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Maskinsäkerhet – Säkerhetskrav vid konstruktion och tillverkning av maskiner för pappers- och massatillverkning – Del 13: Balavtrådningsmaskiner

Safety of machinery – Safety requirements for the design and construction of paper making and finishing machines – Part 13: Machines for de-wiring bales and units

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Denna standard ersätter SS-EN 1034-13:2005, utgåva 1.

The European Standard EN 1034-13:2005+A1:2009 has the status of a Swedish Standard. This document contains the official English version of EN 1034-13:2005+A1:2009.

This standard supersedes the Swedish Standard SS-EN 1034-13:2005, edition 1.

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EN 1034-13:2005+A1

December 2009

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English Version

Safety of machinery - Safety requirements for the design and construction of paper making and finishing machines - Part 13: Machines for de-wiring bales and units

Sécurité des machines - Prescriptions de sécurité pour la conception et la construction de machines de fabrication et de finition du papier - Partie 13: Machines à couper les fils des balles et unités

Sicherheit von Maschinen - Sicherheitstechnische Anforderungen an Konstruktion und Bau von Maschinen der Papierherstellung und Ausrüstung - Teil 13: Maschinen zur Entdrahtung von Ballen und Units

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Foreword

This document (EN 1034-13:2005+A1:2009) has been prepared by Technical Committee CEN/TC 198 “Printing and paper machinery - Safety”, the secretariat of which is held by DIN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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 includes Amendment 1, approved by CEN on 17 November 2009.

This document supersedes EN 1034-13:2005.

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

⟨A1⟩ 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 Annexes ZA and ZB, which are integral parts of this document. ⟨A1⟩

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Introduction

This European Standard is a type C standard as stated in EN ISO 12100-1:2003.

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

For machines that have been designed and built according to the provisions of this C standard, the following stipulation applies: When provisions of this type C standard are different from those which are stated in type B standards or from provisions made in [A1] EN 1034-1:2000+A1:2010 [A1], the provisions of this type C standard take precedence over the provisions of the other standards.

1 Scope

This European Standard applies to machines for de-wiring bales and units and shall be used together with [A1] EN 1034-1:2000+A1:2010 [A1]. It deals with all significant hazards, hazardous situations and hazard events relevant to machines for de-wiring bales and units, when used as intended and under conditions reasonably foreseeable by the manufacturer as incorrect application (see clause 4).

This European Standard is not applicable to hand-held devices.

This European Standard is not applicable to machines for de-wiring bales and units which are manufactured before the date of publication of this document by CEN.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN 418:1992, *Safety of machinery — Emergency stop equipment — Functional aspects — Principles for design.*

EN 619:2002, *Continuous conveyors and systems — Safety and EMC requirements for mechanical conveying systems for packaged goods.*

EN 953:1997, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards.*

EN 954-1:1996, *Safety of machinery — Safety related parts of control systems — Part 1: General principles for design.*

EN 982:1996, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics.*

EN 983:1996, *Safety of machinery — Safety requirements for fluid power systems and their components — Pneumatics.*

[A1] EN 1034-1:2000+A1:2010 [A1], *Safety of machinery — Safety requirements for the design and construction of paper making and finishing machines — Part 1: Common requirements.*

EN 1088:1995, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection.*

EN 1837:1999, *Safety of machinery — Integral lighting of machines.*

EN 13023:2003, *Noise measurement methods for printing, paper converting, paper making machines and auxiliary equipment — Accuracy categories 2 and 3.*

EN 60204-1:1997, *Safety of machinery — Electrical equipment — Part 1: General requirements (IEC 60204-1:1997).*

EN 61000-6-2:2001, *Electromagnetic compatibility (EMC) — Part 6-2: Generic standard — Immunity — Part 2: Industrial environment (IEC 61000-6-2:1999, modified).*

EN 61496-1:2004, *Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests (IEC 61496-1:2004, modified).*

prEN 61496-2:1997, *Safety of machinery — Electro-sensitive protective equipment — Part 2: Particular requirements for equipment using active opto-electronic protective devices (AOPDs) (IEC 61496-2:1997, modified).*

EN ISO12100-1:2003, *Safety of machinery — Basic concepts — General principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003).*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts — General principles for design - Part 2: Technical principles and specifications (ISO 12100-2:2003).*

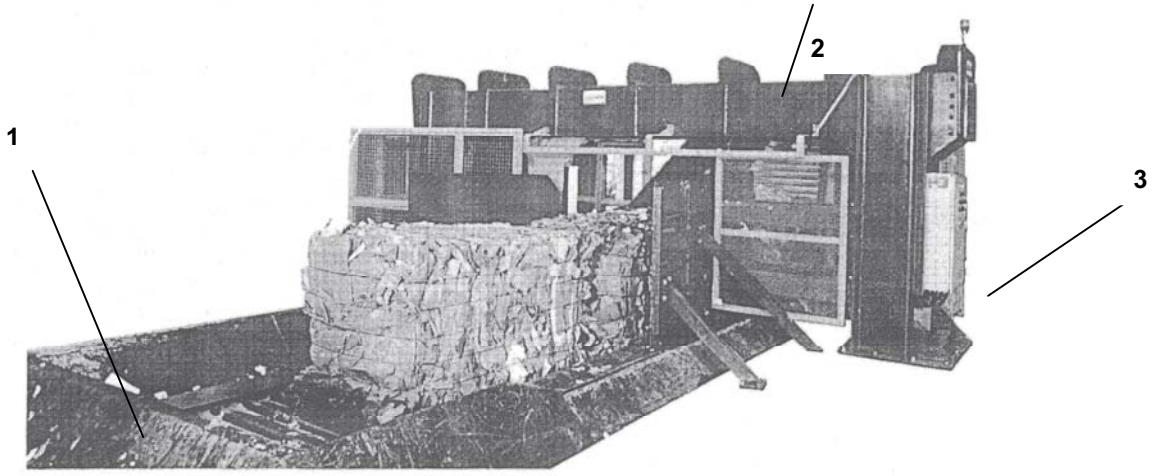
3 Terms and definitions

For the purpose of this European Standard, the definitions given in [A1] EN 1034-1:2000+A1:2010 [A1], EN ISO 12100-1:2003 and the following apply:

3.1
machine for de-wiring bales and units
machinery used for cutting and or opening and removing wires used for binding together bales made of cellulose or paper and units formed of cellulose bales.

This machinery includes the de-wiring device, integrated continuous conveyor for moving the bales and units, the loading conveyor, the positioning device and the wire ejection device, including the drive and control systems.

Examples of machine types are illustrated in Figures 1, 2 and 3.

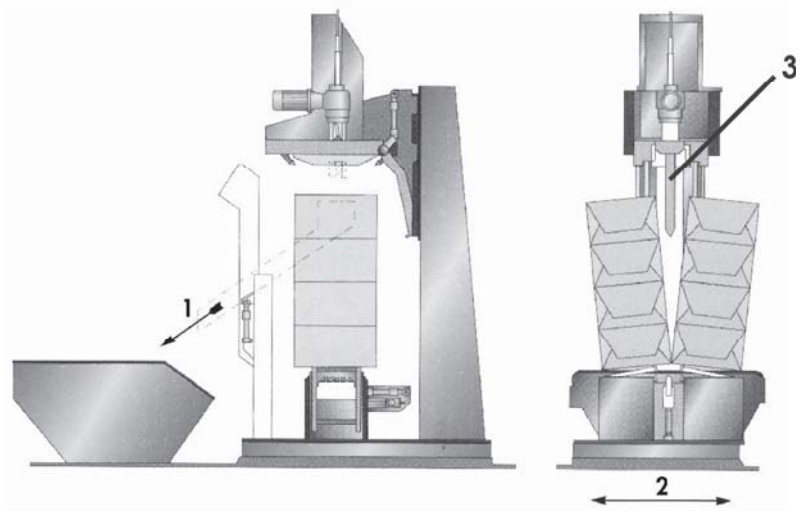


NOTE Safety devices are not shown

Key

1 Loading conveyor
2 Movable blade
3 Control cabinet

Figure 1 — Example of a machine for cutting bale wires

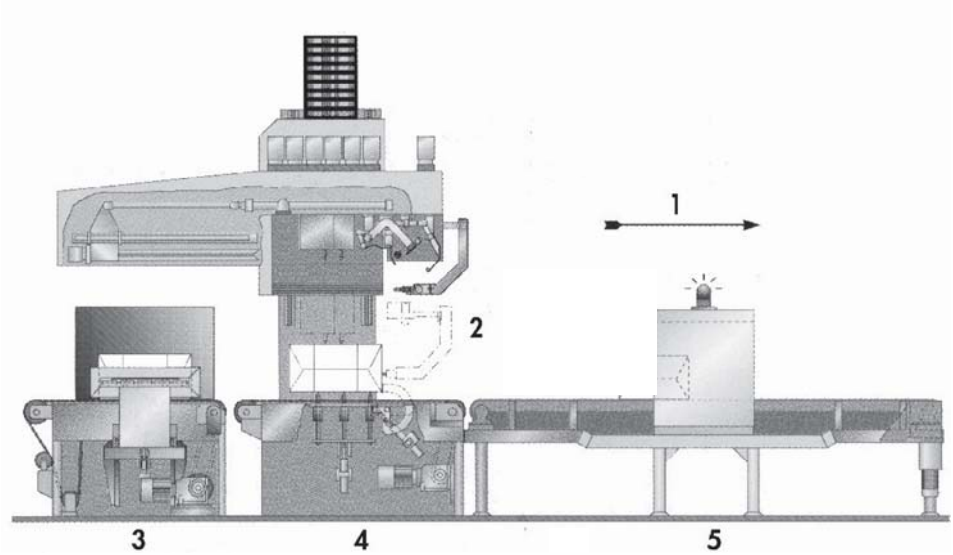


NOTE Safety devices are not shown

Key

1 Wire ejection
2 Feed direction
3 Cutting tool

Figure 2 — Example of a machine for unit de-wiring



NOTE Safety devices are not shown

Key

1 Feed direction
2 Movable cutting tool
3 Loading conveyor
4 Positioning device
5 Continuous conveyor

Figure 3 — Example of a machine for de-wiring cellulose bales

3.2
de-wiring device
device with tools for cutting/opening, gripping and removing the wires, including drive

3.3
loading conveyor
continuous conveyor for transporting bales or units to the feeding point of the de-wiring device

3.4
positioning device
system with sliders that push the bales or units into the position required on the convenyer for de-wiring

3.5
wire ejection device
device used for removing the wire from the machine

3.6
unit
combination of several bales made of cellulose held together by wires

4 List of significant hazards

This clause contains all the significant hazards, hazardous situations and events, as far as they are dealt with in this standard, which are identified by risk assessment as significant for this type of machinery and which require action to eliminate or reduce the risk.