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NSAI Standards

Irish Standard
I.S. EN 10305-1:2016

Steel tubes for precision applications - Technical delivery conditions - Part 1: Seamless cold drawn tubes

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National Foreword

I.S. EN 10305-1:2016 is the adopted Irish version of the European Document EN 10305-1:2016, Steel tubes for precision applications - Technical delivery conditions - Part 1: Seamless cold drawn tubes

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 10305-1

March 2016

ICS 77.140.75

Supersedes EN 10305-1:2010

English Version

Steel tubes for precision applications - Technical delivery conditions - Part 1: Seamless cold drawn tubes

Tubes de précision en acier - Conditions techniques de livraison - Partie 1: Tubes sans soudure étirés à froid

Präzisionsstahlrohre - Technische Lieferbedingungen - Teil 1: Nahtlose kaltgezogene Rohre

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European foreword

This document (EN 10305-1:2016) has been prepared by Technical Committee ECISS/TC 110 "Steel tubes and iron and steel fittings", 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of an identical text or by endorsement, at the latest by September 2016 and conflicting national standards shall be withdrawn at the latest by September 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 10305-1:2010.

In comparison with the previous edition, the following technical changes have been made:

a) References were adapted;

b) The options were renumbered in such a way that now throughout all parts the number of options are the same;

c) Editorial updates.

EN 10305, *Steel tubes for precision applications — Technical delivery conditions*, consists of the following parts:

— *Part 1: Seamless cold drawn tubes*

— *Part 2: Welded cold drawn tubes*

— *Part 3: Welded cold sized tubes*

— *Part 4: Seamless cold drawn tubes for hydraulic and pneumatic power systems*

— *Part 5: Welded cold sized square and rectangular tubes*

— *Part 6: Welded cold drawn tubes for hydraulic and pneumatic power systems*

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1 Scope

This European Standard specifies the technical delivery conditions for seamless cold drawn steel tubes of circular cross section for precision applications with specified outside diameter $D \leq 380$ mm.

This document may also be applied to other types of cross sections.

Tubes according to this document are characterized by having precisely defined tolerances on dimensions and a specified maximum surface roughness. Typical fields of application are in the automotive, furniture and general engineering industries.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10020:2000, *Definition and classification of grades of steel*

EN 10021:2006, *General technical delivery conditions for steel products*

EN 10027-1, *Designation systems for steels - Part 1: Steel names*

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

EN 10052:1993, *Vocabulary of heat treatment terms for ferrous products*

EN 10168, *Steel products - Inspection documents - List of information and description*

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

EN 10266:2003, *Steel tubes, fittings and structural hollow sections - Symbols and definitions of terms for use in product standards*

EN ISO 377, *Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377)*

EN ISO 2566-1, *Steel - Conversion of elongation values - Part 1: Carbon and low alloy steels (ISO 2566-1)*

EN ISO 4287, *Geometrical product specifications (GPS) - Surface texture: Profile method - Terms, definitions and surface texture parameters (ISO 4287)*

EN ISO 6892-1, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1)*

EN ISO 8492, *Metallic materials - Tube - Flattening test (ISO 8492)*

EN ISO 8493, *Metallic materials - Tube - Drift-expanding test (ISO 8493)*

EN ISO 10893-1, *Non-destructive testing of steel tubes - Part 1: Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leaktightness (ISO 10893-1)*

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