



SLOVENSKI STANDARD
kSIST FprEN 10305-5:2015

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Jeklene cevi za precizno uporabo - Tehnični dobavni pogoji - 5. del: Varjene in hladno dimenzionirane kvadratne in pravokotne cevi

Steel tubes for precision applications - Technical delivery conditions - Part 5: Welded cold sized square and rectangular tubes

Präzisionsstahlrohre - Technische Lieferbedingungen - Teil 5: Geschweißte maßumgeformte Rohre mit quadratischem und rechteckigem Querschnitt

Tubes de précision en acier - Conditions techniques de livraison - Partie 5 : Tubes soudés calibrés avec section carrée et rectangulaire

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ICS:

77.140.75	Jeklene cevi in cevni profili za posebne namene	Steel pipes and tubes for specific use
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Steel tubes for precision applications - Technical delivery conditions - Part 5: Welded cold sized square and rectangular tubes

Tubes de précision en acier - Conditions techniques de livraison - Partie 5 : Tubes soudés calibrés avec section carrée et rectangulaire

Präzisionsstahlrohre - Technische Lieferbedingungen - Teil 5: Geschweißte maßumgeformte Rohre mit quadratischem und rechteckigem Querschnitt

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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FprEN 10305-5:2015 (E)**Foreword**

This document (FprEN 10305-5:2015) 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 10305-5:2010.

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 welded cold sized steel tubes of square and rectangular cross section for precision applications.

Tubes according to this document are characterized by having precisely defined tolerances on dimension 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 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 10893-11, *Non-destructive testing of steel tubes — Part 11: Automated ultrasonic testing of the weld seam of welded steel tubes for the detection of longitudinal and/or transverse imperfections (ISO 10893-11)*

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

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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

parent coil

coil originating from the hot rolling process prior to any further operation (pickling, slitting, cold rolling or coating)

4 Symbols

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

5 Classification and designation

5.1 Classification

In accordance with the classification system in EN 10020 the steel grades given in Table 2 are non-alloy quality steels, except steel grade E700 which is an alloy quality steel.

5.2 Designation

For the tubes covered by this document the steel designation consists of the number of this document (EN 10305-5) plus either:

a) the steel name in accordance with EN 10027-1; or