

This is a preview of "ISO 6947:2011". [Click here to purchase the full version from the ANSI store.](#)

Third edition  
2011-05-15

---

---

## Welding and allied processes — Welding positions

*Soudage et techniques connexes — Positions de soudage*



Reference number  
ISO 6947:2011(E)

© ISO 2011

This is a preview of "ISO 6947:2011". [Click here to purchase the full version from the ANSI store.](#)



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2011

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 either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO 6947:2011". [Click here to purchase the full version from the ANSI store.](#)

## Contents

Page

Foreword .....	iv
Introduction.....	v
1 Scope .....	1
2 Terms and definitions .....	1
3 Welding positions.....	1
3.1 Main welding positions .....	1
3.2 Welding positions for production .....	5
3.3 Welding positions for testing .....	5
4 Designation .....	5
Annex A (informative) Limits of the slope of a weld axis and the rotation of the weld face about the weld axis for welding positions in production welds.....	7
Annex B (informative) Comparison of international, European and US designations .....	13
Bibliography.....	17

## 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 6947 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 7, *Representation and terms*.

This third edition cancels and replaces the second edition (ISO 6947:1990), which has been technically revised.

Requests for official interpretations of any aspect of this International Standard should be directed to the Secretariat of ISO/TC 44/SC 7 via your national standards body. A complete listing of these bodies can be found at [www.iso.org](http://www.iso.org).

This is a preview of "ISO 6947:2011". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

This International Standard provides positions for standard discrete test piece orientation PA, PB, H-L045, etc. that have been specified in this International Standard since the first edition (ISO 6947:1980).

In this revision, positions are defined for production welding. These positions are flat, horizontal, vertical, and overhead. Unlike testing positions, these positions are contiguous.

The direction of welding is an essential parameter for determining the welding position, e.g. up or down.

The welding position is not dependent on the geometrical arrangement of the joint, e.g. butt or fillet joint, or that of the semi-finished product. Welds of all types and in all directions are covered.

The main positions have been given symbols which can easily be used for designation purposes; these symbols were chosen independently of possible meaningful abbreviations, i.e. they are not derived from any particular language.

The relationship between testing positions and production welding positions is specified elsewhere, e.g. in ISO 9606<sup>[1]</sup> or ISO 15614<sup>[2]</sup>.