



**SLOVENSKI STANDARD**  
**SIST EN ISO 11681-2:2007**  
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**BUXca Yý U.**  
**SIST EN ISO 11681-2:1999**  
**SIST EN ISO 11681-2:1999/A1:2004**

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**Gozdarski stroji - Zahteve za prenosne motorne verižne žage in preskušanje - 2. del: Žage za nego dreves (ISO/DIS 11681-2:2004)**

Machinery for forestry - Portable chain-saw safety requirements and testing - Part 2: Chain-saws for tree service (ISO 11681-2:2006)

Forstmaschinen - Sicherheitstechnische Anforderungen und Prüfungen für tragbare Kettensägen - Teil 2: Kettensägen für die Baumpflege (ISO 11681-2:2006)

Matériel forestier - Exigences de sécurité et essais des scies à chaîne portatives - Partie 2: Scies à chaîne pour l'élagage des arbres (ISO 11681-2:2006)

**Ta slovenski standard je istoveten z: EN ISO 11681-2:2006**

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English Version

Machinery for forestry - Portable chain-saw safety requirements  
and testing - Part 2: Chain-saws for tree service (ISO 11681-  
2:2006)

Matériel forestier - Exigences de sécurité et essais des  
scies à chaîne portatives - Partie 2: Scies à chaîne pour  
l'élagage des arbres (ISO 11681-2:2006)

Forstmaschinen - Sicherheitstechnische Anforderungen  
und Prüfungen für tragbare Kettensägen - Teil 2:  
Kettensägen für die Baumpflege (ISO 11681-2:2006)

This European Standard was approved by CEN on 12 June 2006.

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, 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 ISO 11681-2:2006) has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" in collaboration with Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", the secretariat of which is held by AFNOR.

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 January 2007, and conflicting national standards shall be withdrawn at the latest by January 2007.

This document supersedes EN ISO 11681-2:1998.

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 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, 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.

### **Endorsement notice**

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The text of ISO 11681-2:2006 has been approved by CEN as EN ISO 11681-2:2006 without any modifications.

## **ANNEX ZA** (informative)

### **Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by Directive 98/79/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 98/37/EC, amended by Directive 98/79/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard 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.

**WARNING:** Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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**Machinery for forestry — Portable  
chain-saw safety requirements  
and testing —**

**Part 2:  
Chain-saws for tree service**

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*Matériel forestier — Exigences de sécurité et essais des scies à chaîne  
portatives —  
Partie 2: Scies à chaîne pour l'élagage des arbres*

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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 11681-2 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable forest machinery*.

This second edition cancels and replaces the first edition (ISO 11681-2:1998), of which it forms the subject of a technical revision, principally by the incorporation of ISO 11681-2:1998/Amd 1:2003 and other modifications made necessary by the revision of ISO 11681-1.

ISO 11681 consists of the following parts, under the general title *Machinery for forestry — Portable chain-saw safety requirements and testing*:

- Part 1: *Chain-saws for forest service*
- Part 2: *Chain-saws for tree service*

## Introduction

The structure of safety standards in the field of machinery is as follows.

- a) **Type-A standards** (basis standards) give basic concepts, principle for design, and general aspects that can be applied to machinery;
- b) **Type-B standards** (generic safety standards) dealing with one or more safety aspect(s) or one or more type(s) of safeguards that can be used across a wide range of machinery:
  - type-B1 standards on particular safety aspects (e.g. safety distances, surface temperature, noise);
  - type-B2 standards on safeguards (e.g. two-hands controls, interlocking devices, pressure sensitive devices, guards);
- c) **Type-C standards** (machinery safety standards) dealing with detailed safety requirements for a particular machine or group of machines.

This document is a type-C standard as stated in ISO 12100-1.

When provisions of this type-C standard are different from those which are stated in type-A or type-B standards, the provisions of this type-C standard take precedence over the provisions of the other standards for machines that have been designed and built according to the provisions of this type-C standard.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document. These hazards are specific to self-propelled, trailed, semi-mounted and mounted agricultural machines.

This part of ISO 11681 has been prepared for a special type of chain-saw used by trained persons for tree service work up in trees.

This part of ISO 11681 differs from ISO 11681-1 in the following respects:

- Clause 1, the tree service chain-saws are limited in size by the maximum allowed dry mass of 4,3 kg;
- Clause 3, a definition of trained operator has been added and that of chain saws for tree service revised;
- 5.2.1, the required handle dimensions have been altered;
- 5.4.1, a requirement for the sideways balance has been added with a limited holding moment of 6 N·m;
- 5.5.2.1, the non-manual chain-brake system must meet stricter requirements;
- 5.5.3.1, the allowed kickback angle has been reduced to 25°;
- 5.12.1, the requirement for protection from contact with parts under high voltage has been enlarged to include a requirement for an ignition interruption or short-circuiting device on the low voltage side;
- 5.15.1, the requirement for protection from hot parts has been enlarged to all parts of the machine, except the guide bar and saw chain;
- 5.20, a requirement and verification for an attachment point has been added;

- 6.1.2, additional information including how to use the saw up in trees using the example in Annex B is required;
- 6.3, new safety warnings and markings on the saw and information at the point of sale are requested, with examples of the symbols to be used given in Annex A.

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