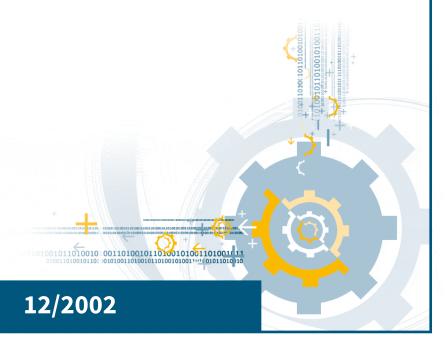


Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

ILNAS-EN 10312:2002



National Foreword

This European Standard EN 10312:2002 was adopted as Luxembourgish Standard ILNAS-EN 10312:2002.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

EUROPEAN STANDARD ILNAS-EN 10312:2002 **EN 10312**NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2002

ICS 23.040.10

English version

Welded stainless steel tubes for the conveyance of aqueous liquids including water for human consumption - Technical delivery conditions

Tubes soudés en acier inoxydable pour le transport des liquides aqueux, y compris l'eau destinée à la consommation humaine - Conditions techniques de livraison

Geschweißte Rohre aus nichtrostenden Stählen für den Transport wässriger Flüssigkeiten einschließlich Trinkwasser - Technische Lieferbedingungen

This European Standard was approved by CEN on 16 October 2002.

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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, 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

Contents

| | | page | | | |
|--------------|---|------|--|--|--|
| Foreword | | | | | |
| Introdu | Introduction5 | | | | |
| 1 | Scope | 6 | | | |
| 2 | Normative references | 6 | | | |
| 3 | Terms and definitions | 7 | | | |
| 4 | Symbols | | | | |
| - | Classification and designation | | | | |
| 5 5.1 | Classification | | | | |
| 5.2 | Designation | | | | |
| 6 | Information to be supplied by the purchaser | 7 | | | |
| 6.1 | Mandatory information | | | | |
| 6.2 6.3 | Options Example of an order | | | | |
| 7 | Manufacturing process | | | | |
| , 7.1 | Grades of steel for feedstock material | | | | |
| 7.2 | Tube manufacture and delivery conditions | - | | | |
| 8 | Requirements | 9 | | | |
| 8.1 | General | | | | |
| 8.2 8.3 | Chemical analysis Mechanical properties | | | | |
| 8.4 | Corrosion resistance | | | | |
| 8.5 | Appearance and soundness | | | | |
| 8.6 8.7 | StraightnessPreparation of ends | | | | |
| 8.8 | Dimensions, masses and tolerances | | | | |
| 8.9 | Reaction to fire | 13 | | | |
| 9 | Inspection | | | | |
| 9.1 9.2 | Type of inspection | | | | |
| 9.2 | Inspection documents Content of inspection document | | | | |
| 9.4 | Summary of inspection and testing | | | | |
| 10 | Sampling | 15 | | | |
| 10.1 | Frequency of tests | | | | |
| 10.2 | Preparation of samples and test pieces | | | | |
| 11 | Test methods | | | | |
| 11.1 11.2 | Tensile test Drift expanding test | | | | |
| 11.3 | Flattening test | | | | |
| 11.4 | Leak-tightness test | 16 | | | |
| 11.5 11.6 | Non-destructive test of weld seam Visual examination | | | | |
| 11.7 | Dimensional inspection | | | | |
| 11.8 | Intergranular corrosion test | | | | |
| 11 O | Material identification | 17 | | | |

| 12 | Retests, sorting and reprocessing | .17 |
|---------|--|------|
| 13 | Marking | .17 |
| 14 | Packaging | .17 |
| Annex | A (informative) Preferred steel grades | .18 |
| Annex | B (informative) Recommended use of tubes | .19 |
| Annex | ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive | . 20 |
| Bibliog | ıraphy | .27 |

Foreword

This document EN 10312:2002 has been prepared by Technical Committee ECISS /TC 29 "Steel tubes and fittings for steel tubes", the secretariat of which is held by UNI.

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 2003, and conflicting national standards shall be withdrawn at the latest by September 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of EU directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

Another European Standard covering tubes for the conveyance of aqueous liquids including water for human consumption is:

EN 10224, Non-alloy steel tubes and fittings for the conveyance of aqueous liquids including water for human consumption — Technical delivery conditions.

Annexes A and B are informative.

This document includes a Bibliography.

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

Introduction

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this standard:

- a) this standard provides no information as to whether the product may be used without restriction in any
 of the member states of the EU or EFTA;
- b) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

The European Committee for Standardisation (CEN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning steel grade 1.4362 given in Table A1.

CEN takes no position concerning the evidence, validity and scope of this patent right.

The holder of this permit has assured CEN that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with CEN. Information may be obtained from

AB Sandvik Steel

20-SLS, FoU Centrum

SE-811 81 SANDVIKEN

Sweden

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those indicated above. CEN is not responsible for identifying any such patent rights.