

Welding and allied processes — Recommendations for joint preparation —

**Part 1: Manual metal-arc welding, gas-
shielded metal-arc welding, gas
welding, TIG welding and beam welding
of steels**

The European Standard EN ISO 9692-1:2003 has the status of a
British Standard

ICS 21.160.40

Confirmed August 2008

National foreword

This British Standard is the official English language version of EN ISO 9692-1:2003. It is identical with ISO 9692-1:2003. It supersedes BS EN 29692:1994 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/1, Definitions and symbols for welding, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the EN ISO title page, the EN ISO foreword page, the ISO title page, pages ii to v, a blank page, pages 1 to 15, the Annex ZA page, an inside back cover and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments
15062 Corrigendum No.1	31 March 2004	Corrected EN ISO Foreword page and incorporation of Annex ZA.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 22 December 2003

© BSI 31 March 2004

ISBN 0 580 43156 8

English version

Welding and allied processes - Recommendations for joint preparation - Part 1: Manual metal-arc welding, gas-shielded metal-arc welding, gas welding, TIG welding and beam welding of steels (ISO 9692-1:2003)

Soudage et techniques connexes - Recommandations pour la préparation de joints - Partie 1: Soudage manuel à l'arc avec électrode enrobée, soudage à l'arc avec électrode fusible sous protection gazeuse, soudage aux gaz, soudage TIG et soudage par faisceau des aciers (ISO 9692-1:2003)

Schweißen und verwandte Prozesse - Empfehlungen zur Schweißnahtvorbereitung - Teil 1: Lichtbogenhandschweißen, Schutzgasschweißen, Gasschweißen, WIG-Schweißen und Strahlschweißen von Stählen (ISO 9692-1:2003)

This European Standard was approved by CEN on 8 December 2003.

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 Management Centre 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 Management Centre 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

CORRECTED 2004-03-03

Foreword

This document (EN ISO 9692-1:2003) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DS.

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 June 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

This document supersedes EN ISO 29692:1994.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 9692-1:2003 has been approved by CEN as EN ISO 9692-1:2003 without any modifications.

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

INTERNATIONAL STANDARD

ISO
9692-1

First edition
2003-12-15

Welding and allied processes — Recommendations for joint preparation —

Part 1:

Manual metal-arc welding, gas-shielded metal-arc welding, gas welding, TIG welding and beam welding of steels

*Soudage et techniques connexes — Recommandations pour la
préparation de joints —*

*Partie 1: Soudage manuel à l'arc avec électrode enrobée, soudage à
l'arc avec électrode fusible sous protection gazeuse, soudage aux gaz,
soudage TIG et soudage par faisceau des aciers*



Contents		Page
Foreword.....		iv
Introduction		v
1	Scope.....	1
2	Normative references	1
3	Materials.....	1
4	Welding processes	2
5	Finish.....	2
6	Type of joint preparation	2

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 9692-1 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 7, *Representation and terms*.

This first edition of ISO 9692-1 cancels and replaces ISO 9692:1992 which has been technically revised.

ISO 9692 consists of the following parts, under the general title *Welding and allied processes — Recommendations for joint preparation*:

- *Part 1: Manual metal-arc welding, gas-shielded metal-arc welding, gas welding, TIG welding and beam welding of steels*
- *Part 2: Submerged arc welding of steels*
- *Part 3: Metal inert gas welding and tungsten inert gas welding of aluminium and its alloys*
- *Part 4: Clad steels*

Introduction

This part of ISO 9692 defines the parameters characterizing the joint preparation and the collection of frequently recurring values and shapes.

The recommendations given in this part of ISO 9692 have been compiled on the basis of experience and contain dimensions for types of joint preparation that are generally found to lead to suitable welding conditions. However, the extended field of application makes it necessary to give a range of dimensions. The dimension ranges specified represent design limits and are not tolerances for manufacturing purposes. Manufacturing limits depend, for instance, on welding process, parent metal, welding position, quality level, etc. Because of the common character of this part of ISO 9692, the examples given cannot be regarded as the only solution for the selection of a joint type.

Specific fields of application and manufacturing requirements (e.g. pipeline construction) may be covered by selected ranges specified in other standards adapted from this basic part of ISO 9692.

Request for an official interpretation of technical aspects of this part of ISO 9692 should be directed to the relevant secretariat of ISO/TC 44/SC 7 via the user's national standardization body; a listing of these bodies can be found at www.iso.org.