

This is a preview of "ISO 11933-2:1997". [Click here to purchase the full version from the ANSI store.](#)

First edition  
1997-08-01

---

---

## Components for containment enclosures —

### Part 2:

### Gloves, welded bags, gaiters for remote-handling tongs and for manipulators

*Composants pour enceintes de confinement —*

*Partie 2: Gants, sacs à souder, manches de protection pour pinces à distance et télémanipulateurs*

This material is reproduced from ISO documents under International Organization for Standardization (ISO) Copyright License number IHS/ICC/1996. Not for resale. No part of these ISO documents may be reproduced in any form, electronic retrieval system or otherwise, except as allowed in the copyright law of the country of use, or with the prior written consent of ISO (Case postale 56, 1211 Geneva 20, Switzerland, Fax +41 22 734 10 79), IHS or the ISO Licensor's members.



Reference number  
ISO 11933-2:1997(E)

This is a preview of "ISO 11933-2:1997". Click here to purchase the full version from the ANSI store.

<b>Contents</b>	<b>Page</b>
<b>Introduction</b>	
1 Scope .....	1
2 Normative references .....	1
3 Definitions .....	2
4 Designation.....	3
5 Gloves .....	6
6 Welded bags.....	13
7 Remote-handling tong gaiters for support rings .....	20
8 Gaiters for manipulators .....	30
<b>Annexes</b>	
A Description of different glove- or bag-changing methods.....	46
B Criteria for the choice of material of manufacture.....	54

© ISO 1997

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 central@iso.ch

X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

This is a preview of "ISO 11933-2:1997". [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.

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 11933-2 was prepared by Technical Committee ISO/TC 85, *Nuclear energy*, Subcommittee SC 2, *Radiation protection*.

ISO 11933 consists of the following parts, under the general title *Components for containment enclosures*

- *Part 1 : Glove/bag ports, bungs for glove/bag ports, enclosure rings and interchangeable units*
- *Part 2: Gloves, welded bags, gaiters for remote-handling tongs and manipulators*
- *Part 3: Transfer systems such as plain doors, double doors for leaktight transfer, airlock chambers, leaktight connections for waste drums*

Annexes A and B of this part of ISO 11933 are for information only.

## Introduction

A great number of leaktight mechanical components for containment enclosures are presently offered on the market. These components:

- may have different geometric dimensions;
- may require holes of different diameters for attachment on the containment enclosure wall;
- may be attached to this wall by different methods;
- may use different mounting systems for their associated leaktight elements, such as gloves, welded bags, bungs, transfer systems, etc.

These components are generally not mutually compatible, but nevertheless often have the same performance level; therefore it was not possible to select only one system as the International Standard.

As a consequence, the aim of this part of ISO 11933 is to present general principles of design and use, and to fully describe the different existing systems in order to:

- avoid new parallel systems based on identical principles and differing only in details or geometric dimensions;
- make possible interchangeability between existing equipment;
- demonstrate consistency among the various parts of the same system such as the basic elements (described in ISO 11933-1), the elements associated with leaktightness (described in ISO 11933-2), or the transfer systems (described in ISO 11933-3).