SLOVENSKI STANDARD
SIST EN 13920-3:2004

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Aluminij in aluminijeve zlitine – Odpadni aluminij – 3. del: Odpadna žica in kabli

Aluminium and aluminium alloys - Scrap - Part 3: Wire and cable scrap

Aluminium und Aluminiumlegierungen - Schrott - Teil 3: Draht- und Kabelschrott

Aluminium et alliages d'aluminium - Scrap (matieres premieres pour recyclage) - Partie 3: Scrap de câble et fils

Ta slovenski standard je istoveten z: **EN 13920-3:2003**

ICS:

13.030.50	Recikliranje	Recycling
77.120.10	Aluminij in aluminijeve zlitine	Aluminium and aluminium alloys

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Aluminium and aluminium alloys - Scrap - Part 3: Wire and cable scrap

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Aluminium und Aluminiumlegierungen - Schrott - Teil 3: Draht- und Kabelschrott

This European Standard was approved by CEN on 28 February 2003.

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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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document (EN 13920-3:2003) has been prepared by Technical Committee CEN /TC 132, "Aluminium and aluminium alloys", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

Within its programme of work, Technical Committee CEN/TC 132 has entrusted CEN/TC132/WG 20 "Scrap" to prepare the following standard.

EN 13920 comprises the following parts under the general title "*Aluminium and aluminium alloys — Scrap*" :

— *Part 1: General requirements, sampling and tests*

— *Part 2: Unalloyed aluminium scrap*

— *Part 3: Wire and cable scrap*

— *Part 4: Scrap consisting of one single wrought alloy*

— *Part 5: Scrap consisting of two or more wrought alloys of the same series*

— *Part 6: Scrap consisting of two or more wrought alloys*

— *Part 7: Scrap consisting of castings*

— *Part 8: Scrap consisting of non-ferrous materials from shredding processes destined to aluminium separation processes*

— *Part 9: Scrap from aluminium separation processes of non-ferrous shredded materials*

— *Part 10: Scrap consisting of used aluminium beverage cans*

— *Part 11: Scrap consisting of aluminium-copper radiators*

— *Part 12: Turnings consisting of one single alloy*

— *Part 13: Mixed turnings consisting of two or more alloys*

— *Part 14: Scrap from post-consumer aluminium packagings*

— *Part 15: Decoated aluminium scrap from post-consumer aluminium packagings*

— *Part 16: Scrap consisting of skimmings, drosses, spills and metallics*

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies characteristics, chemical composition and metal yield of new and old scrap recovered from wire or cable of unalloyed aluminium with a chemical composition not less than 99,5 % aluminium, or of defined aluminium alloys.

Example

New scrap from manufacturing of cables and wires.

Old scrap from used aluminium cables obtained from dismantling of electrical lines.

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 (including amendments).

EN 1715-1, *Aluminium and aluminium alloys — Drawing stock — Part 1: General requirements and technical conditions for inspection and delivery.*

prEN 12258-3:2000, *Aluminium and aluminium alloys — Terms and definitions — Part 3: Scrap.*

EN 13920-1:2003, *Aluminium and aluminium alloys — Scrap — Part 1: General requirements, sampling and tests.*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 12258-3:2000 and EN 13920-1:2003 apply.

4 Ordering information

The ordering information shall include:

— number of this European Standard (EN 13920-3);

— the scrap category (wire and cable scrap) and the indication whether it is unalloyed aluminium or a defined aluminium alloy;

— the gross mass of the consignment;

— the definition of the beginning and end of the period during which the scrap shall be delivered;

— any characteristics deviating from those specified under 5.1, e.g. diameter of wire, foreign material.

The ordering information should include:

— information about the origin of the scrap;

— any information about size and surface condition of the pieces, whenever meaningful.

5 Requirements

5.1 General

In addition to the requirements specified in EN 13920-1, the requirements given in 5.2, 5.3 and 5.4 shall be met.

If the scrap does not meet all these requirements, the supplier shall notify the deviating characteristics to the purchaser and shall obtain his agreement before shipment.

NOTE Scrap recovered by dismantling of old electric lines often does not meet all these requirements.

5.2 Characteristics

The scrap shall consist of wire with a minimum diameter of 0,8 mm for any individual wire.

The scrap shall be free from attachment devices, steel core wires, coiling spools of any material, bundling material and other components of electric lines other than aluminium cables and wires.

The scrap shall not be coated and shall be free from burned wire, oil, grease, dust, plastics and any other type of foreign material.

If not otherwise agreed, the scrap shall be supplied after having undergone a processing operation for volume reduction, e.g. baling, coiling, chopping or knife shredding.

5.3 Chemical composition

The chemical composition after melting as determined in accordance with EN 13920-1 shall conform to the requirements given in Table 1 or Table 2 or to the composition of alloys as specified in EN 1715-1.

Table 1 — Chemical composition of wire and cable scrap of unalloyed aluminium

Composition in percent (mass fraction)

Si max.	Fe max.	Cu max.	Mn max.	Mg max.	Zn max.	Ti max.	others each max.	Al[a] min.
0,25	0,40	0,05	0,05	0,05	0,07	0,05	0,03	99,5

[a] The aluminium content is the difference between 100 % and the total of all the other elements present with values no less than 0,010 % rounded to the second decimal (before the calculation is made).

Table 2 — Chemical composition of wire and cable scrap of aluminium alloys of the 6xxx series

Composition in percent (mass fraction)

Si max.	Fe max.	Cu max.	Mn max.	Mg max.	Cr max.	Zn max.	Ti max.	others each max.	others total max.	Al[a]
0,6	0,30	0,05	0,05	0,6	0,05	0,07	0,10	0,05	0,15	Remainder

[a] The aluminium content is the difference between 100 % and the total of all the other elements present with values no less than 0,010 % rounded to the second decimal (before the calculation is made).

5.4 Metal yield

The metal yield of scrap pertaining to this standard as determined in accordance with EN 13920-1 shall be ≥ 95 %.

6 Classification procedure, treatment of non-conformities and arbitration

The classification procedure which includes sampling and tests, the treatment of non-conformities and arbitration shall be in accordance with EN 13920-1 as appropriate.