

**Vask ja vasesulamid.
Mittedeformeeritavast vasest valutooted**

Copper and copper alloys - Cast unwrought copper products

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1976:2000 sisaldab Euroopa standardi EN 1976:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1976:2000 consists of the English text of the European standard EN 1976:1998.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: See Euroopa standard määrab kindlaks mittedeformeeritavast vasest valutoodete (rafineeritud kujul) koostise ja füüsilised omadused kolmeteistkümne vasemargi ja üheksa hõbedat sisaldava vasemargi kohta.</p>	<p>Scope:</p>
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ICS 77.150.30

Võtmesõnad: elektrilised omadused, katsed, keemiline koostis, kvaliteet, margid, mittedeformeeritavad tooted, mõõtmised, mõõtmeterolerantsid, märgistus, proovivõtmine, tähistused, tüübid, vasesulamid, vask

ICS 77.150.30

Descriptors: Copper, unwrought products.

English version

Copper and copper alloys

Cast unwrought copper products

Cuivre et alliages de cuivre – Formes
brutes de coulée en cuivre

Kupfer und Kupferlegierungen –
Gegossene Rohformen aus Kupfer

This European Standard was approved by CEN on 1998-02-28.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 133 "Copper and copper alloys" the secretariat of which is held by DIN.

Within its programme of work, Technical Committee CEN/TC 133 requested CEN/TC 133/WG 1 "Unwrought copper products" to prepare the following standard:

EN 1976 Copper and copper alloys - Cast unwrought copper products

This is one of a series of European Standards for products manufactured from refined copper grades. Other products are specified as follows:

EN 1977 Copper and copper alloys - Copper drawing stock (wire rod)

EN 1978 Copper and copper alloys - Copper cathodes

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 1998, and conflicting national standards shall be withdrawn at the latest by September 1998.

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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom

1 Scope

This European Standard specifies the composition and physical properties of cast unwrought copper products (refinery shapes) in thirteen grades of copper and nine silver-bearing copper grades. The refinery shapes included are horizontally, vertically and continuously cast wire bars, cakes, billets and ingots. Wire bars, cakes and billets are intended for fabricating into wrought products; ingots are intended for alloying in wrought and cast copper alloys.

A table indicating the refinery shapes in which each copper grade is normally available is given in annex A (informative). Annex B (informative) gives information on the relationships between electrical resistivity and conductivity of copper.

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.

EN 1655	Copper and copper alloys - Declarations of conformity
EN 10204	Metallic products - Types of inspection documents
EN ISO 2626	Copper - Hydrogen embrittlement test (ISO 2626: 1973)
IEC 468	Methods of measurement of resistivity of metallic materials
ISO 197-2	Copper and copper alloys - Terms and definitions - Part 2 : Unwrought products (refinery shapes)
ISO 4746	Oxygen-free copper - Scale adhesion test

NOTE: Informative references to documents used in the preparation of this standard, and cited at the appropriate places in the text, are listed in a bibliography, see annex C.