

Kummi- ja plastitöötlusmasinad. Ekstruuderid ja ekstrusiooniliinid. Osa 2: Ohutusnõuded lameda suulisega granulaatoritele KONSOLIDEERITUD TEKST

Plastics and rubber machines - Extruders and extrusion lines - Part 2: Safety requirements for die face pelletisers CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1114-2:1999+A1:2008 sisaldab Euroopa standardi EN 1114-2:1998+A1:2008 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 27.10.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 03.09.2008. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 1114-2:1999+A1:2008 consists of the English text of the European standard EN 1114-2:1998+A1:2008. This standard is ratified with the order of Estonian Centre for Standardisation dated 27.10.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation. Date of Availability of the European standard text 03.09.2008. The standard is available from Estonian standardisation organisation.
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English Version

Plastics and rubber machines - Extruders and extrusion lines -
Part 2: Safety requirements for die face pelletisers

Machines pour les matières plastiques et le caoutchouc -
Extrudeuses et lignes d'extrusion - Partie 2: Prescriptions
de sécurité pour les granulateurs en tête

Kunststoff- und Gummimaschinen - Extruder und
Extrusionsanlagen - Teil 2: Sicherheitsanforderungen für
Kopfgranulatoren

This European Standard was approved by CEN on 26 January 1998 and includes Amendment 1 approved by CEN on 8 June 2008.

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Foreword

This document (EN 1114-2:1998+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of an identical text or by endorsement, at the latest by March 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-06-08. 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 to EN ISO 12100-2:2003 in the following clauses and sub-clauses: Introduction, 2, 5.6, 5.7, 5.8, Table 1, 7.1, 7.2
- minor changes in the Foreword and in sub-clauses 5.7.2 and 7.1, second paragraph.

This document supersedes EN 1114-2:1998.

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 second in a series of standards on the safety of extruders and extrusion lines.

Part 1 deals with extruders.

Part 2 deals with haul-offs.

Further parts are under discussion.

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 European Standard is a type C Standard as defined in  EN ISO 12100 .

The extent to which hazards are covered is indicated in the scope of this standard. In addition, machinery shall comply as appropriate with  EN ISO 12100  for hazards which are not covered by this standard.

1 Scope

This European Standard specifies safety requirements for the design and construction, in respect of the hazards listed in clause 4 and dealt with in clause 5, of the following kinds of die face pelletisers used with extruders for pelletising of plastics and rubber:

- Underwater pelletisers;
- Water ring pelletisers;
- Dry pelletisers;
- Centrifugal pelletisers;
- Knife rotor pelletisers.

Strand pelletisers are not subject to this standard. They are dealt with in a separate standard being produced by CEN/TC 145/WG6.

This standard does not cover requirements for the design of any exhaust system.

This standard applies to machines which are manufactured after the date of publication by CEN of the standard.

2 Normative references

This European standard includes by dated or undated reference provisions from other publications. These normative references are quoted 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.

 *deleted text* 

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 626-1:1994, *Safety of machinery – Principles for machinery manufacturers on the reduction of risk to health from hazardous substances emitted by machinery*

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 1088:1995, *Safety of machinery – Interlocking devices with and without guard locking – General principles and provisions for design*

EN ISO 3744:1995, *Acoustics – Determination of sound power levels of noise sources – Engineering methods for free field conditions 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)*

EN ISO 9614-1:1995, *Acoustics, Determination of sound power levels of noise sources using sound intensity – Part 1: Measurement at discrete points (ISO 9614-1:1993)*

EN ISO 9614-2:1996, *Acoustics, Determination of sound power levels of noise sources using sound intensity – Part 2: Measurement by scanning (ISO 9614-2:1996)*

EN ISO 11201:1995, *Acoustics-Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at the work station and at other specified positions – Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995)*

EN ISO 11204:1995, *Acoustics-Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at the work station and at other specified positions – Method requiring environmental corrections (ISO 11204:1995)*

EN ISO 12100-1:2003, *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 (ISO 12100-2:2003)*

EN 60204-1:1992, *Safety of machinery – Electrical equipment of machines Part 1: General requirements*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code)*

3 Definitions

For the purposes of this standard, the following definitions apply:

3.1

die face pelletiser

device connected directly at the end of the extruder for converting plasticised material into pellets by forcing the plasticised material, by pressure or centrifugal force, through die plates or nozzles and converting it into strands with small cross section which are then immediately cut off after emerging by cutting knives to create pellets which are cooled and carried away by water or air.