SLOVENSKI STANDARD
kSIST FprEN 10305-1:2015

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Jeklene cevi za precizno uporabo - Tehnični dobavni pogoji - 1. del: Nevarjene hladno vlečene cevi

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

Präzisionsstahlrohre - Technische Lieferbedingungen - Teil 1: Nahtlose kaltgezogene Rohre

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

Ta slovenski standard je istoveten z: **FprEN 10305-1 rev**

ICS:

77.140.75	Jeklene cevi in cevni profili za posebne namene	Steel pipes and tubes for specific use

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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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (FprEN 10305-1:2015) 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 document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 10305-1:2010.

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*

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.

NOTE 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)*

EN ISO 10893-2, *Non-destructive testing of steel tubes — Part 2: Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections (ISO 10893-2)*

EN ISO 10893-3, *Non-destructive testing of steel tubes — Part 3: Automated full peripheral flux leakage testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for the detection of longitudinal and/or transverse imperfections (ISO 10893-3)*

EN ISO 10893-10, *Non-destructive testing of steel tubes — Part 10: Automated full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal and/or transverse imperfections (ISO 10893-10)*

ISO 11484, *Steel products — Employer's qualification system for non-destructive testing (NDT) personnel*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10020:2000, EN 10021:2006, EN 10052:1993, EN 10266:2003 and the following apply.

3.1
employer
organization for which a person works on a regular basis

Note 1 to entry: The employer can be either the tube manufacturer or a third party organization providing services, such as non-destructive testing (NDT).

3.2
manufacturer
party to produce and to deliver tubes in accordance with this document

Note 1 to entry: Where tubes are delivered by an intermediary, see EN 10021:2006, Clause 6.

3.3
imperfection
discontinuity in the wall or on the pipe surfaces detectable by methods described in this document

Note 1 to entry: Imperfections with a size complying with the acceptance criteria specified in this document are considered to have no practical implication on the intended use of the product.

3.4
defect
imperfection of a size not complying with the acceptance criteria specified in this document

Note 1 to entry: Defects are considered to adversely affect or limit the intended use of the product.

3.5
mother tube
length of tube produced in the final cold drawing process

4 Symbols

For the purposes of this document, the symbols in EN 10266:2003 apply.

NOTE For tubes specified by the outside diameter and by the inside diameter, "*T*" is the specified or the calculated wall thickness in this document.