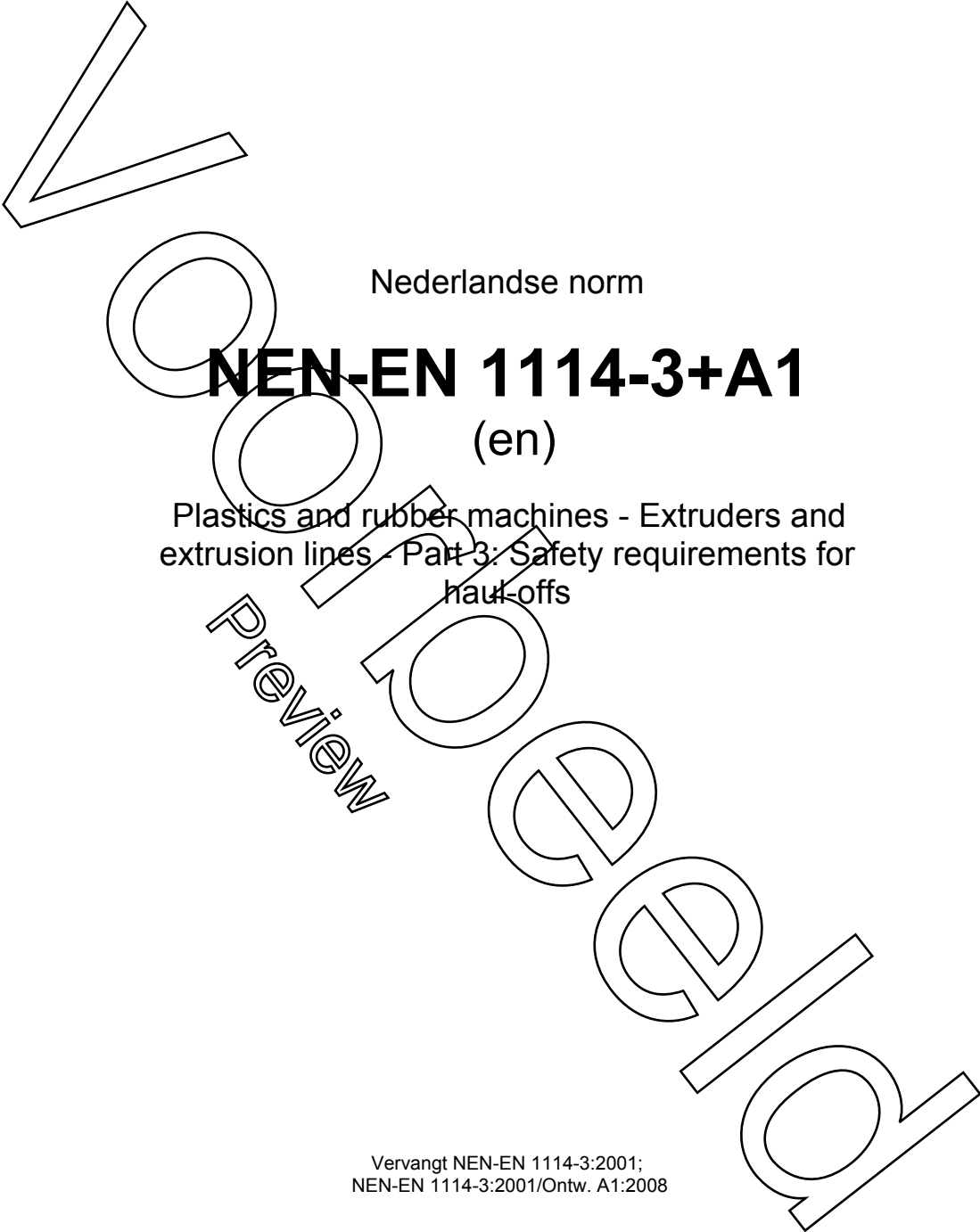


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Nederlandse norm

# **NEN-EN 1114-3+A1**

(en)

Plastics and rubber machines - Extruders and extrusion lines - Part 3: Safety requirements for haul-offs

Vervangt NEN-EN 1114-3:2001;  
NEN-EN 1114-3:2001/Ontw. A1:2008

ICS 83.200  
oktober 2008

Als Nederlandse norm is aanvaard:  
 - EN 1114-3:2001+A1:2008, NDT

Voorbeeld  
 Preview

Normcommissie 341 003 "Rubber- en kunststofmachines"

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## Nederlands voorwoord

Voor de in deze norm vermelde normatieve verwijzingen bestaan in Nederland de volgende equivalenten:

<u>vermelde norm</u>	<u>Nederlandse norm</u>	<u>titel</u>
EN 294:1992	-	-
EN 418:1992	-	-
EN 563:1994	-	-
EN 574:1996	-	-
EN 811:1996	-	-
EN 953:1997	NEN-EN 953:1998	Veiligheid van machines - Afschermingen - Algemene eisen voor het ontwerp en de constructie van vaste en beweegbare afschermingen (en,nl)
EN 954-1:1996	-	-
EN 982:1996	-	-
EN 983:1996	-	-
EN 999:1998	-	-
EN 1037:1995	-	-
EN 1070	-	-
EN 1088:1995	-	-
prEN 1760-2:1996	-	-
EN 60204-1:1997	-	-
EN 60529:1991	NEN 10529:1992	Beschermingsgraden van omhulsels van elektrisch materieel (IP-codering) (en,fr)
EN ISO 3744:1995	NEN-EN-ISO 3744:1995	Akoestiek - Bepaling van geluidvermogniveaus van geluidbronnen via de meting van geluiddrukken - Praktijkmethode voor vrijeveld-omstandigheden boven een reflecterend oppervlak (en)
EN ISO 4871:1996	NEN-EN-ISO 4871:1997	Akoestiek - Opgave en verificatie van geluidemissiewaarden van machines en apparaten (en)
EN ISO 9614	-	-
EN ISO 11201:1995	NEN-EN-ISO 11201:1996	Akoestiek - Geluid uitgestraald door machines en toestellen - Het meten van geluidrukniveaus op de werkplek en op andere aangegeven plekken - Praktijkmethode voor een bij benadering vrij veld boven een reflecterend oppervlak (en)
EN ISO 11204:1995	NEN-EN-ISO 11204:1996	Akoestiek - Geluid uitgestraald door machines en toestellen - Het meten van geluidrukniveaus op de werkplek en op andere aangegeven plekken - Methode voor het bepalen van omgevingscorrecties (en)
EN ISO 11688-1:1998	NEN-EN-ISO 11688-1:1998	Akoestiek - Aanbevolen praktijk voor het ontwerp van machines en apparatuur met een laag geluidsniveau - Deel 1: Planning (en)
EN ISO 12100-1:2003	NEN-EN-ISO 12100-1:2003	Veiligheid van machines - Basisbegrippen, algemene ontwerpbeginselen - Deel 1: Basisterminologie, methodologie (en,nl)
EN ISO 12100-2:2003	NEN-EN-ISO 12100-2:2003	Veiligheid van machines - Basisbegrippen, algemene ontwerpbeginselen - Deel 2: Technische beginselen (en)

Voorbeeld  
Preview

English Version

**Plastics and rubber machines - Extruders and extrusion lines -  
 Part 3: Safety requirements for haul-offs**

Machines pour les matières plastiques et le caoutchouc -  
 Extrudeuses et lignes d'extrusion - Partie 3: Prescriptions  
 de sécurité pour les extracteurs

Kunststoff- und Gummimaschinen - Extruder und  
 Extrusionsanlagen - Teil 3: Sicherheitsanforderungen für  
 Abzüge

This European Standard was approved by CEN on 28 December 2000 and includes Amendment 1 approved by CEN on 15 June 2008.

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## Contents

Page

Foreword.....	3
Introduction.....	4
1 Scope.....	4
2 Normative references.....	5
3 Terms and definitions.....	6
4 List of significant hazards.....	7
4.1 Mechanical Hazards.....	7
4.2 Hazards due to electrical energy.....	13
4.3 Hazards due to hydraulic and pneumatic equipment.....	14
4.4 Hazards due to failure of safety related parts of control systems.....	14
4.5 Thermal hazards.....	14
4.6 Hazards due to noise.....	14
4.7 Hazards due to instability.....	14
5 Safety requirements and/or protective measures.....	14
5.1 Mechanical hazards.....	14
5.1.1 General.....	14
5.1.2 Feeding zone.....	14
5.1.3 Conveying zone.....	15
5.1.4 Drive and power transmission zone.....	15
5.1.5 Discharge zone.....	16
5.1.6 Start up and machine setting operations in the danger zones.....	16
5.1.7 Wheels for machinery movement for changes of location.....	17
5.1.8 Falling/uncontrolled descent due to gravity.....	17
5.2 Hazards due to electrical energy.....	17
5.2.1 Electrical shock or burns caused by direct or indirect contact with live parts.....	17
5.2.2 Hazards due to electrostatic discharge.....	19
5.3 Hazards due to hydraulic and pneumatic equipment.....	19
5.4 Hazards due to failure of safety related parts of control systems.....	19
5.5 Thermal hazards.....	20
5.6 Hazards due to noise.....	20
5.6.1 Noise reduction at source by design.....	20
5.6.2 Determination of noise emission values.....	20
5.6.3 Declaration of noise emission values.....	21
5.7 Hazards due to instability.....	21
6 Verification of the safety requirements and/or protective measures.....	21
7 Information for use.....	23
7.1 Minimum marking on the machine.....	23
7.2 Instruction manual.....	23
Annex ZA (informative) <b>Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC</b> .....	25
Annex ZB (informative) <b>Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC</b> .....	26
Bibliography.....	27

## Foreword

This European Standard (EN 1114-3:2001+A1:2008) 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 April 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-06-15.

**A1** The main changes compared to the previous version are:

- modification of the main element of the title;
- editorial modification of Annex ZA;
- addition of Annex ZB;
- editorial changes of EN 292-1:1991 to EN ISO 12100-1:2003 and of EN 292-2:1991/A1:1995 to EN ISO 12100-2:2003 in the following clauses/sub-clauses: 2, 5, 5.1.1, 5.1.6, 5.5, 5.6.2, Table 2, 7.1, 7.2;
- minor changes in the Foreword and in sub-clauses 5.6.2 and 7.1, second and third indents. **A1**

This document supersedes EN 1114-3:2001.

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**

This is the third in a series of standards on the safety of extruders and extrusion lines.

Part 1 deals with extruders.

Part 2 deals with die face pelletisers.

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

This document is a type C standard as stated in EN 1070.

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 contains the safety requirements for the design and construction of haul-offs used in extrusion lines for processing plastics and rubber for the hazards identified in clause 4. The following kinds of haul-offs are covered:

- caterpillar haul-offs;
- belt haul-offs;
- capstan haul-offs;
- belt capstan haul-offs;
- roller haul-offs.

The machine begins at the material inlet opening and ends at the material outlet.

Cutting units which are integrated with or attached to the haul-off are not covered.

Take-off devices used at film or sheet lines are not covered.

Chemical, toxicological and fire hazards which could occur for example in continuous vulcanisation plants due to the materials processed are not dealt with.

Unwinding and winding machines are not subject to this standard. They are being dealt with in a separate standard being produced by another working group of CEN/TC 145.

This document is not applicable to haul-offs which are manufactured before the date of publication by CEN of this document.



## 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 (including amendments).

~~A1) deleted text A1~~

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 563:1994, *Safety of Machinery - Temperatures of touchable surfaces - Ergonomic data to establish temperature limit values for hot surfaces.*

EN 574:1996, *Safety of machinery - Two-hand control devices - Functional aspects - Principles for design.*

EN 811:1996, *Safety of Machinery - Safety distances to prevent danger zones being reached by the lower limbs.*

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 requirements for fluid power systems and components – hydraulics.*

EN 983:1996, *Safety requirements for fluid power systems and components – pneumatics.*

EN 999:1998, *Safety of machinery - The positioning of protective equipment in respect of approach speeds of parts of the human body.*

EN 1037:1995, *Safety of machinery - Prevention of unexpected start-up.*

EN 1070, *Safety of machinery – Terminology.*

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

prEN 1760-2:1996, *Safety of machinery - Pressure sensitive protective devices - Part 2: General principles for the design and testing of pressure sensitive edges and pressure sensitive bars.*

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

EN 60529:1991, *Degrees of protection provided by enclosures (IP-Code) (IEC:1989).*

EN ISO 3744:1995, *Acoustics; Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994).*

EN ISO 4871:1996, *Acoustics - Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996).*

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