First edition 2003-11-01

Plastics pipes and fittings — Equipment for fusion jointing polyethylene systems —

Part 4: Traceability coding

Tubes et raccords en matières plastiques — Appareillage pour l'assemblage par soudage des systèmes en polyéthylène —

Partie 4: Codage de la traçabilité



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2003

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
Web www.iso.org

Published in Switzerland

Contents		Page
Fore	reword	iv
Intro	oduction	v
1	Scope	1
2	Normative references	1
3		
4	Coding-system design	4
5	Encoding of data	6
6	Data carriers	9
Annex A (informative) Content of traceability system		11
Annex B (normative) Data carrier		12
Ribliography		24

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 12176-4 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 4, *Plastics pipes and fittings for the supply of gaseous fuels*.

ISO 12176 consists of the following parts, under the general title *Plastics pipes and fittings* — *Equipment for fusion jointing polyethylene systems*:

- Part 1: Butt fusion
- Part 2: Electrofusion
- Part 3: Operator's badge
- Part 4: Traceability coding

Introduction

Traceability in the construction and maintenance of a pipeline system is determined by the traceability of all relevant information on the system.

A complete traceability system can be built up from the following elements: fusion-jointing equipment data, fusion-jointing equipment operator data, site data (geographical location), data on fittings and pipes and fusion-jointing parameters, installation dates and assembly procedures.

The aim of this document is solely to define a system for encoding the characteristics of the pipes, fittings, fusion-jointing equipment, fusion-jointing equipment operators and fusion-jointing protocols. It is widely acknowledged that similar encoding systems can be used to monitor other aspects and applications of pipelines, relating to compatibility, for instance. Such systems may be subject to patent rights.

It is up to the user to create the link between the various elements in order to provide a complete traceability system. Care is necessary when determining which data are to be downloaded into the traceability system database and the minimum information to be stored in the database for later retrieval: the choice of data and the amount of data will strongly influence the performance of the database when it is used later.