

### SLOVENSKI STANDARD SIST EN 10223-4:2000

01-april-2000

Jeklena žica in žični izdelki za ograje - 4. del: Varjene mrežne ograje iz jeklene žice

Steel wire and wire products for fences - Part 4: Steel wire welded mesh fencing

Stahldraht und Erzeugnisse aus Stahldraht für Zäune - Teil 4: Geschweißte Gitter aus Stahldraht für Zäune

Fils et produits tréfilés en acier pour clôtures et grillages - Partie 4: Grillage en acier soudé (standards.iteh.ai)

Ta slovenski standard je istoveten ZEN 10223-4:1998 intps://standards.iten.avcatalog/standards/sist/vac1120e-442d-437c-902f-

c9a802b611f8/sist-en-10223-4-2000

ICS:

77.140.65 Jeklene žice, jeklene vrvi in Steel wire, wire ropes and

verige link chains

91.090 Konstrukcije zunaj stavb External structures

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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ICS 77.140.65

Descriptors: fences, wire nettings, wire, steels, designation, characteristics, dimensions, dimensional tolerances, manufacturing, coatings, galvanizing, mechanical strength, tests, packing

English version

## Steel wire and wire products for fences - Part 4: Steel wire welded mesh fencing

Fils et produits tréfilés en acier pour clôtures et grillages -Partie 4 : Grillage en acier soudé

Stahldraht und Erzeugnisse aus Stahldraht für Zäune - Teil 4: Geschweißte Gitter aus Stahldraht für Zäune

This European Standard was approved by CEN on 26 February 1998.

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.

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 Central Secretariat 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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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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 ECISS/TC 30 "Steel wires", the secretariat of which is held by BSI.

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.

This standard comprises the following parts:

Part 1	Zinc and zinc alloy coated steel barbed wire
Part 2	Hexagonal steel wire netting for agricultural, insulation and fencing purposes
Part 3	Hexagonal steel wire netting for engineering purposes
Part 4	Steel wire welded mesh fencing PREVIEW
Part 5	Steel wire woven hinged and knotted mesh fencing
Part 6	SIST EN 10223-4:2000 Steel <sub>ht</sub> wire chain ilink/fencing ndards/sist/9dc1120e-442d-437c-902f- c9a802b611f8/sist-en-10223-4-2000

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.

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#### 1 Scope

This Part of this European Standard specifies requirements for steel wire welded mesh fencing of which there are many types for a variety of applications. It specifies the general characteristics of welded mesh fencing supplied as rolls or panels and coatings, properties and tolerances.

The standard covers only orthogonal welded mesh i.e. wire welded at right angles to one another.

For welded mesh fencing made from panels the specification covers only panels made from wires not greater than 10 mm.

#### 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.

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to applies.	https://standards.iteh.ai/catalog/standards/sist/9dc1120e-442d-437c-902f-
prEN ISO 1461	Hot dip galvanized coatings on fabricated ferrous products Specifications
EN 10021	General technical delivery conditions for iron and steel products
EN 10204	Metallic products - Types of inspection documents
EN 10218-1	Steel wire and wire products - General - Part 1: Test methods
EN 10218-2	Steel wire and wire products - General - Part 2 : Dimensions and tolerances
prEN 10244-1	Steel wire and wire products - Non ferrous metallic coatings on steel wire Part 1: General principles
prEN 10244-2	Steel wire and wire products- Non ferrous metallic coatings on steel wire Part 2: Zinc and zinc alloy coating

prEN 10245-1

Steel wire and wire products - Organic coatings on wire Part 1 : General rules

prEN 10245-2

Steel wire and wire products - Organic coatings on wire Part 2 : PVC coated wire

prEN 10245-3

Steel wire and wire products - Organic coatings on wire Part 3 : PE coated wire

#### 3 Definitions

For the purpose of this Standard, the following definitions apply:-

- 3.1 welded mesh fencing: Fencing made by electrical resistance welding either:
  - a) zinc-coated or zinc alloy coated wires; or PREVIEW
  - b) bright wires which are subsequently coated after welding either with zinc or zinc alloy.

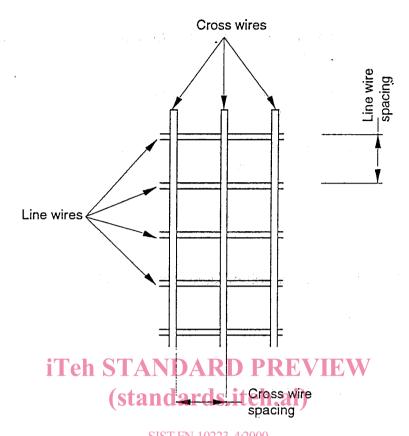
In both cases, the wire may or may not be crimped. The welded mesh may or may not be subsequently coated with an organic materials: en-10223-4-2000

- **3.2 spacing:** The distance measured between leading edge and leading edge of wires (see figure 1).
- 3.3 mesh size: The spacing of line wires followed by the spacing of cross wire e.g. for 50 mm line wire spacing and 25 mm cross wire spacing the mesh size is  $50 \times 25$ .
- **3.4 line wires:** Wires running in the longitudinal direction parallel with the length of the roll or panel. See figure 1.
- 3.5 cross wires: Wires running in the transverse direction. See figure 1.

NOTE: On erection of the fence, the cross wires become vertical.

3.6 panel: welded mesh produced in flat form to specified dimensions or cut from rolls of welded mesh. Panels are produced either with overhanging edges or with flush cut edges.

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Figure 1: Example of mesh

#### 4 Information to be supplied by the purchaser

The following information shall be supplied by the purchaser at the time of enquiry and order:

- a) the number of this European Standard;
- b) the quantity and packaging;
- c) if for agricultural use or not;
- d) roll or panel;
- e) mesh size(s);
- f) diameters of line and cross wires;
- g) length and width of rolls or size of panels;

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- h) the class of zinc or zinc/alloy coating and whether applied before or after manufacture and if required, the adherance and assessment of adherence (wrap specification);
- i) whether an organic material coating is required and, if so, the type and colour;
- j) tensile strength of line wires and cross wires if different from each other;
- k) whether or not crimping is required in line or cross wires
- 1) if applicable, the number of apertures required;
- m) in the case of panels, whether to be produced with overhangs or cut flush;
- n) inspection documentation requirements;
- o) agreed quality characteristics for testing (see clause 7)

#### 5 Manufacture

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#### 5.1 Base metal

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The base metal of the welded mesh fencing shall be low carbon steel 902f

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#### 5.2 Fabrication

#### 5.2.1 Rolls

The welded mesh fencing in roll shall be fabricated by electrical resistance welding either from:

- a) bright wires which subsequently after welding are either zinc or zinc alloy coated to prEN 10244-1 and prEN 10244-2 class A; or
- b) zinc or zinc alloy wire coated to prEN 10244-1 and prEN 10244-2 class A, unless otherwise agreed at the time of enquiry and order.

Where requested by the purchaser the welded mesh fencing shall be subsequently coated with an organic material to prEN 10245-1 and prEN 10245-2 or prEN 10245-3. The type and colour and any other criteria shall be given on the order.