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English Version

Copper and copper alloys - Rod for free machining purposes

Cuivre et alliages de cuivre - Barres pour décolletage

Kupfer und Kupferlegierungen - Stangen für die spanende Bearbeitung

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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European foreword

This document (prEN 12164:2022) has been prepared by Technical Committee CEN/TC 133 “Copper and copper alloys”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12164:2016.

In comparison with EN 12164:2016, the following significant technical changes were made:

a) Introduction in 6.6 of eddy current test parameters;

b) Introduction of 6.7 Internal inclusion;

c) Shape and size of test pieces for Tensile test modified;

d) Modified the definition of diameter or width across-flats at 6.5.1;

e) Added a new Figure for straightness at 6.5.3 and modified values in Table 18;

f) Introduction in the chemical composition Tables of a footnote to explain the meaning of elements for which no upper and lower limits are defined;

g) Deleted alloys groups in Table 7;

h) CuZn4Si4MnP (CW245E) and CuZn9Si4MnP (CW246E) added in the new Table 3 and new Table 10;

i) Chemical composition of CuZn39Pb3 (CW614N), CuZn40Pb2 (CW617N), CuZn35Pb1,5AlAs (CW625N) and CuZn33Pb1,5AlAs (CW626N) modified in Table 7;

j) Added a new alloy CuZn40Pb1 (CW627N) in Table 7 and Table 14;

k) Chemical composition of CuZn33Pb1AlSiAs (CW725R) modified in Table 8;

l) CuNi12Zn38Mn5Pb2 (CW407J) added in Table 4 and Table 11;

m) Added a new alloy CuZn36Si1P (CW726R) in Table 8 and Table 15;

n) Range of width across-flats for CuZn21Si3P (CW724R) modified in Table 15;

o) Table 23 and Table 24 added;

p) Annex ZA added.

This document is one of a series of European Standards for the copper and copper alloy products rod, wire, profile and forgings. Other products are specified as follows:

— EN 12163, *Copper and copper alloys — Rod for general purposes*;

— EN 12165, *Copper and copper alloys — Wrought and unwrought forging stock*;

— EN 12166, *Copper and copper alloys — Wire for general purposes*;

— EN 12167, *Copper and copper alloys — Profiles and bars for general purposes*;

— EN 12168, *Copper and copper alloys — Hollow rod for free machining purposes*;

— EN 13601, *Copper and copper alloys — Copper rod, bar and wire for general electrical purposes*;

— EN 13602, *Copper and copper alloys — Drawn, round copper wire for the manufacture of electrical conductors*;

— EN 13605, *Copper and copper alloys — Copper profiles and profiled wire for electrical purposes*.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Introduction

The European Committee for Standardization (CEN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning the alloys CuZn4Si4MnP (CW245E), CuZn9Si4MnP (CW246E), CuZn33Pb1AlSiAs (CW725R), and CuZn36Si1P (CW726R) given in 6.1.

CEN takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has ensured the CEN that he is willing to negotiate licenses either free of charge or under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with CEN.

— For CuZn4Si4MnP (CW245E) and CuZn9Si4MnP (CW246E) information may be obtained from:

Viega Technology GmbH & Co. KG
Viega Platz 1
57439 Attendorn
GERMANY

— For CuZn33Pb1AlSiAs (CW725R) information may be obtained from:

Diehl Brass Solutions Stiftung & Co. KG
Heinrich-Diehl-Straße 9
D-90552 Röthenbach/Pegnitz
GERMANY

— For CuZn36Si1P (CW726R) information may be obtained from:

Luvata Oy
Kuparitie 5
28330 Pori
FINLAND

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Due to developing legislation, the composition of a material may be restricted to the composition specified in this European Standard with respect to individual uses (e.g. for the use in contact with drinking water in some Member States of the European Union). These individual restrictions are not part of this European Standard. Nevertheless, for materials for which traditional and major uses are affected, these restrictions are indicated. The absence of an indication, however, does not imply that the material can be used in any application without any legal restriction.