



SLOVENSKI STANDARD

SIST EN 914:2009

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Gymnastic equipment - Parallel bars and combination asymmetric/parallel bars -
Requirements and test methods including safety

Turngeräte - Barren und kombinierte Stufenbarren/Barren - Anforderungen und
Prüfverfahren einschließlich Sicherheit

Matériel de gymnastique - Barres parallèles et barres parallèles et asymétriques
combinées - Exigences et méthodes d'essai y compris la sécurité

Ta slovenski standard je istoveten z: EN 914:2008

ICS:

97.220.30 Oprema za dvoranske športe Indoor sports equipment

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en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 914

November 2008

ICS 97.220.30

Supersedes EN 914:1996

English Version

**Gymnastic equipment - Parallel bars and combination
asymmetric/parallel bars - Requirements and test methods
including safety**

Matériel de gymnastique - Barres parallèles et barres
parallèles/asymétriques combinées - Exigences et
méthodes d'essai y compris la sécurité

Turngeräte - Barren und kombinierte Stufenbarren/Barren -
Anforderungen und Prüfverfahren einschließlich Sicherheit

This European Standard was approved by CEN on 27 September 2008.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, 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 document (EN 914:2008) has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and 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 May 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 914:1996.

This European Standard is one of several standards, each of which deals with a particular type or a particular group of gymnastic equipment.

The principal changes from the previous edition of EN 914 are as follows:

- a) the dimensions in Tables 2 and 3 have been adapted;
- b) safety requirements and test methods have been modified;
- c) entrapment has been included;
- d) requirements and test methods for endurance have been deleted.

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

EN 914:2008 (E)**1 Scope**

This European Standard specifies functional requirements (see Clause 3) and specific safety requirements in addition to the general safety requirements in EN 913 (see Clause 4), which shall be read in conjunction with this standard.

This European Standard is applicable to 2 types of parallel bars (see Table 1) intended for use under supervision of a competent person.

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 913, *Gymnastic equipment — General safety requirements and test methods*

3 Requirements**3.1 Classification**

Parallel bars and combination asymmetric parallel bars shall be classified by the design (types and sizes) as shown in Table 1.

Table 1 — Types

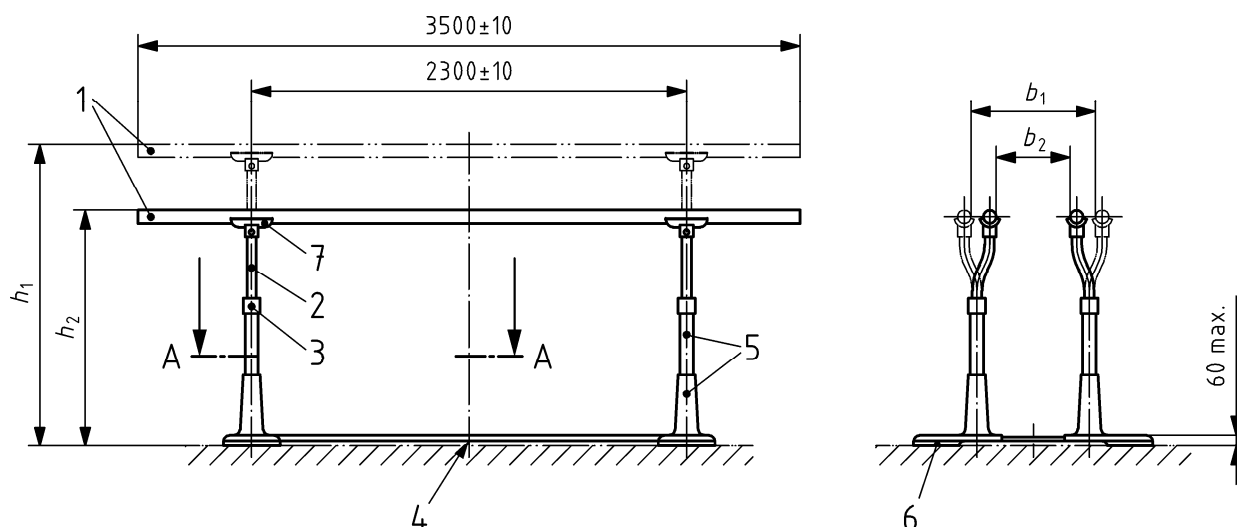
Type	Size	Description
1	1 and 2	parallel bars
2	—	combination asymmetric/parallel bars

3.2 Dimensions

All parallel bars and asymmetric/parallel bars shall comply with the dimensions specified in Table 2 and Figures 1 and 2.

Suitable profiles are defined in Figure 2.

Dimensions in millimetres

**Key**

- 1 Bar
- 2 Upright extension
- 3 Stop, lock and adjustment device
- 4 Longitudinal member
- 5 Upright
- 6 Cross member
- 7 Supporting cup point

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NOTE Section A-A refers to Figure A.1.

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Figure 1 — Parallel bar and combination asymmetric/parallel bar (types 1 and 2)

Table 2 — Dimensions

Dimensions in millimetres

Type	Size	Minimum range of adjustment		Minimum range of adjustment	
		b_1	b_2	h_1	h_2
1	1	520	to 390	1 600	to 1 250
	2	520	to 390	2 050	to 1 400
2	—	550	to 390	Low bar	
				1 850	to 1 500
				High bar	
				2 300	to 1 500

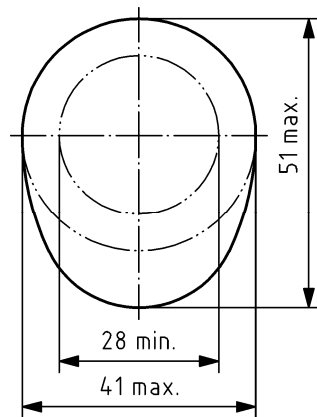


Figure 2

NOTE Any profile lying between the dimensions shown is acceptable.

Figure 2 — Profile of bars

4 Safety requirements

4.1 General requirements

Parallel bars and combination asymmetric/parallel bars shall comply with the requirements of EN 913, except insofar as they are modified by this European Standard.

4.2 Clear path between uprights

When tested in accordance with 5.2 the test pattern shall pass between the uprights.

4.3 Entrapment

The entrapment requirements of EN 913 relate to the uprights, bars and connections between them.

4.4 Stability

When tested in accordance with 5.3, equipment shall not tip in any direction when subjected to a horizontal force representing 40 % of the self weight of the equipment with a minimum of 400 N. The force shall be applied at the middle of the bar and perpendicular to its length.

4.5 Vertical stiffness and residual deflection

When each bar is tested in accordance with 5.4 using a force of $1\,350\text{ N} \pm 50\text{ N}$, the deflection of each bar shall be a minimum of 40 mm and a maximum of 100 mm. The residual deflection shall be no greater than 1 mm.

4.6 Strength

When each bar is tested in accordance with 5.5 using a vertical force of $2\,850\text{ N} \pm 50\text{ N}$ the equipment shall show no signs of fracture, rupture or defects.

4.7 Rigidity of framework

When tested in accordance with 5.3, the bar at the supporting cup point shall not deflect by more than 20 mm in the longitudinal or the transverse direction when subjected to a horizontal force of $570\text{ N} \pm 20\text{ N}$ in each of these directions. Transverse forces shall be applied to the middle of the bar and perpendicular to its length. Longitudinal forces shall be applied along the axis of the bar.

5 Test methods

5.1 General

All loading tests shall be carried out with the bars set at their maximum useful height.

5.2 Determination of the clear path between uprights

5.2.1 Principle

The clear path between the uprights shall be assessed by placing a test pattern between them.

5.2.2 Apparatus

A test pattern as defined in Table 3 and Figure 3.

5.2.3 Procedure

Attempt to pass the test pattern between the uprights in contact with the cross member, while keeping its plane perpendicular to the longitudinal axis of the bars and vertical.

5.2.4 Expression of results

State whether the test pattern can pass between the uprights.

Table 3 — Minimum dimensions of test pattern

Dimensions in millimetres

Type	Size	b_3	b_4	b_5	h_3
1	1	420	310	340	800
	2	420	310	340	1 000
2	—	420	310	340	1 000