



NSAI
Standards

Irish Standard
I.S. EN ISO 11680-2:2011

Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 2: Machines for use with back-pack power source (ISO 11680-2:2011)

I.S. EN ISO 11680-2:2011

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:
EN ISO 11680-2:2000

This document is based on: EN ISO 11680-2:2011
Published: 20 December, 2011

This document was published under the authority of the NSAI and comes into effect on:
20 December, 2011

ICS number:
65.060.80

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

English Version

Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 2: Machines for use with back-pack power source (ISO 11680-2:2011)

Matériel forestier - Exigences de sécurité et essais pour les perches élagueuses à moteur - Partie 2: Machines avec source motrice portée à dos (ISO 11680-2:2011)

Forstmaschinen - Sicherheitstechnische Anforderungen und Prüfung für motorbetriebene Hochentaster - Teil 2: Geräte mit rückertragbarer Antriebseinheit (ISO 11680-2:2011)

This European Standard was approved by CEN on 30 November 2011.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
Foreword	3
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	4

Foreword

This document (EN ISO 11680-2:2011) 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 June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

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 ISO 11680-2:2000.

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, 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 11680-2:2011 has been approved by CEN as a EN ISO 11680-2:2011 without any modification.

Annex ZA
(informative)
Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/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 one means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Union 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 relevant 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.

I.S. EN ISO 11680-2:2011
**INTERNATIONAL
STANDARD**

**ISO
11680-2**

Second edition
2011-12-01

**Machinery for forestry — Safety
requirements and testing for
pole-mounted powered pruners —**

Part 2:
**Machines for use with back-pack power
source**

*Matériel forestier — Exigences de sécurité et essais pour les perches
élagueuses à moteur —*

Partie 2: Machines pour utilisation avec source motrice portée à dos



Reference number
ISO 11680-2:2011(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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 11680-2 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 11680-2:2000), which has been technically revised to reflect the state of the art, and, together with ISO 11806-2, cancels and replaces ISO 14740:1998.

ISO 11680 consists of the following parts, under the general title *Machinery for forestry — Safety requirements and testing for pole-mounted powered pruners*:

- *Part 1: Machines fitted with an integral combustion engine*
- *Part 2: Machines for use with back-pack power source*

Introduction

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

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the scope of this document.

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

Machinery for forestry — Safety requirements and testing for pole-mounted powered pruners —

Part 2: Machines for use with back-pack power source

1 Scope

This part of ISO 11680 gives safety requirements and measures for their verification for the design and construction of portable, hand-held, pole-mounted powered pruners with a back-pack power unit and using a drive shaft to transmit power to a cutting attachment consisting of a saw chain or reciprocating or circular saw blade (hereafter referred to as “machine”). Methods for the elimination or reduction of hazards arising from the use of these machines and the type of information on safe working practices to be provided by the manufacturer are specified.

This part of ISO 11680, together with the relevant sections of ISO 11680-1, deals with all significant hazards, hazardous situations or hazardous events with the exception of electric shock from contact with overhead electric lines (apart from warnings and advice for inclusion in the instruction handbook) and whole-body vibration from the back-pack power unit, relevant to these machines when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer.

NOTE 1 A standardized test procedure for measuring whole-body vibration from the backpack power unit is presently not available.

NOTE 2 See Annex A for a list of significant hazards.

This part of ISO 11680 is applicable to portable, hand-held, pole-mounted powered pruners with back-pack power unit manufactured after its date of publication.

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.

ISO 4413, *Hydraulic fluid power — General rules and safety requirements for systems and their components*

ISO 4414, *Pneumatic fluid power — General rules and safety requirements for systems and their components*

ISO 11680-1:2011, *Machinery for forestry — Safety requirements and testing for pole-mounted powered pruners — Part 1: Machine fitted with an integral combustion engine*

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 11680-1 and ISO 12100 and the following apply.

3.1

appliance

assembly of drive-shaft tube, cutting attachment with its sprocket cover and handles

3.2

machine

pole-mounted powered pruner, including power source and appliance, designed to enable an operator to cut the branches of standing trees

NOTE See Figure 1 for an example.

4 Safety requirements and/or protective measures

4.1 General

Machines shall comply with the safety requirements and/or protective measures of this clause. In addition, the machine shall be designed according to the principles of ISO 12100 for relevant but not significant hazards which are not dealt with by this part of ISO 11680.

Machines shall comply with ISO 11680-1:2011, Clause 4, except for 4.3.

The safe operation of a machine also depends on the safe environment associated with the use of personal protective equipment (PPE), such as gloves, boots and eye and hearing protective equipment, as well as safe working procedures (see ISO 11680-1:2011, 5.1).

Except where otherwise specified in this part of ISO 11680, the safety distances specified in ISO 13857:2008, 4.2.4.1 and 4.2.4.3, shall be met.

4.2 Hand-grip on back-pack power unit

4.2.1 Requirements

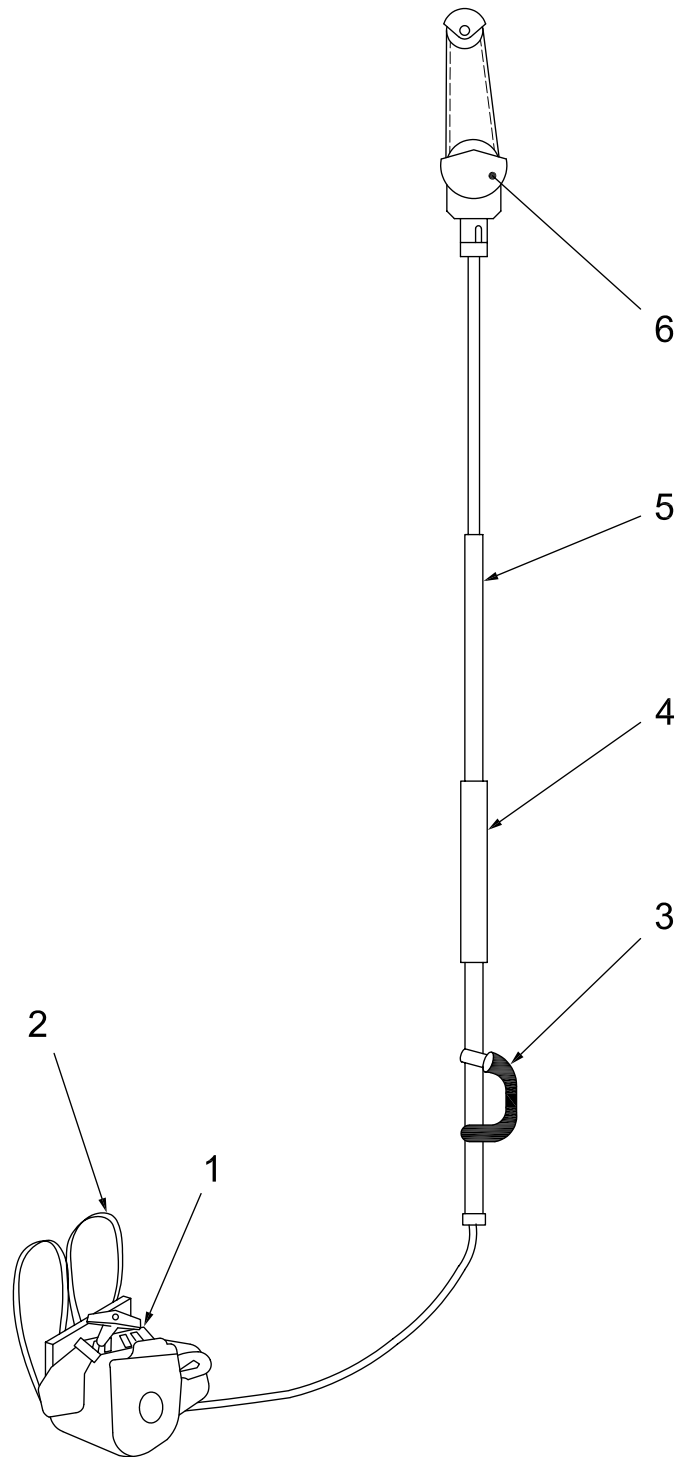
A hand-grip shall be available which may be a part of the frame and which shall allow an operator to grasp the back-pack power unit for handling and transport.

The hand-grip shall be designed such that

- it can be fully gripped by an operator when wearing gloves,
- it provides the necessary sureness of grip by its shaping and surface,
- its length is at least 100 mm and where, for a bail or closed hand-grip, this length is straight or curved at a radius greater than 100 mm together with any blend radius, but not more than 10 mm at one or both ends of the gripping surface.

4.2.2 Verification

The hand-grip design shall be verified by inspection, measurement and functional testing.



Key

- 1 back-pack power unit
- 2 harness for back-pack power unit
- 3 rear hand-grip
- 4 front hand-grip
- 5 drive-shaft tube
- 6 cutting attachment

Figure 1 — Example of pole-mounted powered pruner with back-pack power unit and appliance with saw-chain cutting attachment

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-