# INTERNATIONAL STANDARD

ISO 14175

> First edition 1997-04-01

## Welding consumables — Shielding gases for arc welding and cutting

Produits consommables pour le soudage — Gaz de protection pour le soudage et le coupage à l'arc



Reference number ISO 14175:1997(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.

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 14175 was prepared by Technical Committee ISO/TC 44, Welding and allied processes, Sub-Committee SC 3, Welding consumables.

© 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

### Welding consumables — Shielding gases for arc welding and cutting

### 1 Scope

This International Standard is applicable to gas shielded arc welding and cutting processes with gases and gas mixtures defined within. Applications include, but are not limited to:

- tungsten inert gas (TIG) welding;
- metal active gas (MAG) welding;
- metal inert gas (MIG) welding;
- plasma arc welding;
- plasma arc cutting;
- back shielding.

The purpose of this International Standard is to classify shielding gases according to their chemical properties as a base for the approval of shielding gas and filler wire combinations.

Gas purities and mixing tolerances are also specified.

### 2 Properties of gases

The physical and chemical properties are listed in table 1.