
7.1 Foundation anchor bolts	18
7.2 Shims	19
7.3 Bedding and grouting	19
8 Erection tolerances	19
8.1 General	19
8.2 Connection to concrete foundations	20
8.3 Column bases	20
8.4 Plumbing and alignment of columns	20
8.5 Alignment of beams	22
8.6 Fit of compression joints	22
9 Corrosion protection of steelwork	22
9.1 General	22
9.2 Surface preparation	22
9.3 Protective treatment	26
10 Control in fabrication	26
10.1 Certification	26
10.2 Control of works	27
11 Control and inspection during erection	28
11.1 General	28
11.2 Inspection	28
11.3 Temporary works and supports	28
Annex A (informative) Guidance for control of distortion and shrinkage	29
Annex B (informative) Guidance for repair of welds	30
Annex C (informative) Guidance for the qualification of personnel	31
Annex D (informative) Testing and inspection of welds	32
Bibliography	44

This is a preview of "ISO 10721-2:1999". [Click here to purchase the full version from the ANSI store.](#)

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 3.

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 10721-2 was prepared by Technical Committee ISO/TC 167, *Steel and aluminium structures*, Subcommittee SC 2, *Steel: Fabrication and erection*.

ISO 10721 consists of the following parts, under the general title *Steel structures*:

- *Part 1: Materials and design*
- *Part 2: Fabrication and erection*

Annexes A to D are for information only.

This is a preview of "ISO 10721-2:1999". [Click here to purchase the full version from the ANSI store.](#)

Introduction

This part of ISO 10721 establishes a common basis for drafting national standards for the fabrication and erection of steel structures, in order to ensure an adequate and consistent treatment of safety and serviceability compatible with ISO 10721-1. The specific and numerate requirements for the achievement of structures which are optimal with respect to the state of the economy, development and general values of a nation are given in the appropriate national standard.

NOTE Those concerned with a construction project may need to take into account the safety and health of the construction workers in accordance with national laws, regulations and practice. Thus, fabricators, clients, designers, constructors, employers, self-employed persons and employees may be concerned with this matter.