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BS EN 13418:2013



BSI Standards Publication

Plastics and rubber machines — Winding machines for film or sheet — Safety requirements

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This British Standard is the UK implementation of EN 13418:2013. It supersedes BS EN 13418:2004+A1:2008 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/3/2, Rubber and plastics machine - Safety.

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.

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ISBN 978 0 580 73080 1

ICS 83.200

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

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 June 2013.

Amendments issued since publication

Date	Text affected
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EUROPÄISCHE NORM

May 2013

ICS 83.200

Supersedes EN 13418:2004+A1:2008

English Version

Plastics and rubber machines - Winding machines for film or sheet - Safety requirements

Machines pour les matières plastiques et le caoutchouc -
Bobineuses pour films ou feuilles - Prescriptions de
sécurité

Kunststoff- und Gummimaschinen - Wickelmaschinen für
flache Bahnen - Sicherheitsanforderungen

This European Standard was approved by CEN on 11 April 2013.

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Foreword

This document (EN 13418:2013) has been prepared by Technical Committee CEN/TC 145 "Plastics and rubber machines", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

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 13418:2004+A1:2008.

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.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

List of significant technical changes since the last edition:

- partially modified requirements and/or protective measures for individual functional groups by taking into account the technological changes in the plastics and rubber industry and the development of the safety technology;
- modified requirements for the safety related parts of the machine control system by taking into account the performance levels as specified in EN ISO 13849-1;
- complete revision of the clause on start-up procedure and manual intervention;
- addition of a noise test code in form of a normative annex;
- modified informative annexes showing examples of safety concepts used at winding machines.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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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.

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

1 Scope

This European Standard deals with all significant hazards, hazardous situations and events relevant to the design and construction of winding machines used for the winding and/or unwinding and/or rewinding and/or slitting of film or sheet manufactured from rubber, plastic and composite materials, when the machines are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4).

A machine used for winding or rewinding (winder or rewinder) begins at the intake of the film or sheet into the winding machine and ends at the discharge position of the reel(s).

A machine used for unwinding (unwind) begins at the take-up position of the reel(s) and ends at the film or sheet take-off point.

A machine used for unwinding, slitting and re-winding (slitter rewinder) begins at the take-up position of the reel(s) and ends at the discharge positions of the reel(s) and covers one or more integrated slitting/cutting units.

In some machines the winding, unwinding, rewinding and slitting functions may be combined.

Hazards due to electro-magnetic radiation, e.g. from the use of thickness monitoring devices, are not covered by this European Standard.

Toxic or chemical hazards and hazards due to dusts, fumes or gases, which could occur from the materials being wound, unwound, slit or rewound are not covered by this European Standard.

NOTE Directive 94/9/EC concerning equipment and protective systems intended for use in potentially explosive atmospheres can be applicable to the type of machine or equipment covered by this European Standard. The present standard is not intended to provide means of complying with the essential health and safety requirements of Directive 94/9/EC.

This European Standard is not applicable to winding machines which are manufactured before the date of its publication.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 953:1997+A1:2009, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

EN 1037:1995+A1:2008, *Safety of machinery — Prevention of unexpected start-up*

EN 1088:1995+A2:2008, *Safety of machinery — Interlocking devices associated with guards — Principles for design and selection*

EN 1760-1:1997+A1:2009, *Safety of machinery — Pressure sensitive protective devices — Part 1: General principles for the design and testing of pressure sensitive mats and pressure sensitive floors*

EN 1760-3:2004+A1:2009, *Safety of machinery — Pressure sensitive protective devices — Part 3: General principles for the design and testing of pressure sensitive bumpers, plates, wires and similar devices*