BRITISH STANDARD

BS EN
706:1996
+A1:2009

# Agricultural machinery — Vine shoot tipping machines — Safety

ICS 65.060.60

# National foreword

This British Standard is the UK implementation of EN 706:1996+A1:2009. It supersedes BS EN 706:1997, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated by [A1⟩ ⟨A1].

The UK participation in its preparation was entrusted to Technical Committee AGE/32, Agricultural implements and trailers.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard, having been prepared under the direction of the Engineering Sector Board, was published under the authority of the Standards Board and comes into effect on
15 February 1997



**ISBN 978 0 580 62816 0**

**Amendments/corrigenda issued since publication**

| Date | Comments |
|---|---|
| 31 August 2009 | Implementation of CEN amendment A1:2009 and alignment of BSI and CEN publication dates |
| | |
| | |
| | |

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 706:1996+A1

July 2009

ICS 65.060.50

Supersedes EN 706:1996

English Version

# Agricultural machinery - Vine shoot tipping machines - Safety

Matériel agricole - Rogneuses à vignes - Sécurité

Landmaschinen - Reblaubschneidegeräte - Sicherheit

This European Standard was approved by CEN on 11 July 1996 and includes Amendment 1 approved by CEN on 23 May 2009.

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 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 respons bility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN 706:1996+A1:2009: E

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# Foreword

This document (EN 706:1996+A1:2009) 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 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 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

This document includes Amendment 1, approved by CEN on 2009-05-23.

This European Standard supersedes EN 706:1996.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ⟨A1⟩ ⟨A1⟩.

This European Standard 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).

⟨A1⟩ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. ⟨A1⟩

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, 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.

# Introduction

The extent to which hazards are covered is indicated in the scope of this standard. These hazards are specific to vine shoot tipping machines.

The hazards that are common to all the agricultural and forestry machines will be dealt with in a general standard currently in preparation.

Machines shall comply as appropriate with EN 292 for hazards which are not dealt with and especially with annex A of EN 292-2:1991/A1:1995 when EN 292 does not give precise requirements.

## 1 Scope

This standard specifies safety requirements and their verification for design and construction of self-propelled, mounted or semi-mounted vine shoot tipping machines. These mobile machines are used for trimming vineyard and other fruit tress that grow in the same way (trellising plants) and similar applications. Their cutting tools are either:

— High speed rotative blades (which cut by impact), or

— Rotative blade and counter blade (which cut by shearing), or

— Reciprocating cutting bar (which cuts by shearing).

This standard does not apply to:

— Tipping machines for free standing fruit bushes,

— Walk-behind pedestrian controlled machines,

— Machines intended to be mounted on walk-behind pedestrian controlled machines,

— Hand-held machines.

NOTE 1 Machines intended to be mounted on walk-behind pedestrian controlled machines will be dealt with in the next revision of this standard.

This standard describes methods for the elimination or reduction of risks which need specific requirements for vine shoot tipping machines. It does not deal with general hazards, particularly general hazards related to mobility, including those specific to self-propelled machines. These aspects will be dealt with in another standard produced by CEN/TC 144 (see introduction).

In addition, it specifies the type of information on safe working practices to be provided by the manufacturer.

The list of significant hazards dealt with in this standard is given in annex A. Annex A also indicates the hazards which have not been dealt with.

NOTE 2 This standard does not deal with:

— the location and the operation of the controls;

— the adaptability and the setting up of mounted machines on tractors or other vehicles.

Environmental aspects have not been considered in this standard.

This standard applies primarily to machines which are manufactured after the date of issue of the standard.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN 165:1994, *Personal eye protection – Vocabulary.*

EN 166:1994, *Personal eye protection – Specifications.*

EN 292-1:1991, *Safety of machinery – Basic concepts, general principles for design – Part 1: Basic terminology, methodology.*

EN 292-2:1991, *Safety of machinery – Basic concepts, general principles for design – Part 2: Technical principles and specifications (and amendment A1:1995).*

EN 294:1992, *Safety of machinery – Safety distances to prevent danger zones being reached by the upper limbs.*

EN 10025:1990, *Hot rolled products of non-alloy structural steels – Technical delivery conditions.*

EN 25353:1988, *Earth-moving machinery and tractors and machinery for agriculture and forestry – Seat index point.*

## 3 Safety requirements and/or measures

### 3.1 General

Unless otherwise specified in this standard, the machine shall comply with the requirements of tables 1, 3, 4 and 6 of EN 294:1992.

### 3.2 Protection whilst handling and during storage

A machine whose mass is lower than 40 kg, which can be manually installed, shall be fitted with handles located in such a way they ensure safe handling and that during this operation the operator does not have any contact with the cutting tools.

A machine whose mass is equal to or greater than 40 kg shall be fitted with hooking points to enable the use of lifting equipment.

A machine shall either have attachments for suspending it when the machine is not being used or shall be designed to be stored on supports supplied by the manufacturer.

Movable or self-closing (retractable) guards for the cutting tools shall be provided by the manufacturer for when the machine is not in use.

### 3.3 Protection against hazards associated with moving power transmission parts

To ensure protection against hazards related to accessible moving power transmission parts, the machine shall be fitted with fixed guards (according to 3.22.1 of EN 292-1:1991).

When frequent access is foreseen, the machine shall be fitted with guards needing a tool for their opening. These guards shall remain attached to the machine when opened (for example by means of hinges) and automatically lock in the closed position without the use of a tool.

If this type of guard is not used, the machine shall be fitted with:

— Interlocking movable guards (according to 3.22.4 of EN 292-1:1991); or

— Movable guards fitted with a device which prevents their opening so long as the parts are moving.

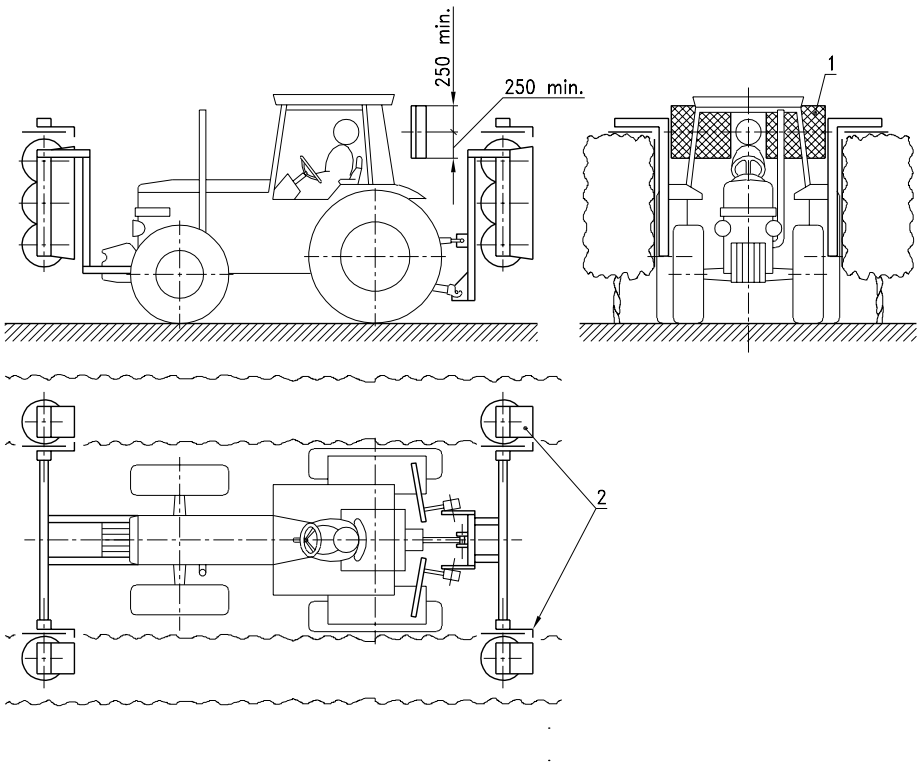
### 3.4 Protection against unintentional contact with the cutting tools

Cutting tools shall be fitted with rigid deflectors in accordance with figures 1 and 2.

All parts of the cutting tools not protected against contact with the operator shall be located at more than 850 mm from the reach zone as shown in figure 3.

NOTE Requirements on the strength of the deflectors will be added by the revision of the standard.

Dimensions in millimetres

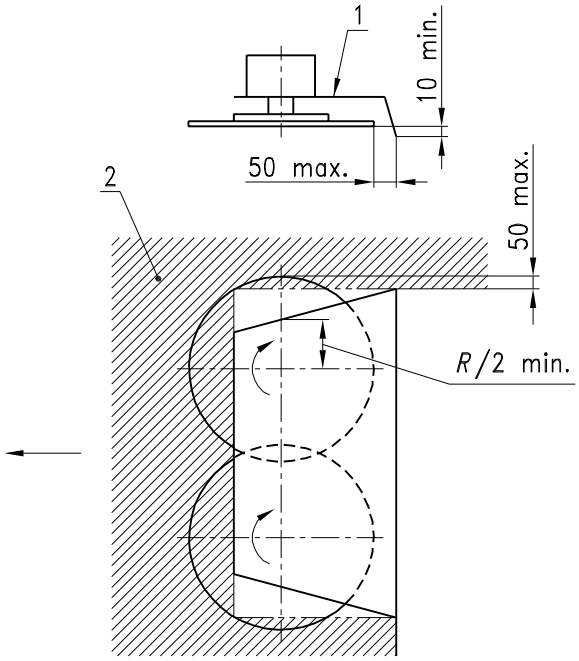



**Key**

1 protective grating
2 rigid deflector

**Figure 1**

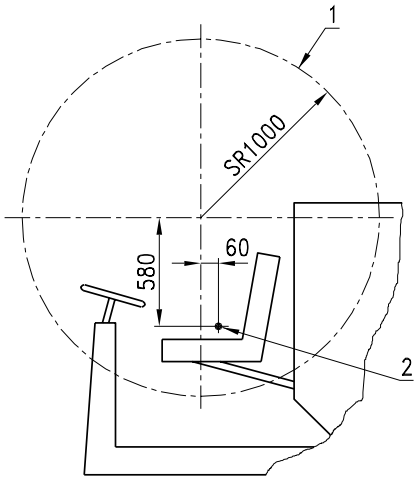
Dimensions in millimetres




**Key**
1 rigid deflector
2 residual projection plane

**Figure 2**

Dimensions in millimetres




**Key**

1 reach zone
2 SIP (according to EN 25353)

**Figure 3**

### 3.5 Protection against ejection of vegetable waste

The protection against the ejection of vegetable waste is ensured by the rigid deflectors described in 3.4 when the residual projection plane as defined in figure 2 does not encroach into the driving station.

If this residual projection place does not encroach into the driving station, the machine shall be fitted with a protective grating. This protective grating shall be an integral part of the machine and shall be perpendicular to the rotation plane of the cutting tools. The grating shall extend to a minimum height of 25 cm on both sides of the tool's rotation plane (50 cm minimum total height). Its width shall be at least equal to the cutting width of the concerned cutting tool (see figure 1). The mesh of the grating shall not permit the penetration of a cylinder of diameter greater than 10 mm and shall have a maximum length of 20 mm.

These requirements do not apply to machines with reciprocating cutting bars nor to machines with rotative blade and counter blade.

NOTE Requirements for the strength of the protective gratings will be added by the revision of the standard.

### 3.6 Protection against breakage of the cutting tools

Rotating parts involved in the cutting action shall be designed and built so that they cannot break or come free as a result of centrifugal force and the pull caused by the way they work, for example in the event of them striking obstacles such as stakes. This requirement shall be verified using the test method described in 4.2.

This requirement does not apply to machines with reciprocating cutting bars nor to machines with rotative blade and counter blade.

The maximum rotation speed of the cutting tools shall be fixed by design. In the case of hydraulically powered tools, this requirement is fulfilled when the driving circuit is fitted with a maximum flow control valve.

### 3.7 Balancing of the cutting tools

Cutting tools working by impact shall be dynamically balanced.

### 3.8 Locking of lateral movement

A machine capable of lateral movement shall be fitted with a mechanical locking device for the transport position.

## 4 Verification of safety requirements and/or measures

### 4.1 General

Unless otherwise specified, compliance with the safety requirements stated in this standard shall be verified by manual inspection using appropriate measuring instruments.

### 4.2 Impact test

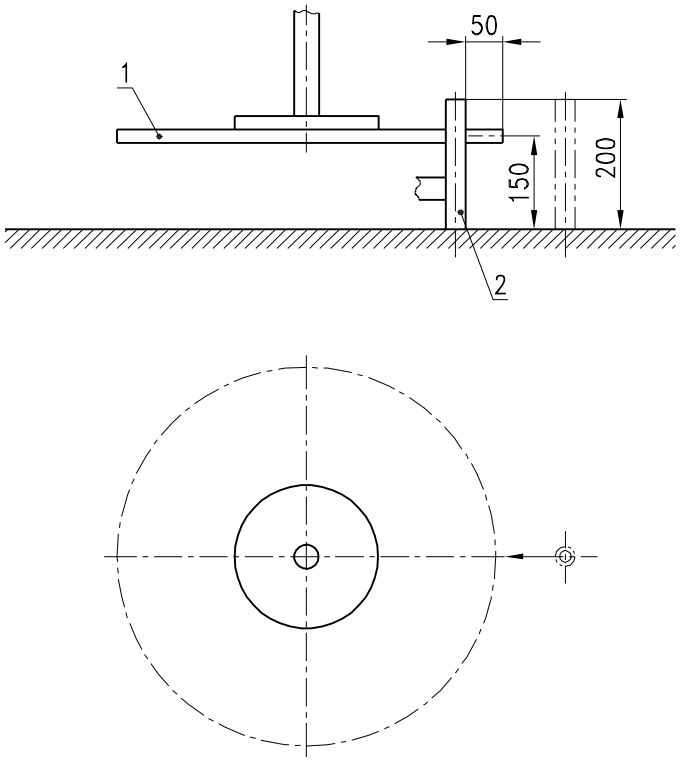
#### 4.2.1 Test procedure

Attach the cutting tool on a rigid frame by the same means as on the machine and drive it in rotation at the limit speed and at the torque recommended by the manufacturer for normal use.

Place an obstacle formed of a 30 mm x 3 mm metal tube of steel Fe 310-0 (in accordance with EN 10025) in front of the cutting tool perpendicular to the cutting plane and move the obstacle at a speed of less than 2 m/s with a force of 1 500 N towards the tool. The impact point is at 150 mm above the fixing surface for the obstacle which is 200 mm high (see figure 4).

Apply the force of 1 500 N for 10 s. Carry out this test 10 times.

Dimensions in millimetres




**Key**

1 cutting tool
2 tube 30X3

**Figure 4**

### 4.2.2 Test acceptance

Neither the cutting tools nor their supports shall become detached.

Any visible fracture or break in a cutting tool or a supporting device shall be considered as a failure.

The break of a torque limiting device (e.g. shear-pin) if one is fitted, is not considered as a failure.

NOTE This test acceptance will be reviewed at the time of revision of the standard.

# 5 Information for use

## 5.1 Instruction handbook

Comprehensive instructions and information on maintenance, the safe system of work, extra precautions and special equipment shall be provided in the instruction handbook. It shall comply with 5.5 of EN 292-2:1991.

In particular, the following points shall be emphasised:

a) The maximum cutting speed as well as the technical data for ensuring this is not exceeded;

b) The residual risks and the individual protection to be used to remedy these risks, specifically that it is necessary:

— To wear gloves, for any work on the machine and more particularly on the cutting tools

— When driving tractors with an open cab or without a cab, to wear spectacles with lateral protection or goggles, according to EN 165, that comply with the basic requirements and the specifications for the protection against high speed particles, category low energy (according to 7.1 and 7.22.2 of EN 166:1994).

c) The instructions to be followed for the assembly, dismantling and storage of the mobile parts and cutting tools;

d) The need for the operator to sound an audible warning before starting up the machine;

e) That during the operation of the machine all persons other than the operator are kept away;

f) That the cutting tools have to be stopped at the end of the row;

g) The need to turn off the tractor or self-propelled machine engine before any intervention;

h) Servicing operations to be carried out during use and for storage;

i) The list of the components that have to be carefully checked before any start up of the machine, the characteristics of the replacement cutting tools and their fixing elements, including the way to mount them;

j) The maximum output of the hydraulic lines of the machine;

k) As soon as any abnormal vibration occurs, stop the machine, proceed with an inspection or have it inspected by the manufacturer agent until the cause is identified and rectified;

l) For a machine with lateral movement, ensure that after use the mechanical locking device is in place;

m) The possible adaptability of the machine on track tractors due to the higher level of ride vibrations.

## 5.2 Marking

The marking shall comply with 5.4 of EN 292-2:1991.

All machines shall be marked legibly and indelibly with at least the following information:

— ▌A1⟩ the business name and full address of the manufacturer and, where applicable, his authorised representative; ⟨A1▐

— Year of construction;

— ⟦A1⟩ the designation of the machinery; ⟨A1⟧

— Designation of series or type;

— Serial number, if any;

— Mass in kg of the most usual configuration;

— Nominal rotation frequency and direction of rotation of the power input connection (marked by an arrow);

— A clearly visible warning mark (e.g. red/white plates) attached to the outer arms of the machine.

# Annex A
(normative)

# List of hazards

Table A.1 gives the list of hazards based on EN 292-1:1991 and EN 292-2:1991 and annex A of EN 292-2:1991/A1:1995.

Table A.2 gives the list of hazards due to the mobility of the machine.

The meaning of the different statements given in the last column (solutions given by this standard) of these tables are:

— "not relevant": the hazard is not significant for the machine.

— "dealt with": the hazard is significant. The measures given in the indicated clauses provide guidance for dealing with the hazard in accordance with the principles of safety integration of EN 292; that means:

  — Elimination or reduction of the risk by design, as far as possible;

  — Protection measures;

  — Information on the residual risks.

— "partly dealt with": the hazard is significant for several parts of the machine. The measures given in the indicated clauses deal with this hazard for some of these parts. In the other parts where the hazard is significant, other measures, not included in this standard, will have to be applied in order to deal with this hazard.

— "not dealt with": the hazard is significant for the machine but has not been taken into account during the preparation of this European Standard.

**Table A.1 — List of hazards**

| Hazards | | Relevant clauses (informative) | | Solutions given by this standard |
|---|---|---|---|---|
| | | EN 292-1 | EN 292-2 | |
| 1 | **Mechanical hazards** (caused for example by:<br>- shape<br>- relative location,<br>- mass and stability (potential energy of elements),<br>- mass and velocity (kinetic energy of elements),<br>- inadequacy of the mechanical strength,<br>- accumulation of potential energy by :<br>- elastic elements (springs), or<br>- liquids or gases under pressure, or<br>- vacuum<br>of the machine parts or workpieces). | 4.2 | - | - |
| 1.1 | crushing hazard | 4.2.1, 4.2.2 | 3.2 | dealt with in 3.2, 5.1 |
| 1.2 | shearing hazard | 4.2.1, 4.2.2 | 3.2, 4.1.1 | dealt with in 3.2, 3.3, 5.1 |
| 1.3 | cutting or severing hazard | 4.2.1, 4.2.2 | 3.2 | dealt with in 3.2, 3.4, 5.1 |
| 1.4 | entanglement hazard | 4.2.1, 4.2.2 | - | dealt with in 3.3 |
| 1.5 | drawing-in or trapping hazard | 4.2.1 | 3.11, 4.1.1, 6.1.2 | not relevant |
| 1.6 | impact hazard | 4.2.1 | - | dealt with in 3.2, 3.4, 3.5, 3.6, 5.1 |
| 1.7 | stabbing or puncture hazard | 4.2.1 | - | dealt with in 3.2, 3.4, 5.1 |
| 1.8 | friction or/abrasion hazard | 4.2.1 | 3.3 b) | not relevant |
| 1.9 | high pressure fluid injection hazard | 4.2.1 | - | not dealt with |
| 1.10 | ejection of parts (of machinery and processed material/workpieces) | 4.2.2 | 3.8 | dealt with in 3.5, 3.6, 3.7, 5.1 |
| 1.11 | loss of stability (of machinery and machine parts) | 4.2.2 | 6.2.5, 3.3 | dealt with in 3.2, 5.1 (partly dealt with for self-propelled machines) |
| 1.12 | slip, trip and fall hazards in relationship with machinery (because of their mechanical nature) | 4.2.3 | 6.2.4 | not relevant |
| 2 | **Electrical hazards**, caused for example by : | 4.3 | 3.9 | - |
| 2.1 | electrical contact (direct or indirect) | 4.3 | - | not dealt with (only relevant for self-propelled machines and machines with an electrical auxiliary motor) |
| 2.2 | Electrostatic phenomena | 4.3 | - | not relevant |

| | | | | |
|---|---|---|---|---|
| 2.3 | Thermal radiation or other phenomena such as ejection of molten particles, and chemical effects from short-circuits, overloads, etc. | 4.3 | - | not relevant |
| 2.4 | External influences on electrical equipment | 4.3 | 3.4 | not dealt with (only relevant for self-propelled machines) |

(continued)

**Table A.1 (continued)**

| Hazards | | Relevant clauses (informative) | | Solution given by this standard |
|---|---|---|---|---|
| | | EN 292-1 | EN 292-2 | |
| **3** | **Thermal hazards** resulting in : | 4.4 | 3.6.3 | - |
| 3.1 | burns and scalds, by a possible contact of persons, by flames or explosions and also by the radiation of heat sources | 4.4 | - | not dealt with (only relevant for self-propelled machines) |
| 3.2 | health-damaging effects by hot or cold work environment | 4.4 | - | not relevant |
| **4** | **Hazards generated by noise**, resulting in : | 4.5 | 3.6.3 | - |
| 4.1 | hearing losses (deafness), other physiological disorders (e.g. loss of balance, loss of awareness) | 4.5 | - | not dealt with |
| 4.2 | interferences with speech communication, acoustic signals, etc. | 4.5 | - | not relevant |
| **5** | **Hazards generated by vibration** (resulting in a variety of neurological and vascular disorders) | 4.6 | 3.6.3 | not dealt with (only relevant for self-propelled machines) |
| **6** | **Hazards generated by radiation,** especially by : | 4.7 | - | - |
| 6.1 | electrical arcs | - | - | not relevant |
| 6.2 | lasers | - | - | not relevant |
| 6.3 | ionizing radiation sources | 4.7 | - | not relevant |
| 6.4 | machines making use of high frequency electromagnetic fields | - | - | not relevant |
| **7** | **Hazards generated by materials and substances processed, used or exhausted by machinery,** for example : | 4.8 | 3.3 b) | - |
| 7.1 | hazards resulting from contact with or inhalation of harmful fluids, gases, mists, fumes and dusts | 4.8 | - | not relevant |
| 7.2 | fire or explosion hazard | 4.8 | - | not relevant |
| 7.3 | biological and micro-biological (viral or bacterial) hazards | 4.8 | - | not relevant |

| | | | | |
|---|---|---|---|---|
| **8** | **Hazards generated by neglecting ergonomic principles in machine design** (mismatch of machinery with human characteristics and abilities) caused for example by : | 4.9 | 3.6 | - |
| 8.1 | unhealthy postures or excessive efforts | 4.9 | 3.6.1, 3.6.4 | dealt with in 3.2 (partly dealt with for self-propelled machines) |
| 8.2 | Inadequate consideration of human hand-arm or foot-leg anatomy | 4.9 | 3.6.2 | not relevant |
| 8.3 | Neglected use of personal protection equipment | 5.5 | - | dealt with in 5.1 (partly dealt with for self-propelled machines) |
| 8.4 | Inadequate area lighting | - | 3.6.5 | not relevant |
| 8.5 | Mental overload or underload, stress, etc. | 4.9 | 3.6.4 | not relevant |
| 8.6 | Human error | 4.9 | 3.6 | dealt with in 5.1, 5.2 |

(Continued)

**Table A.1 (concluded)**

| Hazards | | Relevant clauses (informative) | | Solutions given by this standard |
|---|---|---|---|---|
| | | **EN 292-1** | **EN 292-2** | |
| **9** | **Hazard combinations** | 4.10 | - | not relevant |
| **10** | **Hazards caused by failure of energy supply, breaking down of machinery parts and other functional disorders**, for example : | 5.2.2 | 3 | - |
| 10.1 | failure of energy supply (of energy and/or control circuits) | 3.16 | 3.7 | not dealt with |
| 10.2 | unexpected ejection of machine parts or fluids | - | 3.8, 4 | dealt with in 3.6, 3.7 |
| 10.3 | failure, malfunction of control system (unexpected start up, unexpected overrun) | 3.15, 3.16, 3.17 | 3.7 | not relevant |
| 10.4 | errors of fitting | - | - | dealt with in 5.1, 5.2 |
| 10.5 | overturn, unexpected loss of machine stability | 4.2.2 | 6.2.5 | dealt with in 3.2 |
| **11** | **Hazards caused by (temporary) missing and/or incorrectly positioned safety related measures/means,** for example **:** | - | 4 | - |
| 11.1 | all kinds of guard | 3.22 | 4.2 | dealt with in 5.1 |
| 11.2 | all kinds of safety related (protection) devices | 3.23 | 4.2 | dealt with in 5.1 |
| 11.3 | starting and stopping devices | - | 3.7 | not relevant |

| | | | | |
|---|---|---|---|---|
| 11.4 | safety signs and signals | - | 3.6.7, 5.2, 5.3, 5.4 | dealt with in 5.1 |
| 11.5 | all kinds of information or warning devices | - | 5.4 | not relevant |
| 11.6 | energy supply disconnecting devices | - | 6.2.2 | not relevant |
| 11.7 | emergency devices | - | 6.1 | not relevant |
| 11.8 | feeding/removal means of workpieces | - | 3.11 | not relevant |
| 11.9 | essential equipment and accessories for safe adjusting and/or maintaining | 3.3, 3.11 | 3.12, 6.2.1, 6.2.3, 6.2.6 | dealt with in 5.1 |
| 11.10 | equipment evacuating gases, etc | - | - | not relevant |

**Table A.2: List of hazards due to mobility**

| Hazards | | Solutions given by this standard |
|---|---|---|
| **12** | **Inadequate lighting of moving/working area** | not dealt with (only relevant for self-propelled machines) |
| **13** | **Hazards due to sudden movement, instability, etc** | dealt with in 3.2, 5.1 |
| **14** | **Inadequate/unergonomic design of driving/operating position** | - |
| 14.1 | hazards due to dangerous environments (contact with moving parts, exhaust gases etc.) | not dealt with (only relevant for self-propelled machines) |
| 14.2 | inadequate visibility from driver's/operator's position | not dealt with |
| 14.3 | inadequate seat/seating (SIP) | not dealt with (only relevant for self-propelled machines) |
| 14.4 | inadequate/unergonomic design/positioning of controls | not dealt with (only relevant for self-propelled machines) |
| 14.5 | starting/moving of machinery | not dealt with (only relevant for self-propelled machines) |
| 14.6 | traffic of machinery | not dealt with (only relevant for self-propelled machines) |
| 14.7 | movement of pedestrian controlled machinery | not relevant |
| **15** | **Mechanical hazards** | - |
| 15.1 | hazards to exposed persons due to uncontrolled movement | not dealt with |

| | | |
|---|---|---|
| 15.2 | hazards due to break-up and/or ejection of parts | 3.6, 3.7 |
| 15.3 | hazards due to rolling over (deflection limiting volume: DLV) | not dealt with (only relevant for self-propelled machines) |
| 15.4 | hazards due to falling objects (DLV) | not relevant |
| 15.5 | inadequate means of access | not dealt with (only relevant for self-propelled machines) |
| 15.6 | hazards caused due to towing, coupling, connecting, transmission, etc | partly dealt with in 3.3, 5.1, 5.2 |
| 15.7 | hazards due to batteries, fire, emissions of dust and gas, etc. | not dealt with (only relevant for self-propelled machines) |

# Annex ZA
(informative)

## [A1] Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/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 on machinery.

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 relevant Essential Requirements, *except Essential Requirement(s) for all machines: 1.2.1, 1.2.6, 1.2.7, 1.3.2, 1.4.1 (1st indent), 1.5.8, 1.7.4.f), and for self-propelled machines: 1.1.2.d), 1.1.2.e), 1.1.4, 1.1.5 (1st and 3rd par), 1.2.2, 1.5.1, 1.5.5, 1.5.9, 1.5.11, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.3, 3.4.5, 3.4.6, 3.5.1, 3.5.2, 3.6.3.a),* 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. [A1]

# Annex ZB
(informative)

## A1 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 a 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 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 relevant Essential Requirements, *except Essential Requirement(s) for all machines: 1.2.1, 1.2.6, 1.3.2, 1.4.1 (1st indent), 1.4.2.1 (2nd paragraph), 1.5.8, 1.7.4.2 q), 1.7.4.2 u), and for self-propelled machines: 1.1.2 d), 1.1.4, 1.1.5 (2nd and 4th par), 1.1.6, 1.1.7, 1.1.8, 1.5.1, 1.2.2, 1.5.5, 1.5.9, 1.5.11, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.3, 3.4.5, 3.4.6, 3.5.1, 3.5.2, 3.6.3.1,* 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. A1

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