

STN	Meď a zliatiny meďi Bezšvové medené rúry na elektrotechnické účely	STN EN 13600 42 8715
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Copper and copper alloys - Seamless copper tubes for electrical purposes

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/21

Obsahuje: EN 13600:2021

Oznámením tejto normy sa ruší
STN EN 13600 (42 8715) z decembra 2013

133415

EUROPEAN STANDARD

EN 13600

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2021

ICS 77.150.30

Supersedes EN 13600:2013

English Version

Copper and copper alloys - Seamless copper tubes for electrical purposes

Cuivre et alliages de cuivre - Tubes sans soudure en cuivre pour usages électriques

Kupfer und Kupferlegierungen - Nahtlose Rohre aus Kupfer für die Anwendung in der Elektrotechnik

This European Standard was approved by CEN on 5 March 2021.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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European foreword

This document (EN 13600:2021) has been prepared by Technical Committee CEN/TC 133 “Copper and copper alloys”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by October 2021, and conflicting national standards shall be withdrawn at the latest by October 2021.

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

This document supersedes EN 13600:2013.

In comparison with EN 13600:2013, the following changes were made:

- a) modification of tolerances on wall thicknesses;
- b) update of normative references.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 13600:2021 (E)**1 Scope**

This document specifies the composition, property requirements including electrical properties, and tolerances on dimensions and form for seamless drawn copper tubes for electrical purposes, delivered in straight lengths or alternatively in level wound coils with the cross-sections and size ranges below:

- for round tubes in straight lengths with outside diameters from 3 mm up to and including 450 mm and wall thicknesses from 0,3 mm up to and including 10 mm;
- for round tubes in level wound coils with outside diameters from 3 mm up to and including 30 mm and wall thicknesses from 0,3 mm up to and including 10 mm;
- for square and rectangular tubes with major outside dimension from 5 mm up to and including 150 mm and wall thicknesses from 0,5 mm up to and including 10 mm.

The sampling procedures and test methods for verification of conformity to the requirements of this document are also specified.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1976, *Copper and copper alloys — Cast unwrought copper products*

EN ISO 2626, *Copper — Hydrogen embrittlement test (ISO 2626)*

EN ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method (ISO 6506-1)*

EN ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method (ISO 6507-1)*

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

EN ISO 7438, *Metallic materials — Bend test (ISO 7438)*

EN ISO 8491, *Metallic materials — Tube (in full section) — Bend test (ISO 8491)*

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