

Sveiste stålrør for trykkpåkjent utstyr
Tekniske leveringsbetingelser
Del 4: Elektrisk sveiste ulegerte stålrør med
spesifiserte egenskaper ved lave
temperaturer

Welded steel tubes for pressure purposes
Technical delivery conditions
Part 4: Electric welded non-alloy steel tubes with specified low temperature
properties

Nasjonalt forord

Den engelskspråklige versjonen av europeisk standard EN 10217-4:2002 er fastsatt som Norsk Standard NS-EN 10217-4:2002.

National foreword

The English language version of European Standard EN 10217-4:2002 has been adopted as Norwegian Standard NS-EN 10217-4:2002.

ICS 23.040.10; 77.140.75

English version

Welded steel tubes for pressure purposes - Technical delivery conditions - Part 4: Electric welded non-alloy steel tubes with specified low temperature properties

Tubes soudés en acier pour service sous pression -
Conditions techniques de livraison - Partie 4: Tubes soudés
électriquement en acier non allié avec caractéristiques
spécifiées à basse température

Geschweißte Stahlrohre für Druckbeanspruchungen -
Technische Lieferbedingungen - Teil 4: Elektrisch
geschweißte Rohre aus unlegierten Stählen mit
festgelegten Eigenschaften bei tiefen Temperaturen

This European Standard was approved by CEN on 25 April 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

Foreword.....	3
1 SCOPE	4
2 NORMATIVE REFERENCES.....	4
3 Definitions	5
4 Symbols	5
5 CLASSIFICATION AND DESIGNATION.....	6
5.1 Classification.....	6
5.2 Designation	6
6 Information to be supplied by the purchaser	6
6.1 Mandatory information.....	6
6.2 Options	6
6.3 Example of an order	7
7 Manufacturing process	7
7.1 Steelmaking process.....	7
7.2 Deoxidation process	7
7.3 Tube manufacture and delivery conditions	7
8 REQUIREMENTS.....	8
8.1 General.....	8
8.2 Chemical composition	9
8.3 Mechanical properties.....	9
8.4 Appearance and internal soundness.....	12
8.5 Straightness	13
8.6 Preparation of ends	13
8.7 Dimensions, masses and tolerances.....	13
9 Inspection	18
9.1 Types of inspection	18
9.2 Inspection documents.....	18
9.3 Summary of inspection and testing.....	18
10 Sampling.....	20
10.1 Frequency of tests.....	20
10.2 Preparation of samples and test pieces.....	20
11 Test methods	22
11.1 Chemical analysis.....	22
11.2 Tensile test on the base material	22
11.3 Transverse tensile test on the weld.....	22
11.4 Flattening test	22
11.5 Ring tensile test	22
11.6 Drift expanding test	23
11.7 Ring expanding test	23
11.8 Impact test.....	23
11.9 Leak tightness test	24
11.10 Dimensional inspection	24
11.11 Visual examination	25
11.12 Non-Destructive Testing	25
11.13 Retests, sorting and reprocessing	25
12 Marking	25
12.1 Marking to be applied.....	25
12.2 Additional marking	26
13 protection	26
Annex ZA (informative)	27
Bibliography	28

Foreword

This document (EN 10217-4:2002) has been prepared by Technical Committee EC/ISS/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 November 2002, and conflicting national standards shall be withdrawn at the latest by November 2002.

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.

Other parts of EN 10217 are:

- Part 1: Non-alloy steel tubes with specified room temperature properties.
- Part 2: Electric welded non-alloy and alloy steel tubes with specified elevated temperature properties.
- Part 3: Alloy fine grain steel tubes.
- Part 5: Submerged arc welded non-alloy and alloy steel tubes with specified elevated temperature properties.
- Part 6: Submerged arc welded non-alloy steel tubes with specified low temperature properties.
- Part 7: Stainless steel tubes.

Another European Standard series covering tubes for pressure purposes is:

- EN 10216: Seamless steel tubes for pressure purposes.

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.