

**Betoonist ja kaltsiumsilikaadist
konstruktsioonielementide
valmistamiseks mõeldud masinad.
Ohutus. Osa 1: Ühtsed nõuded**

Machines for the manufacture of constructional
products from concrete and calcium-silicate - Safety
- Part 1: Common requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12629-1:2000 sisaldab Euroopa standardi EN 12629-1:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.11.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12629-1:2000 consists of the English text of the European standard EN 12629-1:2000.</p> <p>This document is endorsed on 15.11.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard applies to machines and assemblies for the manufacture of constructional products from concrete and/or calcium silicate as listed in Annex A of this part. It gives concepts and general and common requirements for the design, operation and maintenance of such machines.</p>	<p>Scope:</p> <p>This European Standard applies to machines and assemblies for the manufacture of constructional products from concrete and/or calcium silicate as listed in Annex A of this part. It gives concepts and general and common requirements for the design, operation and maintenance of such machines.</p>
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Võtmesõnad:

English version

**Machines for the manufacture of constructional
products from concrete and calcium-silicate – Safety**
Part 1: Common requirements

Machines pour la fabrication de
produits de construction en béton et
silico-calcaire – Sécurité – Partie 1:
Exigences communes

Maschinen und Anlagen für die
Herstellung von Bauprodukten aus
Beton und Kalksandsteinmassen –
Sicherheit – Teil 1: Gemeinsame
Anforderungen

This European Standard was approved by CEN on 2000-05-12.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 151 "Construction equipment and building material machines - 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 December 2000, and conflicting national standards shall be withdrawn at the latest by December 2000.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The series "Machines for the manufacture of constructional products from concrete and calcium-silicate - Safety" consists of the following parts:

- Part 1: Common requirements
- Part 2: Block making machines
- Part 3: Slide and turntable machines
- Part 4: Concrete rooftile making machines
- Part 5: Pipe making machines
- Part 6: Stationary and mobile equipment for the manufacture of precast reinforced products
- Part 7: Stationary and mobile equipment for the benching manufacture of prestressed products
- Part 8: Machines and equipment for the manufacture of constructional products from calcium-silicate (and concrete).

The Annex A is informative and contains "Machines for the manufacture of constructional products from concrete and calcium silicate", Annex B is informative and contains "Guarding examples".

Introduction

This European Standard is a Type C-standard as stated in EN 1070:1998.

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

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.

Reference to pertinent standards mentioned above is made where requirements of such standards are relevant.

1 Scope

1.1 This European Standard applies to machines for the manufacture of constructional products from concrete and/or calcium silicate examples of which are listed in annex A of this part. It gives concepts and general and common requirements for the design, operation and maintenance of such machines.

1.2 This European Standard deals with the hazards listed in clause 4 which can arise during the operation and maintenance, including the interfaces, of the machines for the manufacture of constructional products from concrete and calcium silicate, when carried out in accordance with the specifications given by the manufacturer or his authorised representative.

Parts 2 to 8 of this standard give additional specific requirements and therefore have to be applied together with this part.

1.3 The preparation of concrete and/or calcium-silicate mixture and the transport from the mixer to the manufacturing plant are not part of this European Standard (see prEN 12151:1995). The equipment for the transport and handling of formed products, other than the integrated transport systems, is not covered by this standard.

1.4 Those hazards that are relevant for all mechanical, electrical, pneumatic, hydraulic or other equipment of machinery and that are dealt with in standards for common use (Type A, B1 and B2 standards) are not covered by this European Standard.

1.5 At the time of drafting, machine specific noise test codes for prEN 12629-2 to -8 are not available to fulfil the requirements of 5.7.2 and 7.4.2. When they are available, they will be incorporated in these standards.

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.

EN 292-1:1991, *Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology*

EN 292-2:1991+ A1:1995, *Safety of machinery - Basic concepts - General principles for design - Part 2: Technical principles and specifications*

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

- EN 349:1993, *Safety of machinery - Minimum gaps to avoid crushing of parts of the human body*
- EN 418:1992, *Safety of machinery - Emergency stop equipment, functional aspects - Principles for design*
- EN 457:1992, *Safety of machinery - Auditory danger signals - General requirements, design and testing*
- EN 547-1:1996, *Safety of machinery - Human body measurements – Part 1: Principles for determining the dimensions required for openings for whole body access into machinery*
- EN 547-2:1996, *Safety of machinery - Human body measurements - Part 2: Principles for determining the dimensions required for access openings*
- EN 547-3:1996, *Safety of machinery - Human body measurements – Part 3: Anthropometric data*
- EN 574, *Safety of machinery - Two hand control devices – Functional aspects - Principles for design*
- EN 614-1:1995, *Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles*
- EN 626-1:1994, *Safety of machinery - Reduction of risks to health from hazardous substances emitted by machinery - Part 1: Principles and specifications for machinery manufacturers*
- EN 811:1996, *Safety of machinery - Safety distances to prevent danger zones being reached by the lower limbs*
- EN 894-1:1997, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 1: General principles for human interactions with displays and control actuators*
- EN 894-2:1997, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 2: Displays*
- EN 894-3:2000, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 3: Control actuators*
- 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*
- EN 999, *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 1070:1998, *Safety of machinery - Terminology*
- EN 1088, *Safety of machinery - Interlocking devices associated with guards - Principles for design and selection*
- prEN 12437-1:1996, *Safety of machinery - Permanent means of access to machines and industrial plants - Part 1: Choice of a fixed means of access between two levels*
- prEN 12437-2:1996, *Safety of machinery - Permanent means of access to machines and industrial plants - Part 2: Working platforms and walkways*
- prEN 12437-3:1996, *Safety of machinery - Permanent means of access to machines and industrial plants - Part 3: Stairways, stepladders and guard-rails*

prEN 12437-4:1996, *Safety of machinery - Permanent means of access to machines and industrial plants - Part 4: Fixed ladders*

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

EN 61310-1:1995, *Safety of machinery - Indicating, marking and actuation - Part 1: Requirements for visual, auditory and tactile signals (IEC 61310-1:1995)*

EN 61496-1:1997, *Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests (IEC 61496-1:1997)*

EN ISO 3746:1995, *Acoustics - Determination of sound power levels of noise sources using sound pressure - Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:1995)*

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

EN ISO 11688-1:1998, *Acoustics - Recommended practice for the design of low-noise machinery and equipment - Part 1: Planning (ISO/TR 11688-1:1995)*

3 Definitions

For the purposes of this European Standard, the definitions stated in EN 1070:1998 apply.

Additional definitions specifically needed for prEN 12629 series are given below:

3.1

products

constructional items manufactured from concrete or calcium silicate

3.1.1

blocks [bricks]

generally cuboid product made from concrete or calcium silicate. They are used in the construction of buildings for example, and can be solid or hollow

3.1.2

concrete kerbs unit

unit of precast concrete (see prEN 1340:1993), intended to separate surfaces of the same or different level to provide:

- physical or visual declination or containment;
- drainage channels, either on their own or in combination with other units;
- separation between surfaces submitted to different kinds of traffic.

3.1.3

concrete flag

precast concrete unit (see prEN 1340:1993) used as a surfacing material that satisfies the following conditions:

- overall length does not exceed 1 m;
- overall length divided by its thickness is greater than four.

3.1.4

element

generally cuboid product of calcium silicate bigger than a block used in the construction of buildings