



SLOVENSKI STANDARD
SIST EN 15503:2010+A1:2014/kFprA2:2015
01-oktober-2015

**Oprema za nego vrta - Vrtni pihalniki, vrtni sesalniki in vrtni pihalniki/sesalniki -
Varnost - Dopolnilo A2**

Garden equipment - Garden blowers, vacuums and blowers/vacuums - Safety

Gartengeräte - Blasgeräte, Sauggeräte und Blas-/Sauggeräte für den Garten - Sicherheit

Matériel de jardinage - Souffleurs, aspirateurs et aspirateurs-souffleurs de jardin -
Sécurité

Ta slovenski standard je istoveten z: EN 15503:2009+A1:2013/FprA2:2015

ICS:

65.060.70 Vrtnarska oprema Horticultural equipment

SIST EN **en,fr,de**
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EUROPEAN STANDARD
NORME EUROPÉENNE
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FINAL DRAFT
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ICS 65.060.70

English Version

Garden equipment - Garden blowers, vacuums and blower/vacuums - Safety

Matériel de jardinage - Souffleurs, aspirateurs et
aspirateurs-souffleurs de jardin - Sécurité

Gartengeräte - Blasgeräte, Sauggeräte und Blas-
/Sauggeräte für den Garten - Sicherheit

This draft amendment is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 144.

This draft amendment A2, if approved, will modify the European Standard EN 15503:2009+A1:2013. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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EN 15503:2009+A1:2013/FprA2:2015

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Foreword

This document (EN 15503:2009+A1:2013/FprA2:2015) has been prepared by Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", the secretariat of which is held by AFNOR.

This document is currently submitted to the Formal Vote.

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 2006/42/EC.

For relationship with EU Directive 2006/42/EC, see informative Annex ZA in the main document.

EN 15503:2009+A1:2013/FprA2:2015**1 Modification to Clause 3**

Add the following new term 3.18:

"3.18**tortuous path**

design principle which prevents access for fingers by requiring their joints and those of wrist and elbow to adopt orientations/articulations which are beyond their natural range of movements".

2 Modifications to 5.2

Replace the 1st paragraph to read as follows:

"Infeed openings and discharge openings shall be guarded to prevent contact with hazardous moving parts during normal operation:

- a) For straight line access, compliance with EN ISO 13857:2008, 4.2.4.1 and 4.2.4.3;
- b) For protection provided by a tortuous path, there shall be no contact with hazardous moving parts when applying both arm probes of Figure D.1 as described in Annex D."

Replace the existing 2nd and 3rd paragraphs with the following:

"Guards shall be either:

- a) fixed guards, detachable only with the use of a tool; or
- b) interlocking guards detachable without tools; or
- c) Automatically closing guards that are retained automatically in the closed position and shall only be removed or released by the use of a tool.

When the guard needs to be removed as part of routine cleaning, setting or maintenance procedures that are described in the instruction handbook and intended to be performed by the user, their fixing system shall be permanently attached to the guard and/ or the machine.

The safety-related control system of interlocked guards shall conform to well-trying principles and apply well-trying components.

A "well-trying component" for a safety-related application is a component which has been either

- a) widely used in the past with successful results in similar applications, or
- b) made and verified using principles which demonstrate its suitability and reliability for safety related applications.

Newly developed components and safety principles may be considered as equivalent to "well-trying" if they fulfil the conditions of b)."

3 Addition of a new Annex D

Add the following new Annex D:

"

Annex D

(normative)

Tortuous path test

D.1 Requirements

The path of access from any point of the opening to hazardous moving parts shall be designed in such a way to prevent moving parts being reached by the fingers.

D.2 Test procedure

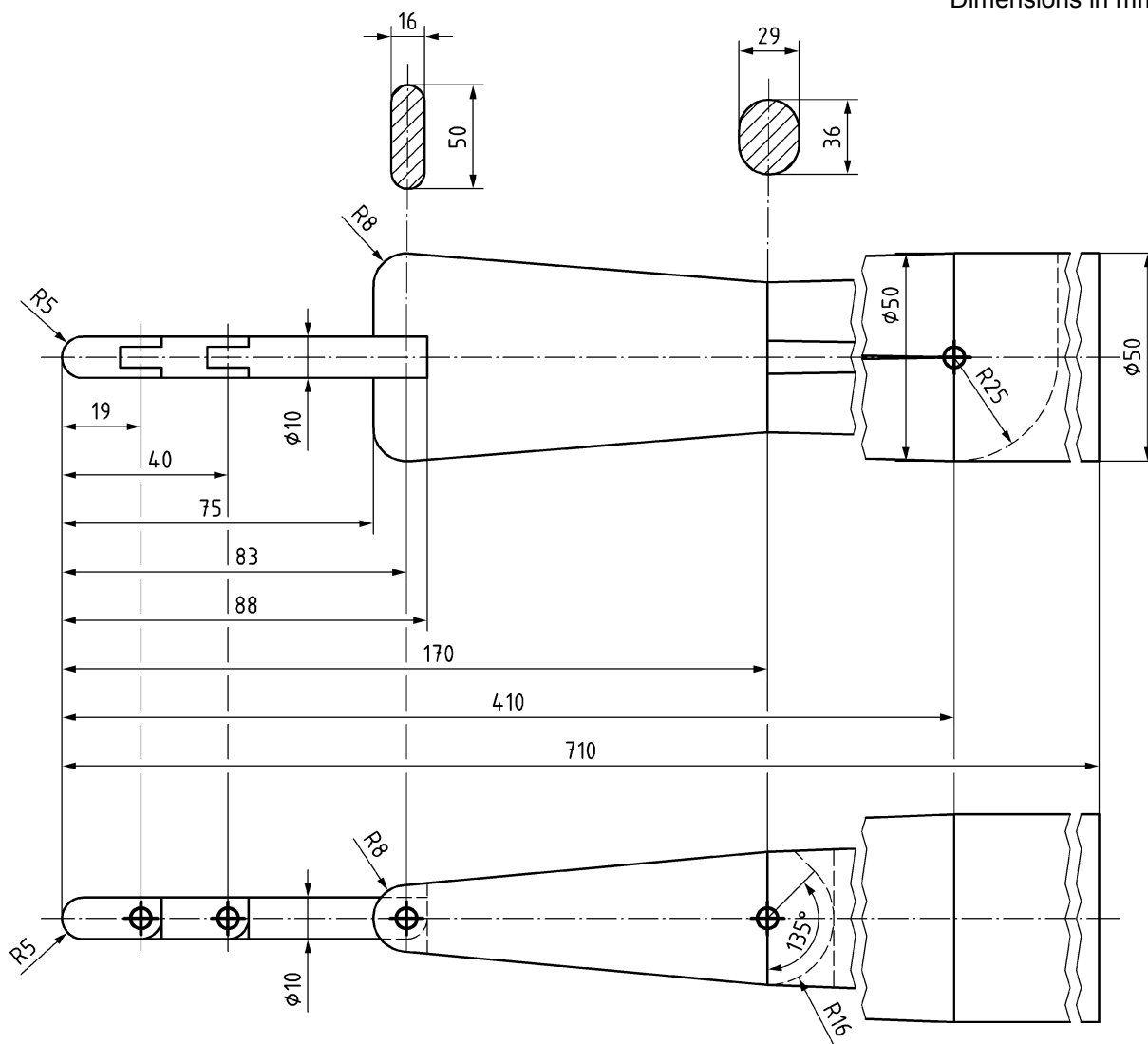
The two arm probes shown in Figure D.1 shall not be able to make contact with the hazardous moving parts when they are inserted into the in-feed and discharge opening up to the maximum distance permitted by their shape and articulation under the following conditions. All probe tests shall begin from the straight position, for the fingers and the elbow the articulation of the probes shall enable a rotation of 90° and for the wrist it shall be +90° and -45°. The movements of the joints of the probes shall be free enough to allow easy articulation as the probes are inserted into the opening. The probes shall be applied with a force not exceeding 20 N.

The arm probes shall be twisted and moved in any direction allowed by the joints when approaching the hazardous moving parts. If necessary, one or more sections of the machine may be cut away to allow the probe to be configured such that it penetrates as far as possible towards the hazardous moving parts. If a section is removed this shall not allow the probe to penetrate further than it would have done before the removal of the section(s).

The test shall be carried out both with and without the debris collector in place. If by design (e.g. interlocking) the removal of the debris collector causes the power to the fan and/or shredding means to be stopped, then the test shall only be done with the debris collector in place.

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Dimensions in mm



a) young adult arm probe