



# SLOVENSKI STANDARD SIST EN ISO 5010:2020

01-marec-2020

Nadomešča:  
SIST EN 12643:2014

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**Stroji za zemeljska dela - Stroji s kolesi - Zahteve za krmiljenje (ISO 5010:2019)**

Earth-moving machinery - Wheeled machines - Steering requirements (ISO 5010:2019)

Erdbaumaschinen - Bereifte Maschinen - Lenkanlagen (ISO 5010:2019)

Engins de terrassement - Engins équipés de pneumatiques - Systèmes de direction (ISO 5010:2019)

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Ta slovenski standard je istoveten z: **EN ISO 5010:2019**

SIST EN ISO 5010:2020  
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**ICS:**

53.100      Stroji za zemeljska dela      Earth-moving machinery

**SIST EN ISO 5010:2020**

**en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 5010**

December 2019

ICS 53.100

Supersedes EN 12643:2014

English Version

**Earth-moving machinery - Wheeled machines - Steering requirements (ISO 5010:2019)**

Engins de terrassement - Engins équipés de pneumatiques - Systèmes de direction (ISO 5010:2019)

Erdbaumaschinen - Bereifte Maschinen - Lenkanlagen (ISO 5010:2019)

This European Standard was approved by CEN on 17 November 2019.

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.

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

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

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## European foreword

This document (EN ISO 5010:2019) has been prepared by Technical Committee ISO/TC 127 "Earth-moving machinery" in collaboration with Technical Committee CEN/TC 151 "Construction equipment and building material machines - Safety" 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 2020, and conflicting national standards shall be withdrawn at the latest by June 2020.

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 12643:2014.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZA, which is an integral part of this document.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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## Endorsement notice

The text of ISO 5010:2019 has been approved by CEN as EN ISO 5010:2019 without any modification.

## Annex ZA (Informative)

### Relationship between this European Standard and the essential requirements of Directive 2006/42/EC machinery, and amending Directive 95/16/EC (recast) [2006 L157] aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/396 to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) [2006 L157].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Directive 2006/42/EC [2006 L157]**

Essential Requirements of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.1.2. Principles of safety integration	4	
1.1.3. Materials and products	4.7.3	
1.1.6. Ergonomics	4.3.8, 4.5.1, 4.9	
1.2.1. Safety and reliability of control systems	4.2.2, 4.3.1, 4.4	
1.2.2. Control devices	4.3.3, 4.3.7, 5, 6, 7, 8, 9, 10	
1.2.5. Selection of control or operating modes	4.8	
1.3.2. Risk of break-up during operation	4.4.1, 4.7.3	
1.6.1. Machinery maintenance	4.3.5	
1.6.2. Access to operating positions and servicing points	4.3.5	
1.7.1.1. Information and information devices	4.8.3	
1.7.1.2. Warning devices	4.7.1.1	
1.7.4.2. Contents of the instructions	10	
3.3.1. Control devices	4.3.2, 4.3.4, 4.3.6, 4.3.7	
3.3.5. Control circuit failure	4.2.2, 4.3.1, 4.6, 4.7, 4.8	

3.4.5. Means of access	4.3.7, 4.4.1 c)	
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**WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.**

**WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.**

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INTERNATIONAL  
STANDARD

ISO  
5010

Fourth edition  
2019-11

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**Earth-moving machinery — Wheeled  
machines — Steering requirements**

*Engins de terrassement — Engins équipés de pneumatiques —  
Systèmes de direction*

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## ISO 5010:2019(E)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety requirements and human factors*.

This fourth edition cancels and replaces the third edition (ISO 5010:2007), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the title has been changed to “Wheeled machines” to include machines with drums and crawler wheel assemblies;
- requirements have been provided for earth-moving machinery (EMM) with a maximum machine speed <20 km/h.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).