



National Standards Authority of Ireland

STANDARD

I.S. EN 10296-1:2003

ICS 77.140.75

**WELDED CIRCULAR STEEL TUBES FOR
MECHANICAL AND GENERAL ENGINEERING
PURPOSES - TECHNICAL DELIVERY
CONDITIONS -
PART 1: NON-ALLOY AND ALLOY STEEL
TUBES**

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*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland
and comes into effect on:
September 12, 2003*

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EUROPEAN STANDARD

EN 10296-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2003

ICS 77.140.75

English version

**Welded circular steel tubes for mechanical and general
engineering purposes - Technical delivery conditions - Part 1:
Non-alloy and alloy steel tubes**

Tubes ronds soudés en acier pour utilisation en mécanique
générale et en construction mécanique - Conditions
techniques de livraison - Partie 1: Tubes en acier non allié
et allié

Geschweißte kreisförmige Stahlrohre für den
Maschinenbau und allgemeine technische Anwendungen -
Technische Lieferbedingungen - Teil 1: Rohre aus
unlegierten und legierten Stählen

This European Standard was approved by CEN on 20 February 2003.

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



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Foreword

This document (EN 10296-1:2003) 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 December 2003, and conflicting national standards shall be withdrawn at the latest by December 2003.

Another part of EN 10296 in course of preparation is :

— Part 2: Stainless steel tubes

Another European Standard series covering seamless steel tubes for mechanical and general engineering purposes is currently being prepared.

— EN 10297: Seamless circular steel tubes for mechanical and general engineering purposes — Technical delivery conditions.

Other European Standard series being prepared in this area are prEN 10294 for hollow bars for machining and prEN 10305 for steel tubes for precision applications.

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

EN 10296-1:2003 (E)

1 Scope

This Part of EN 10296 specifies the technical delivery conditions for electric welded, laser beam welded and submerged arc welded tubes of circular cross section made of non-alloy and alloy steels for mechanical and general engineering purposes.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 910, *Destructive tests on welds in metallic materials - Bend tests.*

EN 10002-1, *Metallic materials - Tensile testing - Part 1: Method of test at ambient temperature.*

EN 10020, *Definition and classification of grades of steel.*

EN 10021, *General technical delivery requirements for steel and iron products.*

EN 10027-1, *Designation systems for steel - Part 1: Steel names, principal symbols.*

EN 10027-2, *Designation systems for steel - Part 2: Numerical system.*

EN 10045-1, *Metallic materials - Charpy Impact test - Part 1: Test method.*

EN 10052, *Vocabulary of heat treatment terms for ferrous products.*

prEN 10168¹⁾, *Steel products - Inspection documents – List of information and description.*

EN 10204, *Metallic products - Types of inspection documents.*

EN 10220, *Seamless and welded steel tubes – Dimensions and masses per unit length.*

EN 10232, *Metallic materials - Tube (in full section) - Bend test.*

EN 10233, *Metallic materials - Tube - Flattening test.*

EN 10234, *Metallic materials - Tube - Drift expanding test.*

EN 10246-1, *Non-destructive testing of steel tubes - Part 1: Automatic electromagnetic testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for verification of hydraulic leak-tightness.*

EN 10246-3, *Non-destructive testing of steel tubes - Part 3: Automatic eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections.*

EN 10246-5, *Non-destructive testing of steel tubes - Part 5: Automatic full peripheral magnetic transducer/flux leakage testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for the detection of longitudinal imperfections.*

EN 10246-7, *Non-destructive testing of steel tubes - Part 7: Automatic full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal imperfections.*

1) In preparation; until this document is published as a European Standard, a corresponding national standard should be agreed at the time of enquiry and order.

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