



SLOVENSKI STANDARD

SIST EN 1510:2005

01-januar-2005

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SIST EN 1510:1996

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Playing field equipment - Tennis equipment - Functional and safety requirements, test methods

Spielfeldgeräte - Tennisrichtungen - Funktionelle und sicherheitstechnische Anforderungen, Prüfverfahren

Equipements de jeux - Equipements de tennis - Exigences fonctionnelles et de sécurité, méthodes d'essai <https://standards.iteh.ai/catalog/standards/sist/8cab60dc-6086-4947-9e05-9237c07772bb/sist-en-1510-2005>

Ta slovenski standard je istoveten z: EN 1510:2004

ICS:

97.220.30	Oprema za dvoranske športe	Indoor sports equipment
97.220.40	Oprema za športe na prostem in vodne športe	Outdoor and water sports equipment

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EUROPEAN STANDARD

EN 1510

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2004

ICS

Supersedes EN 1510:1996

English version

Playing field equipment - Tennis equipment - Functional and safety requirements, test methods

Equipements de jeux - Equipements de tennis - Exigences fonctionnelles et de sécurité, méthodes d'essai

Spielfeldgeräte - Tenniseinrichtungen - Funktionelle und sicherheitstechnische Anforderungen, Prüfverfahren

This European Standard was approved by CEN on 24 June 2004.

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.

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

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN 1510:2004) has been prepared by Technical Committee CEN/TC 136 “Sport, playground and other recreational equipment”, 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 March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

This document supersedes EN 1510:1996.

Other types and sizes as those described in this document are permissible provided the safety requirements are taken into consideration.

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

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EN 1510:2004 (E)

1 Scope

This document specifies the functional requirements (see Clause 3) and the safety requirements (see Clause 4) of tennis equipment, excluding rackets and balls.

This document is applicable to 3 types of tennis equipment (see 3.1) which are used indoors and outdoors.

2 Normative references

The following referenced documents are indispensable for the application 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 ISO 1806, *Fishing nets — Determination of mesh breaking force of netting (ISO 1806:2002)*

EN ISO 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method (ISO 13934-1:1999)*

ISO 3108, *Steel wire ropes for general purposes — Determination of actual breaking load*

3 Requirements

3.1 Classification

Tennis equipment shall be classified by the design (types) and the nets by the breaking force (classes) as shown in Tables 1 and 2.

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Table 1 — Types

Type	Description	Example
1	with ground sockets	Figure 1
2	with bases and ground fixings	Figure A.1
3	freestanding	Figure A.2

Table 2 — Classes of nets

Class	Breaking strength N min.		
	Mesh	Top net line	Top tape
A	1 800 (1 500) ^a	8 000	2 500
B	1 080 (900) ^a	6 000	1 250
C	792 (660) ^a	3 000	900

^a This corresponds to the breaking strength of the net yarn, tested in accordance with EN ISO 2062.

3.2 Dimensions

Tennis equipment shall comply with the dimensions shown in Figure 1.

Dimensions in millimetres

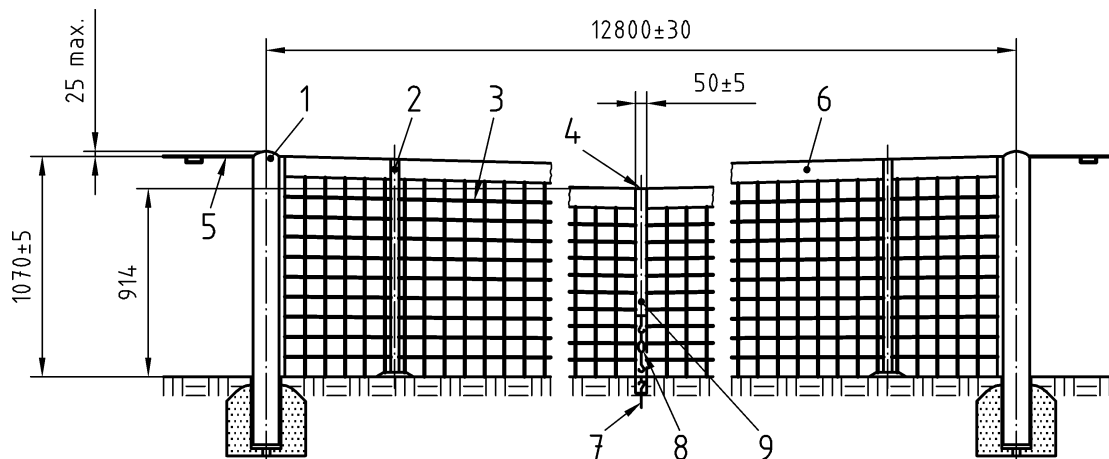


Figure 1

Key

- | | |
|-----------------------|---|
| 1 Post | 6 Top tape |
| 2 Single stick | 7 Floor anchorage (to secure the centre net adjuster) |
| 3 Net | 8 Adjuster |
| 4 Centre net adjuster | 9 Net centre strap |
| 5 Top net line | |

Figure 2 — Tennis equipment Type 1 ((to be modified))

For example for foundations see Annex B.

Tennis equipment **Type 1** shall have the following components:

- 2 posts (1 with tensioning device, 1 without);
- net with top net line;
- centre net adjuster;
- 2 singles sticks (optional);
- 2 ground sockets.

Tennis equipment **Type 2** shall have the following components:

- 2 posts with bases and ground fixings (1 with tensioning device, 1 without);
- 1 net;
- 1 centre net adjuster.

An example of a tennis equipment Type 2 is shown in Annex A.

Tennis equipment **Type 3** shall have the following components:

- 2 posts (1 with tensioning, 1 without);
- 1 net;
- 1 centre net adjuster;
- bottom structure.

An example of a tennis equipment Type 3 is shown in Annex A.

EN 1510:2004 (E)**3.3 Materials****3.3.1 Posts, singles sticks and bottom structure of Type 3 and ground fixings**

These may be made of steel, light metal, synthetics or wood, provided the requirements of this document are fulfilled.

Light metal shall be non-corrosive and steel protected against corrosion (e. g. hot-galvanized, powder coated or painted).

3.3.2 Net

The net shall be made from synthetic fibres.

3.3.3 Top net line

The top net line shall be made from galvanized or corrosion-resistant steel wires or equivalent material.

NOTE Plastics covering is acceptable.

3.3.4 Top tape and net centre strap

These can be made from synthetic or natural fibres

3.4 Design

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3.4.1 Net posts

The net posts shall be not more than 150 mm square or not more than 150 mm in diameter.

The construction of the net posts shall be such that the top net line can be supported or guided at a height of 1 070 mm. One net post shall be provided with a tensioning device for the top net line, the other net post shall be provided with a guiding and fixing system for the top net line.

When tested in accordance with 5.2, after removal of the test force the net posts shall not be deformed permanently or show a deflection of more than 10 mm.

3.4.2 Net

The top tape shall be white. It shall have a folded depth of between 50 mm and 65 mm.

The top tape shall be sewn into the net by one of the following methods:

- a) at least twice with synthetic thread of 50 N breaking force; or
- b) once with synthetic thread of 100 N breaking force; or

it shall be provided with a fastening device which is of at least equivalent strength.

The top net line shall have a diameter of not more than 8 mm.

The top net line shall be inserted into the top tape. The ends of the top net line shall be designed in such a way that they do not fray and so that they fit the appropriate tensioning and fixing devices.

The net shall be designed to completely fill the space between the posts, the top tape and the court surface. The net shall not be tensioned.

The mesh width shall be sufficiently small to prevent the ball from passing through.

Regarding the breaking forces of the net and its components the classes of Table 2 shall be selected as appropriate.

3.4.3 Centre net adjuster

The centre net adjuster shall consist of the following components:

- a) 1 net centre strap;
- b) 1 adjuster;
- c) 1 floor anchorage (for Types 1 and 2, for Type 3 appropriate to the bottom structure).

The net centre strap shall be white.

The adjuster shall be capable of adjusting the height of the net from 1 070 mm to 910 mm.

NOTE The final height of the net centre is given by the international and/or national tennis federation.

3.4.4 Singles sticks

Where a doubles net is used for singles play the net can be supported by two freestanding posts called singles sticks.

The single sticks shall maintain the top net line at the required height while supporting the doubles net when placed according to the rules of the game (see Figure 1). A singles stick shall be not more than 75 mm square or in diameter. The height shall be not more than that of the posts.

3.4.5 Ground sockets

All ground sockets shall be resistant to corrosion.

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4 Safety requirements

4.1 General

Exposed corners and edges shall be rounded with a radius of at least 3 mm.

The floor anchorage shall not protrude to the court surface.

4.2 Tensioning devices

The tensioning devices shall be constructed in such a way that, when tested in accordance with 5.2, they cannot start without control.

If handles are provided, e. g. for a winch, they shall be removable, retractable or remain inside the post.

4.3 Net hooks

The open end of net hooks (if any) shall not be directed towards the court. The net hooks shall be constructed in such a way that they are not dangerous to the players.

5 Test methods

5.1 General

Requirements of Clauses 3 and 4, for which no particular tests are indicated in the following, shall be appropriately verified, e. g. by measurement, visual inspection, tactile or functional testing.

5.2 Posts and tensioning devices