

<b>STN</b>	<b>Horolezecké vybavenie Skoby do skaly Bezpečnostné požiadavky a skúšobné metódy</b>	<b>STN EN 959</b>  94 2009
------------	---	--------------------------------------

Mountaineering equipment - Rock anchors - Safety requirements and test methods

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/19

Obsahuje: EN 959:2018

Oznámením tejto normy sa ruší  
STN EN 959 (94 2009) z novembra 2007

**128826**

EUROPEAN STANDARD

EN 959

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2018

ICS 97.220.40

Supersedes EN 959:2007

English Version

## Mountaineering equipment - Rock anchors - Safety requirements and test methods

Équipement d'alpinisme et d'escalade - Amarrages pour rocher - Exigences de sécurité et méthodes d'essai

Bergsteigerausrüstung - Bohrhaken - Sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 29 July 2018.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN 959:2018 (E)**

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>4 Safety requirements</b> .....	<b>6</b>
<b>4.1 Material(s)</b> .....	<b>6</b>
<b>4.2 Design</b> .....	<b>7</b>
<b>4.3 Load-bearing capacity</b> .....	<b>9</b>
<b>4.3.1 Axial load-bearing capacity</b> .....	<b>9</b>
<b>4.3.2 Radial load-bearing capacity</b> .....	<b>10</b>
<b>4.3.3 Belay rock anchor linking elements</b> .....	<b>10</b>
<b>5 Test methods</b> .....	<b>10</b>
<b>5.1 Check of materials</b> .....	<b>10</b>
<b>5.2 Concrete block</b> .....	<b>10</b>
<b>5.3 Procedure</b> .....	<b>10</b>
<b>5.3.1 Examination of design</b> .....	<b>10</b>
<b>5.3.2 Determination of load-bearing capacity</b> .....	<b>10</b>
<b>6 Marking</b> .....	<b>12</b>
<b>7 Information supplied by the manufacturer</b> .....	<b>12</b>
<b>Annex A (informative) Standards on mountaineering equipment</b> .....	<b>14</b>
<b>Annex B (informative) Choice of materials for different environmental conditions and the consequences for inspection and maintenance</b> .....	<b>15</b>
<b>Annex C (informative) Stress corrosion cracking of steel anchors</b> .....	<b>16</b>
<b>Annex D (informative) General guidance for placing rock anchors</b> .....	<b>17</b>
<b>Bibliography</b> .....	<b>18</b>

## European foreword

This document (EN 959:2018) 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 June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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

This document supersedes EN 959:2007.

Changes made in comparison with EN 959:2007:

- a) definition for “eye” added;
- b) definition for “connector” added;
- c) classes for rock anchors added in 4.1 “materials” and amendments of 4.1;
- d) amendment of 4.2 “Design” and change of the overall thickness of the border of the eye;
- e) amendment of 5.3.2 “Determination of load-bearing capacity”;
- f) amendment of Clause 6 “Marking”;
- g) amendment of Clause 7 “Information supplied by the manufacturer”;
- h) inclusion of informative Annex C “Stress corrosion cracking of steel anchors”;
- i) Annex C “General guidance for placing rock anchors” changed to Annex D;
- j) editorial amendments;
- k) introduction of a new class of rock anchor designed especially for the top of a route for lowering/rappelling.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**EN 959:2018 (E)****Introduction**

The text of this document is based on the former UIAA Standard P (Union Internationale des Associations d'Alpinisme), which has been prepared with international participation.

This document is one of a package of standards for mountaineering equipment, see Annex A.

## **1 Scope**

This document specifies safety requirements and test methods for rock anchors for use in mountaineering including climbing.

## **2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 1920-3, *Testing of concrete - Part 3: Making and curing test specimens*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**