

საქართველოს სტანდარტი

მანქანა-დანადგარების უსაფრთხოება-უსაფრთხოების მოთხოვნები
ქალაქის შემქმნელი და ქალაქის გამომყვანი მანქანების მიმართ-
ნაწილი 2: ქერქის დოლები

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

სსტ ენ 1034-3:2011/2019

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 6 დეკემბრის № 98 განკარგულებით

3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 1034-3:2011 „მანქანა-დანადგარების უსაფრთხოება-უსაფრთხოების მოთხოვნები ქაღალდის შემქმნელი და ქაღალდის გამომყვანი მანქანების მიმართ- ნაწილი 2: ქერქის დოლები“

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 6 დეკემბერი №268-1.3-016215

დაუშვებელია წინამდებარე სტანდარტის სრული ან ნაწილობრივი კვლავწარმოება, ტირაჟირება და გავრცელება სსიპ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე

English Version

Safety of machinery - Safety requirements for the design and construction of paper making and finishing machines - Part 3: Rereelers and winders

Sécurité de machines - Exigences techniques de sécurité pour la conception et la construction de machines de fabrication et de finition du papier - Partie 3 : Visiteuses et bobineuses

Sicherheit von Maschinen - Sicherheitsanforderungen an Konstruktion und Bau von Maschinen der Papierherstellung und Ausrüstung - Teil 3: Umroller und Rollenschneider

This European Standard was approved by CEN on 29 October 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..... 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 List of significant hazards 9

5 Safety requirements and/or measures 12

5.1 General..... 12

5.2 Workplaces, means of access, catwalks, passageways 13

5.3 Start-up warning device 13

5.4 Emergency stop device and braking system..... 13

5.5 Isolation and energy dissipation, prevention of unexpected start-up 14

5.6 Equipment for make-ready and maintenance..... 14

5.7 Equipment for cleaning and removal of broke and waste..... 15

5.8 Control system and actuators 15

5.9 Noise 16

5.10 Integrated lighting..... 17

5.11 Ergonomic principles 17

5.12 Electrical equipment..... 17

5.13 Hydraulic equipment 17

5.14 Pneumatic equipment 17

5.15 Electric drive system 17

5.16 Power transmission elements, mechanical brakes..... 18

5.17 Web threading 18

5.18 Unwind 18

5.19 Feeding of broke into the pulper, pulper flap 20

5.20 Rolls, guide rolls, spreader rolls, slitter rolls 20

5.21 Embossing calender of tissue winders 21

5.22 Web cutting device 21

5.23 Hazards caused by web breaks..... 21

5.24 Slitter section, device for removing the trimmed material, integrated shredder 21

5.25 Windup section 22

6 Verification of compliance with safety requirements and/or measures 25

7 Information for use 26

7.1 General..... 26

7.2 Instruction handbook 26

7.3 Marking 27

Annex A (informative) Figures 28

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC 40

Table 1 — List of significant hazards 10

Table 2 — List of safety functions, Performance Level and Safety Integrity Level specified in this standard..... 15

Table 3 — Verification of compliance with safety requirements and/or measures 26

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.

Figure A.1 — Principle of a rereeler	28
Figure A.2 — Principle of a two-drum winder	29
Figure A.3 — Principle of a two-drum winder for narrow slitting width.....	30
Figure A.4 — Principle of a two-drum winder	31
Figure A.5 — Principle of a two-drum winder with an integrated pulper and reel spool storage	32
Figure A.6 — Principle of a single-drum bobbin winder with centre-surface drive	33
Figure A.7 — Principle of a single-drum winder with centre-drive	34
Figure A.8— Principle of a centre driven winder with single contact rolls	35
Figure A.9 — Principle of a winder with machine reel- and reel spool storage	36
Figure A.10 — Principle of a single-drum centre-driven winder.....	37
Figure A.11 — Principle of a tissue winder (plying machine)	38
Figure A.12 — Example for a tool for changing slitter knives	39
Figure A.13 — Examples for shell and bearing supports, a) without locking arm, b) with locking arm	39

Foreword

This document (EN 1034-3:2011) has been prepared by Technical Committee CEN/TC 198 "Printing and Paper Machinery - Safety", the secretariat of which is held by DIN.

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 1034-3:1999+A1:2009.

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) 2006/42/EC, see informative Annex ZA, which is an integral part of this document.

In comparison to EN1034-3:2000+A1:2010, the following amendments have been made:

- a) the content of the standard was modified to reflect the present state of the art;
- b) the normative references were updated;
- c) the requirements for the safety-related parts of control systems were updated. For an increased number of defined safety functions, requirements were specified on the basis of the standards EN ISO 1398-1 and EN 62061;
- d) the requirements of the Machinery Directive 2006/42/EC regarding the captivity of the fixing systems of guards have been included;
- e) the document was supplemented by requirements relating to the electric drive system, to threading devices, unwinds and winds with automatic set changing;
- f) new requirements were added concerning integrated embossing calendars, machine pulpers and shredders for trimmed material;
- g) illustrations of rereelers and winders were added in Annex A.

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.

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

Introduction

This document is a type C standard as stated in EN ISO 12100:2010. The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document. For machines that have been designed and built according to the provisions of this C standard, the following stipulation applies: Where provisions of this type C standard are different from those which are stated in type A or B standards or from provisions made in EN 1034-1:2000+A1:2010, the provisions of this type C standard take precedence over the provisions of the other standards.